



# The New York Dragonfly and Damselfly Survey

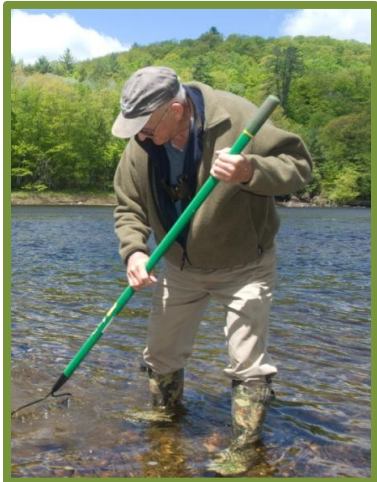
2005-2009



## Distribution and Status of the Odonates of New York



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Cover photos: Clockwise from top left: Common Green Darner (*Anax junius*), perched, Jeremy Martin 2008. Ebony Jewelwings (*Calopteryx maculata*) in the “wheel” mating position, Jeremy Martin 2006; Calico Pennant (*Celithemis elisa*), Stephen Diehl and Vici Zaremba 2008; Nick Donnelly sampling for larvae, Stephen Diehl and Vici Zaremba 2008; Exuvia (dragonfly skin), Stephen Diehl and Vici Zaremba 2008; Variable Dancer (*Argia fumipennis violacea*), Jeremy Martin 2008; Student with dragonfly at North Fork Audubon Center Dragonfly Day, Annette Oliveira 2008



## Executive Summary

The New York Dragonfly and Damselfly Survey (NYDDS) began in 2005, spanned five field seasons through 2009, and relied heavily on citizen scientists to help collect data over a large geographic area. Its primary goal was to document the current distribution of all odonate species in New York State. This cooperative project between the New York State Department of Environmental Conservation (NYSDEC), Division of Fish, Wildlife and Marine Resources, and the New York Natural Heritage Program was funded through New York State Wildlife Grant T-2-1 in cooperation with the U.S. Fish and Wildlife Service Division of Wildlife and Sport Fish Restoration. Survey efforts were directed toward under-surveyed regions, areas with potential high diversity, and locations with potential for harboring Species of Greatest Conservation Need (SGCN).

NYDDS volunteers were trained at workshops held throughout the state during the summers of 2005-2007. The training was designed for beginners from all walks of life and focused on basic odonate biology, taxonomy, and identification, as well as field capture and specimen preservation techniques. Nearly 300 people were trained at these workshops, some of whom were NYSDEC or NY Natural Heritage staff. We focused most of our survey efforts on adults rather than larvae due to their relative ease of identification. Surveys were completed from April through October in or near aquatic breeding habitats such as lakes, ponds, bogs and fens, rivers and streams, marshes, swamps, and forest seeps. Wooded areas and fields near aquatic habitats were also fruitful survey sites, as adults use these areas to mature, roost, and forage. We took many steps to ensure that data received from volunteers were accurate. Participants were provided with a list that noted, for each species (and in some cases, for each sex) the level of verification necessary for record confirmation (observation, photograph or specimen). These photo and specimen vouchers were verified by odonate experts.

Our five-year sampling effort yielded many important finds. Most notable were five species added to the list of known odonates for the state, bringing the cumulative total to 194 species, one of the highest diversities of any U.S. state. Owing to the efforts of entomologists, odonatologists, and odonate enthusiasts prior to the NYDDS, New York has records extending back to the late 1800s. This existing county distribution information was compiled by odonatologist Thomas “Nick” Donnelly of the Dragonfly Society of the Americas in 1999 and again in 2004. We were unable to confirm the presence of 15 of the 189 Odonata species ever documented in New York by Donnelly, and every one of these species was rare in the state to begin with.

Participants visited over 2,170 survey sites statewide and a total of 4,383 surveys were conducted, including repeat visits. We confirmed over 18,000 individual species records based on our verification protocol. NYDDS yielded 1,111 new county records beyond these pre-existing data. Each county’s documented richness increased by 18 species on average, and we documented at least 75 species in two-thirds of New York’s 62 counties. A list was compiled for each county as well as a distributional map and phenology chart for all 194 species and full species accounts are included for all 48 SGCN. We calculated draft S-ranks for rare species using NatureServe’s Element Rank Calculator and we found that of NY’s 194 odonate species, 26% are likely to be ranked as critically imperiled (S1) or imperiled (S2).

Surveys for the state historical Ringed Boghaunter (*Williamsonia lintneri*) were unsuccessful, but produced leads in the Grafton and Rome areas. We completed at least five group surveys in western NY for the Federally Endangered Hine’s Emerald (*Somatochlora*



*hineana*) in appropriate habitat; we did not confirm the species, and it seems unlikely to be present, with the nearest known population occurring in Michigan. Multiple surveys have often been required before the presence of Hine's Emerald was confirmed at new sites discovered in Wisconsin and other states, so future survey work may yet prove fruitful. Surveys for New York's state-threatened damselflies in Suffolk county revealed two new sites for Pine Barrens Bluet (*Enallagma recurvatum*) (previously known from nine ponds), seven new sites for Scarlet Bluet (*Enallagma pictum*) (previously known from three ponds), and The Little Bluet (*Enallagma minusculum*) is known from three locations (two in Suffolk county and one in Queens). These surveys will inform the development of a Recovery Plan for these species. Analyses of survey effort showed that the state was sampled sufficiently to document its odonate fauna. Similarly, each of the state's seven ecoregions was well sampled, while some counties could have used additional survey effort. Such counties where additional survey effort would be most productive were identified and survey effort, ecological and biogeographical explanations were forwarded as possible reasons for the apparent lower species richness in western vs. eastern New York. Since odonates are noted indicators of water quality, biodiversity, and ecological change, our findings should help inform future conservation efforts in freshwater habitats. Along with previous distribution information, this report provides baseline information on the distribution and status of odonates in New York against which to measure future change. Much like the 2000-2005 Breeding Bird Atlas followed up on the 1980-1985 Atlas, leading to some highly informative analyses of distributional shifts, we hope that in the future this survey effort will be similarly revisited to assess shifts in odonate distributions. Monitoring of this sort may be the only way to know whether we are maintaining New York's dragonfly and damselfly biodiversity in the face of continuing global change.



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## Introduction

### Background

In recent years there has been a slow but steady growth in the popularity of the study of various insect groups, beginning with butterflies, and more recently, dragonflies. The recent interest in dragonflies began in the early 1990s, spurred in part by the publication of the first field guides to these fascinating insects.

New York State began receiving funding from a new federal funding source, the State Wildlife Grants Program, in 2003. A required element for this funding is the development of a New York State Comprehensive Wildlife Conservation Strategy (CWCS), complete with a discussion of actions needed for species designated as “Species of Greatest Conservation Need” (SGCN). Given our incomplete knowledge of the status of dragonflies and damselflies in New York State, the increasing public interest in these insects, and the need to develop the Comprehensive Wildlife Conservation Strategy, the timing was right for beginning a formal statewide survey of the dragonflies and damselflies of New York State. In the first year of funding under State Wildlife Grants, such a survey was selected.

The New York Dragonfly and Damselfly Survey (NYDDS) began in 2005 under the coordination of Paul Novak and spanned five field seasons through 2009. Erin White coordinated the project from November of 2006 through 2010. The project officially ended on March 31, 2010 with the compilation of this report. The records for the NYDDS were in part from NY Natural Heritage staff and contractors, but the majority came from trained volunteers. The results of the New York Dragonfly and Damselfly Survey have been summarized below for use by conservation biologists, planners, and odonate enthusiasts. The information gained as a result of this survey will be important in the development of Comprehensive Wildlife Conservation Strategy with respect to the conservation of these insects. Information on new locations for SGCN will help to guide conservation activities beneficial to those species and prevent harmful manipulations of their habitats.

The New York Dragonfly and Damselfly Survey was a project of the New York State Department of Environmental Conservation (NYSDEC), Division of Fish, Wildlife and Marine Resources, and the New York Natural Heritage Program (NYNHP). Funding for the NYDDS is through New York State Wildlife Grant T-2-1 in cooperation with the U.S. Fish and Wildlife Service Division of Wildlife and Sport Fish Restoration.

### Project Objectives

The main project objective was to document the distribution of all odonate (dragonfly and damselfly) species occurring in New York, by building upon existing county distribution information previously compiled by world renowned odonatologist Thomas “Nick” Donnelly (Donnelly 1992, 1999, 2004a) of the Dragonfly Society of the Americas. A second, related



Variable Dancer (*Argia fumipennis violacea*) by Wayne Jones

objective was to direct intensive survey efforts to selected habitats, particularly the habitats that support those SGCNs.

Two additional project objectives included evaluating the relative abundance of three state Threatened damselfly species at sites on Long Island and surveying some areas with the potential to support the federally listed Hine's emerald dragonfly (*Somatochlora hineana*).

While this project had no specific education objective, we expected the New York Dragonfly and Damselfly Survey to foster public interest in the conservation of dragonflies, damselflies, and the aquatic habitats on which they depend. Finally, as all dragonflies and damselflies are aquatic in their immature stages, they can provide important information on water-quality issues that are matters of public concern.

## Methodology

### Survey Design

Due to the efforts of entomologists, odonatologists, and odonate enthusiasts prior to the NYDDS, New York has odonate records that extend back to the late 1800s (Needham 1928). Odonatologist Nick Donnelly compiled and published *The Dragonflies and Damselflies of New York* in 1992 and 1999 which summarized county, phenology, and observational information for each odonate species recorded in the state (Donnelly 1992, 1999). Donnelly verified museum records and compiled data from museums and individuals to complete these lists as well as published *The Distribution of North American Odonata* in 2004 as part of his dot map project, which documented county-level distributional information throughout species' ranges in North America (Donnelly 2004b,c,d, Abbott 2010). Many of the New York records were from years prior to 1990, and in many cases, much earlier. Participants were encouraged to survey close to home as well as in targeted locations, as new or interesting finds were possible anywhere in the state.

Unlike some other Atlas projects, like the New York State Breeding Bird Atlas (NYSBBA; McGowan & Corwin 2008), volunteers were not assigned sites or blocks, but allowed to choose survey sites themselves. This approach facilitated recruitment of a much smaller potential volunteer base of unknown size. (For comparison, birding is the most popular form of wildlife watching. The NYSBBA had over 1,200 volunteers [McGowan & Corwin 2008] who were skilled birders at the beginning of the project.) Many volunteers were more comfortable participating when allowed to travel short distances and choose their own survey sites. Further, odonate habitat is not distributed as uniformly across the landscape as that for other taxa. Odonates have aquatic larvae and adults of most species stay close to water; to some degree the distribution of effort expended to survey odonates must match the distribution of aquatic ecosystems. While this survey design yielded somewhat uneven coverage across the state (see Survey Effort, page 12) we attempted to fill the most egregious geographic holes with targeted surveys (described below).

There had been Atlas efforts for odonate fauna in other states in recent years to model our work after, including the the Ohio Odonata Survey, Maine Dragonfly and Damselfly Survey, New Jersey Odonata Survey (The Ohio Odonata Survey 2005, Brunelle & deMaynadier 2005, Bangma & Barlow 2010). At the onset of the NYDDS, survey designs and protocols from these and other surveys, as well as expert opinion, were consulted and built upon for implementation in New York.



Trained participants were asked to follow one of three strategies for their survey work: 1. Frequent visits to a small number of sites close to home, 2. Visits to habitats supporting particular species or species groups, and 3. Visits to a wide variety of habitats in counties with few species recorded as of 2004. We suggested that volunteers concentrate their efforts in or near aquatic habitats such as lakes, ponds, bogs and fens, rivers and streams, marshes, swamps, and forest seeps since these are the larval habitats of odonates and where many adults can be observed breeding. Wooded areas and fields near aquatic habitats were also fruitful survey sites, as adults use these areas to mature, roost, and forage. We focused most of our efforts on surveying for adults rather than larvae due to the ease of identification of the adult form compared to the larvae. We did provide training to participants in larval sampling and tank rearing of larvae to adult form (for ease and confirmation of identification) before our last field season and emphasized the collection of dragonfly exuviae during the last few years of the survey in order to gain more records for elusive riverine species. An exuvia is the skin left behind when an adult emerges from the water and metamorphoses into adult form and can be identified by experts to species level. These are generally found on shorelines, emergent vegetation, rock, or human structures like bridge abutments at aquatic habitats. While the primary goal of the project was to document the current distribution of all odonate species in New York State, secondary goals guided survey work as well. Special efforts were made to direct survey efforts to regions that were previously under-surveyed, areas with potential to hold great diversity of species, as well as the following habitats that offered the greatest potential for new locations for SGCNs (Appendix I):

- Large rivers and streams
- Small, low gradient forest streams
- Seepages and rivulets that feed into streams and gorges
- Bogs/fens, bog ponds, and small streams within bogs
- Lakes and ponds with abundant water lilies
- Lakes at higher elevations (principally Adirondacks and Catskills)
- Brackish marshes, ponds and lakes (these are principally on Long Island)
- Coastal plain ponds and lakes (these are only on Long Island)

These goals became a way to streamline our efforts during the last two years of the survey, when we held several “county busters” and group survey efforts for specific purposes as well as directed individual survey efforts for SGCN.

Survey work was completed from 2005-2009 during the months of April through October. Odonates actually spend most of their lives in the water, as larvae, from several months to years, whereas adults survive for a single warm season, usually a month to three months. The earliest odonates in New York emerge in late April or early May (and at least one migratory species, the Common Green Darner [*Anax junius*] can be seen earlier) and die by July after completing their flight season. Others will not emerge until August and can fly into October or November, even surviving early frosts. Therefore, surveyors were encouraged to visit sites multiple times throughout the season (approximately once in early to mid-June, once in mid to late July, and once in mid-August to mid-September) to provide the most comprehensive list of



Exuvia, by Stephen Diehl and Vici Zaremba 2008



odonate species that could be present at a site. In addition, certain sites were targeted for survey work to coincide with emergence or appearance of certain taxa. For instance, for targeted survey work on Snaketails (*Ophiogomphus* spp.), timing our searching for emerging adults and exuviae on rivers and streams in early June proved most productive.

Volunteers were advised to time surveys for mid-morning through late afternoon, with specific recommendations for some species like those of the genera *Aeshna* and *Somatochlora* with peaked activity in the evening during feeding swarms. Species of another genus, *Neurocordulia*, were sought with surveys timed at dusk for adult activity, while their exuviae and emerging adults were sought in early morning hours and during the day.

We also completed targeted group work, especially in the last years of the survey. In an attempt to survey under-represented areas of the state, groups of trained volunteers were organized to target specific areas of the state during a one or two-day stretch in field season. Generally, the groups would either split off into small groups and go to separate sites, or the large group would visit several locations for shorter periods throughout the day. Such locations included Ontario and Yates counties in the Finger Lakes region, Delaware and Otsego (which yielded two new county records for Otsego County and 12 new county records for Delaware County), and smaller groups headed to Wyoming, Orleans, Erie, and Lewis counties in 2008. Fulton, Herkimer, and Chenango counties were surveyed with group efforts in 2009.

The Northeastern meeting of the Dragonfly Society of the Americas was held in Malone, New York on June 26-29, 2008, led by Jan Trybula and Erin White. There were at least 40 people in attendance and 66 odonate species were found over two days of field surveys in bogs in the Adirondack Park as well as river habitats in Robert Moses State Park.

In May of 2009, a Spring Event was held near Albany to serve as a kick-off for the final field season and as an opportunity to thank volunteers for their participation in the Survey. Some preliminary results were presented and great finds were highlighted, but species and areas of the state that had been under-represented in the Survey were also discussed and participants signed up to survey the final summer to address those needs.

## Volunteer Recruitment

Volunteers played an integral role in the success of the NYDDS. This statewide project relied heavily on its citizen scientists to help collect information on dragonfly and damselfly distribution over a large geographic area. Staff and funds for contractors were limited and New York State is a large area to survey; therefore, a volunteer network overseen with high standards of data quality allowed data to be collected at a scale far beyond what NY Natural Heritage and DEC alone could have accomplished. We simply could not have done it without them!

As with many citizen science projects, NYDDS did not require participants to have a scientific background or specialized experience; NYDDS Advisors provided the aforementioned training in odonate biology and survey methodology needed to get volunteers started. Depending on individual motivation and time available, each volunteer continued their scientific education and engagement with the project at



NYDDS Workshop, by Matt Schlesinger 2007



a pace that was right for them. NYDDS volunteers were trained in weekend workshops held in each region of the state during the summers of 2005-2007. The training was designed for beginners from all walks of life and focused on basic odonate biology, taxonomy, and identification, as well as capture (with a field component) and specimen preservation techniques. Nearly 300 people were trained at these workshops, some of whom were NYS DEC or NY Natural Heritage staff. Volunteers were provided with an NYDDS Handbook for Workers that covers similar material to that presented here, but in greater depth, as well as a list of all species expected to occur in New York (White 2007). The Handbook included information on selecting places to survey, when to conduct surveys, the information that needed to be collected during a survey, and how to record and report the data gathered. Experts were available in each region of New York to help volunteers select appropriate survey sites and answer their questions. While we did not train additional volunteers during the last two years of the survey, our large existing volunteer base continued to provide both important records to the database and a vital source of enthusiasm for continued study of New York's dragonflies and damselflies.

## Survey Protocol

Volunteers followed standardized protocols for reporting data from the NYDDS surveys. They filled out Survey Site Visit Forms (Appendix II) with the following minimum required fields: site name, county, additional site location directions, observers, and date. Ideally, records were submitted on these paper forms or in an electronic version of the NYDDS database and contained locational, temporal, habitat, species, abundance, and behavioral information. Because the identification of selected species required careful examination under a microscope, observers were asked to collect single voucher specimens or, for other selected species, take close-up photographs.

NYDDS took many steps to ensure that data received from volunteers were accurate. Participants were provided with a list that noted, for each species (and in some cases, for each sex) the level of proof of identification necessary to verify a single observation. The acceptable levels of identification, in order of increasing identification difficulty, were Observation (OBS), Photo (PHOT—often specifying exactly what features should be photographed), and Specimen (SPEC) (Appendix I). The photo and specimen vouchers submitted with datasheets were verified by odonate experts. Nick Donnelly, Paul Novak, and Erin White reviewed adult specimens for the project. Dennis Paulson, Jan Trybula, Nick Donnelly, Paul Novak, and Erin White reviewed photos for the project, and most exuviae were identified by Virginia Brown. Paul Brunelle and Ken Tennesen also provided exuviae identification and Fred Sibley and Skip Blanchard were also experts on the project. Each fall, participants submitted data to NY Natural Heritage Program for processing into a Microsoft Access database. Following data processing and quality control, specimens were deposited in the odonate collection at the New York State Museum to provide permanent location records for each species. While specimens may have been required for species that are more difficult to identify, ethical considerations were emphasized. As insects, odonates have high reproductive rates and typically occur as large populations in the places where they are found. However,



Paul Novak holding a dragonfly for Al Hicks to examine, photographer unknown



participants were asked to keep collection to a minimum, and follow the protocol outlined in Appendix I, collecting only for species where a specimen voucher was required or identification was not possible in the field or with photos. Participants were also encouraged to follow the Collection Policy and Guidelines adopted by the Dragonfly Society of the Americas (Mauffray 2008). Specimen labels were provided to volunteers so that appropriate information could accompany specimens for data entry and museum deposition.

Other information provided to volunteers included a document highlighting regions, habitats, and species needing attention which included species that had not been recorded in the state as of 2004. In addition, the NYDDS provided letters to the volunteers that summarized the project with contact information for NY Natural Heritage staff to assist in gaining access to properties and informing others encountered on their surveys. In general, NYSDEC and staff as well as staff of The Nature Conservancy were informed of the project's survey goals, but it was left up to the individual volunteers to obtain permission to access private lands from the landowner prior to surveys. Participants were encouraged to contact NYSDEC staff prior to visits to state lands to inform them of activities that could involve collection. In addition, recommended field guides and materials were listed as well as contact information for DEC regional staff and NYDDS regional experts. Volunteers were also asked to report their hours and mileage on effort forms to demonstrate the match component requirement of the SWG funding that supported the project.

## Final Results

### Highlights

Our five-year odonate sampling effort in New York State yielded many excellent finds. Most notable, were five species added to the list of known odonates for the state, bringing the total to 194 species of dragonflies and damselflies known from New York (Table 1). There were 189 species of dragonflies and damselflies listed for the state prior to the NYDDS (Donnelly 2004a). The five species that had not been documented in New York before are Double-ringed Pennant (*Celithemis verna*) found by Virginia and Charles Brown in Suffolk county, Horned Clubtail (*Arigomphus cornutus*) found by Jan Trybula and Adam Simmons in St. Lawrence county, Broadtailed Shadowdragon (*Neurocordulia michaeli*) adults found by Jeff Corser in Delaware County, Four-spotted Pennant (*Brachymesia gravida*) found by Annette Oliveira in Suffolk county, and Zigzag Darner (*Aeshna sitchensis*) found by Kevin Hemeon in Warren county.



Horned Clubtail (*Arigomphus cornutus*),  
by Jan Trybula

NYDDS participants visited over 2,170 survey sites statewide, many of which were visited more than once. This level of effort yielded 1,111 new county records when compared to data compiled by Nick Donnelly, which is available electronically at the Odonata Central website and highlighted as the Dot Map Project (Donnelly 2004a, Abbott 2010). This total includes less than 20 hybrid records for *Sympetrum* and other taxa which were documented for the first time in specific counties. A full county list may be viewed in Appendix III, which lists



odonate species alphabetically by scientific name and shows whether species were documented pre-NYDDS, and/or during NYDDS, and highlights new county records. As described in the Methodology, photographic and specimen vouchers were used to confirm records for certain species (Appendix I). We were able to verify over 18,000 individual species records based on our protocol, either by accepting the record as confirmed by observation, or verifying the record with a photo, exuvia, or adult specimen. There were 9,114 vouchers submitted, most of which (8,665) were verified to the species level. In total, the NYDDS records were comprised of 2,041 photos, 6,115 adult specimens, and at least 760 exuviae with confirmed identifications by odonate experts. In some cases, multiple specimens, photos, or exuviae submitted for a species at a site counted as a single record. As aforementioned, larval collection was not the focus of the NYDDS, but some participants reared larvae in tanks to adult form to confirm identification. There were 35 verified larval records submitted during the project.

Table 1. All odonates known for New York State, listed alphabetically by scientific name. Species only known from pre-NYDDS data are followed by “pre.” Species new to the state as a result of the NYDDS are indicated with “new.”

<b>Species</b>	<b>Common name</b>	
<i>Aeshna canadensis</i>	Canada Darner	
<i>Aeshna clepsydra</i>	Mottled Darner	
<i>Aeshna constricta</i>	Lance-tipped Darner	
<i>Aeshna eremita</i>	Lake Darner	
<i>Aeshna interrupta</i>	Variable Darner	
<i>Aeshna sitchensis</i>	Zigzag Darner	new
<i>Aeshna subarctica</i>	Subarctic Darner	
<i>Aeshna tuberculifera</i>	Black-tipped Darner	
<i>Aeshna umbrosa</i>	Shadow Darner	
<i>Aeshna verticalis</i>	Green-striped Darner	
<i>Amphiagrion saucium</i>	Eastern Red Damsel	
<i>Anax junius</i>	Common Green Darner	
<i>Anax longipes</i>	Comet Darner	
<i>Archilestes grandis</i>	Great Spreadwing	
<i>Argia apicalis</i>	Blue-fronted Dancer	
<i>Argia bipuctulata</i>	Seepage Dancer	pre
<i>Argia fumipennis violacea</i>	Variable Dancer	
<i>Argia moesta</i>	Powdered Dancer	
<i>Argia tibialis</i>	Blue-tipped Dancer	
<i>Argia translata</i>	Dusky Dancer	
<i>Arigomphus cornutus</i>	Horned Clubtail	new
<i>Arigomphus furcifer</i>	Lilypad Clubtail	
<i>Arigomphus villosipes</i>	Unicorn Clubtail	
<i>Basiaeschna janata</i>	Springtime Darner	
<i>Boyeria grafiana</i>	Ocellated Darner	
<i>Boyeria vinosa</i>	Fawn Darner	
<i>Brachymesia gravida</i>	Four-spotted Pennant	new
<i>Calopteryx aequabilis</i>	River Jewelwing	
<i>Calopteryx amata</i>	Superb Jewelwing	





<b>Species</b>	<b>Common name</b>	
<i>Calopteryx angustipennis</i>	Appalachian Jewelwing	pre
<i>Calopteryx dimidiata</i>	Sparkling Jewelwing	pre
<i>Calopteryx maculata</i>	Ebony Jewelwing	
<i>Celithemis elisa</i>	Calico Pennant	
<i>Celithemis eponina</i>	Halloween Pennant	
<i>Celithemis fasciata</i>	Banded Pennant	
<i>Celithemis martha</i>	Martha's Pennant	
<i>Celithemis verna</i>	Double-ringed Pennant	new
<i>Chromagrion conditum</i>	Aurora Damsel	
<i>Coenagrion interrogatum</i>	Subarctic Bluet	pre
<i>Coenagrion resolutum</i>	Taiga Bluet	
<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	
<i>Cordulegaster erronea</i>	Tiger Spiketail	
<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	
<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	
<i>Cordulia shurtleffi</i>	American Emerald	
<i>Didymops transversa</i>	Stream Cruiser	
<i>Dorocordulia lepida</i>	Petite Emerald	
<i>Dorocordulia libera</i>	Racket-tailed Emerald	
<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	
<i>Enallagma antennatum</i>	Rainbow Bluet	
<i>Enallagma aspersum</i>	Azure Bluet	
<i>Enallagma basidens</i>	Double-striped Bluet	
<i>Enallagma boreale</i>	Boreal Bluet	
<i>Enallagma carunculatum</i>	Tule Bluet	
<i>Enallagma civile</i>	Familiar Bluet	
<i>Enallagma cyathigerum</i>	Northern Bluet	
<i>Enallagma divagans</i>	Turquoise Bluet	
<i>Enallagma doubledayi</i>	Atlantic Bluet	
<i>Enallagma durum</i>	Big Bluet	
<i>Enallagma ebrium</i>	Marsh Bluet	
<i>Enallagma exsulans</i>	Stream Bluet	
<i>Enallagma geminatum</i>	Skimming Bluet	
<i>Enallagma hageni</i>	Hagen's Bluet	
<i>Enallagma laterale</i>	New England Bluet	
<i>Enallagma minusculum</i>	Little Bluet	
<i>Enallagma pictum</i>	Scarlet Bluet	
<i>Enallagma recurvatum</i>	Pine Barrens Bluet	
<i>Enallagma signatum</i>	Orange Bluet	
<i>Enallagma traviatum</i>	Slender Bluet	
<i>Enallagma vernale</i>	Northern Bluet	
<i>Enallagma vesperum</i>	Vesper Bluet	
<i>Enallagma weewa</i>	Blackwater Bluet	
<i>Epiaeschna heros</i>	Swamp Darner	
<i>Epicordulia princeps</i>	Prince Baskettail	



<b>Species</b>	<b>Common name</b>	
<i>Epitheca canis</i>	Beaverpond Baskettail	
<i>Epitheca cynosura</i>	Common Baskettail	
<i>Epitheca semiaquea</i>	Mantled Baskettail	
<i>Epitheca spinigera</i>	Spiny Baskettail	
<i>Erythemis simplicicollis</i>	Eastern Pondhawk	
<i>Erythrodiplax berenice</i>	Seaside Dragonlet	
<i>Erythrodiplax minuscula</i>	Little Blue Dragonlet	pre
<i>Gomphaeschna antilope</i>	Taper-tailed Darner	
<i>Gomphaeschna furcillata</i>	Harlequin Darner	
<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	
<i>Gomphus adelphus</i>	Mustached Clubtail	
<i>Gomphus borealis</i>	Beaverpond Clubtail	
<i>Gomphus descriptus</i>	Harpoon Clubtail	
<i>Gomphus exilis</i>	Lancet Clubtail	
<i>Gomphus fraternus</i>	Midland Clubtail	
<i>Gomphus lividus</i>	Ashy Clubtail	
<i>Gomphus quadricolor</i>	Rapids Clubtail	
<i>Gomphus rogersi</i>	Sable Clubtail	
<i>Gomphus septima</i>	Septima's Clubtail	
<i>Gomphus spicatus</i>	Dusky Clubtail	
<i>Gomphus vastus</i>	Cobra Clubtail	
<i>Gomphus ventricosus</i>	Skillet Clubtail	
<i>Gomphus viridifrons</i>	Green-faced Clubtail	pre
<i>Hagenius brevistylus</i>	Dragonhunter	
<i>Helocordulia uhleri</i>	Uhler's Sundragon	
<i>Hetaerina americana</i>	American Rubyspot	
<i>Ischnura hastata</i>	Citrine Forktail	
<i>Ischnura kellicotti</i>	Lilypad Forktail	
<i>Ischnura posita</i>	Fragile Forktail	
<i>Ischnura prognata</i>	Furtive Forktail	pre
<i>Ischnura ramburii</i>	Rambur's Forktail	
<i>Ischnura verticalis</i>	Eastern Forktail	
<i>Ladona deplanata</i>	Blue Corporal	
<i>Ladona exusta</i>	White Corporal	
<i>Ladona julia</i>	Chalk-fronted Skimmer	
<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	
<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	
<i>Lestes australis</i>	Southern Spreadwing	
<i>Lestes congener</i>	Spotted Spreadwing	
<i>Lestes disjunctus</i>	Common Spreadwing	
<i>Lestes dryas</i>	Emerald Spreadwing	
<i>Lestes eurinus</i>	Amber-winged Spreadwing	
<i>Lestes forcipatus</i>	Sweetflag Spreadwing	
<i>Lestes inaequalis</i>	Elegant Spreadwing	
<i>Lestes rectangularis</i>	Slender Spreadwing	



<b>Species</b>	<b>Common name</b>	
<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	
<i>Lestes vigilax</i>	Swamp Spreadwing	
<i>Leucorrhinia frigida</i>	Frosted Whiteface	
<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	
<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	
<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	
<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	
<i>Libellula auripennis</i>	Golden-winged Skimmer	
<i>Libellula axilena</i>	Bar-winged Skimmer	
<i>Libellula cyanea</i>	Spangled Skimmer	
<i>Libellula flavida</i>	Yellow-sided Skimmer	
<i>Libellula incesta</i>	Slaty Skimmer	
<i>Libellula luctuosa</i>	Widow Skimmer	
<i>Libellula needhami</i>	Needham's Skimmer	
<i>Libellula pulchella</i>	Twelve-spotted Skimmer	
<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	
<i>Libellula semifasciata</i>	Painted Skimmer	
<i>Libellula vibrans</i>	Great Blue Skimmer	
<i>Macromia illinoensis</i>	Illinois River Cruiser	
<i>Nannothemis bella</i>	Elfin Skimmer	
<i>Nasiaeschna pentacantha</i>	Cyrano Darner	
<i>Nehalennia gracilis</i>	Sphagnum Sprite	
<i>Nehalennia integricollis</i>	Southern Sprite	
<i>Nehalennia irene</i>	Sedge Sprite	
<i>Neurocordulia michaeli</i>	Broadtailed Shadowdragon	new
<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	
<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	
<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	
<i>Ophiogomphus aspersus</i>	Brook Snaketail	
<i>Ophiogomphus carolus</i>	Riffle Snaketail	
<i>Ophiogomphus colubrinus</i>	Boreal Snaketail	pre
<i>Ophiogomphus howei</i>	Pygmy Snaketail	
<i>Ophiogomphus mainensis</i>	Maine Snaketail	
<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	
<i>Pachydiplax longipennis</i>	Blue Dasher	
<i>Pantala flavescens</i>	Wandering Glider	
<i>Pantala hymenaea</i>	Spot-winged Glider	
<i>Perithemis tenera</i>	Eastern Amberwing	
<i>Plathemis lydia</i>	Common Whitetail	
<i>Progomphus obscurus</i>	Common Sanddragon	
<i>Rhionaeschna mutata</i>	Spatterdock Darner	
<i>Somatochlora albicincta</i>	Ringed Emerald	pre
<i>Somatochlora cingulata</i>	Lake Emerald	
<i>Somatochlora elongata</i>	Ski-tailed Emerald	
<i>Somatochlora forcipata</i>	Forcipate Emerald	



<b>Species</b>	<b>Common name</b>	
<i>Somatochlora franklini</i>	Delicate Emerald	
<i>Somatochlora incurvata</i>	Incurvate Emerald	
<i>Somatochlora kennedyi</i>	Kennedy's Emerald	pre
<i>Somatochlora linearis</i>	Mocha Emerald	
<i>Somatochlora minor</i>	Ocellated Emerald	
<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	
<i>Somatochlora walshii</i>	Brush-tipped Emerald	
<i>Somatochlora williamsoni</i>	Williamson's Emerald	
<i>Stylogomphus albistylus</i>	Least Clubtail	
<i>Stylurus amnicola</i>	Riverine Clubtail	pre
<i>Stylurus notatus</i>	Elusive Clubtail	pre
<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	
<i>Stylurus scudderi</i>	Zebra Clubtail	
<i>Stylurus spiniceps</i>	Arrow Clubtail	
<i>Sympetrum corruptum</i>	Variegated Meadowhawk	pre
<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	
<i>Sympetrum danae</i>	Black Meadowhawk	
<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	
<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	
<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	
<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	
<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	
<i>Tachopteryx thoreyi</i>	Gray Petaltail	
<i>Tramea abdominalis</i>	Vermilion Saddlebags	pre
<i>Tramea calverti</i>	Striped Saddlebags	pre
<i>Tramea carolina</i>	Carolina Saddlebags	
<i>Tramea lacerate</i>	Black Saddlebags	
<i>Williamsonia fletcheri</i>	Ebony Boghaunter	
<i>Williamsonia lintneri</i>	Ringed Boghaunter	pre



## Survey Effort

### Survey Participants

Over the project's five years, 341 volunteers registered to participate in the project. This tally includes a small handful of project organizers, NY Natural Heritage and DEC staff, and contractors. Volunteers came from all over the state, with notably high participation in the Adirondacks, Capital region, Hudson Valley, and Lake Ontario and Lake Erie basins (Figure 1). Many volunteers traveled far and wide to conduct surveys, so a map of home zip codes does not represent the distribution of survey sites. Nearly half (156; 45.7%) participated in at least one field survey (Figure 2), not including volunteers whose names were not on site survey forms but who might have contributed specimens because not only registered volunteers participated in surveys. Beyond the 156 registered volunteers who participated, 277 additional named individuals participated in surveys (for a total of 433 unique surveyors at a minimum), plus hundreds more unidentified adults and children in school groups, camp groups, workshops, and college courses. Many of these groups were facilitated by Audubon NY through a grant with the Biodiversity Research Institute. Although many surveyors participated in only a single or a few surveys, many registrants and other volunteers participated in hundreds of surveys (Figure 2).



Michael Blust and Nick Donnelly sampling larvae, by Stephen Diehl and Vici Zaremba 2008



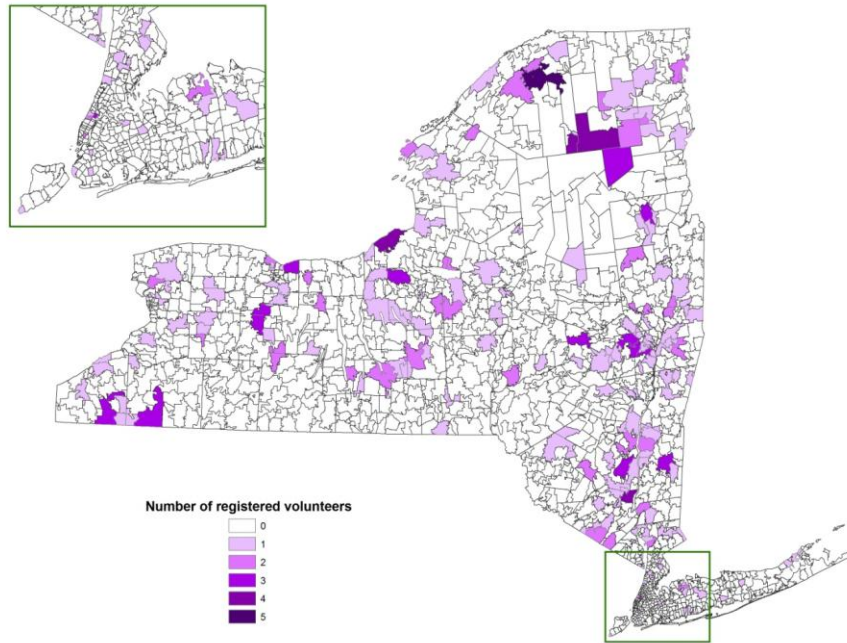


Figure 1. Number of registered NYDDS volunteers by zip code. The New York City metropolitan area is enlarged to show detail.

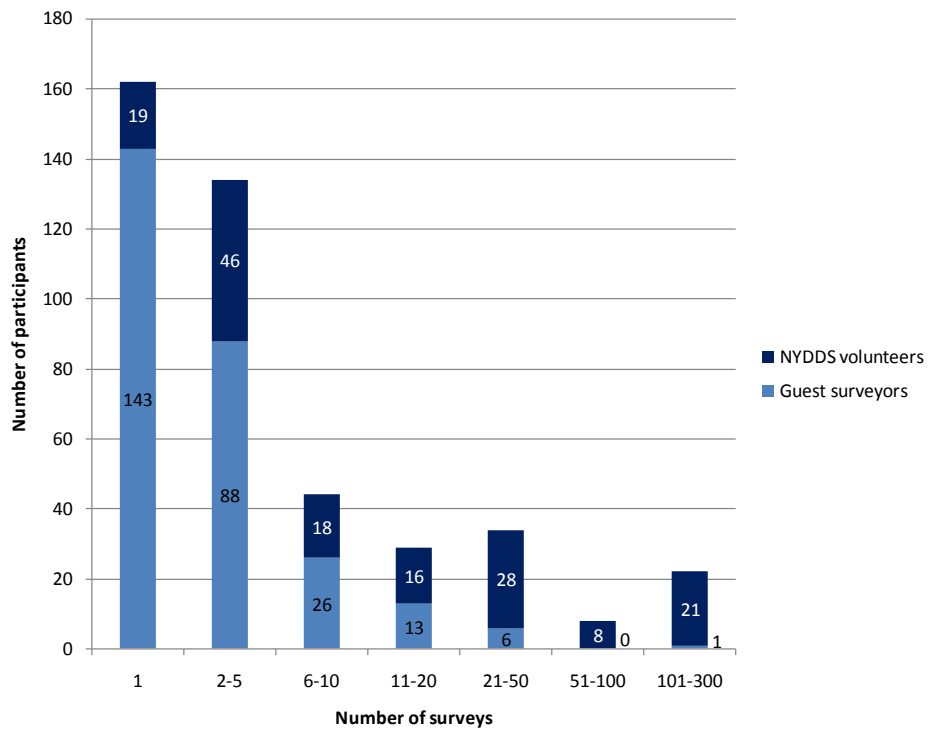


Figure 2. Number of field surveys in which NYDDS volunteers and other surveyors participated from 2005-2009.



## Sites Visited and Surveys Conducted

Over 2,170 sites were visited all over New York State (Figure 3). Including repeat visits to the same site on different dates, a total of 4,383 surveys were conducted. (This latter tally does not include sites where specimens were collected but surveys were not reported.) Survey participants visited a wide variety of habitat types: rivers, streams, lakes, ponds, bogs, springs, beaches, and forests (Table 2). Sites were somewhat evenly distributed among lakes and ponds, wetlands (bogs and fens, marshes and swamps), and rivers and streams. Openings visited included trails, roads, railroad beds, fields, and forest gaps. These numbers add up to more than the total number of sites because participants were allowed to choose multiple habitat types per site. For instance, a fen might have had a creek running through it, or a pond might have graded into a marsh. Not every site was given a habitat classification, so these tallies are based on the subset of sites with habitat information (64% of sites). In addition, it should be noted that participants may have had different criteria they used to classify a habitat as bog vs. fen or marsh vs. swamp, so it does make sense for us to speak in generalities by lumping wetland types together for the purposes of discussion. Since surveys in various breeding habitats were somewhat evenly distributed across the broad habitat categories of pond/lake, wetlands, and running water, we can expect that the NYDDS survey effort was about equal across types and that surveys revealed species known to inhabit each type.

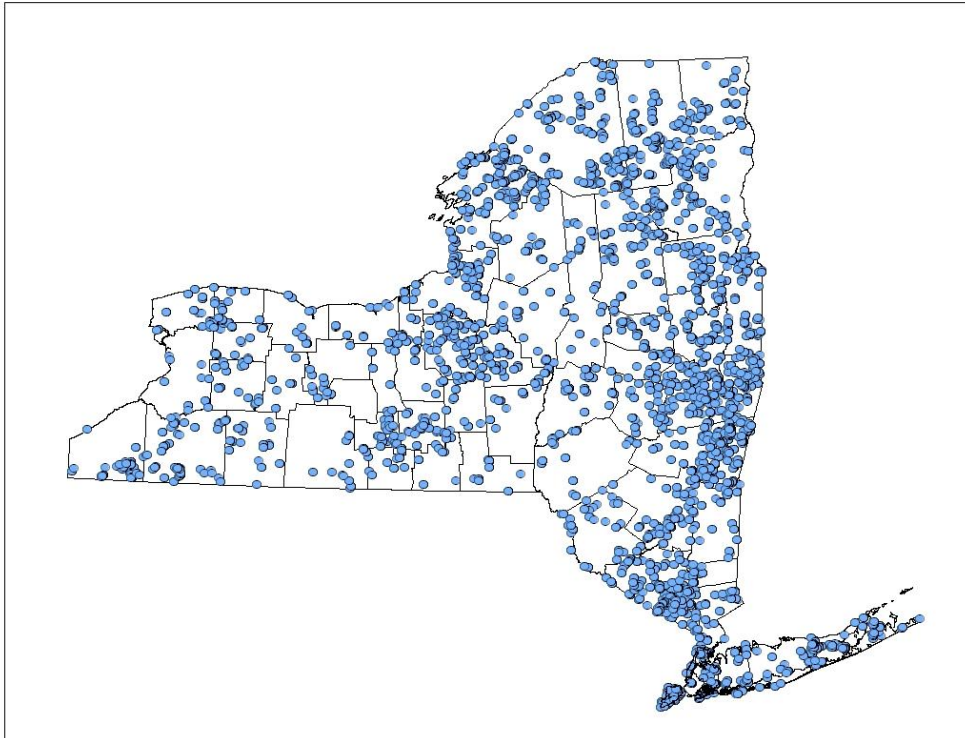


Figure 3. Locations of survey sites visited during the NYDDS.



Table 2. Number of NYDDS sites classified as each of five major habitat types.

Habitat type	Number of sites
Bog/fen	233
Marsh/swamp	665
Pond/lake	1,244
Openings	719
Running water	1,094

Survey effort was lowest in 2005, the first year of the project, but picked up to a solid, steady pace from 2006-2008, with over 1,000 surveys in each year (Figure 4). In 2009, we encouraged a more focused effort from a smaller pool of volunteers so we could specifically target particular species, locations, and habitat types with directed survey. There were still over 600 surveys conducted in 2009. As we would expect, survey effort varied by month. Across years, the large majority (82%) of surveys were conducted in June, July, and August (Figure 5), with the remainder conducted in May and September and a small handful in earlier and later months.

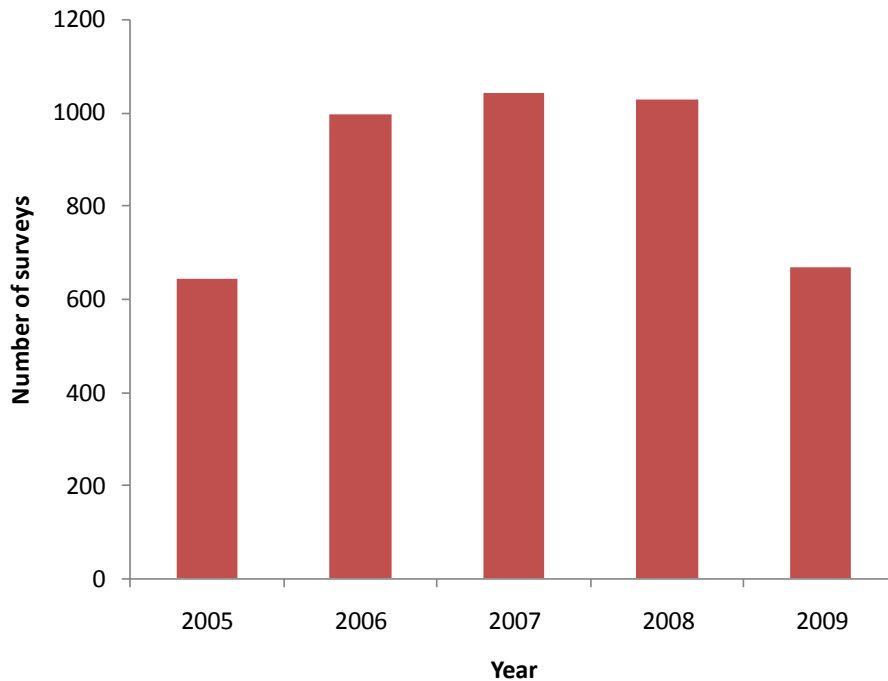


Figure 4. Number of NYDDS surveys by year.





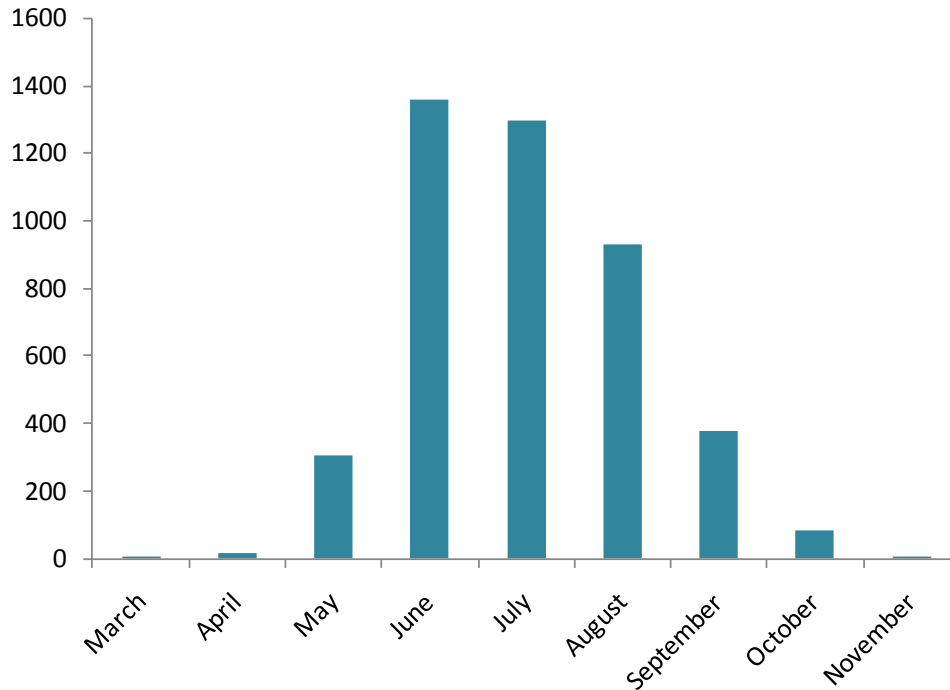


Figure 5. Number of NYDDS surveys by month, compiled across 2005-2009.

### How Thoroughly was New York Surveyed?

We were interested in exploring the completeness with which this five-year effort sampled New York State for odonates. We wanted to know how well sampled the state was geographically and by ecoregion. Further, we wanted to know whether the patterns of species detection and species richness we observed were real or artifacts of sampling effort. To address this, we calculated the expected number of species for each county and ecoregion in New York and compared that to the number of species actually detected during the Survey. For this analysis, we removed all detections that were not identified to species. We retained hybrid specimens if both of the two component species were not present in a particular county, but removed them for all other analyses.

We calculated expected species richness through rarefaction (Colwell *et al.* 2004) using the program EstimateS (Colwell 2009). Briefly, the objective of this analysis was to determine the expected number of species given the rate of accumulation over the course of multiple surveys within a sampling unit (county, ecoregion, entire state). The order of surveys was randomized 50 times so that especially productive or unproductive surveys did not drive the pattern of species accumulation. Two main, related, products were generated from these analyses: 1) the total expected number of species; and 2) a curve showing how the number of species accumulated with sampling effort (number of surveys). Dividing the number of species observed ( $S_{obs}$  Mao Tau) by the number expected (MMMeans) yielded the percent of expected species detected during the Survey.



Given the rate at which surveys accumulated new species records over the five years of the project, the NYDDS detected approximately the number of species that would be expected for New York State (Table 3). In other words, the NYDDS sampled the state more than sufficiently to enumerate its odonate fauna as expected from the pattern of survey productivity. Note that it does not mean that that new species for New York might not continue to be discovered; as a case in point, when we ran this analysis in early 2009 in preparation for the final field season, we obtained a similar result: that we had sampled the state as a whole sufficiently. But then in 2009 a zigzag darner was documented for the first time in the state. Even though the NYDDS was highly successful in documenting New York’s odonate species, more survey effort is bound to unearth exciting new finds.

Table 3 shows how the number of species documented in New York accumulated with increasing sampling effort. Surveys used in this analysis included repeat visits to the same site on different dates, but did not include sites where specimens were collected but surveys were not reported. We included verified (confirmed according to the protocol in Appendix I) as well as unvouchered records (see page 23 for a description of verification). At roughly 1,000 surveys, the curve really starts to “level off,” which suggests that the productivity of sampling is slowing down. As noted above, however, additional species continued to be detected, but at a much slower rate.

The state level is not the only geographic region of interest; most of New York’s counties were well sampled during the NYDDS. Fifty counties (80%) had at least 70% of their expected species detected during the course of the Survey. Ten counties (16%) had at least 90% of their expected species detected. Five counties (8%) in southern and central New York fell under 50% detection of their expected species; these counties would have required more effort to enumerate the majority of their species. This information is displayed graphically in Figure 7. Those with knowledge of the volunteer base can point to the darker colors as evidence of particularly active volunteers.

Table 3. Sampling effort and estimated species richness for New York State and its 62 counties. The number of species detected includes both verified and unvouchered records.

County	No. surveys	No. species detected	Lower bound	Upper bound	No. species estimated	Percent of expected species detected
Albany	183	89	82.6	95.4	92.3	96%
Allegany	23	42	34.3	49.7	68.9	61%
Bronx	62	29	24.1	33.9	32.3	90%
Broome	17	46	39.7	52.3	90.2	51%
Cattaraugus	107	65	58.9	71.1	77.3	84%
Cayuga	42	39	31.5	46.5	46.5	84%
Chautauqua	190	72	61.5	82.5	72.0	100%
Chemung	10	47	39.7	54.4	105.2	45%
Chenango	18	45	39.1	50.9	83.0	54%
Clinton	65	48	41.7	54.3	68.8	70%
Columbia	228	86	78.4	93.6	87.5	98%



<b>County</b>	<b>No. surveys</b>	<b>No. species detected</b>	<b>Lower bound</b>	<b>Upper bound</b>	<b>No. species estimated</b>	<b>Percent of expected species detected</b>
Cortland	28	47	38.1	55.9	66.8	70%
Delaware	24	53	46.5	59.5	84.9	62%
Dutchess	42	59	49.2	68.8	81.2	73%
Erie	19	26	18.2	33.8	44.5	58%
Essex	205	91	84.1	97.9	107.2	85%
Franklin	190	95	87.9	102.1	106.6	89%
Fulton	38	69	61.4	76.6	99.0	70%
Genesee	69	51	45.2	56.8	65.4	78%
Greene	51	51	42.6	59.4	68.0	75%
Hamilton	92	76	68.6	83.5	93.5	81%
Herkimer	32	56	48.6	63.4	80.9	69%
Jefferson	152	77	71.7	82.3	84.7	91%
Kings	23	21	16.3	25.7	28.0	75%
Lewis	44	64	57.9	70.1	89.0	72%
Livingston	10	29	21.3	36.7	67.3	43%
Madison	97	76	68.5	83.5	84.8	90%
Monroe	16	26	18.7	33.3	50.3	52%
Montgomery	25	57	47.6	66.4	84.9	67%
Nassau	52	48	41.6	54.4	57.3	84%
New York	5	13	6.7	19.3	54.7	24%
Niagara	26	39	32.4	45.6	50.9	77%
Oneida	28	40	33.1	46.9	59.6	67%
Onondaga	135	76	68.9	83.1	77.2	98%
Ontario	17	28	21.3	34.7	41.3	68%
Orange	166	87	80.6	93.4	92.7	94%
Orleans	33	42	37.2	46.8	60.8	69%
Oswego	86	65	60.9	69.1	76.5	85%
Otsego	56	64	55.9	72.1	81.9	78%
Putnam	23	42	35.5	48.5	92.4	45%
Queens	105	33	29.9	36.1	37.3	89%
Rensselaer	244	114	104.7	123.3	128.2	89%
Richmond	129	49	40.7	57.3	50.7	97%
Rockland	175	84	77.1	90.9	85.1	99%
Saratoga	103	85	76.0	94.0	101.8	83%
Schenectady	46	54	46.0	62.0	71.2	76%
Schoharie	38	57	49.0	65.0	80.3	71%
Schuyler	120	87	81.1	92.9	90.1	97%
Seneca	16	38	31.3	44.7	59.7	64%
St Lawrence	192	115	108.1	121.9	131.0	88%
Steuben	12	48	41.2	54.8	88.3	54%



County	No. surveys	No. species detected	Lower bound	Upper bound	No. species estimated	Percent of expected species detected
Suffolk	285	87	80.6	93.4	88.7	98%
Sullivan	43	64	55.6	72.4	105.8	60%
Tioga	10	33	26.5	39.5	69.0	48%
Tompkins	44	56	46.0	66.0	93.4	60%
Ulster	103	85	78.7	91.4	101.4	84%
Warren	113	93	85.8	100.2	111.4	83%
Washington	89	91	83.7	98.3	118.3	77%
Wayne	21	27	18.9	35.1	43.3	62%
Westchester	151	81	76.9	85.1	93.4	87%
Wyoming	30	41	35.0	47.0	59.0	70%
Yates	5	12	9.2	14.8	21.5	56%
<b>New York State</b>	<b>4803</b>	<b>185</b>	<b>181.3</b>	<b>188.7</b>	<b>181.5</b>	<b>102%</b>

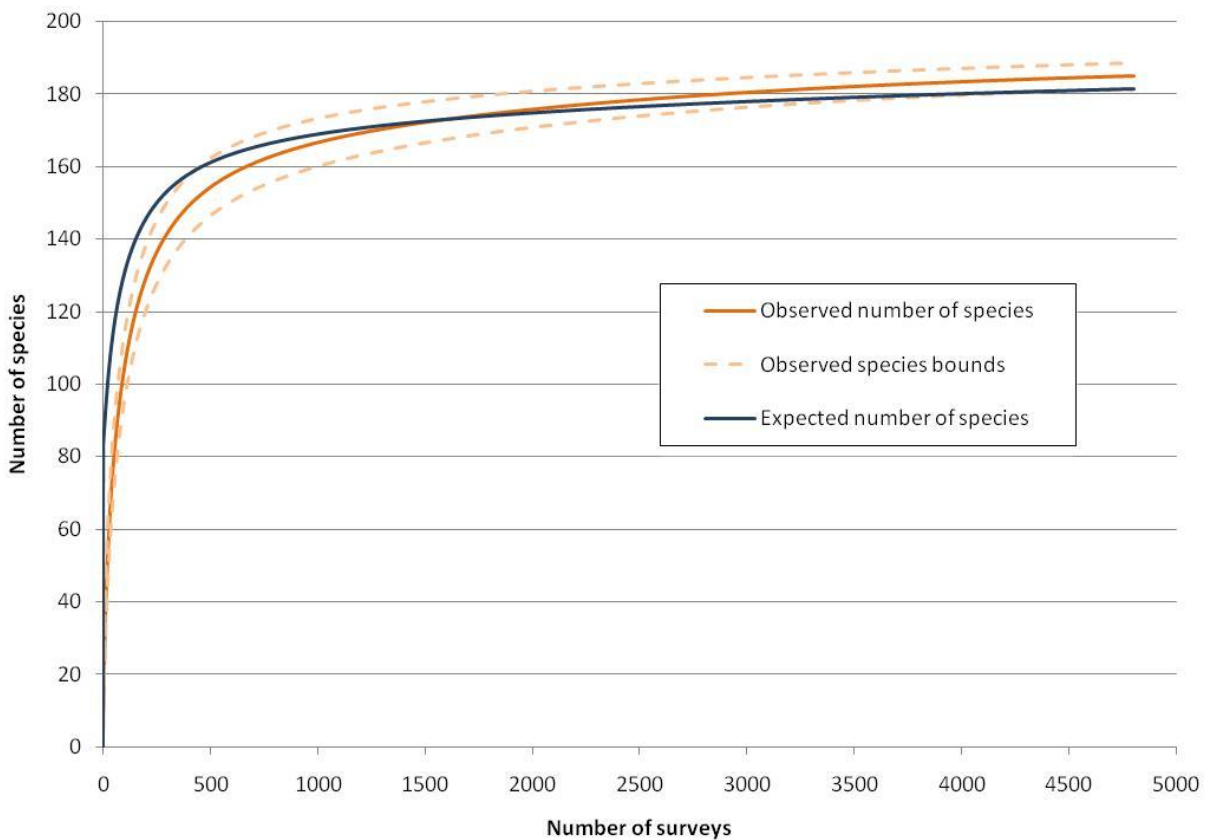


Figure 6. NYDDS species accumulation curve for New York State.



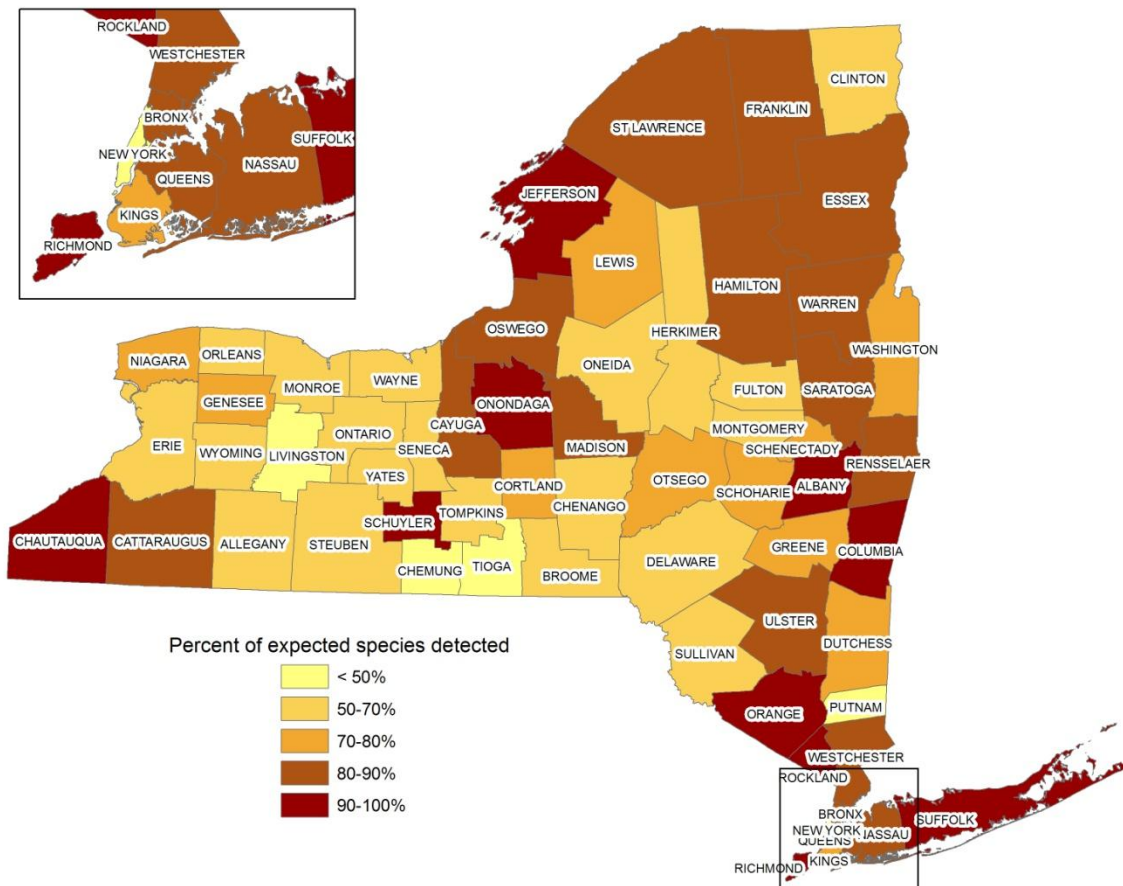


Figure 7. Percent of expected species of odonates detected by county during the five years of NYDDS. The New York City metropolitan area is enlarged to show detail.

Generally speaking, the more surveys in a county, the higher percentage of its expected species were detected (Figure 8). However, in some cases relatively few surveys were needed to detect most of a county's species; for instance, 23 surveys in Kings County were sufficient to detect 75% of its expected species, and 42 surveys in Cayuga County were sufficient to detect 84% of its expected species. By comparison, 205 surveys in Essex County detected 85% of its expected species. The main point is that sampling effort was not perfectly related to how fully a county's odonate fauna was detected. Another pattern depicted in Figure 8 is the increasing expected species richness with increasing numbers of surveys. In theory, there should not be a relationship here; however, increased effort is often put toward counties with richer odonate faunas and counties that are felt to be undersampled. In fact, this was a primary goal of the Survey's final year.



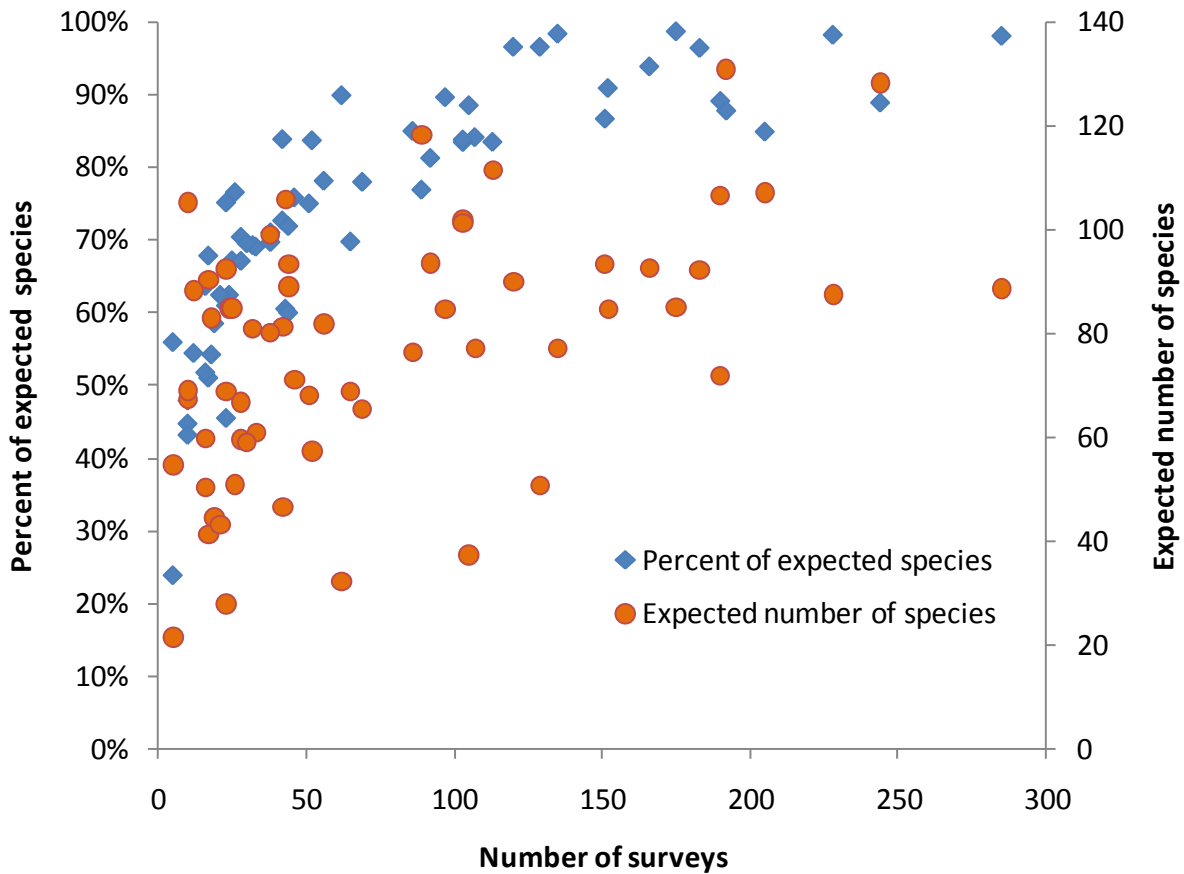


Figure 8. Percent of expected species detected in each county, and expected number of species in each county, as related to the number of NYDDS surveys conducted. Each dot represents a county.

Of greater interest ecologically (or biogeographically) is the sampling sufficiency of different ecological regions of the state, given that they might be expected to have different odonate faunas. So we conducted a similar analysis by “Level III ecoregion,” which is The Nature Conservancy’s adaptation of Bailey’s (1997) ecoregions of the world. Ecoregions are defined as “large areas of the earth’s surface that have similarities in faunal and floral composition due to large-scale, predictable patterns of solar radiation and moisture” (Groves *et al.* 2002, after (Bailey 1997). New York intersects seven Level III ecoregions (Table 4; Figure 9) with considerably varying odonate biodiversity. All ecoregions were well sampled, with five ecoregions having 98% or more of their expected species detected, and the Western Allegheny Plateau was the lowest, but still well sampled, at 89%.



Table 4. Sampling effort and estimated species richness for New York's Level III ecoregions.

Ecoregion	No. surveys	No. species detected	Lower bound	Upper bound	No. species estimated	Percent of expected species detected
Great Lakes	622	125	114.9	135.1	120.2	104%
High Allegheny Plateau	585	129	121.9	136.1	129.9	99%
Lower New England - Northern Piedmont	1389	151	141.5	160.5	150.7	100%
North Atlantic Coast	565	93	79.0	107.0	92.1	101%
Northern Appalachian - Acadian	843	133	129.6	136.4	135.6	98%
St. Lawrence - Champlain Valley	228	100	92.0	108.0	109.1	92%
Western Allegheny Plateau	115	54	48.5	59.5	60.6	89%

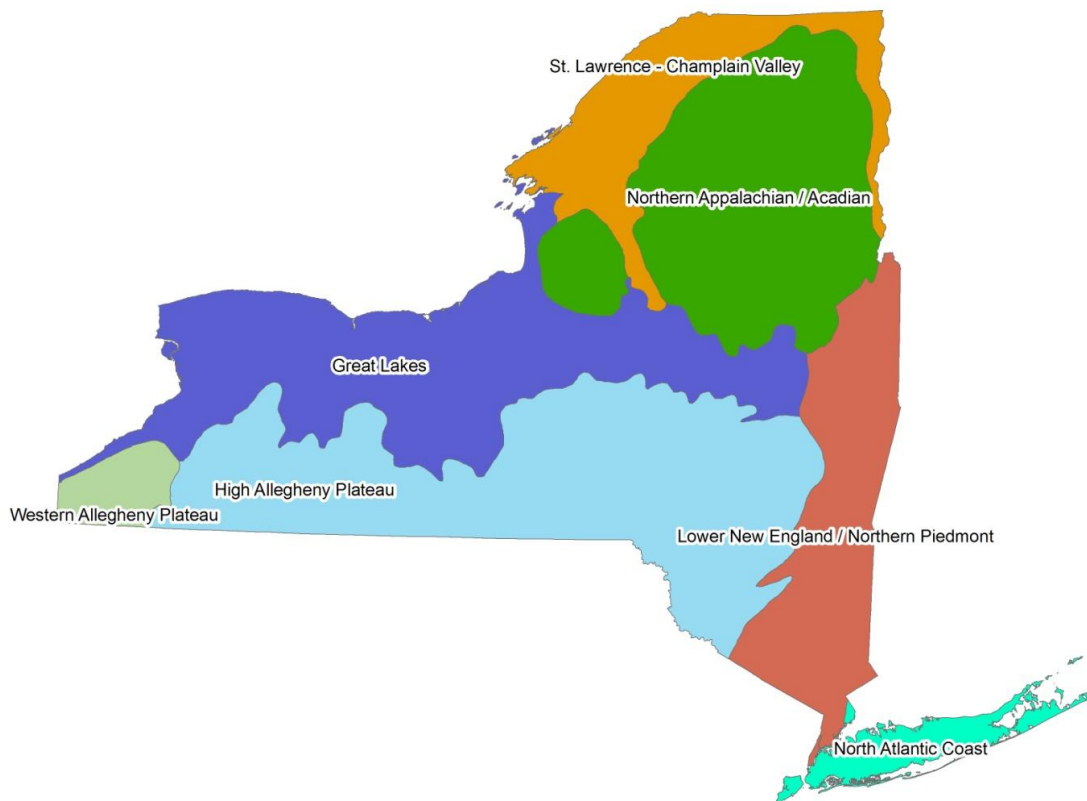


Figure 9. Ecoregions of New York.



## Species Accounts, Distributional Maps, and Phenology Charts

We extracted spatial data from the NYDDS database and compiled them using ArcGIS 9.3 mapping software to view survey locations of species observations. We completed a map for each species ever detected in New York (with the exception of the Seepage Dancer [*Argia bipunctulata*], since county specific information was not known).



Banded Pennant (*Celithemis fasciata*), by Alan W. Wells 2008

Each species map includes counties shaded in light green, which represent those New York counties with records prior to 2005. This information was obtained from Donnelly's 2004 list of odonate species by county, compiled as part of his dot map project described earlier (Donnelly 2004a, Abbott 2010). In those very few cases where the specific county was unknown, but New York City was noted for older records in the Donnelly 1999 list, New York county was chosen to represent that record. Donnelly's dot maps were included in this section as a reference for the entire species' ranges as well as a reference for the known distributions right before the project began (Donnelly 2004b,c,d).

Every effort was made to determine precise coordinates for locations of NYDDS surveys completed, represented as dots on the species maps. Occasionally, coordinates represented approximate locations if the information on a survey form was vague. Dark blue dots represent "NYDDS Verified Records" and refer to all records that met the criteria outlined in the Odonate List for Volunteers (Appendix I); these were either species that were accepted by observation only, or submitted vouchers that were verified to the species level (White 2007). Any records that could not be confirmed to the species level following the protocol were not included in the species or county lists. There were a number of records submitted to the project that did not meet the criteria in Appendix I. Many of these were observational records for species which NYDDS required a voucher for confirmation, but because of the difficulty of capturing these insects, even for the most experienced surveyor, a voucher simply was not always possible. These records are indicated by a light blue dot on the species maps and labeled as "NYDDS Unvouchered Records," although they may represent vouchered records that were not able to be confirmed by experts due to various reasons, like a photo of a determining character was not taken or the species was teneral (newly emerged) and difficult to identify. These records may either indicate possible or probable locations for species occurrences, and would be excellent places for future study. New county records were determined by recognizing counties with records in the "verified" category that did not overlap pre-NYDDS confirmed county data. These were highlighted with dark green shading with the following designation: "Counties first documented during NYDDS." The same legend appears on each NYDDS map, but the map may or may not contain each of the features in the legend, if that information was not available. For instance, there are no light blue dots for Ebony Jewelwing (*Calopteryx maculata*), as this is a species we accept by observation only, thus all records were verified (dark blue dots). Similarly, as there were no NYDDS records for Subarctic Bluet (*Coenagrion interrogatum*), only the light green pre-NYDDS county shading exists for that map. We were unable to confirm the presence of 15 Odonata previously documented in New York by Donnelly 2004a): Four damselflies (*Calopteryx angustipennis*, *C. dimidiata*, *Coenagrion interrogatum*, *Ischnura prognata*); four Gomphids (*G.*





*viridifrons*, *Ophiogomphus colubrinus*, *Stylurus amnicola*, *S. notatus*); three emeralds (*Somatochlora albicincta*, *S. kennedyi*, *Williamsonia lintneri*); and four Libellulids (*Erythrodiplax minuscula*, *Sympetrum corruptum*, *Tramea abdominalis*, *T. calverti*). Two other species were recorded as slightly uncertain, but probable during the NYDDS, *Libellula flavida* (see page 254) and *Gomphus septima* (see page 146). For more discussion on this, see the Conservation and Monitoring section (page 299).

NYNHP generated phenology charts for every species that had verified records during the NYDDS. Flight season data are displayed in half-month increments, with the first three letters of the month on the x-axis followed by a number “1,” for the first half of the month, or a “2,” for the second half. The number of site records is displayed on the y-axis and a site refers to a unique survey, which may include the same site visited a number of times. This is not the number of individuals observed at a single site; rather, the number of records (one per survey site visit form) observed in a given half-month increment across all surveys completed during that time-frame. For instance, if Canada Darner (*Aeshna canadensis*) had 29 site records in the second half of August, that species was confirmed on 29 separate survey site visits during that time frame.

For the purposes of obtaining data for adult flight seasons in New York, larval records (35 verified) were excluded. That said, there were many cases where larvae were sampled in early spring for tank-rearing to adult form in indoor aquaria. In general, tank-reared adults emerge earlier than those in the wild, perhaps due to increased water temperature in a tank environment. Any dates that seem early for a species, especially in the first part of May for some of the *Gomphus* spp., should be compared with field guides and other literature for the northeastern United States, adjacent states or Donnelly’s *The Dragonflies and Damselflies of New York* (Donnelly 1999). This is addressed in the narratives of species accounts for some of the SGCNs, but other species do not have a narrative accompaniment.



Dragonhunter (*Hagenius brevistylus*) larva, by Stephen Diehl and Vici Zaremba 2009

Confirmed exuviae that were identified to species level were included in flight season analysis, as they would generally represent timing from emergence of the adults. While exuviae can still be found late in the season, potentially even after an odonate’s flight season has concluded, this is usually not the case, as they are generally found mostly within a one- or two-week period after emergence (Lubertazzi & Ginsberg 2009).

Please refer to the maps above for county boundaries and names (Figure 7), ecoregional boundaries (Figure 9), and survey site locations (Figure 3) to provide context for viewing the species maps in the next section, as this may aid in their interpretation.

The species maps and charts are organized below taxonomically by family, and then alphabetically within family. Species accounts are included in this section for New York’s SGCN. A list of all odonate SGCN can be found in Appendix I and Table 5 as bolded species. Species accounts include status, habitat description, distribution, inventory needs, and phenology information. For some of the accounts, future survey site suggestions were determined by using Element Distribution Models (EDMs) generated by NYNHP. Element Distribution Models map places with environmental conditions similar to known species’ locations by statistically evaluating the relationship between occupied sites and a suite of environmental factors (Guisan & Zimmerman 2000). While not guaranteeing occupancy in these new locations, EDMs can help



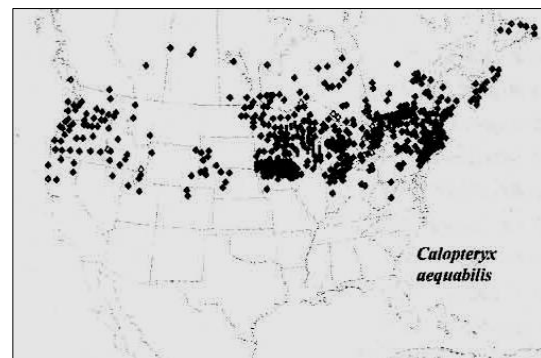
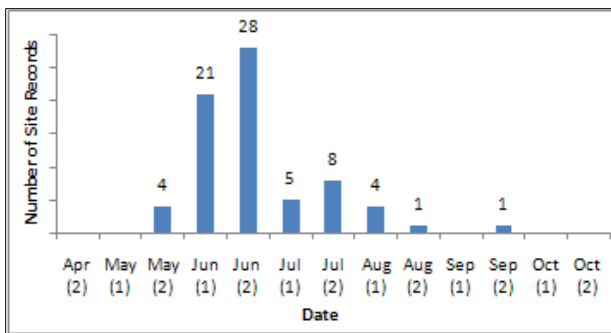
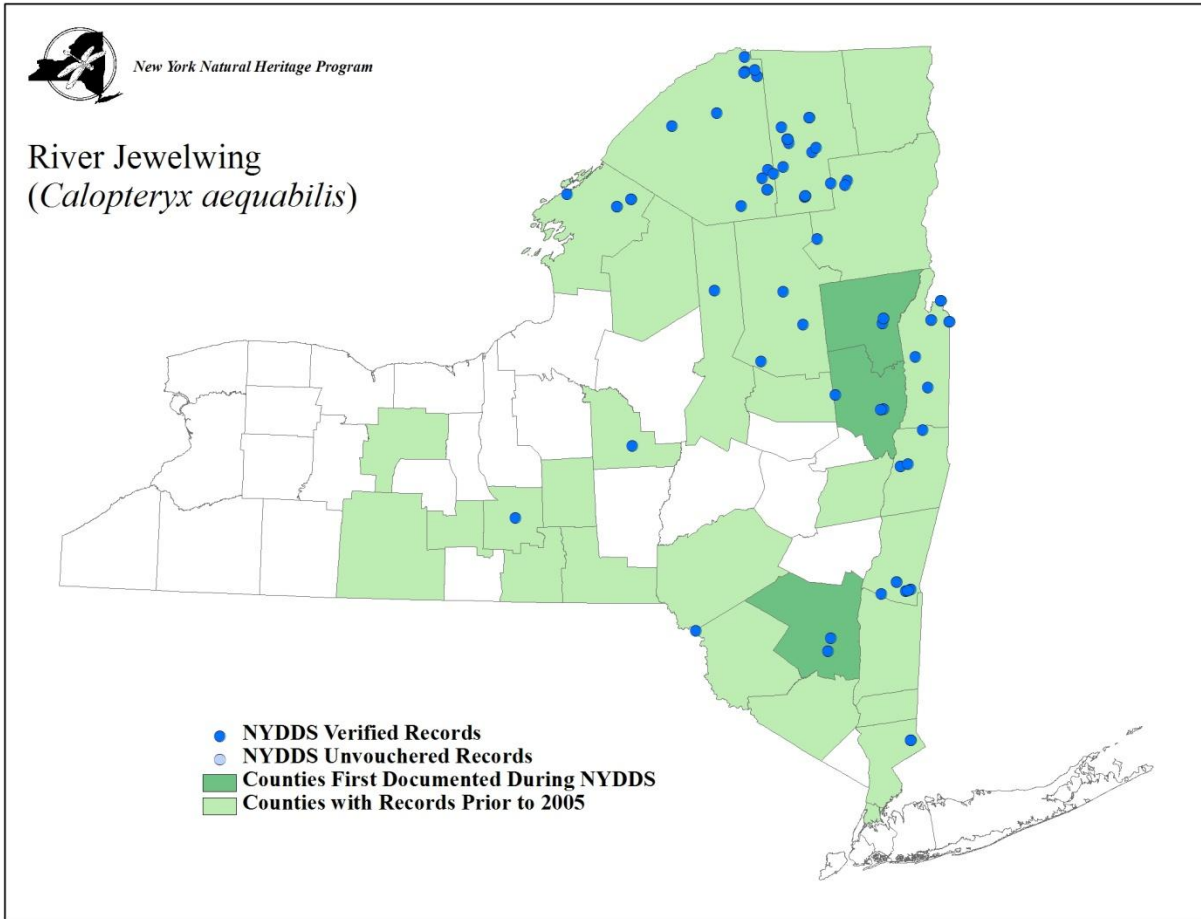
prioritize field inventory, and indeed, such models have been shown to significantly improve rare species discovery success rates in the past (e.g., Guisan et al. 2006).



**CALOPTERYGIDAE**

**River Jewelwing (*Calopteryx aequabilis*)**

**Pre-NYDDS Status: G5, S3S4**



(Donnelly 2004b)

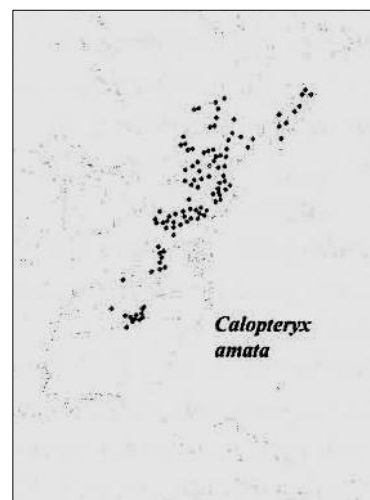
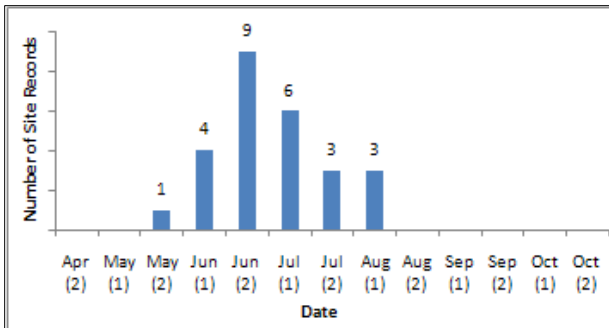
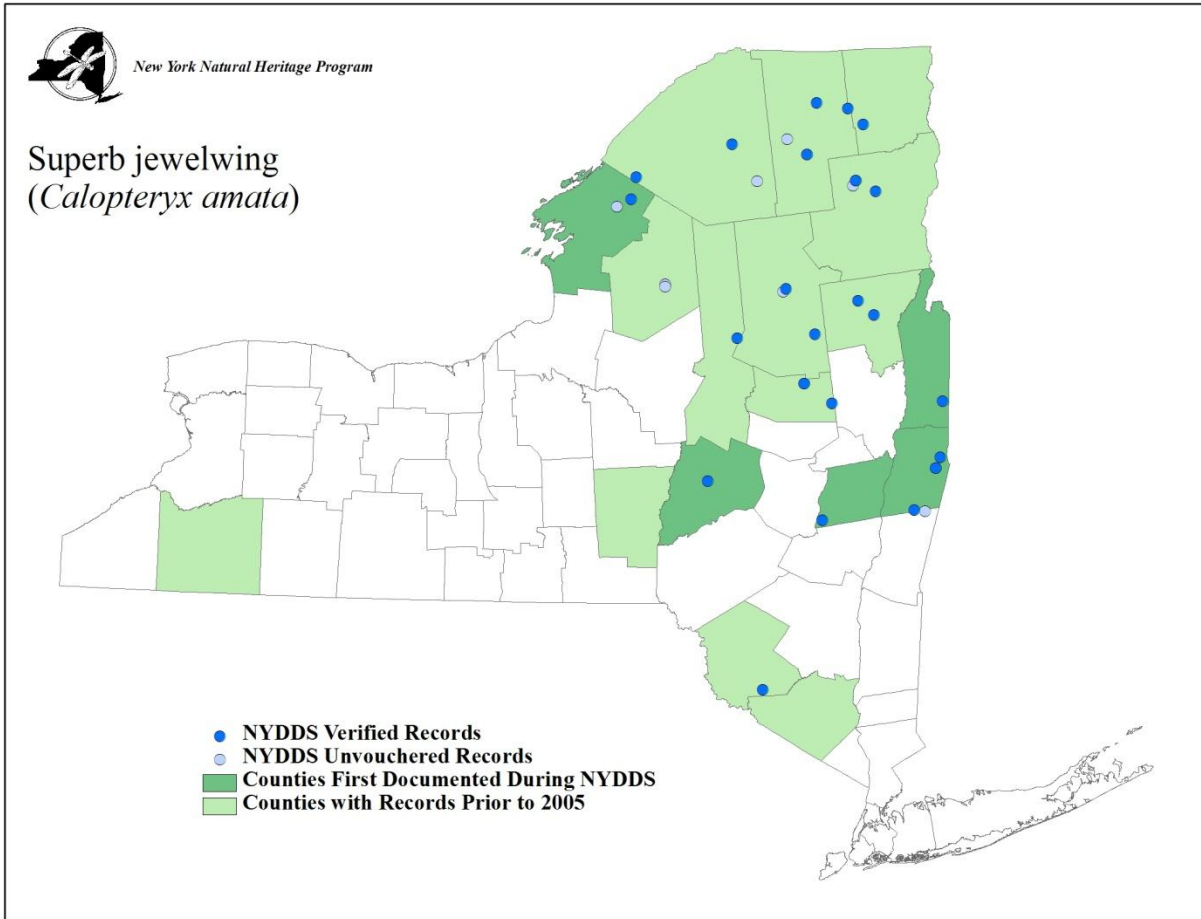


**CALOPTERYGIDAE**

**Superb Jewelwing (*Calopteryx amata*)**

**Pre-NYDDS Status: G4, S3**

**Draft Revised Status: S3**



(Donnelly 2004b)



## CALOPTERYGIDAE

### Appalachian Jewelwing (*Calopteryx angustipennis*)

Pre-NYDDS Status: G4, SH

Draft Revised Status: SH

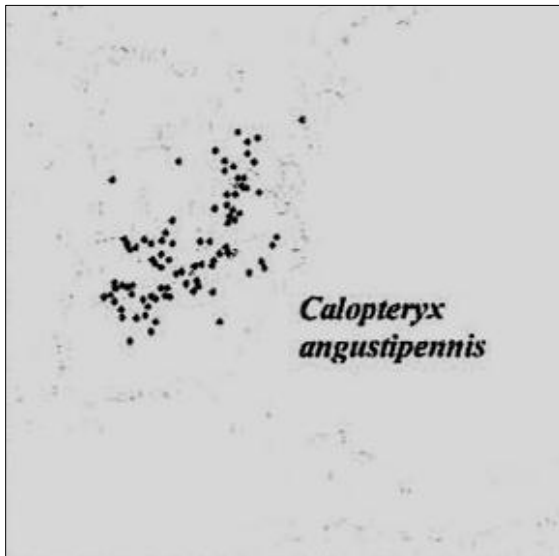
**Habitat Characteristics:** *Calopteryx angustipennis* is known to inhabit small rivers or large streams, preferring riffle areas and rapids in other states (Lam 2004), but the habitat in New York is unknown.



Blair Nikula

### **Distribution and Inventory Needs:** The Appalachian

Jewelwing ranges from Alabama northward to Indiana and eastward to the Atlantic coast of the U.S. (Donnelly 2004b), but has not been confirmed in New York since the early 1900s. There is one confirmed record from Rockland County, NY from “Ramapo” circa 1910 (Donnelly 1999).



(Donnelly 2004b)

Searches both on the Ramapo River in southeastern New York and on the Mahwah River in the town of Ramapo were completed by NYDDS volunteers; however, the species was not documented. There is an additional possible record from 1931 from Allegany State Park in Cattaraugus County, but the identification may have been confused with *Calopteryx amata* and was not confirmed (Donnelly 1999). Further inventory is warranted on small rivers in the southeastern portion of the state as well as Allegany State Park to assess the current status of the species in New York.

**Phenology:** The single confirmed specimen in New York was an adult taken in June (Donnelly 1999). Ohio survey records indicate mid-June as the prime flight season (The Ohio Odonata

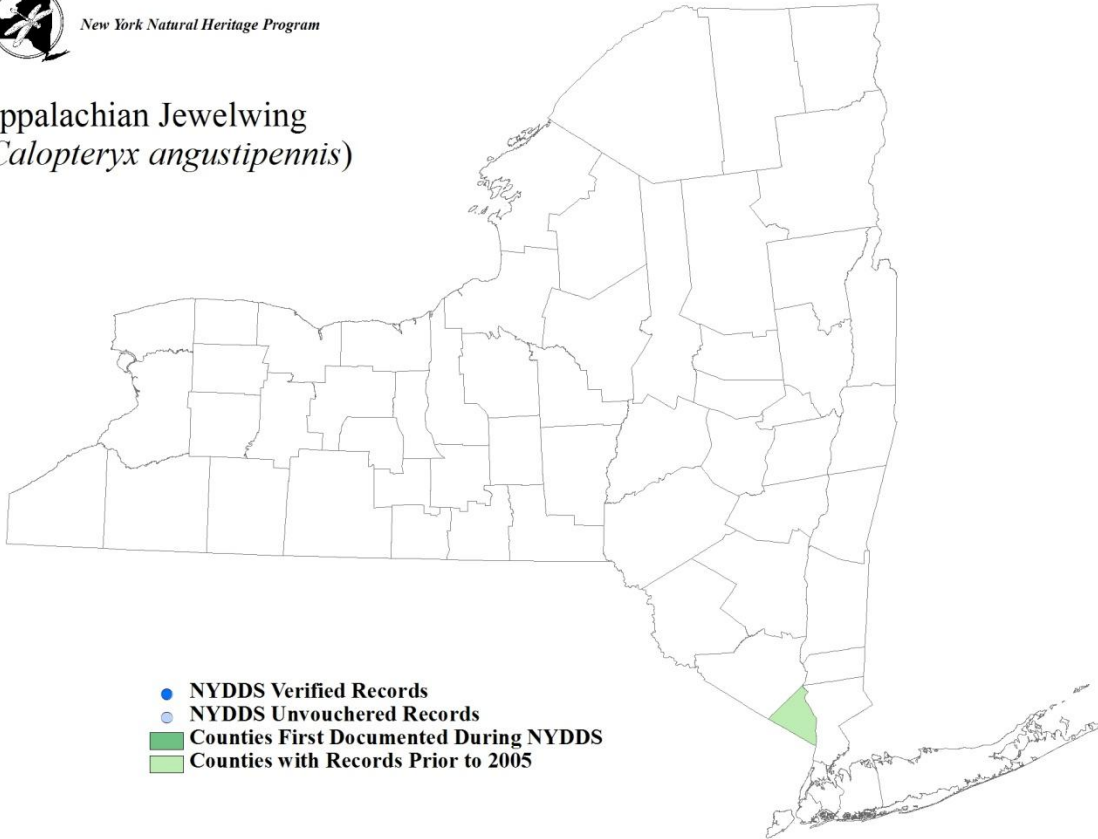
Society 2000), while mid-May through mid-July is the known flight window in Virginia (Lam 2004).





New York Natural Heritage Program

## Appalachian Jewelwing (*Calopteryx angustipennis*)



## CALOPTERYGIDAE

### Sparkling Jewelwing (*Calopteryx dimidiata*)

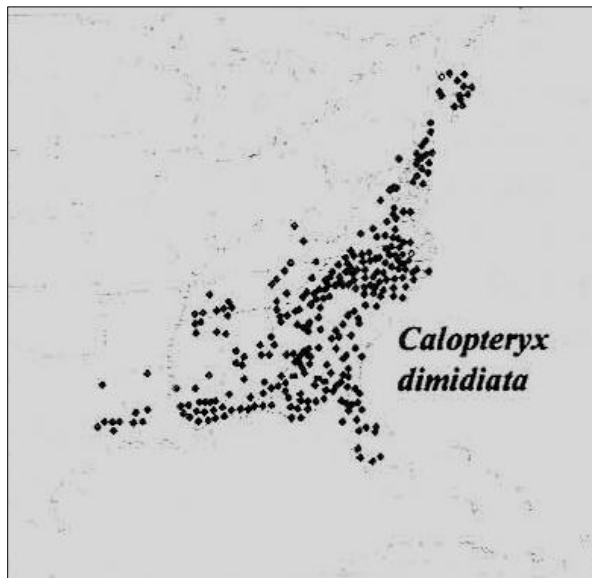
Pre-NYDDS Status: G5, SH

Draft Revised Status: SH

**Habitat Characteristics:** The habitat is unknown for Sparkling Jewelwing in New York, but in other northeastern states it includes sandy-bottomed and slow-flowing streams and rivers along the coastal plain (Lam 2004) with stands of eelgrass (Bangma & Barlow 2010) or other emergent vegetation (Nikula *et al.* 2003).



Blair Nikula



(Donnelly 2004b)

**Distribution and Inventory Needs:** This southern species ranges in the U.S. from Texas eastward to the Atlantic coast and northward to southern New Hampshire (Donnelly 2004b, Abbott 2010). *C. dimidiata* is ranked SH (state historical) in both Pennsylvania and New York (NatureServe 2009b). There are two confirmed records for New York without specific location or habitat information, one from Westchester county in 1973 and one from New York City in 1928 (Donnelly 1999). While heavy survey effort during the NYDDS and prior to the NYDDS in this portion of the state did not yield verified records for this species, it has recently been documented in nearby New Jersey (Bangma & Barlow 2010) and other adjacent states along the coastal plain (Abbott 2010),

so an occurrence for New York is within the realm of possibility.

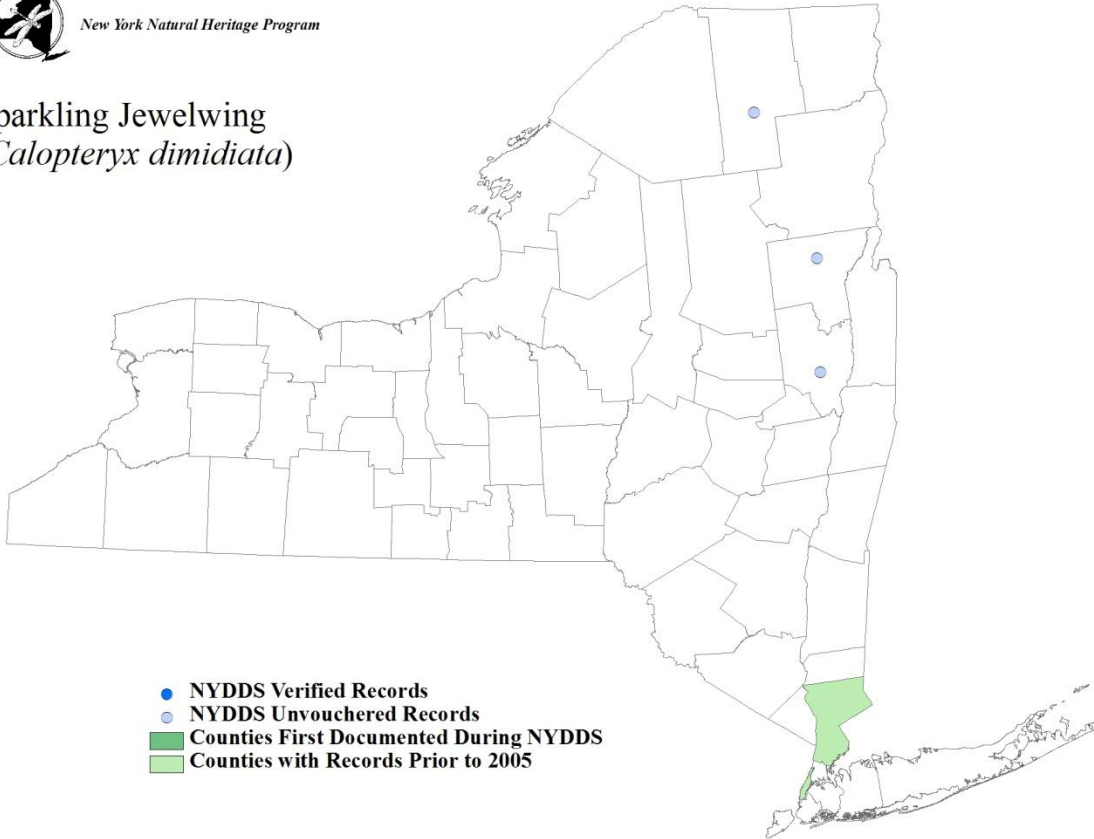
**Phenology:** *Calopteryx dimidiata* has been observed in flight from mid-May through mid-September in New Jersey (Bangma & Barlow 2010).





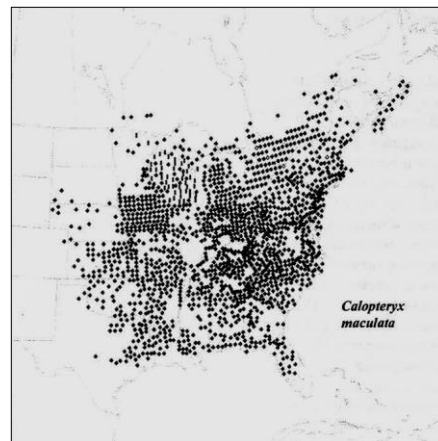
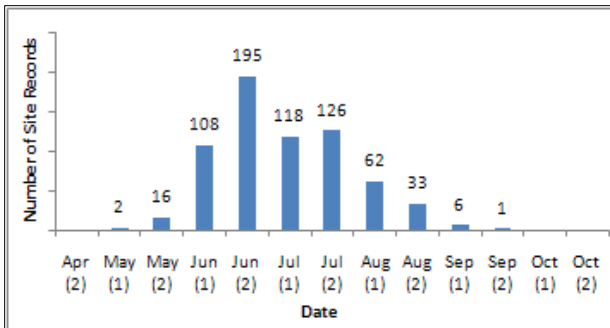
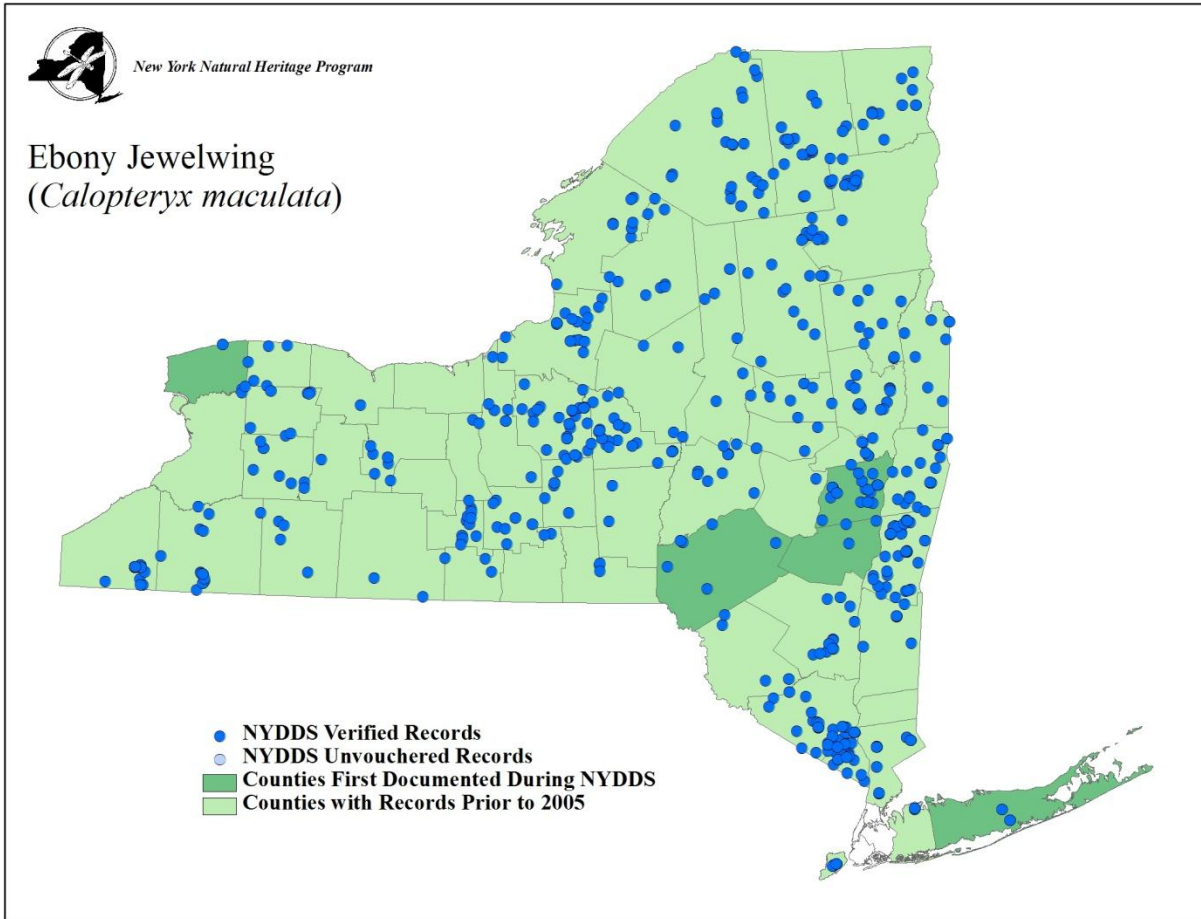
New York Natural Heritage Program

### Sparkling Jewelwing (*Calopteryx dimidiata*)





**CALOPTERYGIDAE**  
**Ebony Jewelwing (*Calopteryx maculata*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)



## CALOPTERYGIDAE

### American Rubyspot (*Hetaerina americana*)

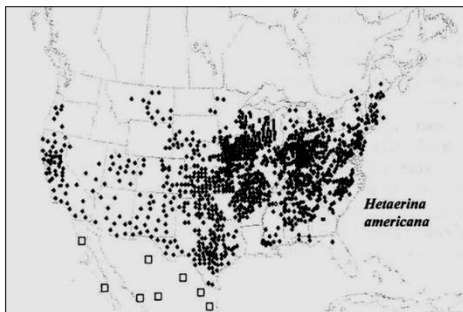
Pre-NYDDS Status: G5, S3

Draft Revised Status: S3

**Habitat Characteristics:** Throughout its wide range this species is a lotic habitat generalist. In New York it inhabits open, sunny, smaller to medium-sized creeks and small rivers, including rocky, swiftly-flowing streams with sandy bottoms in places. Other habitats for New York are more sluggish, muddy or silty creeks with well-vegetated banks. During the daytime, adults perch on and hunt from low vegetation along the banks and at night they form loose roosting aggregations (up to 65 individuals) on the side of the stream that receives early morning sun for thermoregulatory and anti-predator functions (Switzer & Grether 2000, Grether & Switzer 2000). Little is known of the larval habitat.



Meena Haribal 2009



(Donnelly 2004b)

**Distribution and Inventory Needs:** This species is widely distributed across the U.S. and Mexico, with the center of its distribution along the Oklahoma/Kansas border in the central/south mixed grasslands ecoregion. Johnson (1973) suggested that it was limited in its northern distribution by low temperature (although he did not indicate a mechanism), and this southern species does not range north of about 48 degrees north latitude. In New York, Rubyspots are near their northeastern range margin and have a disjunct distribution, being found primarily in far eastern (upper Hudson and Lake Champlain watersheds) and western (Lake Erie, southwest lake Ontario watersheds) New York. In western New York, many of the creeks (i.e., Tonawanda, Cayuga, Cazenovia, Cattaraugus, Buffalo) draining into Lake Erie east and south of Buffalo support populations, as do some of those draining north into Lake Ontario through Niagara County (Johnson, Oak Orchard). Most of the eastern New York records were from tributaries of the Hudson River, and one from a tributary of Lake Champlain (New York Natural Heritage Program 2010).

The distribution in central New York is much spottier. Here, there were repeated observations at Fall Creek in Tompkins County and a roadkill report in Ontario County near Canandaigua Creek. Further survey effort is needed in central New York to determine whether this species ranges more or less continuously across the state. The current disjunct distribution strongly suggests post-glacial colonization via separate pathways (Beatty & Beatty 1968); a coastal route up the Hudson and Champlain Valleys and a Great Lakes route with a putative contact zone in central New York.

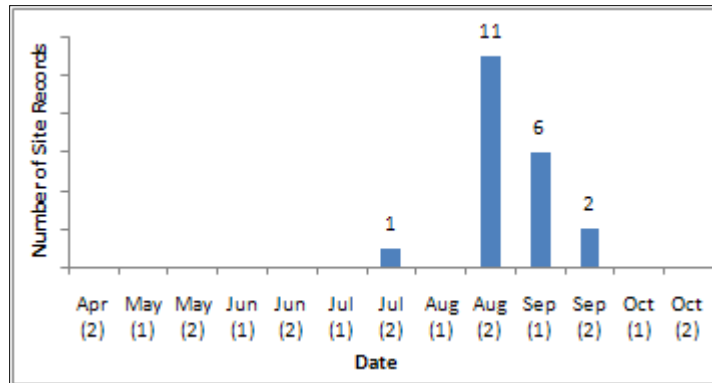
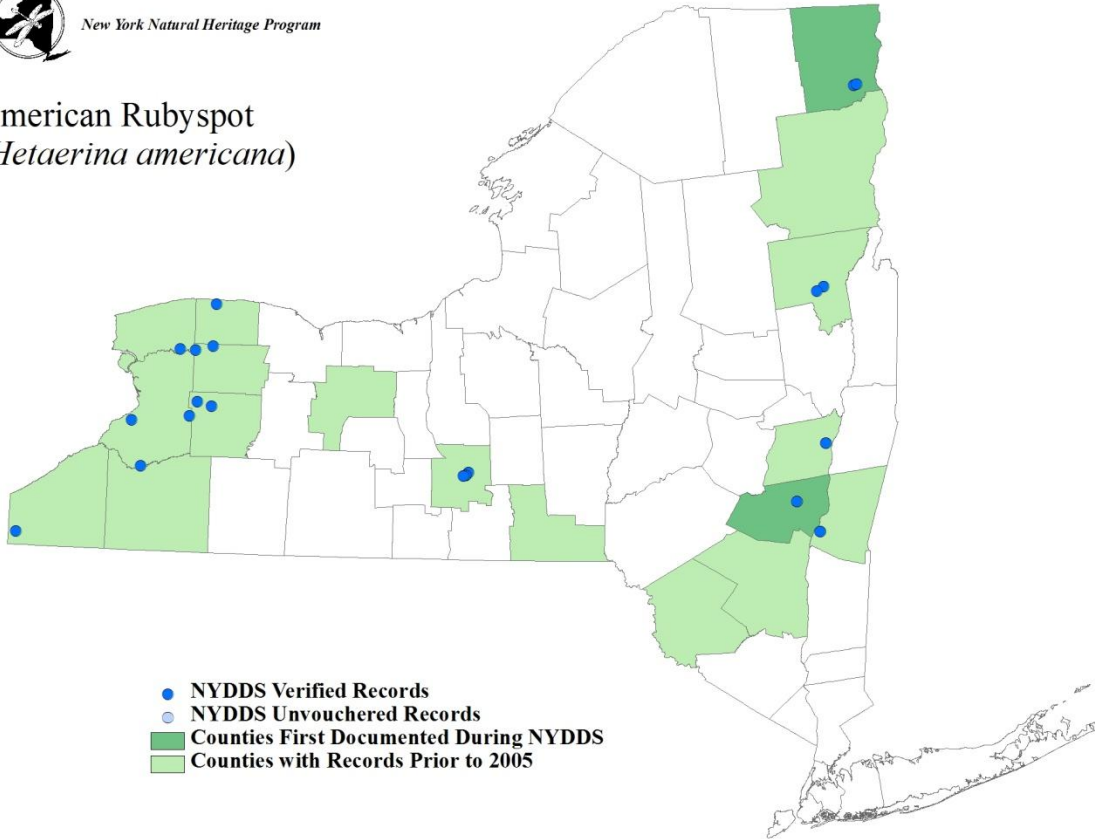
**Phenology:** This is a late-season damselfly, with about a five-week flight period from the very end of July to the first week of September, with most sightings coming in late August and early September in New York.





New York Natural Heritage Program

### American Rubyspot (*Hetaerina americana*)

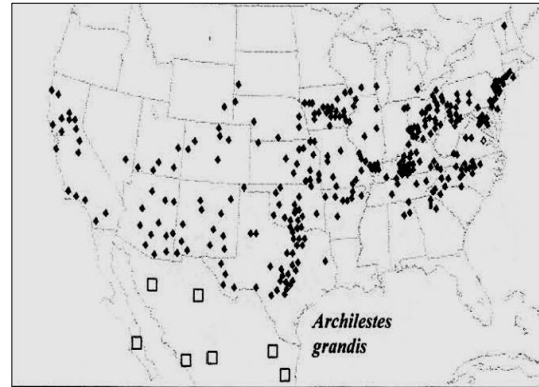
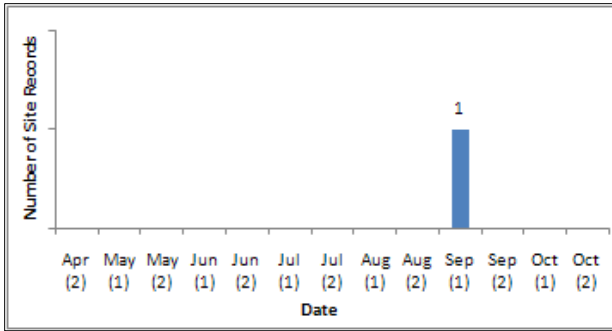
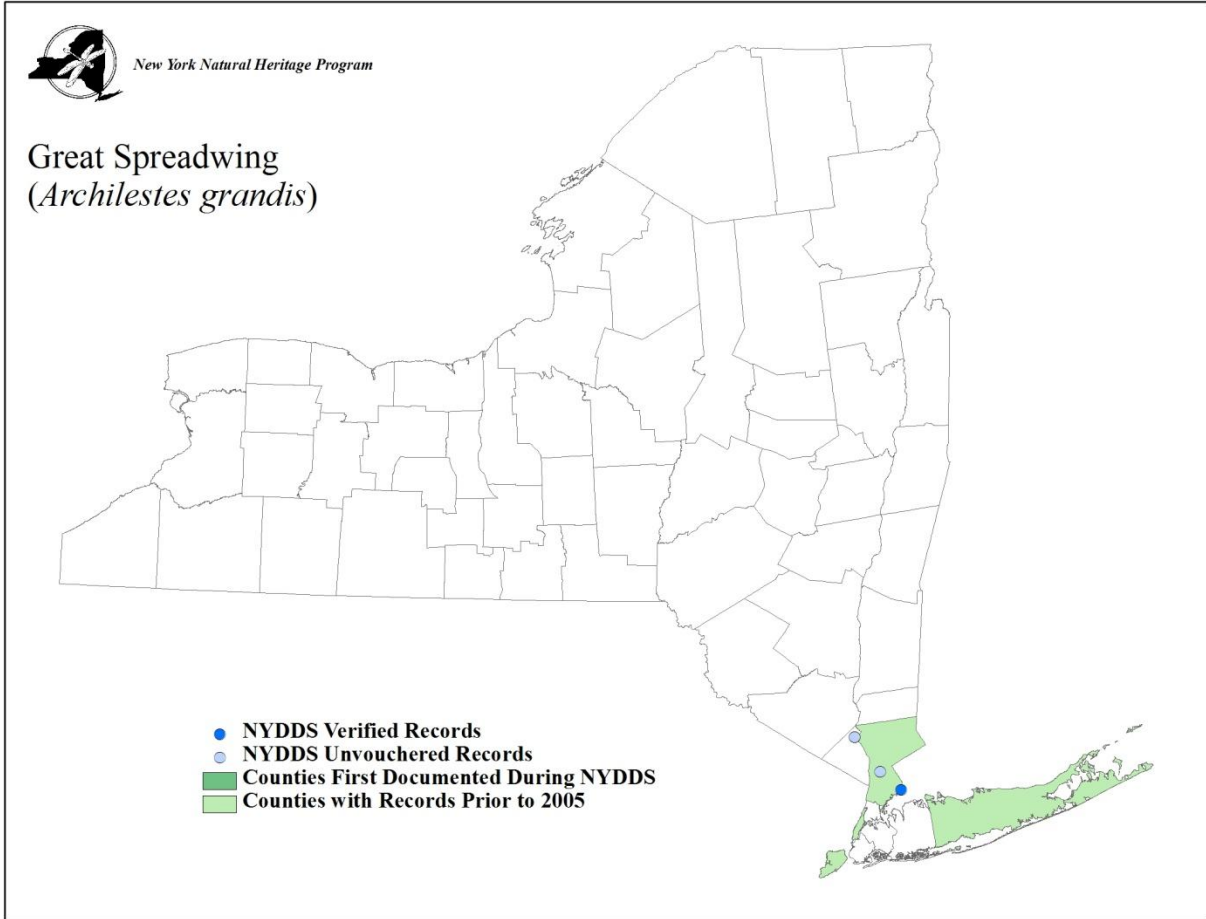


**LESTIDAE**

**Great Spreadwing (*Archilestes grandis*)**

**Pre-NYDDS Status: G5, SNA**

**Draft Revised Status: S1**



(Donnelly 2004b)

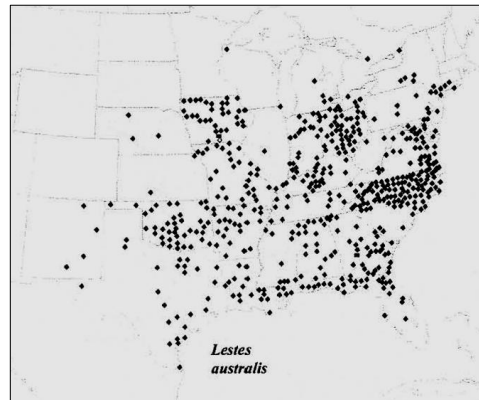
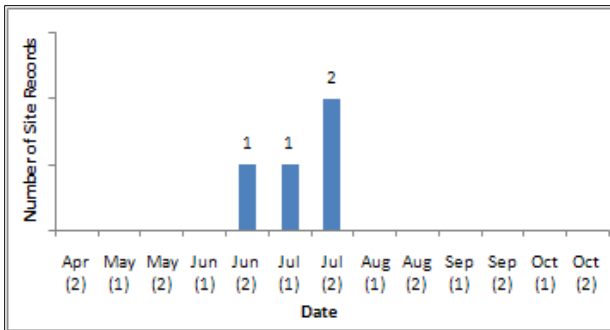
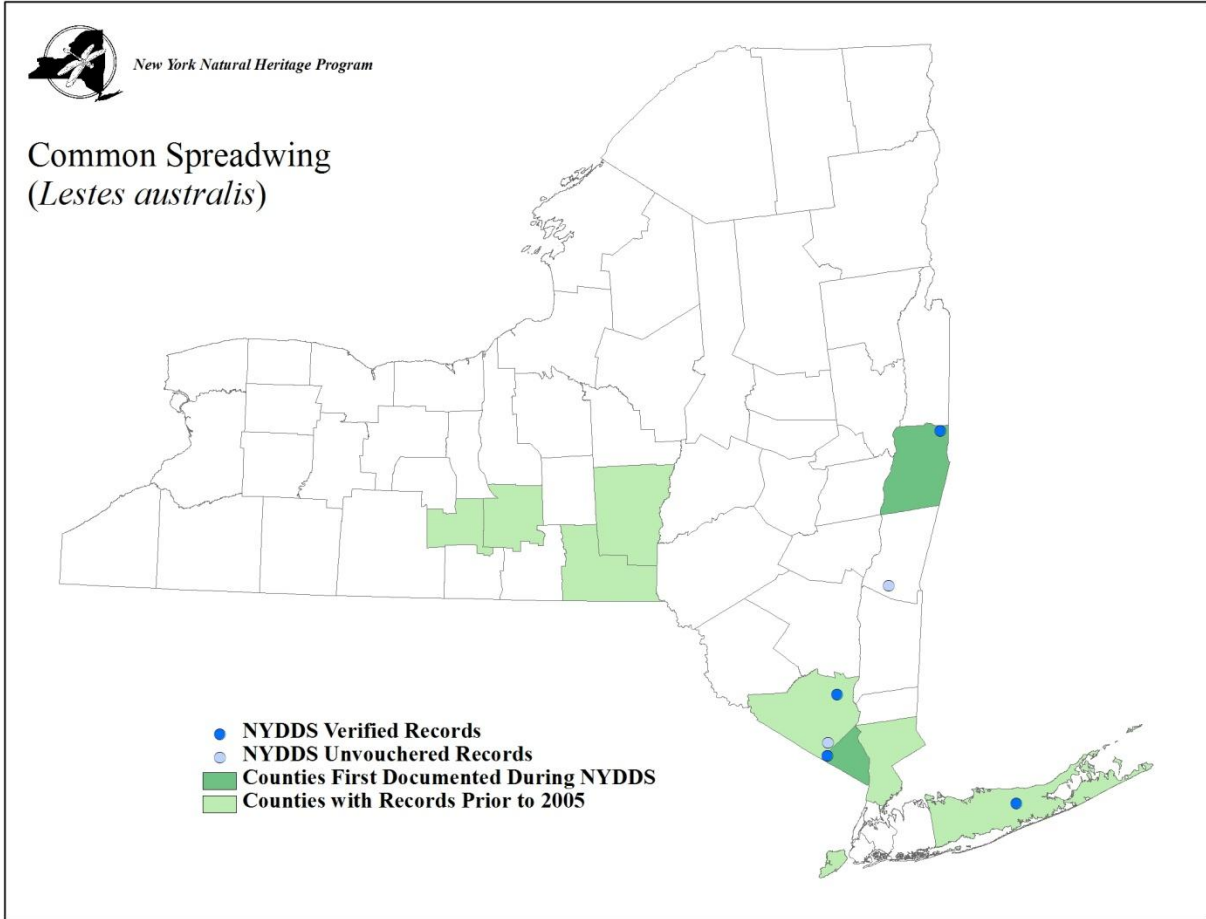


**LESTIDAE**

**Southern Spreadwing (*Lestes australis*)**

**Pre-NYDDS Status: G5, S3S4**

**Draft Revised Status: S2S3**



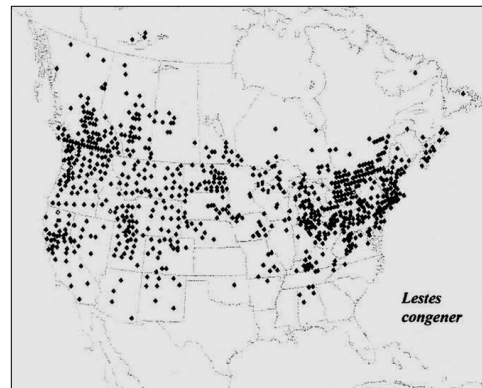
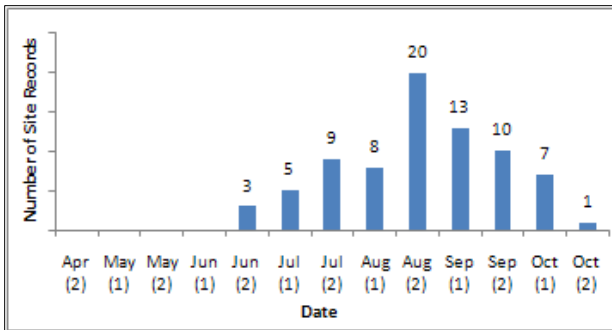
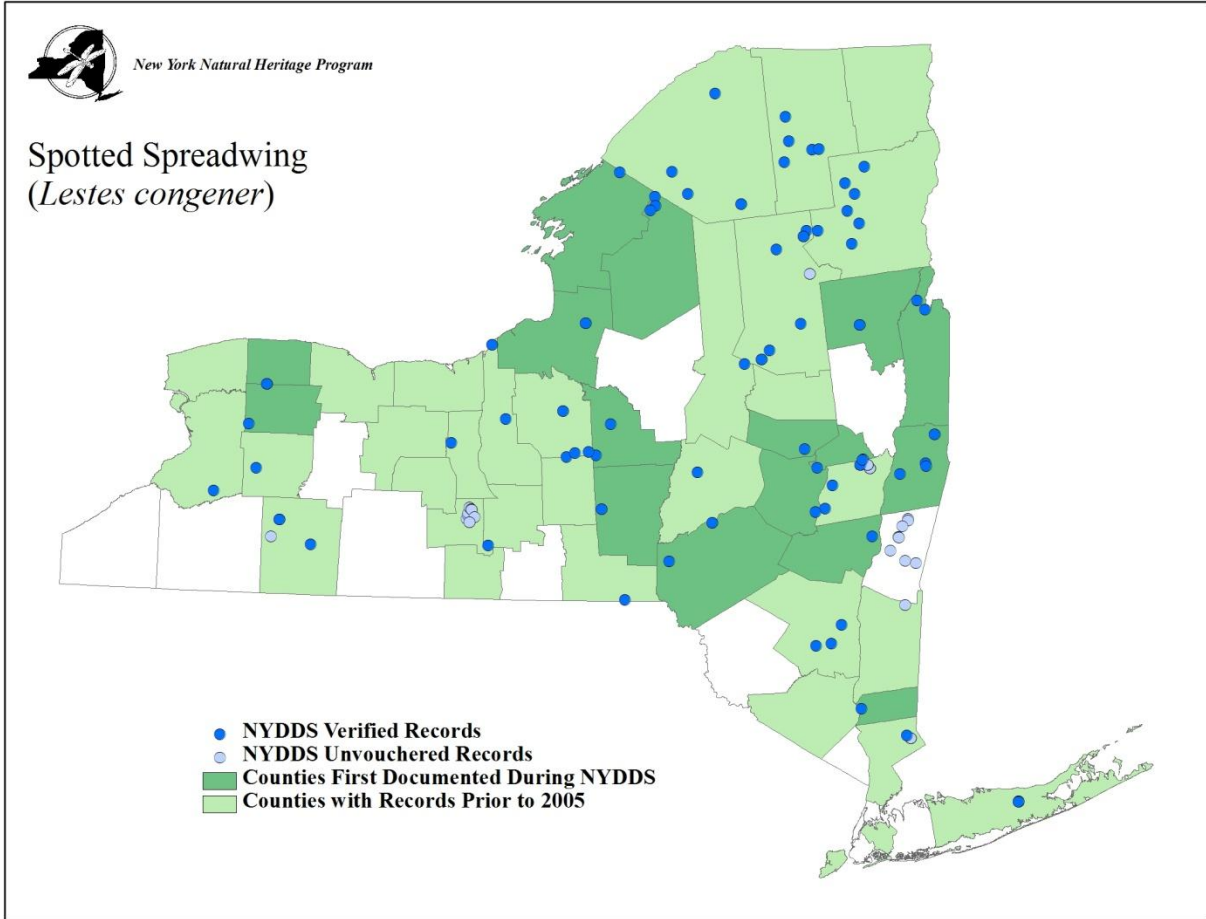
(Donnelly 2004b)



**LESTIDAE**

**Spotted Spreadwing (*Lestes congener*)**

**Pre-NYDDS Status: G5, S5**



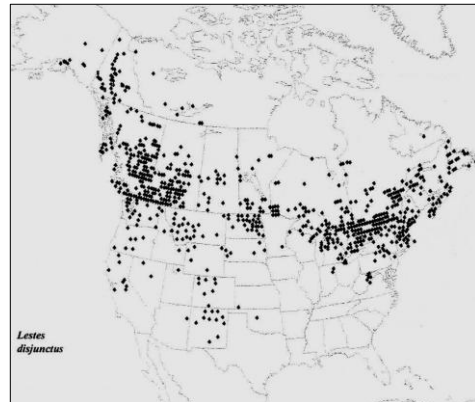
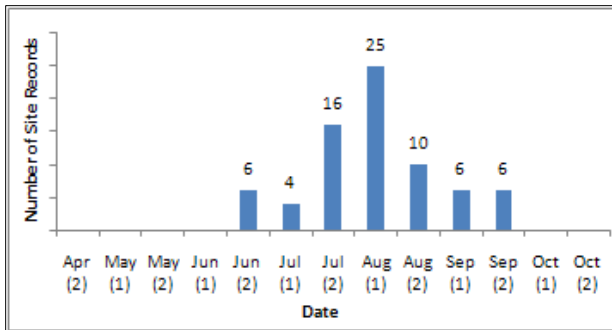
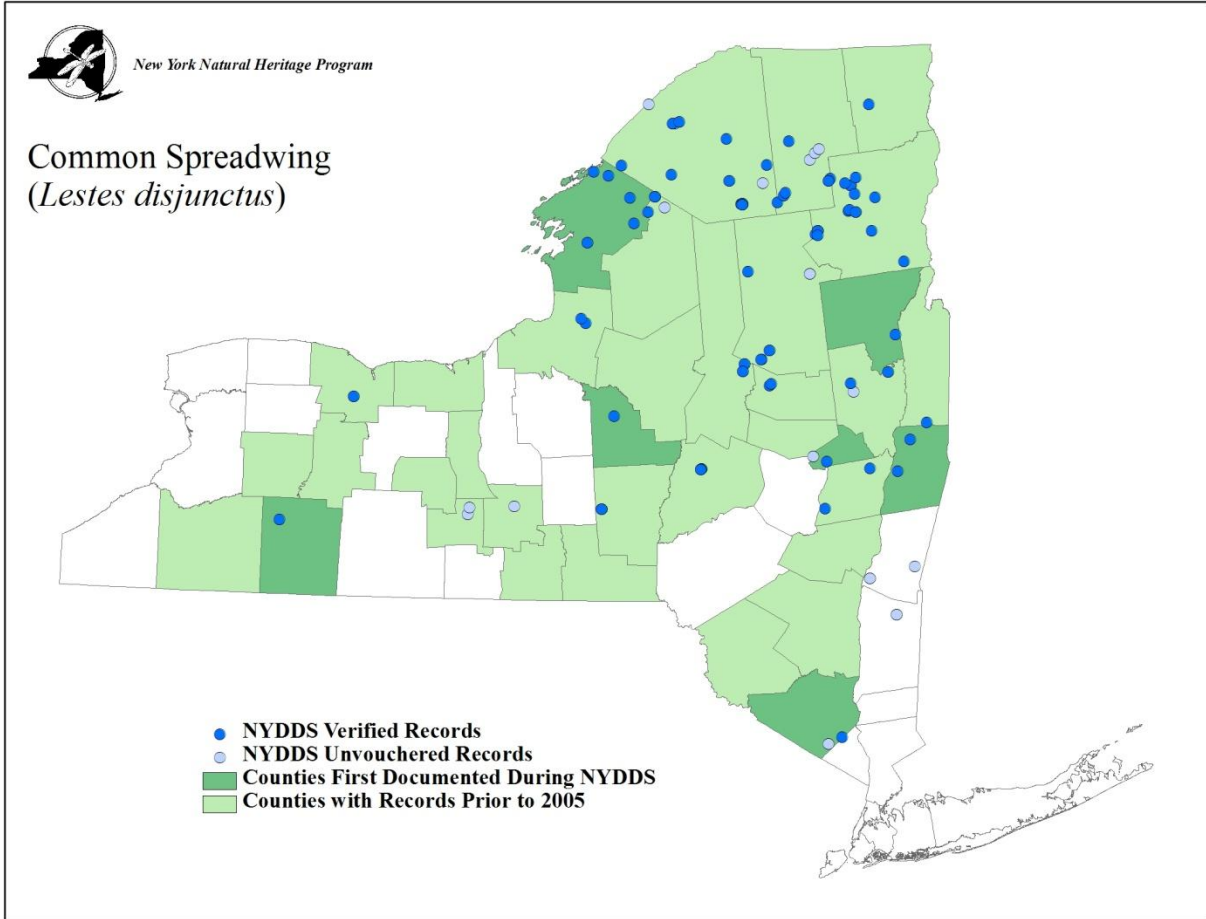
(Donnelly 2004b)



**LESTIDAE**

**Common Spreadwing (*Lestes disjunctus*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)

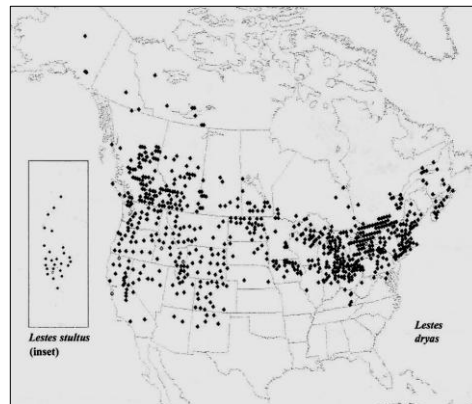
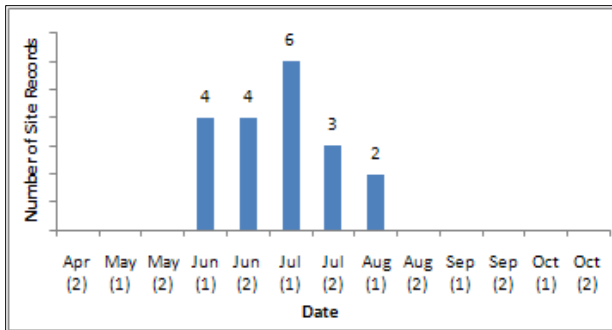
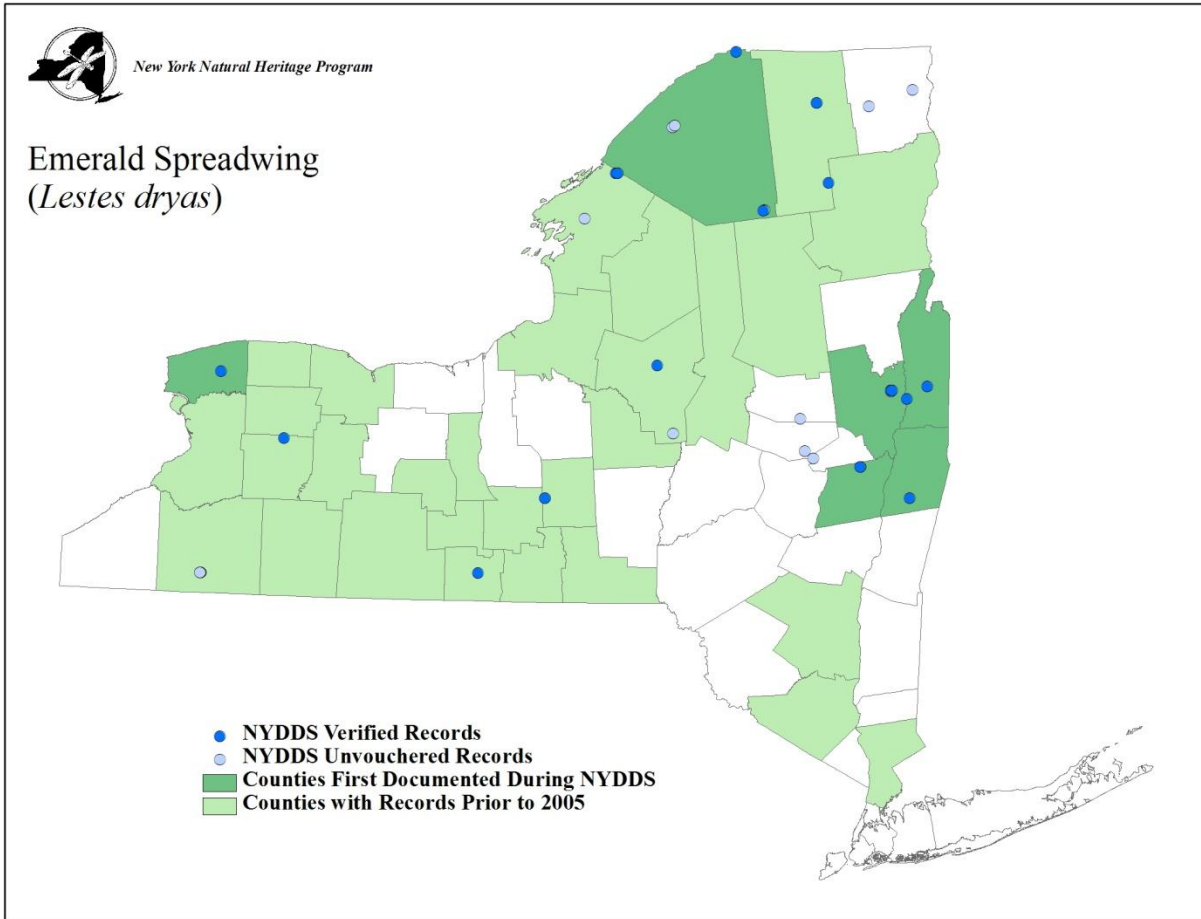


**LESTIDAE**

**Emerald Spreadwing (*Lestes dryas*)**

**Pre-NYDDS Status: G5, S4**

**Draft Revised Status: S3**



(Donnelly 2004b)

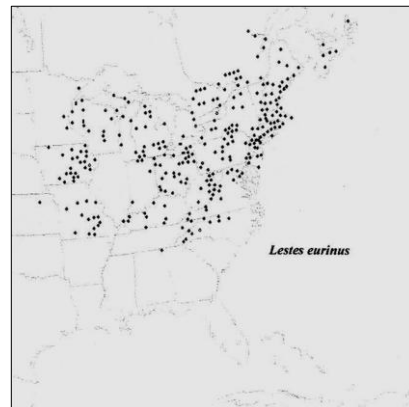
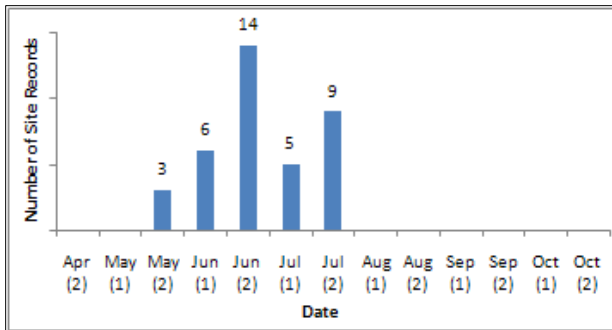
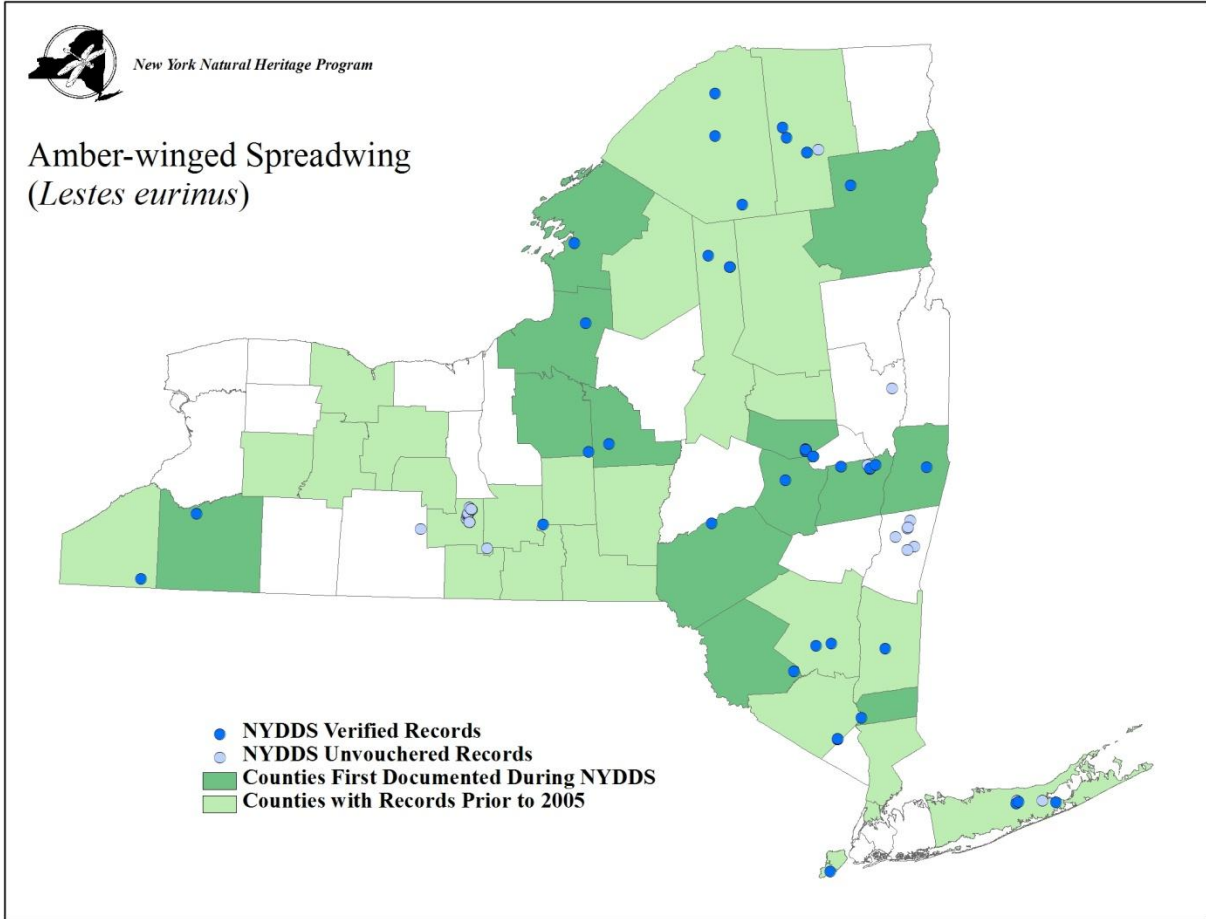




**LESTIDAE**

**Amber-winged Spreadwing (*Lestes eurinus*)**

**Pre-NYDDS Status: G4, S3S4**



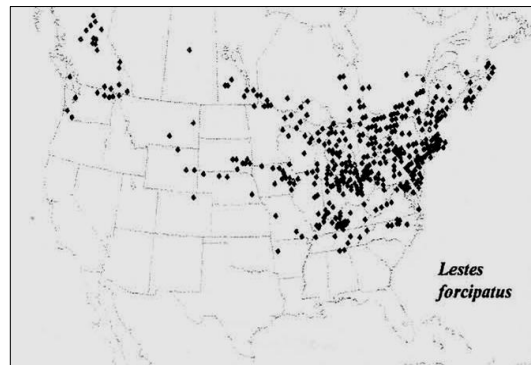
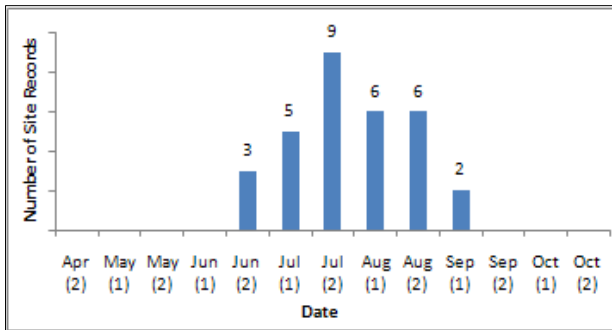
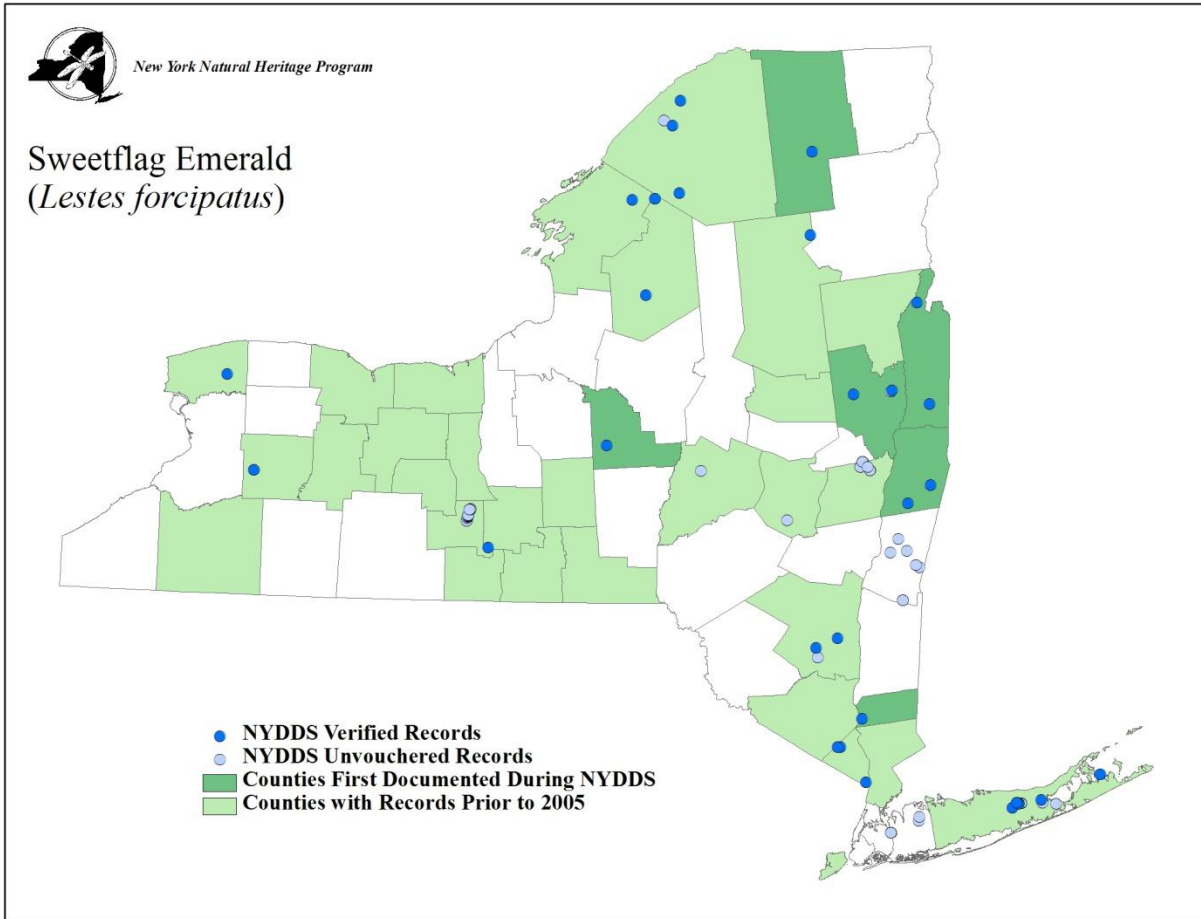
(Donnelly 2004b)



**LESTIDAE**

**Sweetflag Spreadwing (*Lestes forcipatus*)**

**Pre-NYDDS Status: G5, S5**



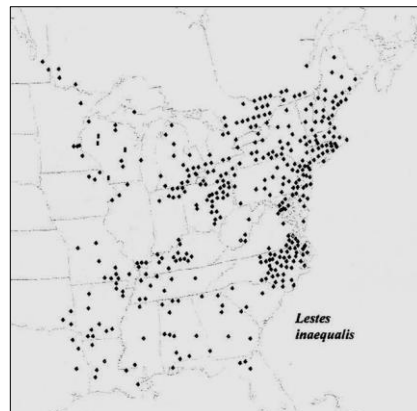
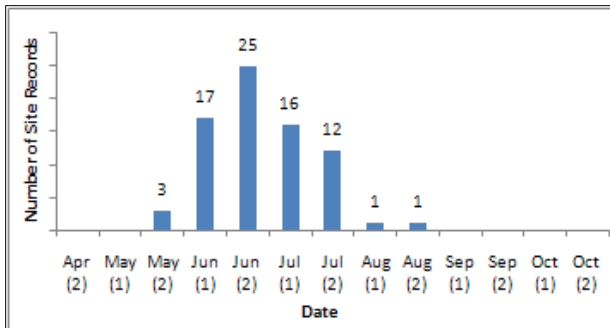
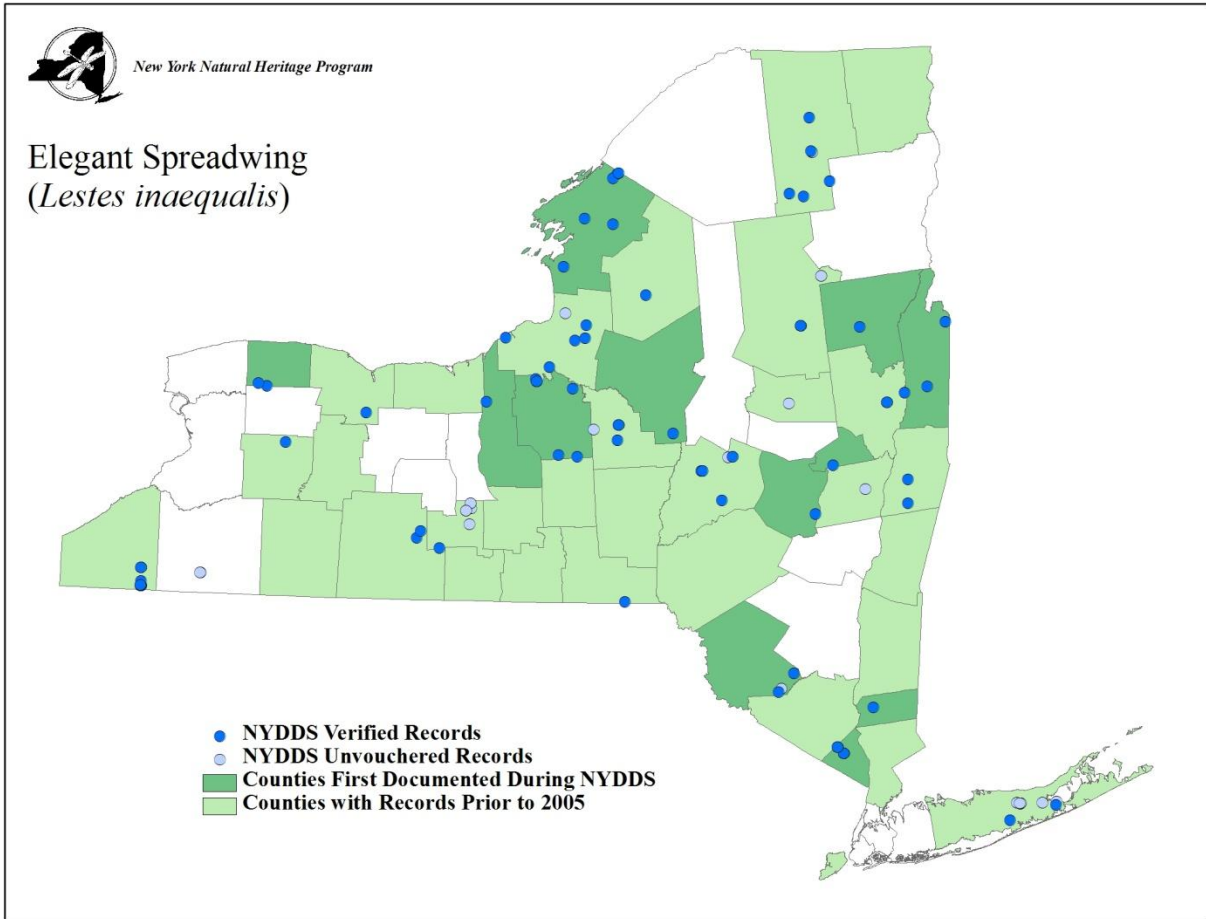
(Donnelly 2004b)



**LESTIDAE**

**Elegant Spreadwing (*Lestes inaequalis*)**

**Pre-NYDDS Status: G5, S5**



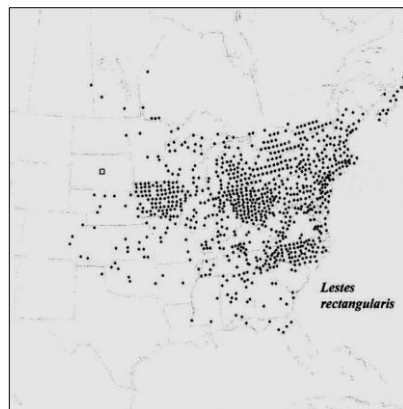
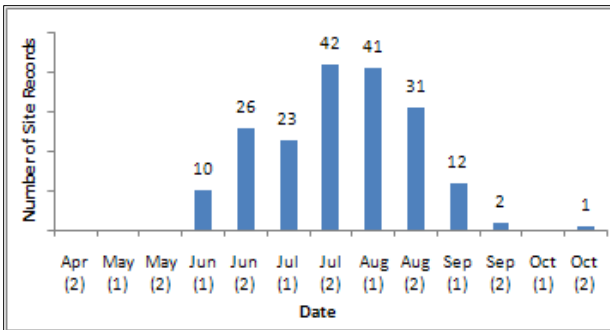
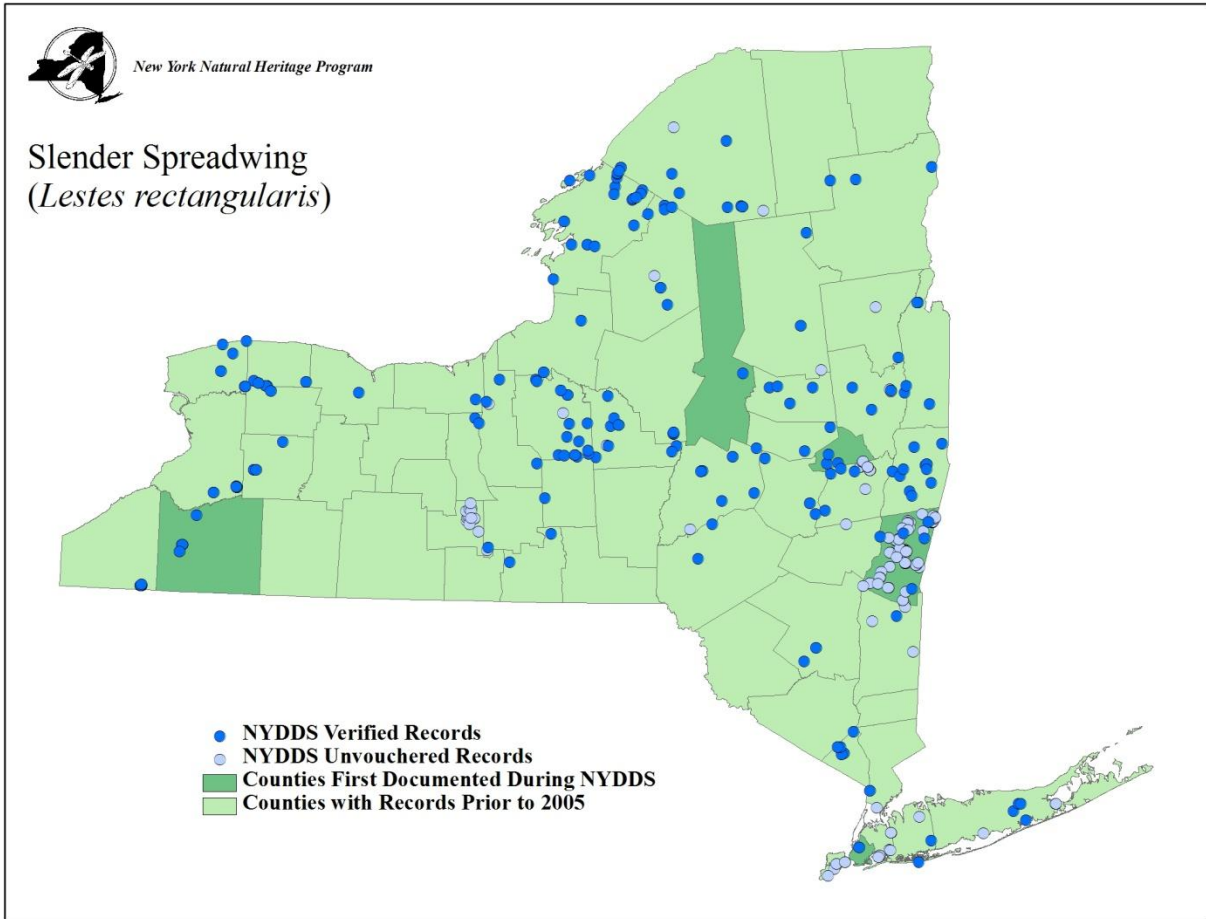
(Donnelly 2004b)



**LESTIDAE**

**Slender Spreadwing (*Lestes rectangularis*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)

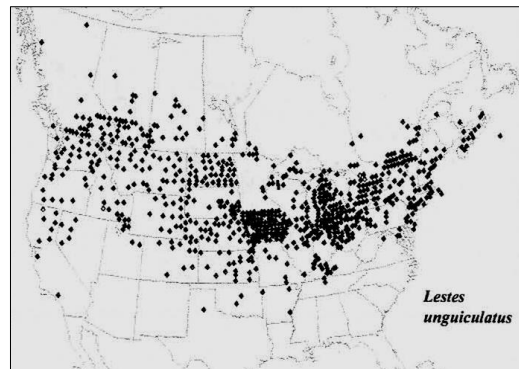
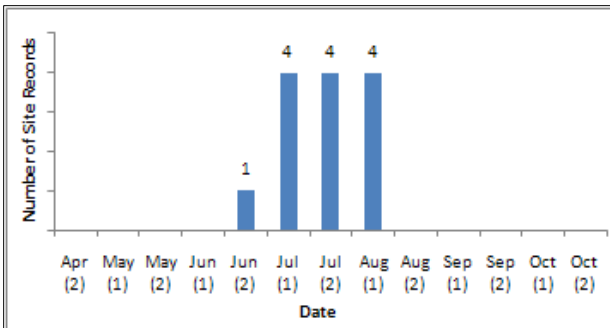
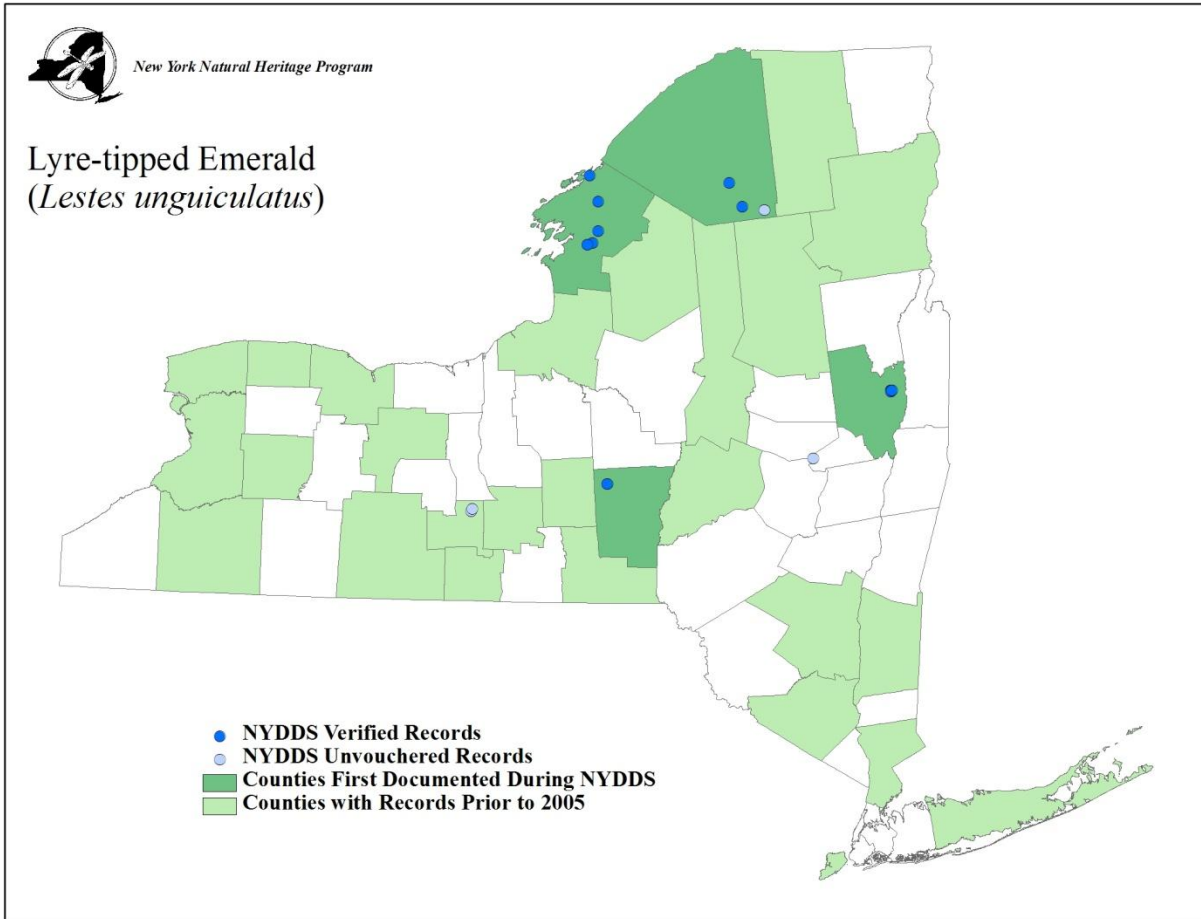


**LESTIDAE**

**Lyre-tipped Spreadwing (*Lestes unguiculatus*)**

**Pre-NYDDS Status: G5, S3S4**

**Draft Revised Status: S2S3**



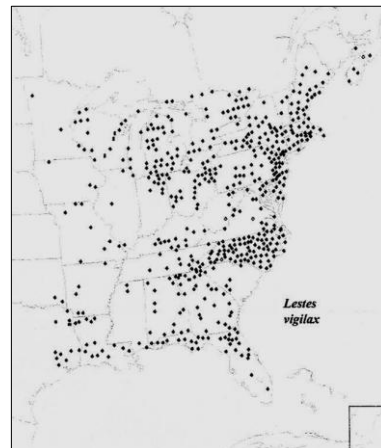
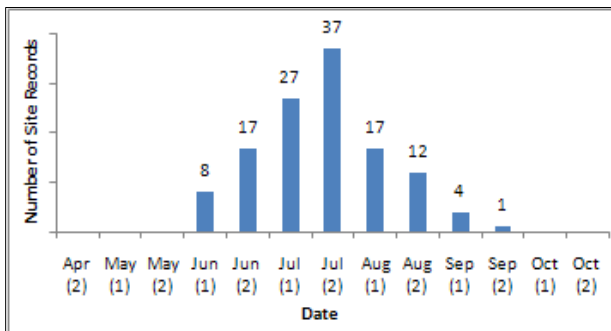
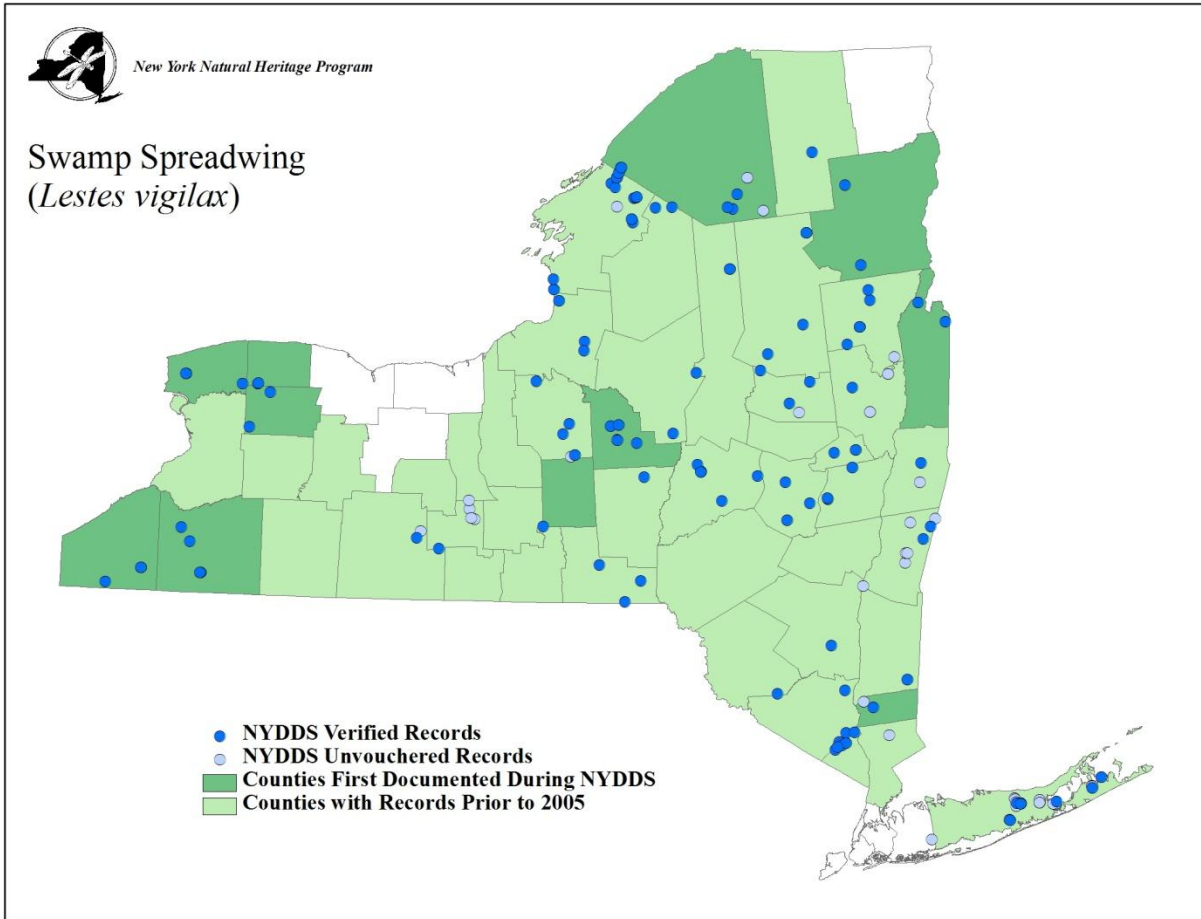
(Donnelly 2004b)



**LESTIDAE**

**Swamp Spreadwing (*Lestes vigilax*)**

**Pre-NYDDS Status: G5, S4**



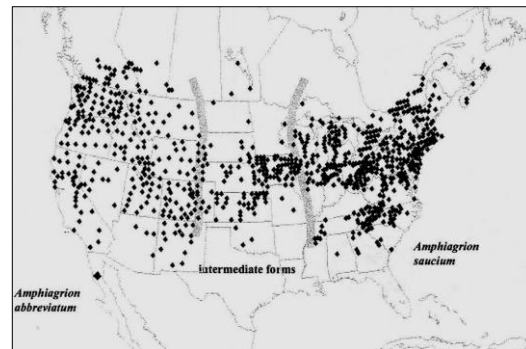
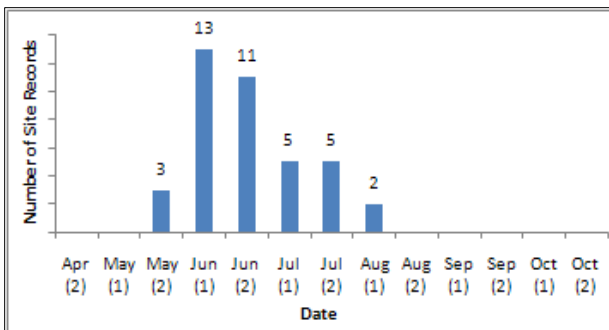
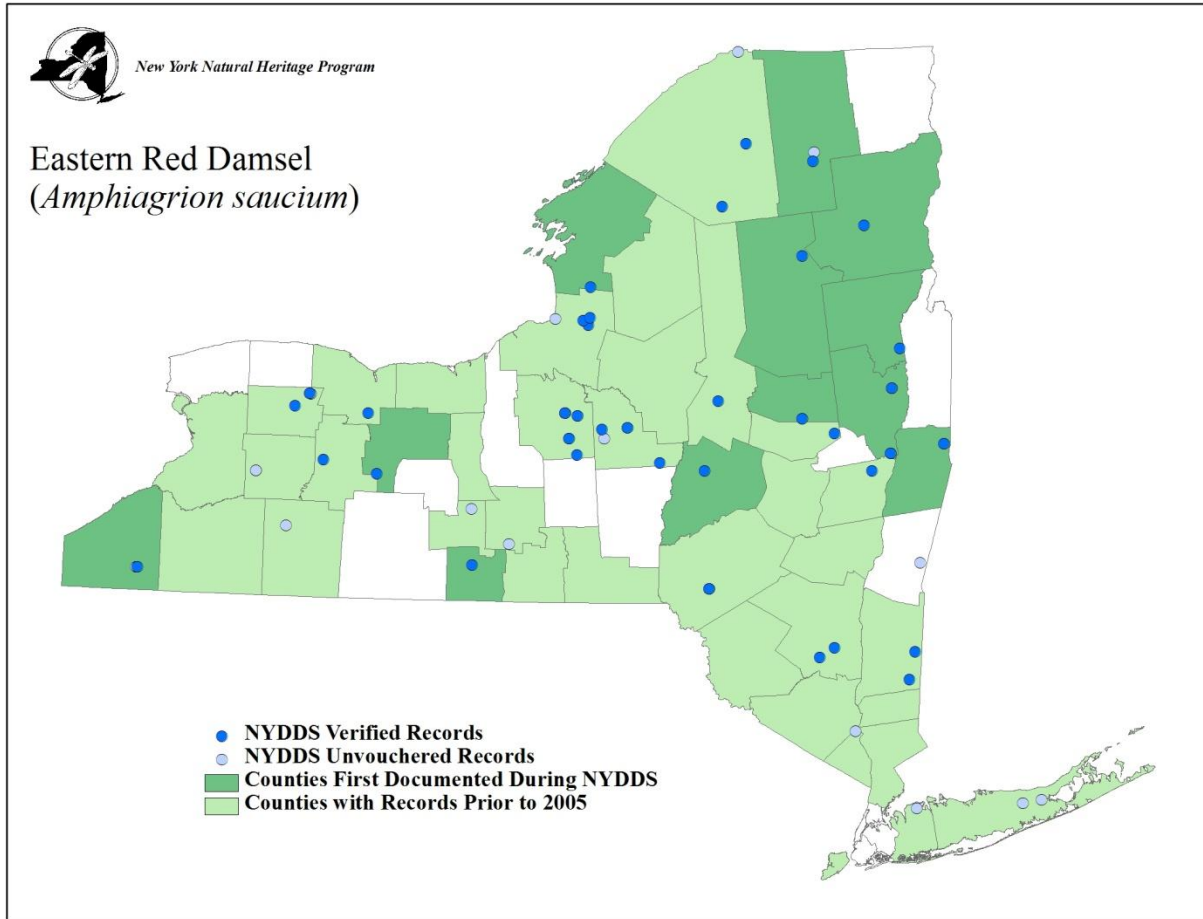
(Donnelly 2004b)



**COENAGRIONIDAE**

**Eastern Red Damsel (*Amphiagrion saucium*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)

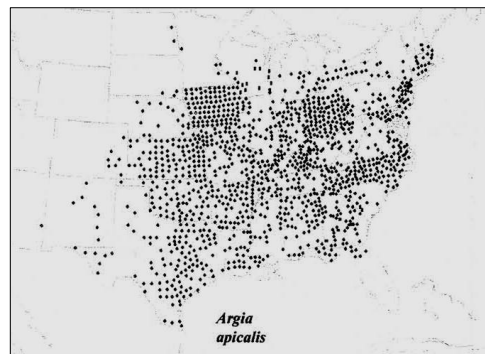
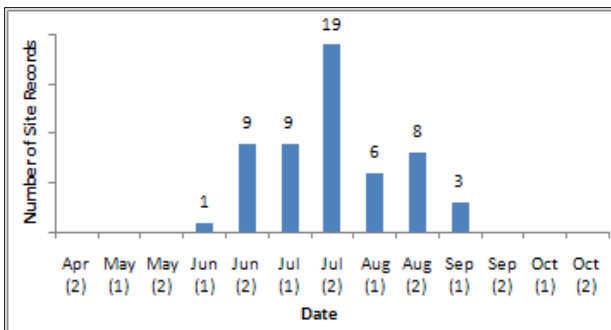
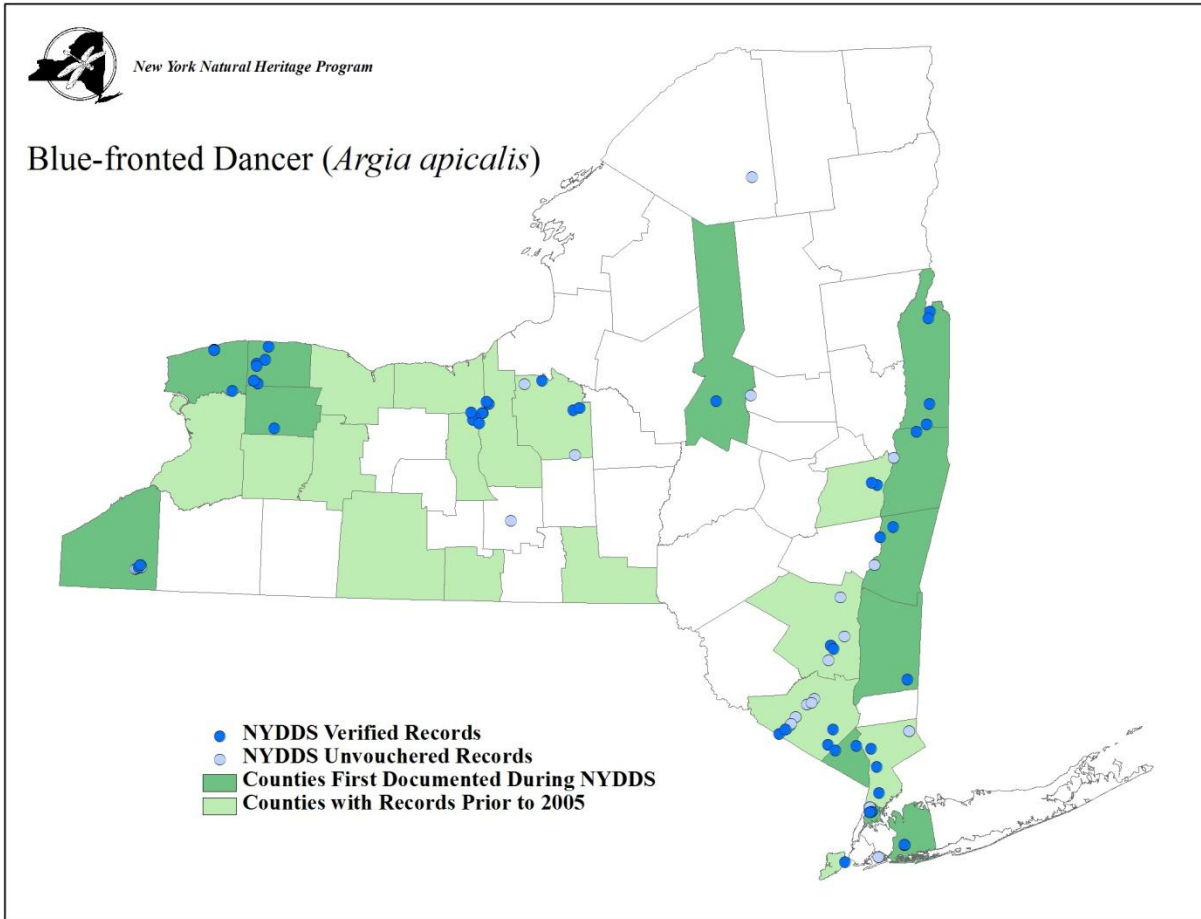


**COENAGRIONIDAE**

**Blue-fronted Dancer (*Argia apicalis*)**

**Pre-NYDDS Status: G5, S3**

**Draft Revised Status: S3**



(Donnelly 2004b)





## COENAGRIONIDAE

### Seepage Dancer (*Argia bipunctulata*)

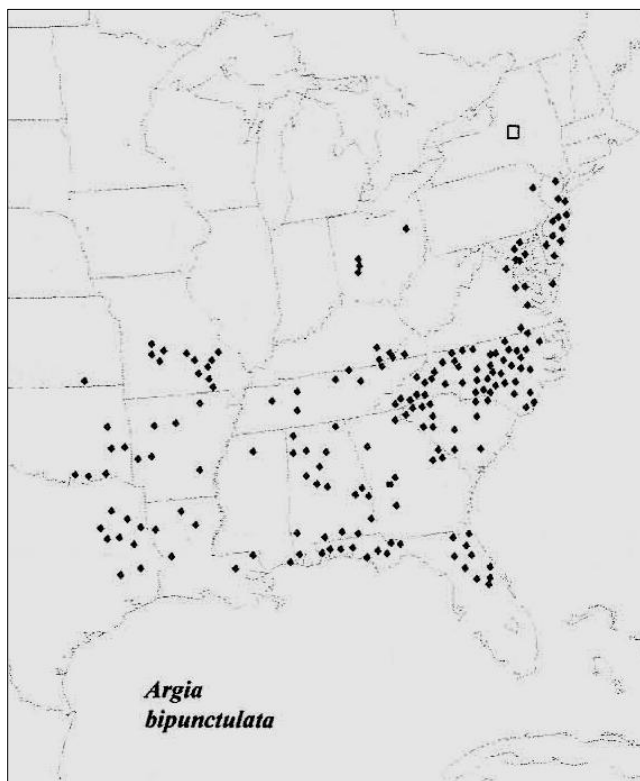
**Pre-NYDDS Status: G4, SH**

**Draft Revised Status: SH**

**Habitat Characteristics:** As this is a historical species in New York, the habitat in the state is unknown. In other parts of its range, it is found in grassy seeps, bogs, small lakes, ponds, and streams (Lam 2004, Bangma & Barlow 2010).



Bryan Pfeiffer, Wings Photography



(Donnelly 2004b)

**Distribution and Inventory Needs:** The species ranges from the south-central states eastward to the coast and northward to Pennsylvania and New Jersey (Donnelly 2004b). There are recent records from these adjacent states as well as Ohio (Bangma & Barlow 2010, NatureServe 2009b, The Ohio Odonata Society 2000), but the last confirmed record in New York was from the 1890s and attributed only to NYS without specific location information (Donnelly 1999). For this reason, no distributional map was generated for this species. As this is a more southern species with records from Pennsylvania and New Jersey, if it shows up again in New York, it will likely be in the southern portion of the state (Donnelly 2004b).

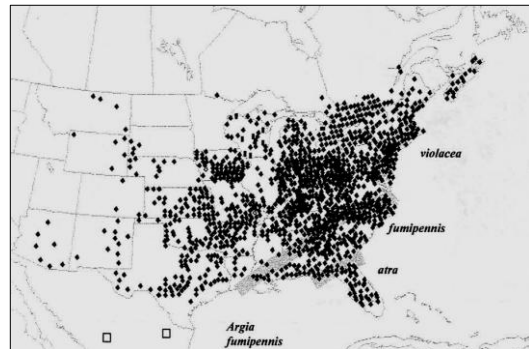
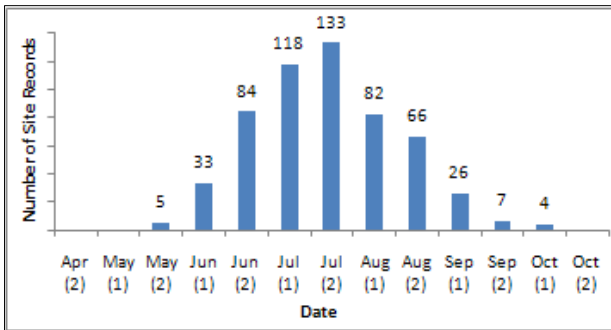
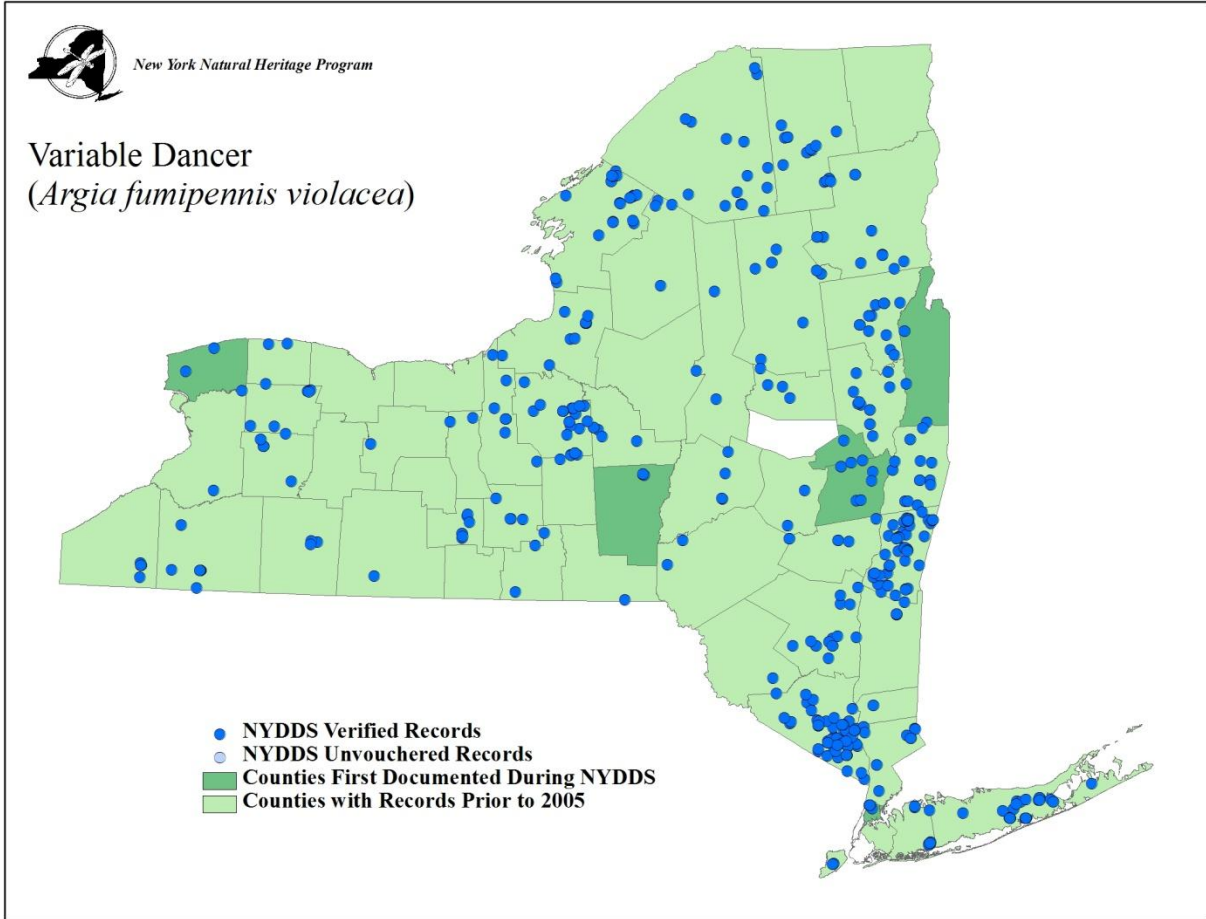
**Phenology:** In Ohio, adults are known to fly from June through mid-September (The Ohio Odonata Society 2000), while in New Jersey they may show up as early as mid-May (Bangma & Barlow 2010).



**COENAGRIONIDAE**

**Variable Dancer (*Argia fumipennis violacea*)**

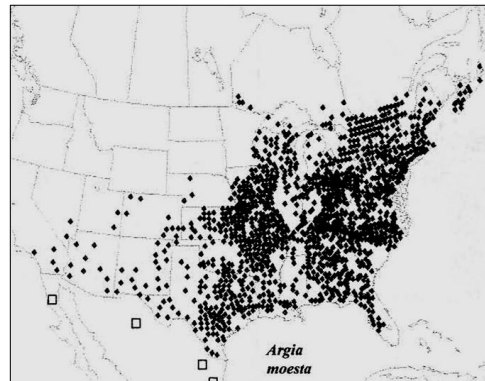
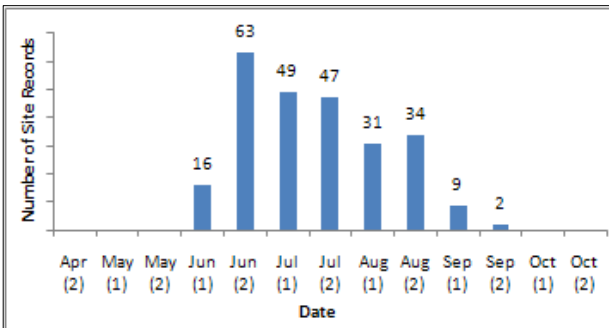
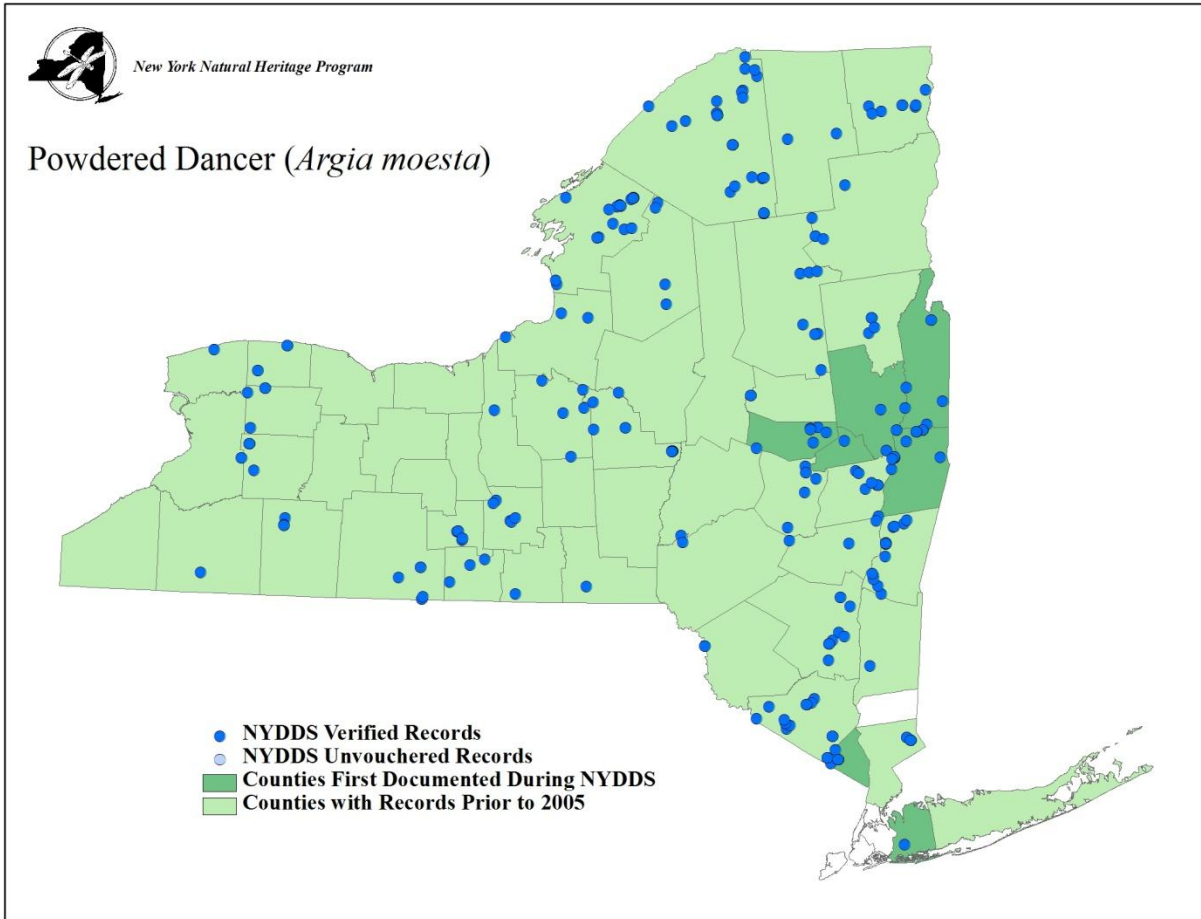
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)



**COENAGRIONIDAE**  
**Powdered Dancer (*Argia moesta*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)



## COENAGRIONIDAE

### Blue-tipped Dancer (*Argia tibialis*)

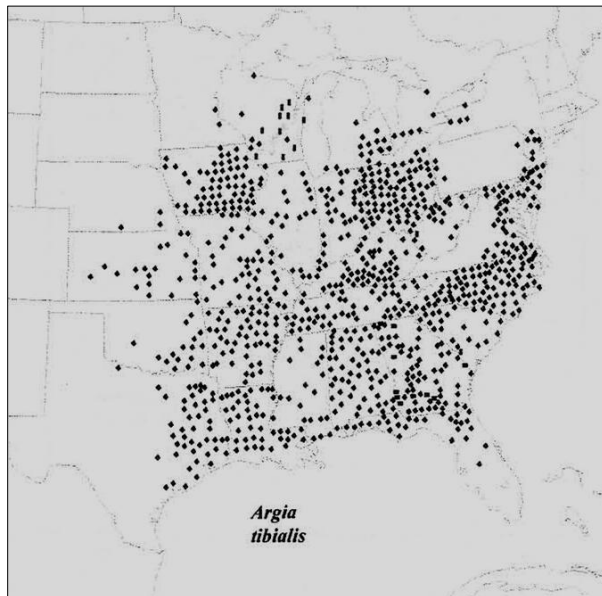
Pre-NYDDS Status: G5, S2

Draft Revised Status: S3

**Habitat Characteristics:** Blue-tipped Dancers are known to occur in a variety of habitats in the northeast including fast or slow-flowing rivers and streams, swamps, and ponds (Lam 2004). In New York, however, they are known from only river and stream habitats (New York Natural Heritage Program 2010).



Jeremy Martin 2006



(Donnelly 2004b)

**Distribution and Inventory Needs:** *Argia tibialis* ranges from the gulf coast of the U.S. northward into southern Ontario and throughout the central United States eastward to the Atlantic coast and northward into New York State (Donnelly 2004b, Abbott 2010), so New York lies in the northeast corner of its range. Within New York, Blue-tipped Dancers occur in the Allegheny River watershed from three rivers and creeks in Chautauqua county, at least two creeks in the Lake Erie watershed, five lotic waters in southwestern Lake Ontario, four to six locations in southeastern Lake Ontario, one occurrence in the Lower Hudson, and many points along the Wallkill River in Orange county within the Upper Hudson watershed (New York Natural Heritage Program 2010).

Many locations were added during the NYDDS, and the species will likely be found at more locations within these watersheds in the future. NYDDS records from Madison and Onondaga counties represent the most northeastern locations known throughout the entire species' range (Abbott 2010). Based on the new information from the last five years, a revision of the state rank to an S3 is suggested.

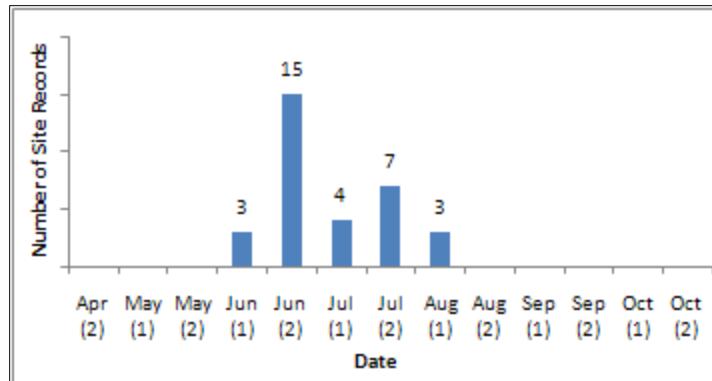
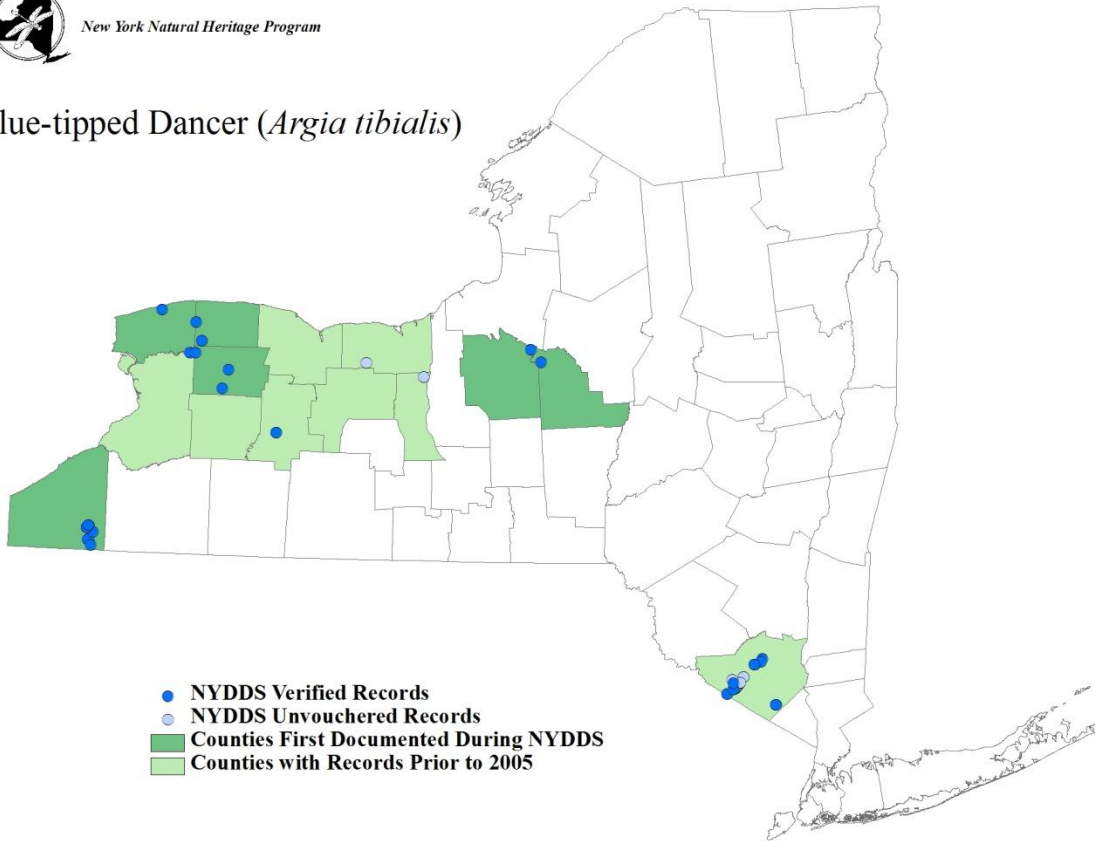
**Phenology:** In recent years pre-NYDDS and during, adults were documented in New York between mid-June and early September, with most records in late June (New York Natural Heritage Program 2010).





New York Natural Heritage Program

### Blue-tipped Dancer (*Argia tibialis*)

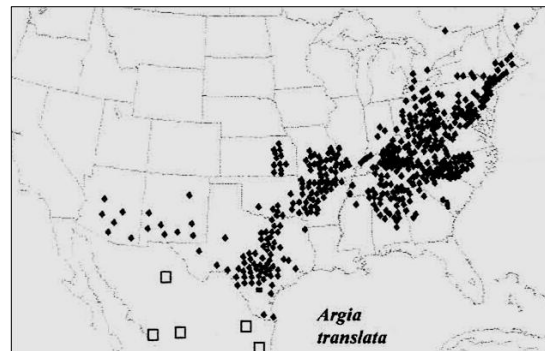
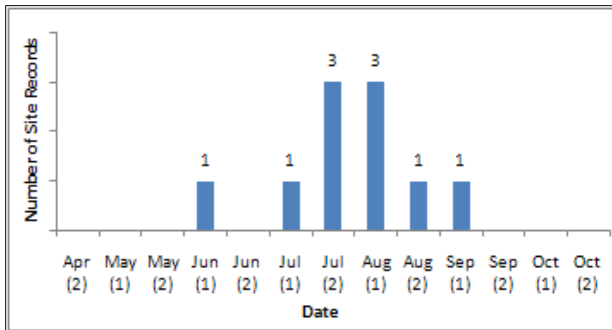
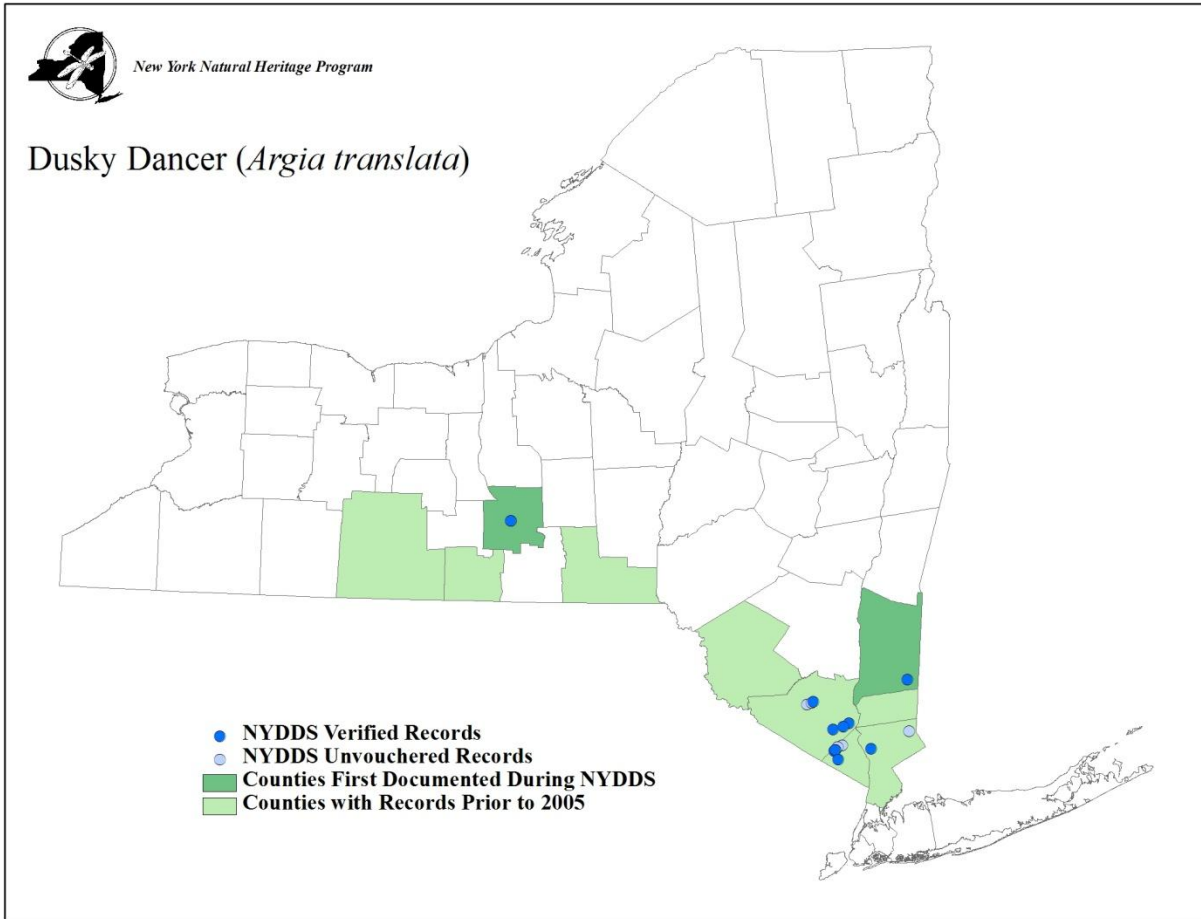


**COENAGRIONIDAE**

**Dusky Dancer (*Argia translata*)**

**Pre-NYDDS Status: G5, S3**

**Draft Revised Status: S1**



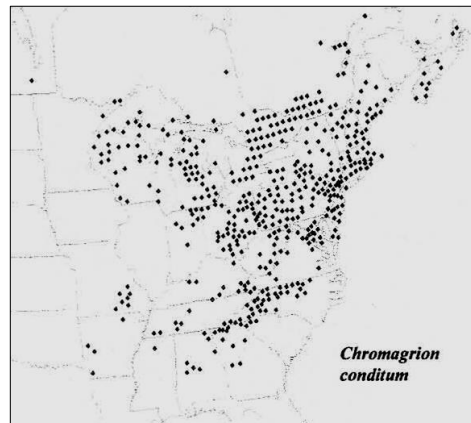
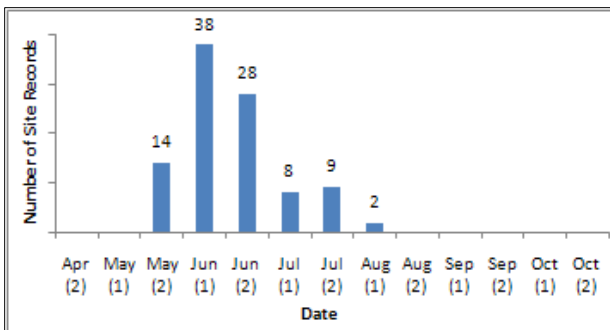
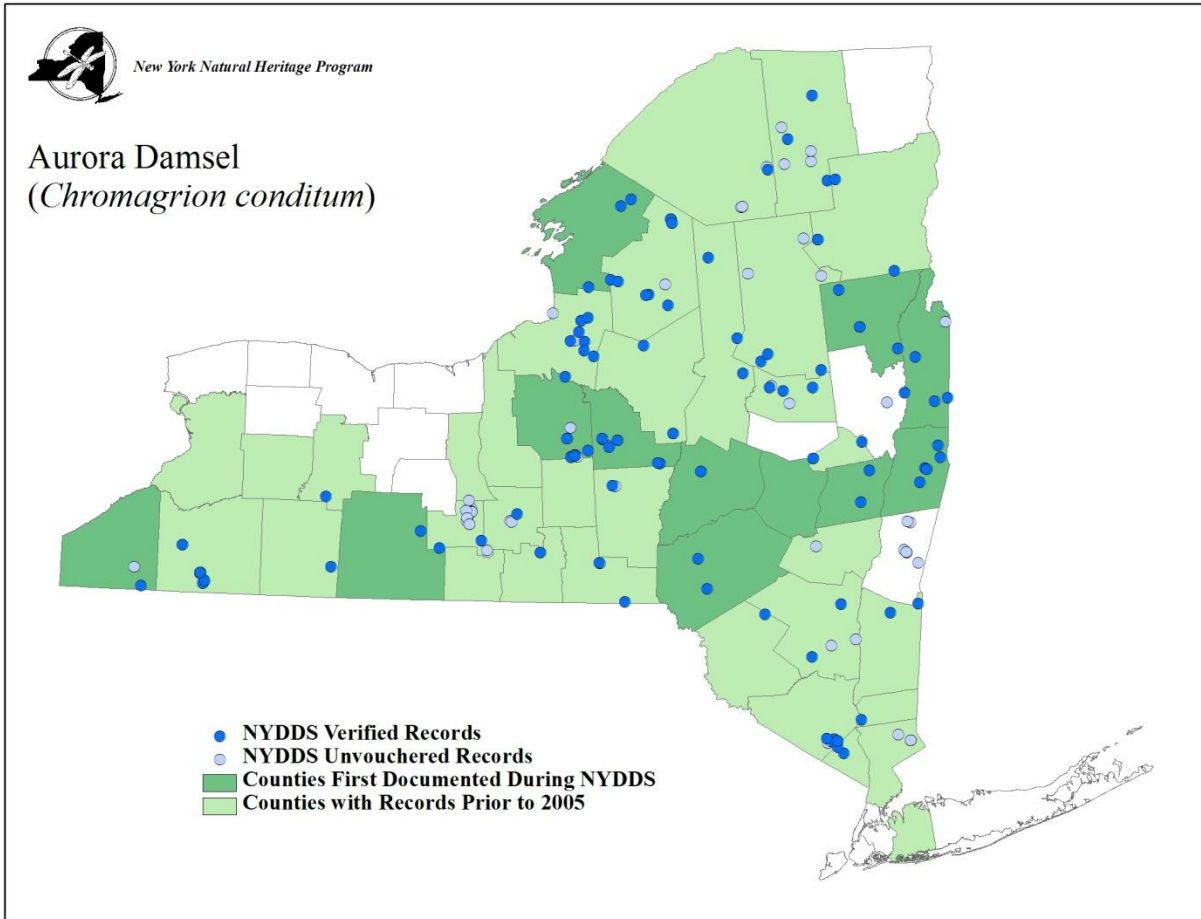
(Donnelly 2004b)



**COENAGRIONIDAE**

**Aurora Damsel (*Chromagrion conditum*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)



## COENAGRIONIDAE

### Subarctic Bluet (*Coenagrion interrogatum*)

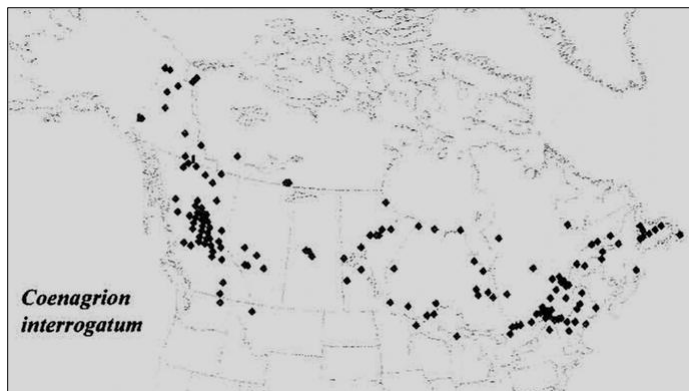
Pre-NYDDS Status: G5, S1S3

Draft Revised Status: S1

**Habitat Characteristics:** Subarctic Bluets are found in open fens, bogs, bog-bordered ponds, and marshes with cool water and are most commonly found in these habitats that contain abundant floating aquatic moss such as *Sphagnum* spp. (Jones 2005, Fleckenstein 2006, Wisconsin Odonata Survey 2009, DuBois *et al.* 2005, Cannings & Cannings 1997).



Denis A. Doucet



(Donnelly 2004b)

### Distribution and Inventory Needs:

The Subarctic Bluet ranges from Alaska and the Yukon Territory eastward across Canada to Newfoundland, Labrador, and Nova Scotia. In the northern U.S., it has been confirmed in the northern reaches of the following states: Washington, Montana, Wisconsin, New York, Vermont, New Hampshire, and Maine (Abbott 2010), but is mainly a Canadian bluet. They do not appear to occur north of the Arctic treeline

(Cannings & Cannings 1997, Corbet 2003). In New York (at the southern edge of its range), it has been documented at two locations in Franklin County in 1993 in the vicinity of Paul Smiths (Donnelly 1999). There were no records for this species during the NYDDS despite searching in and near one of the known locations and other locations throughout northern New York.

**Phenology:** A chart was not generated for this species since there were no records during the NYDDS. For the two New York records in 1993, adults were observed on the 12<sup>th</sup> and 19<sup>th</sup> of June (Donnelly 1999). The known flight season is from late May through mid-August throughout its range (Wisconsin Odonata Survey 2009, Fleckenstein 2006). Capture has been known to decline after mid-July (Cannings & Cannings 1997). Corbet (2003) hypothesized that individuals at the northern portion of their range may emerge earlier than southern ones, responding to temperature and photoperiod. On the same date in the spring, the photoperiod is longer as latitudes become more northern, and Corbet (2003) suggests that this bluet, as well as other odonates adapted to cold climates, may have increased their development rate (provided conditions are right, like ample prey availability) in more northern habitats with shorter summers. A study to determine emergence rates in the wild at latitudes throughout its range would be just one step in this possible future research.

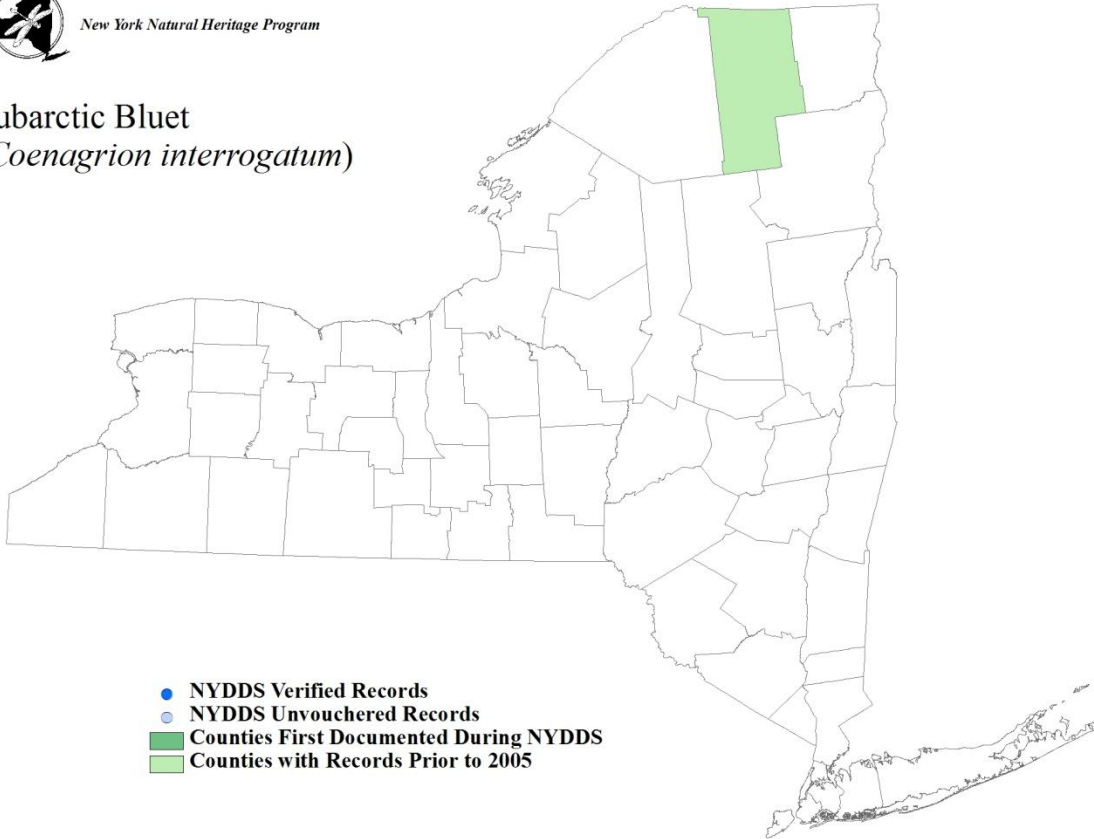






New York Natural Heritage Program

### Subarctic Bluet (*Coenagrion interrogatum*)

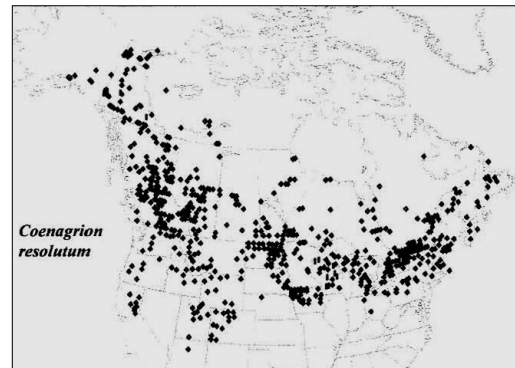
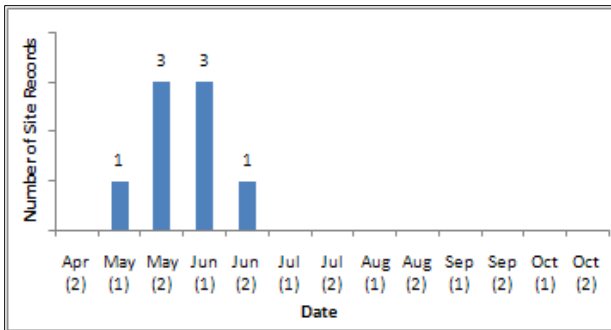
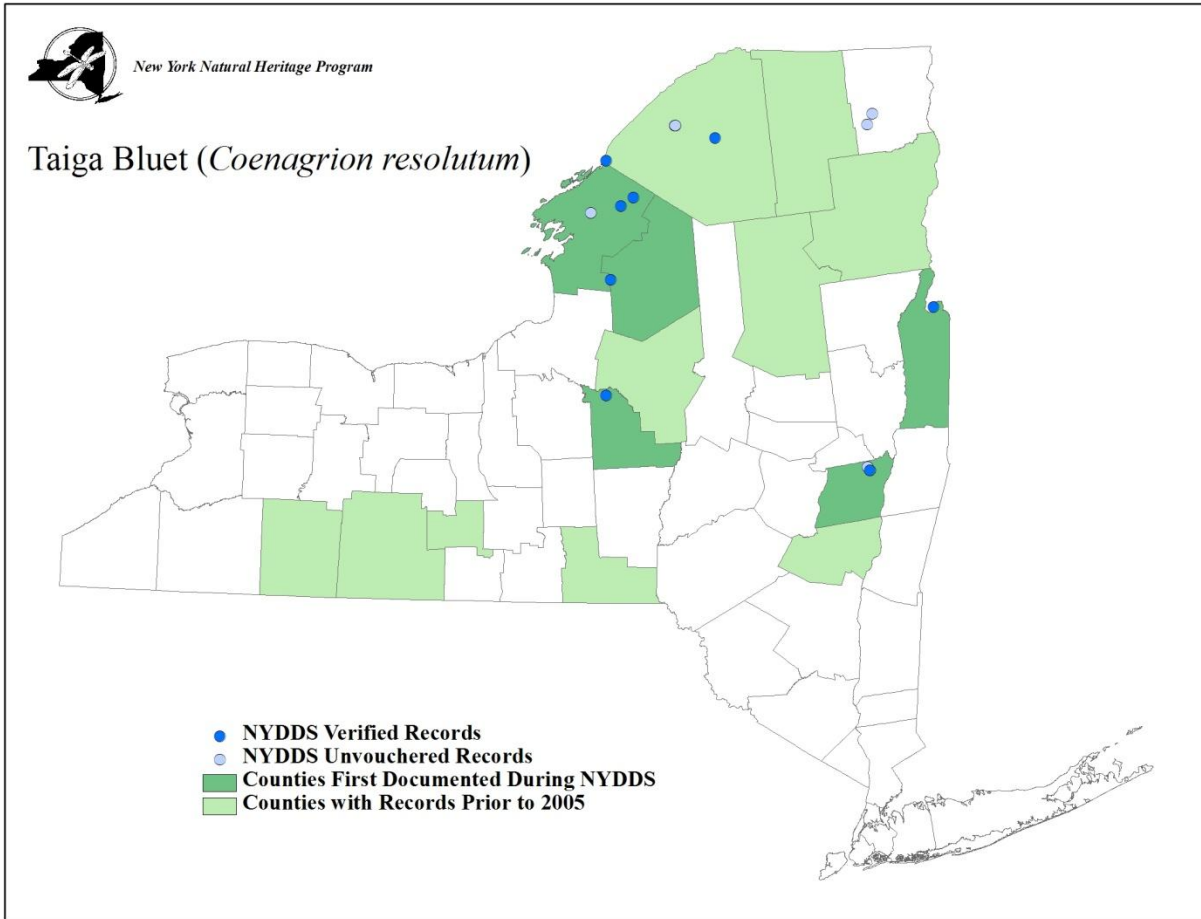


**COENAGRIONIDAE**

**Taiga Bluet (*Coenagrion resolutum*)**

**Pre-NYDDS Status: G5, S4**

**Draft Revised Status: S3**



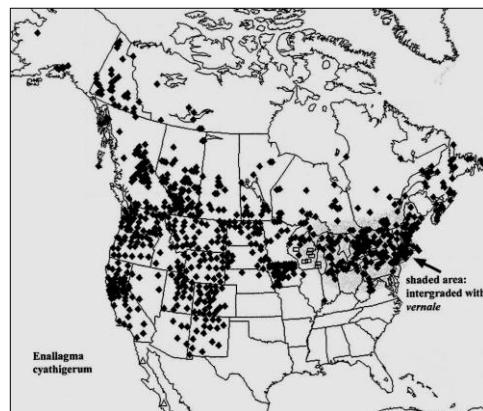
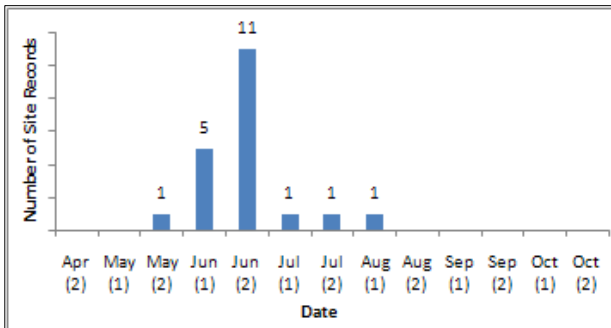
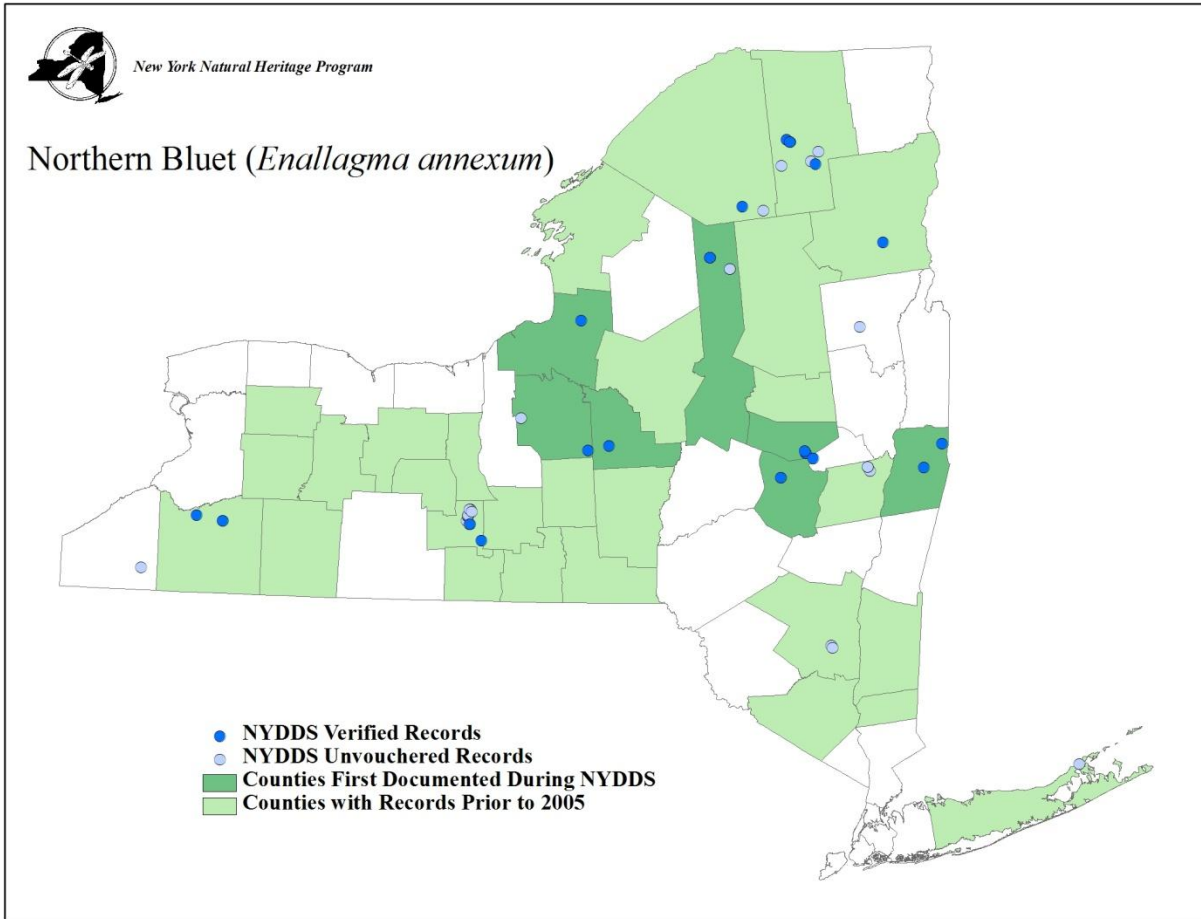
(Donnelly 2004b)



**COENAGRIONIDAE**

**Northern Bluet (*Enallagma annexum*, syn. *Enallagma cyathigerum*)**

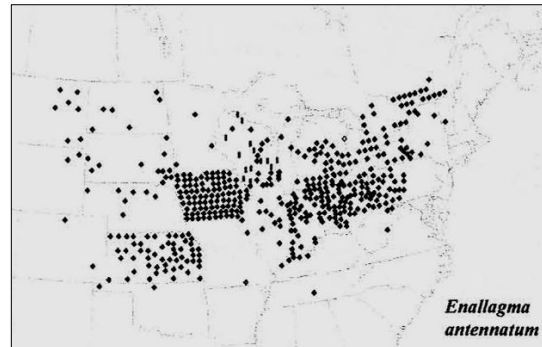
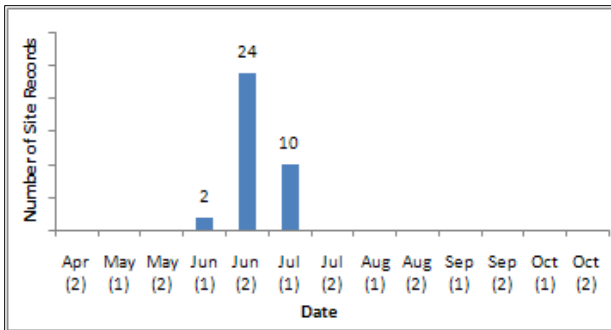
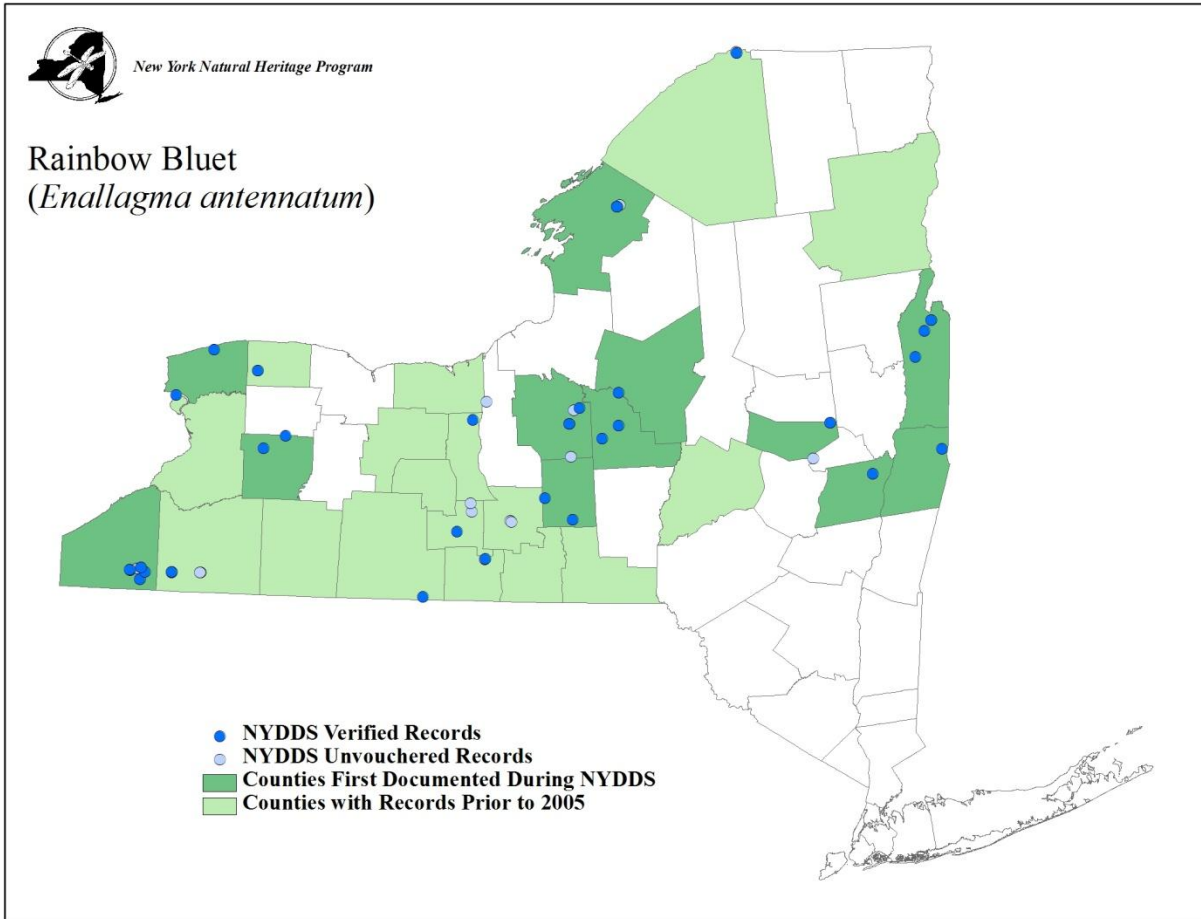
**Pre-NYDDS Status: G5, S4**



(Donnelly 2004b)



**COENAGRIONIDAE**  
**Rainbow Bluet (*Enallagma antennatum*)**  
**Pre-NYDDS Status: G5, S3S4**



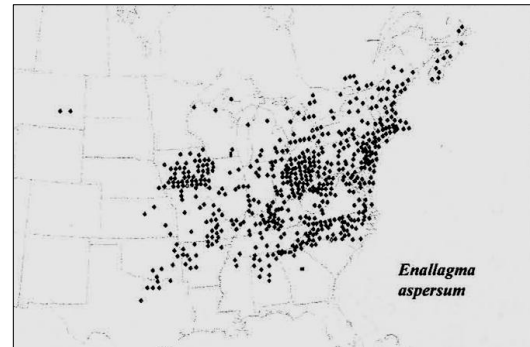
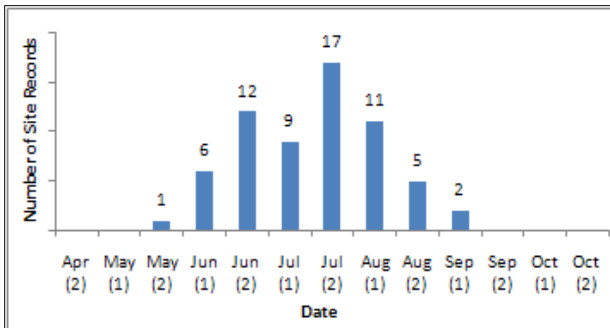
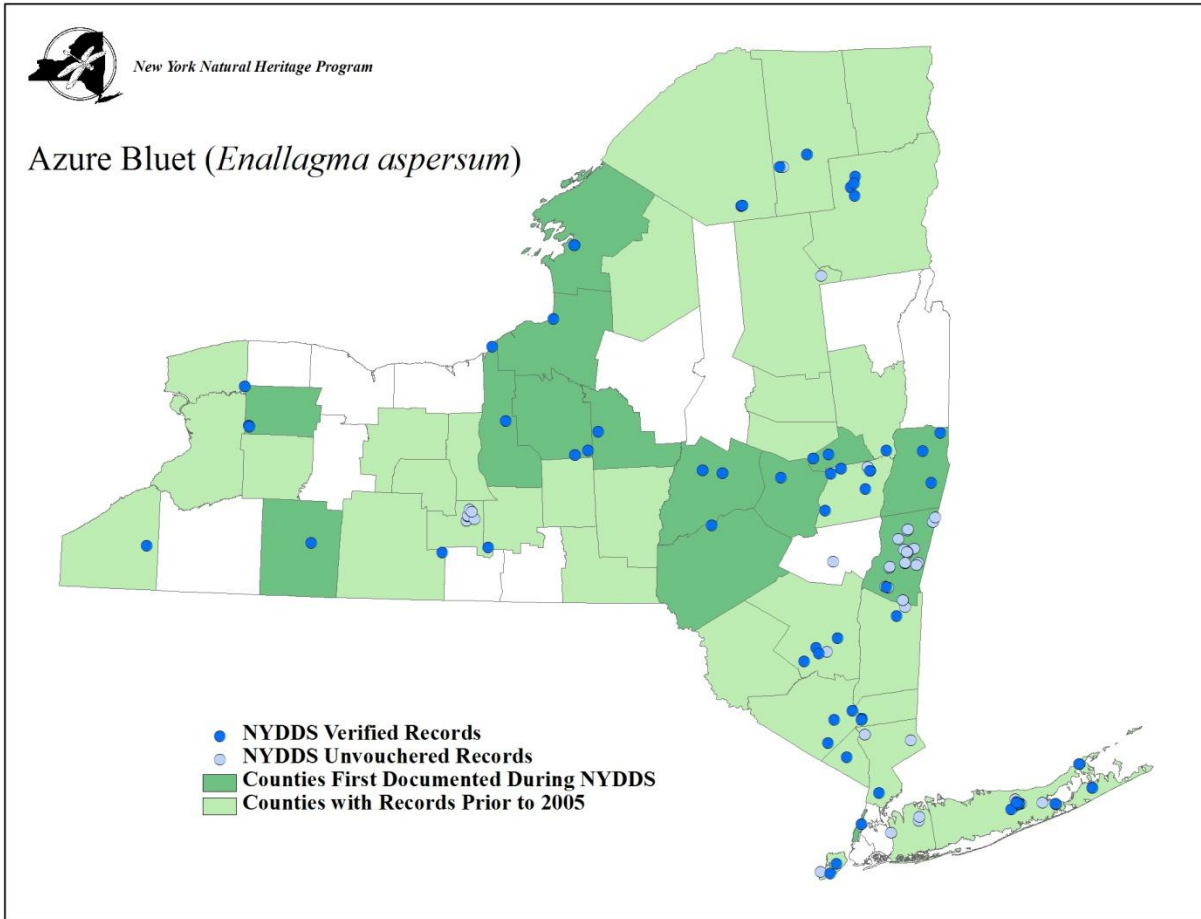
(Donnelly 2004b)



**COENAGRIONIDAE**

**Azure Bluet (*Enallagma aspersum*)**

**Pre-NYDDS Status: G5, S4**



(Donnelly 2004b)

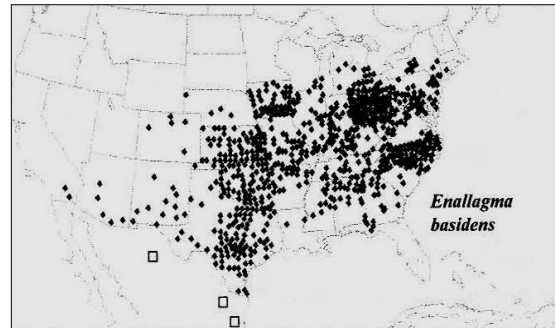
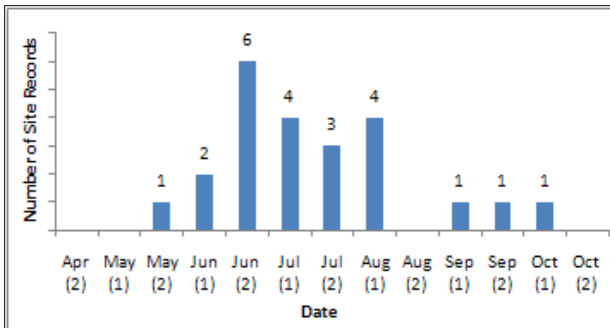
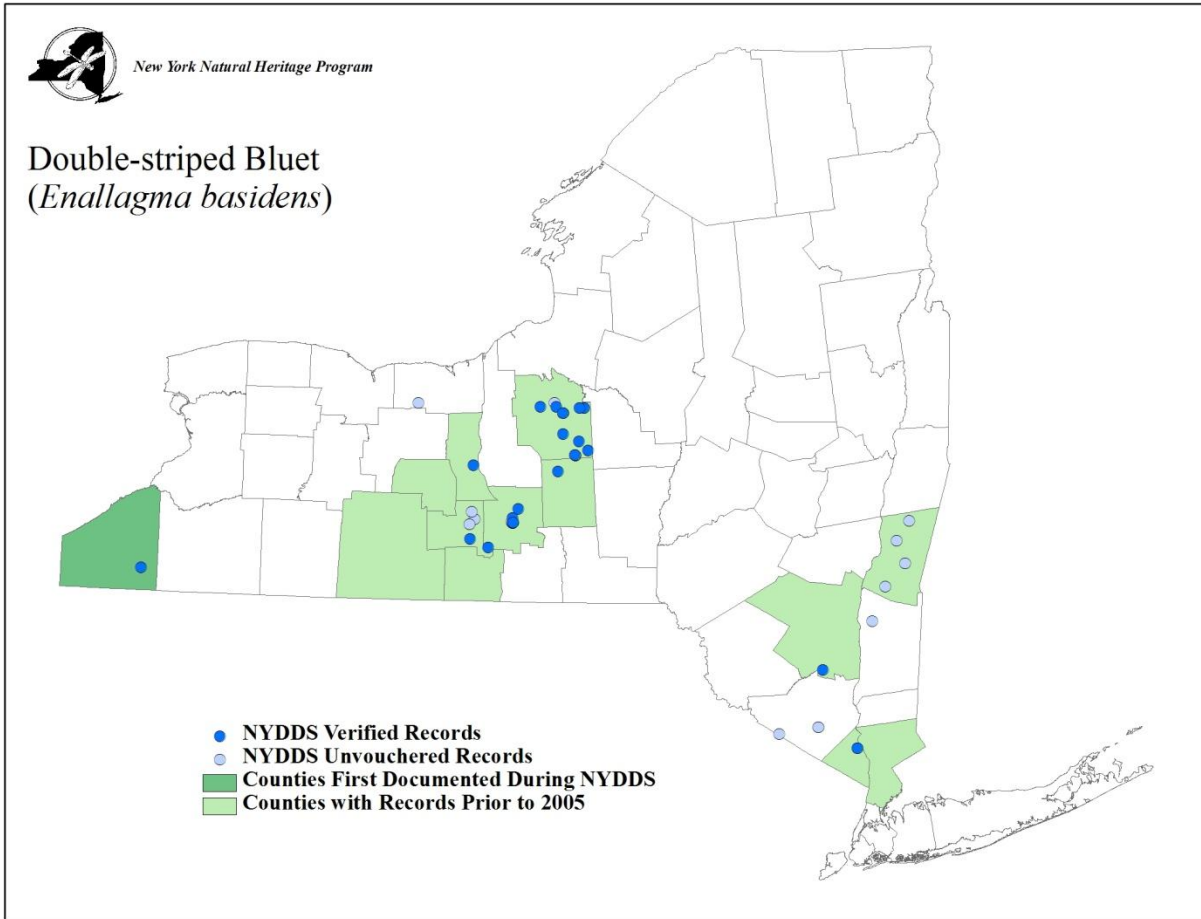


**COENAGRIONIDAE**

**Double-striped Bluet (*Enallagma basidens*)**

**Pre-NYDDS Status: G5, SNR**

**Draft Revised Status: S3**



(Donnelly 2004b)

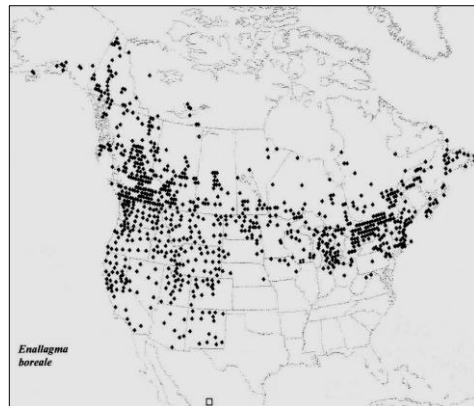
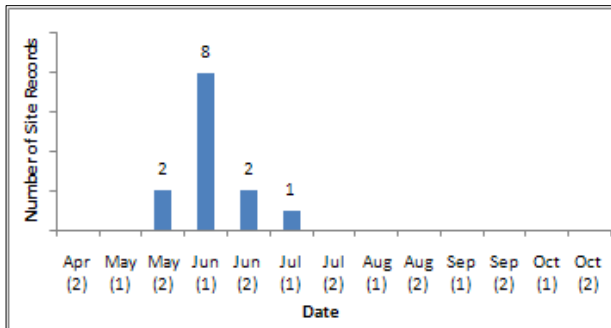
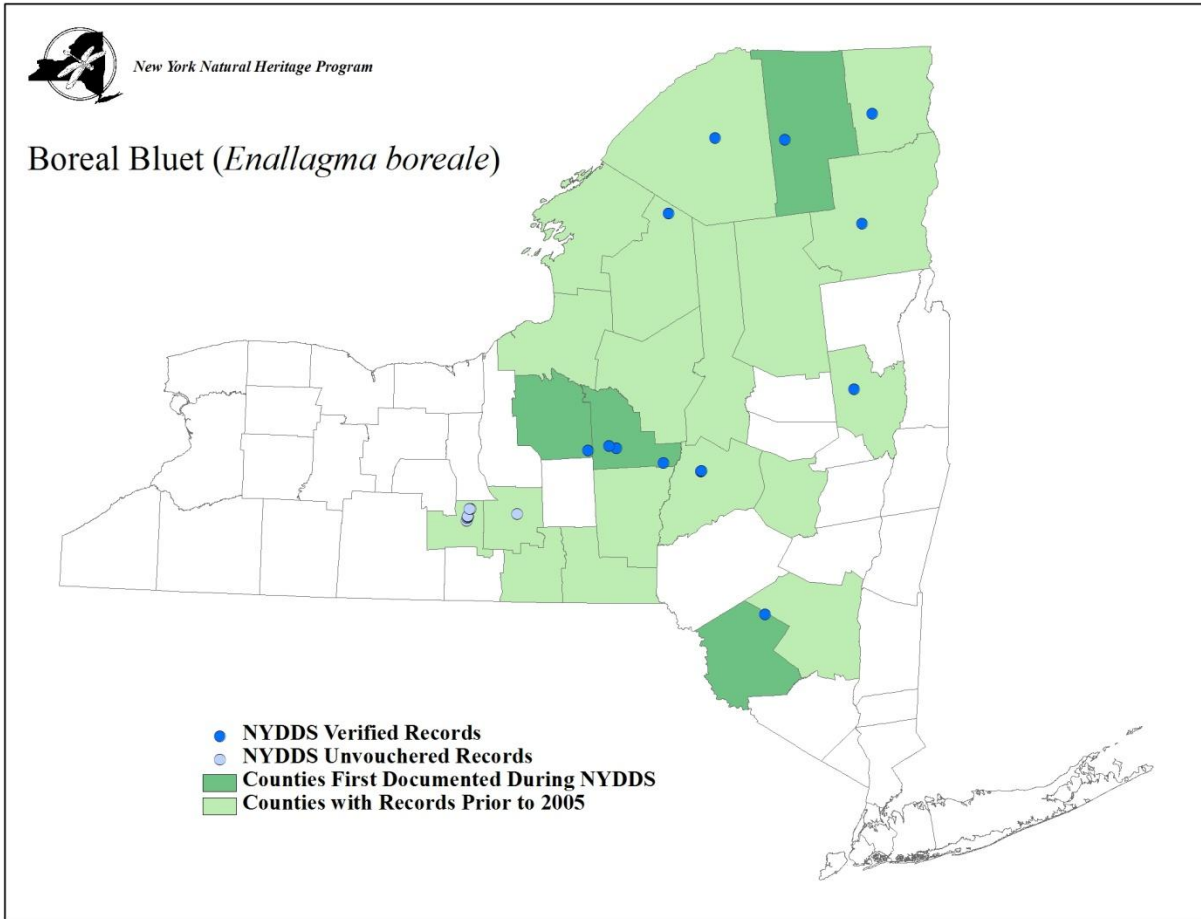


**COENAGRIONIDAE**

**Boreal Bluet (*Enallagma boreale*)**

**Pre-NYDDS Status: G5, S4**

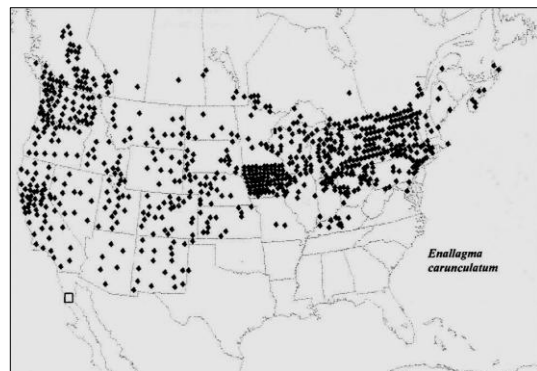
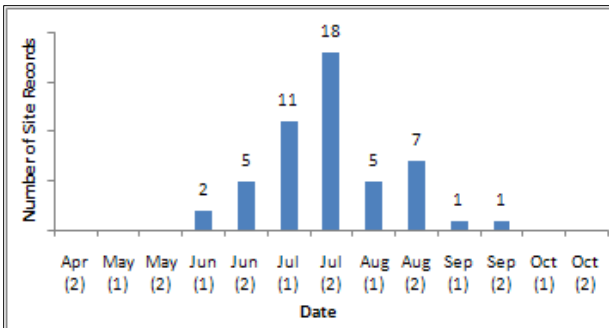
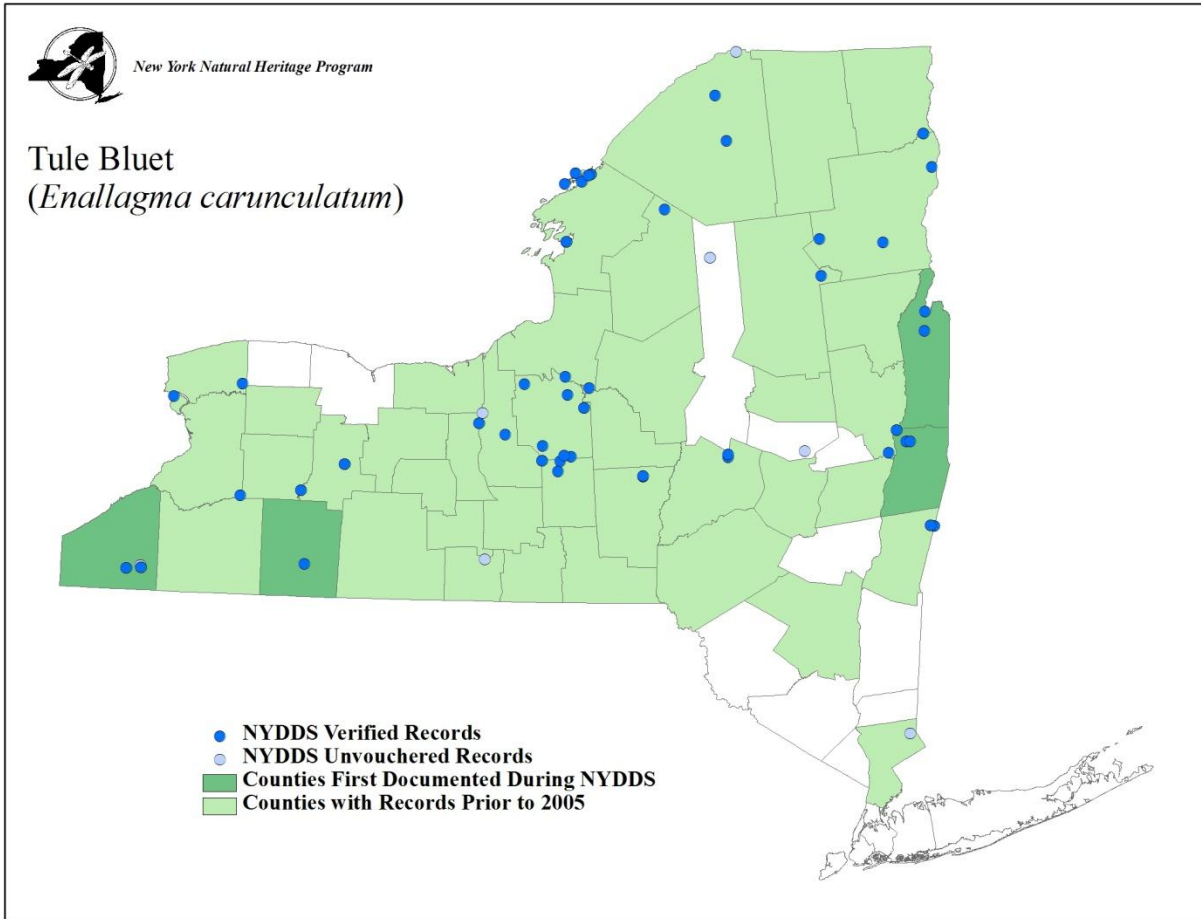
**Draft Revised Status: S3**



(Donnelly 2004b)



**COENAGRIONIDAE**  
**Tule Bluet (*Enallagma carunculatum*)**  
**Pre-NYDDS Status: G5, S4**

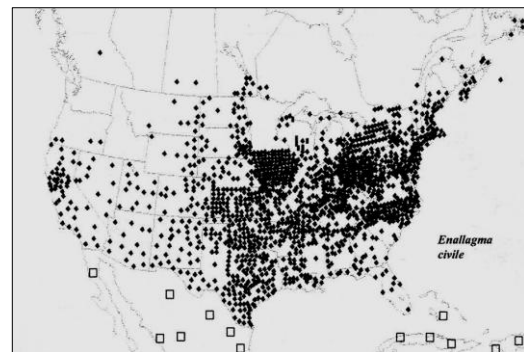
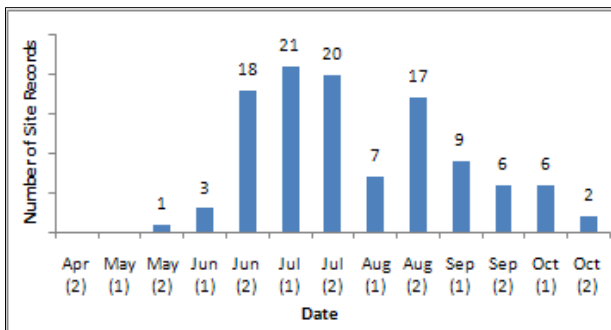
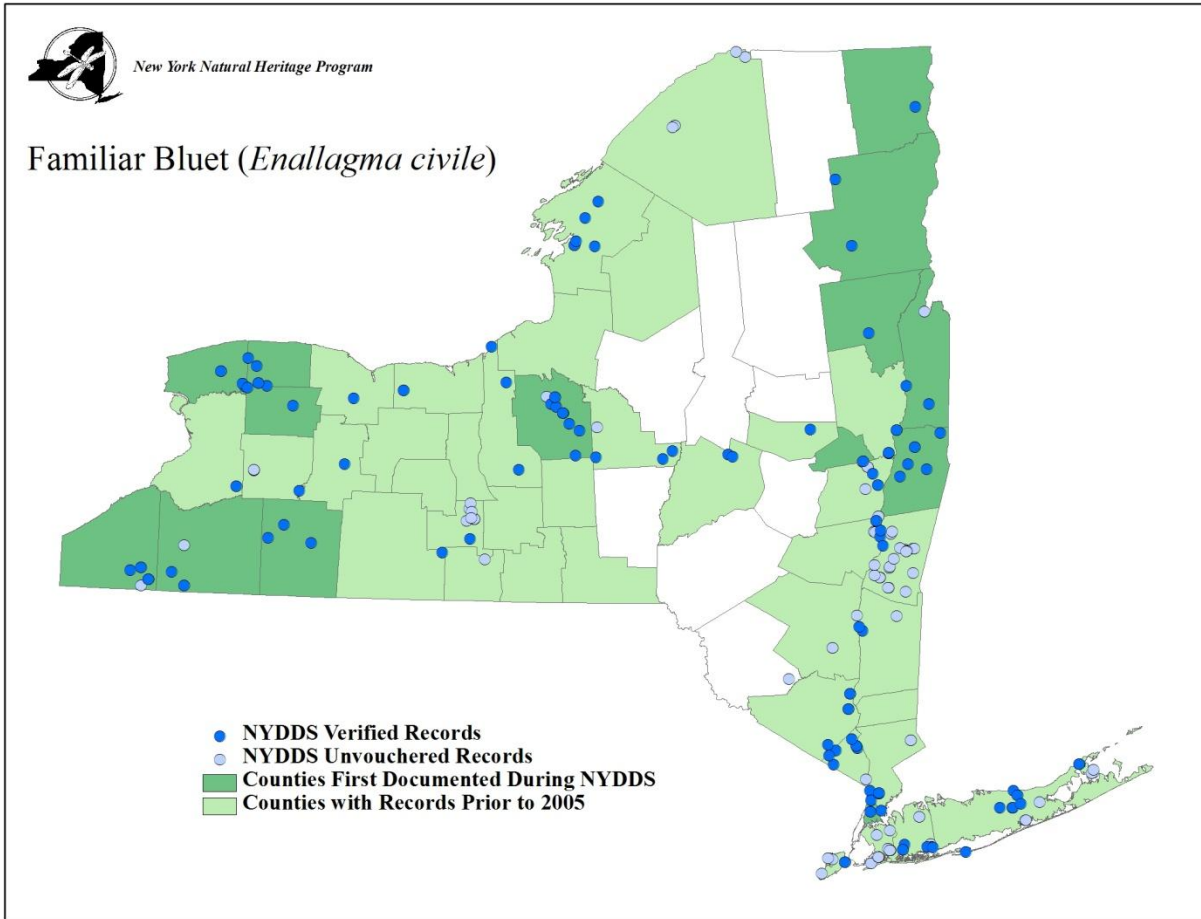


(Donnelly 2004b)





**COENAGRIONIDAE**  
**Familiar Bluet (*Enallagma civile*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)

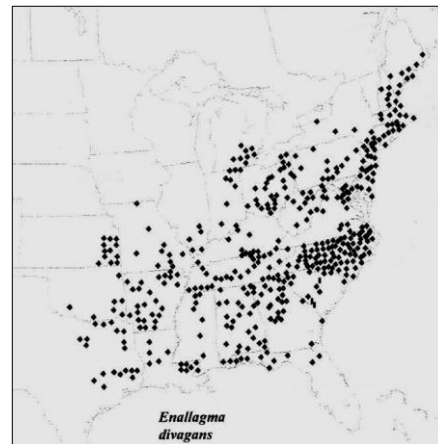
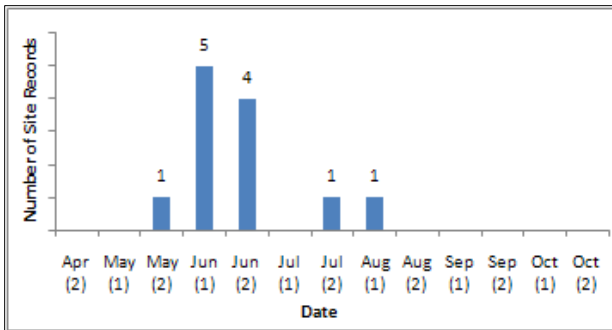
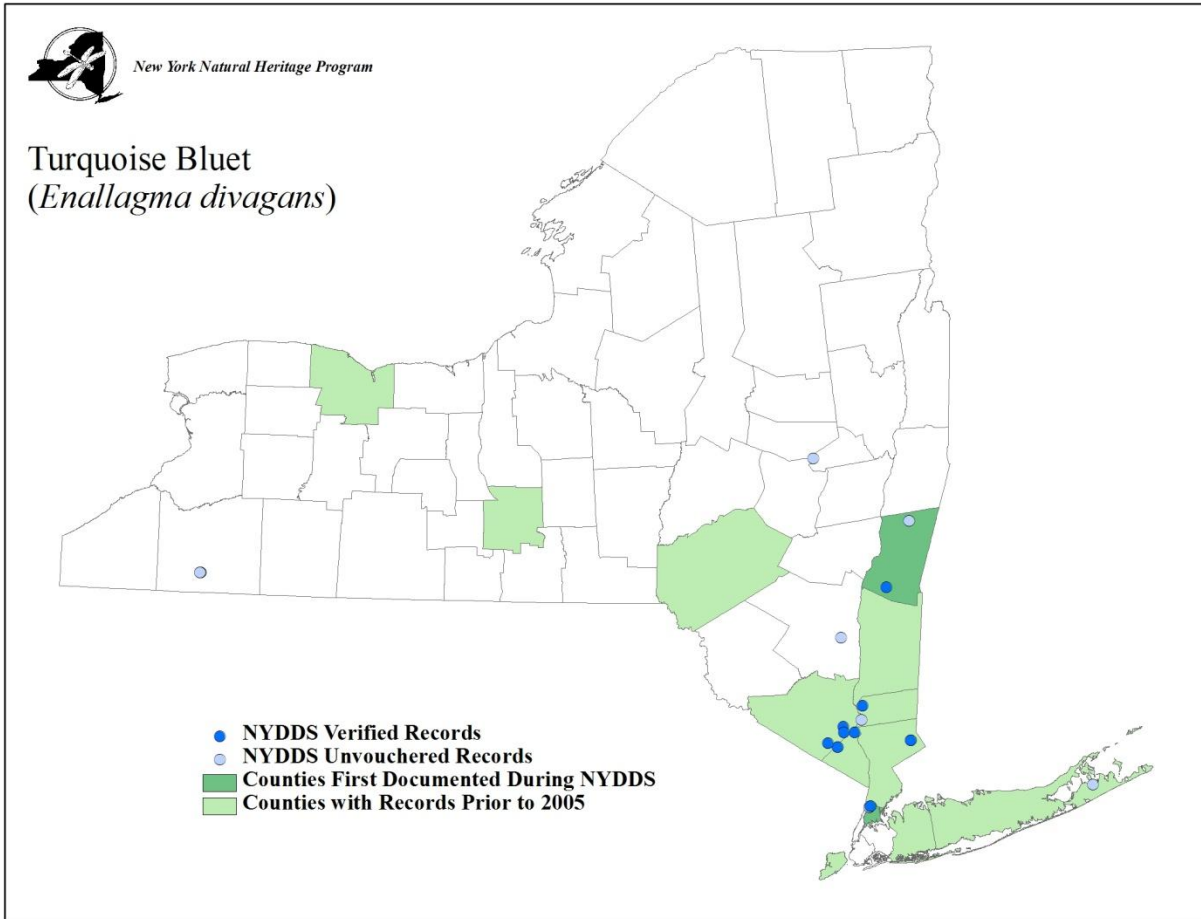


**COENAGRIONIDAE**

**Turquoise Bluet (*Enallagma divagans*)**

**Pre-NYDDS Status: G5, S3S4**

**Draft Revised Status: S3**



(Donnelly 2004b)

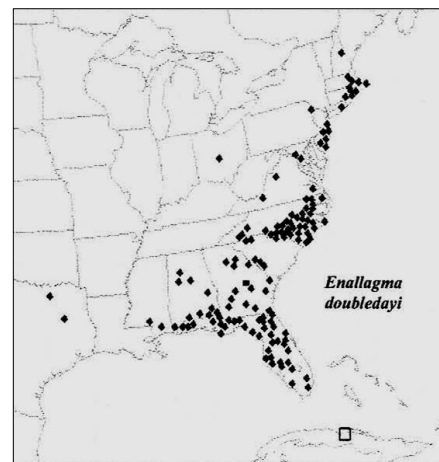
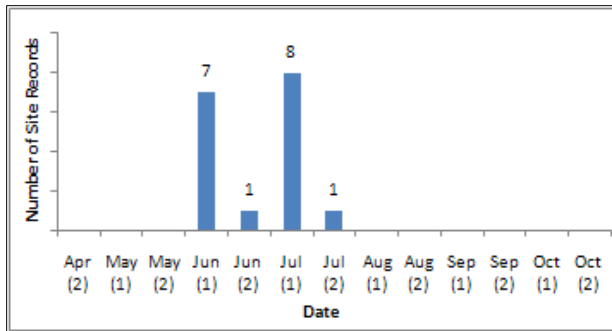
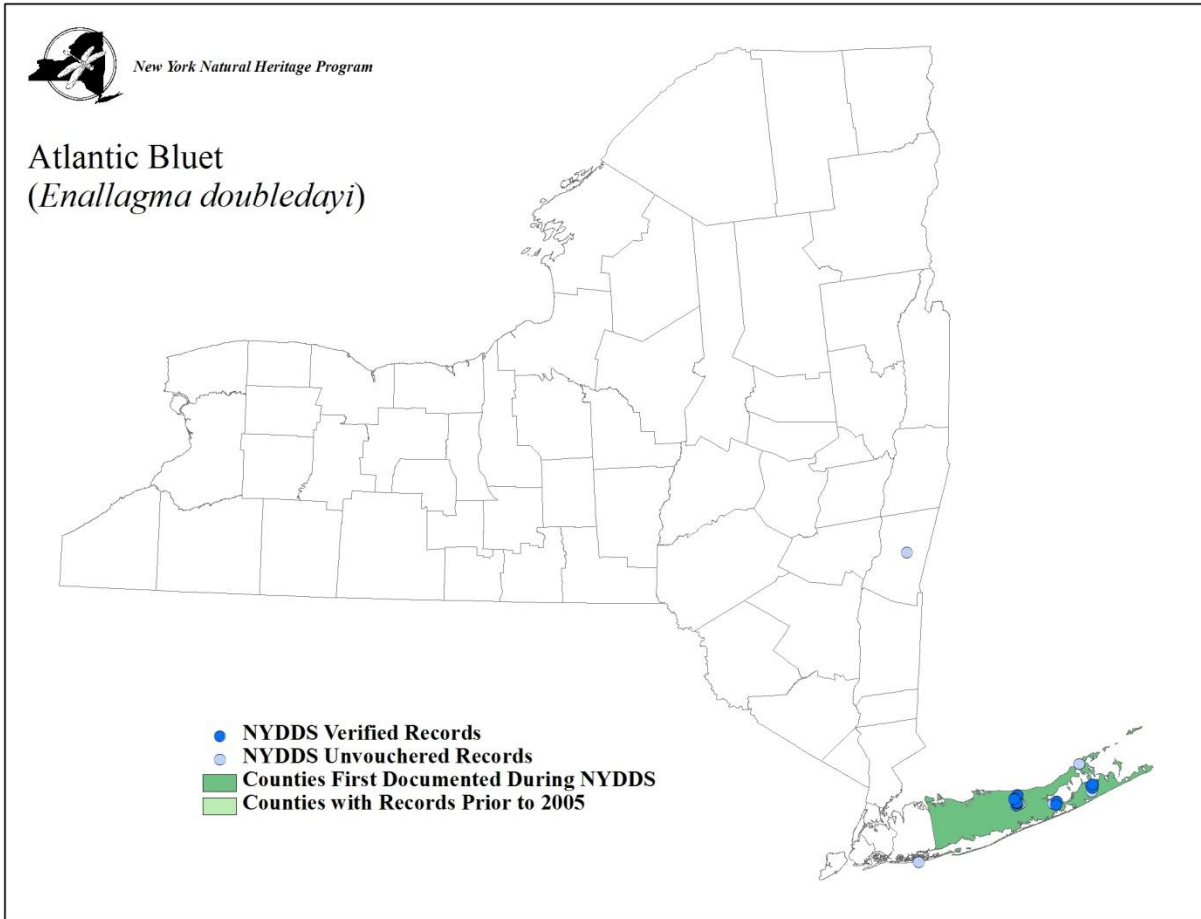


**COENAGRIONIDAE**

**Atlantic Bluet (*Enallagma doubledayi*)**

**Pre-NYDDS Status: G5, S4**

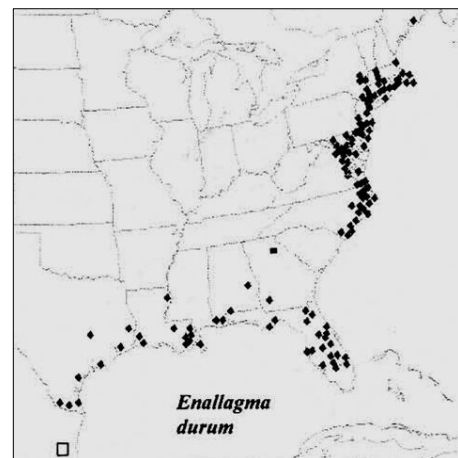
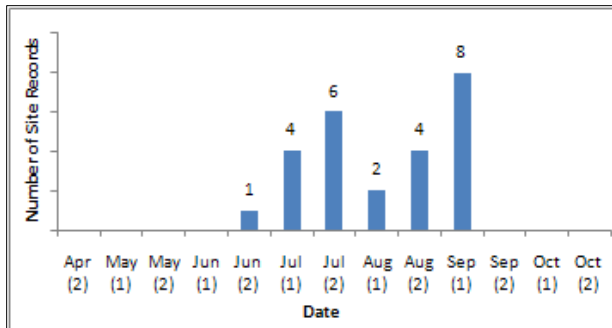
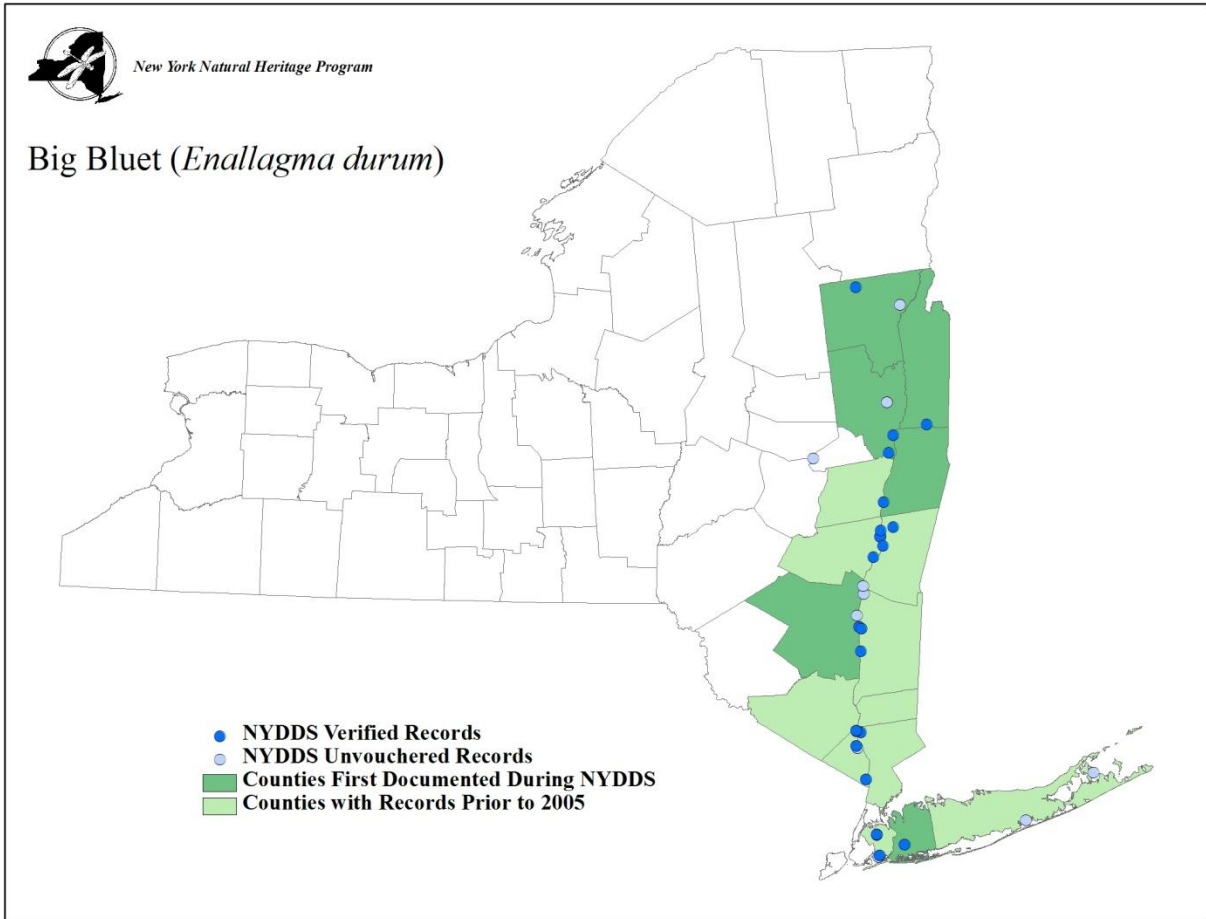
**Draft Revised Status: S1S2**



(Donnelly 2004b)



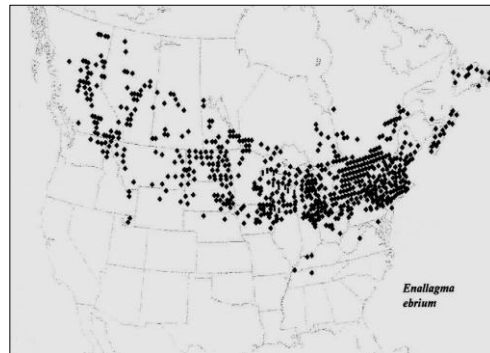
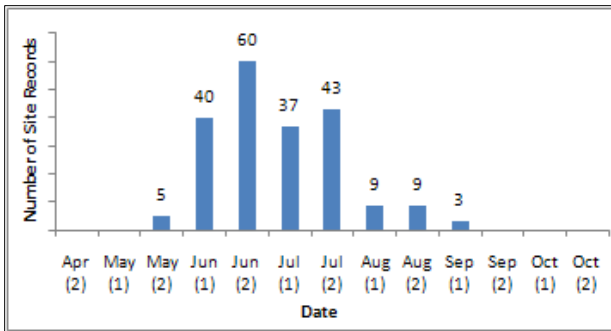
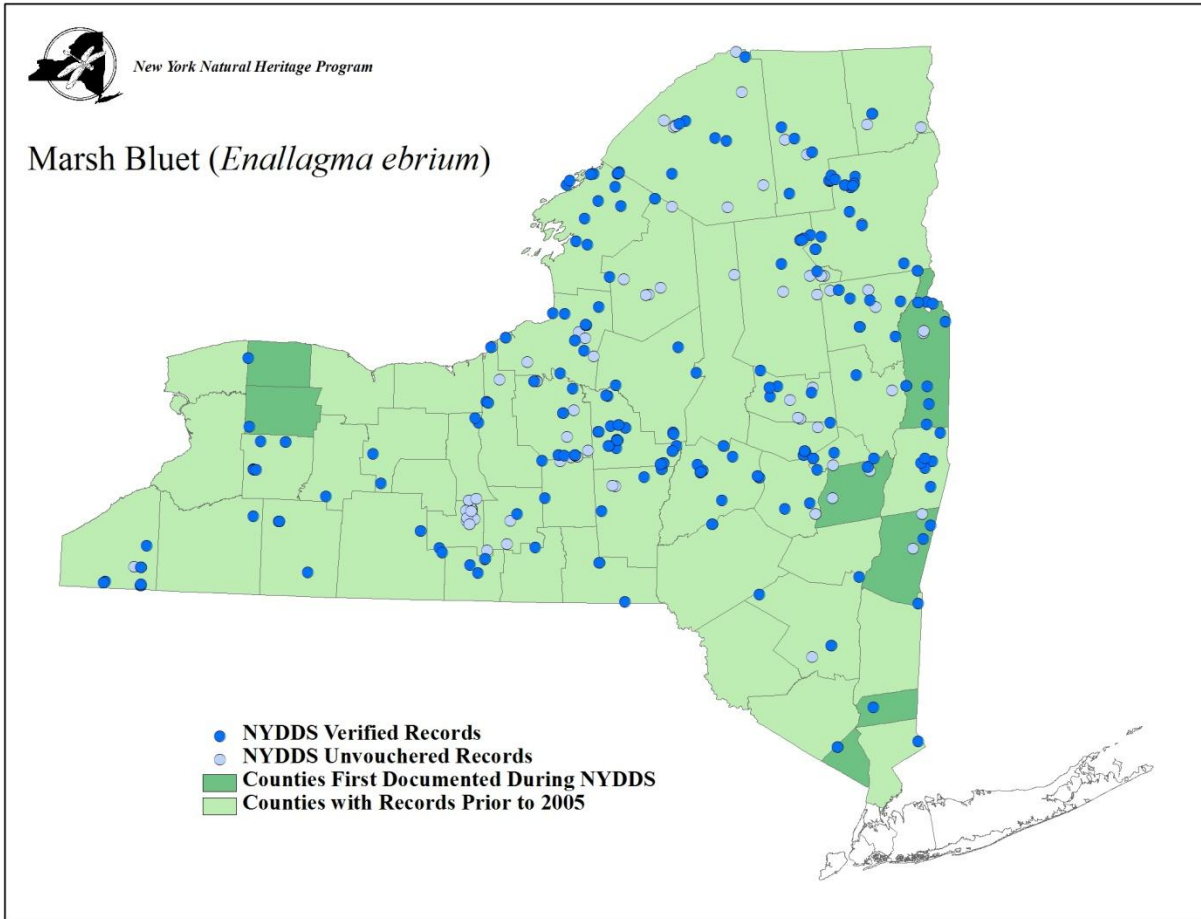
**COENAGRIONIDAE**  
**Big Bluet (*Enallagma durum*)**  
**Pre-NYDDS Status: G5, S3**  
**Draft Revised Status: S3**



(Donnelly 2004b)



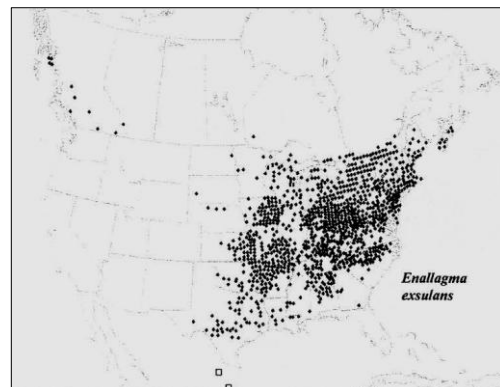
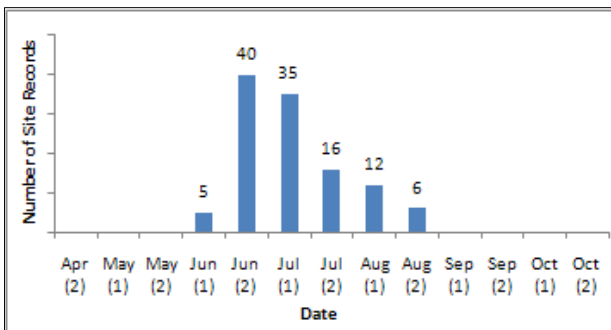
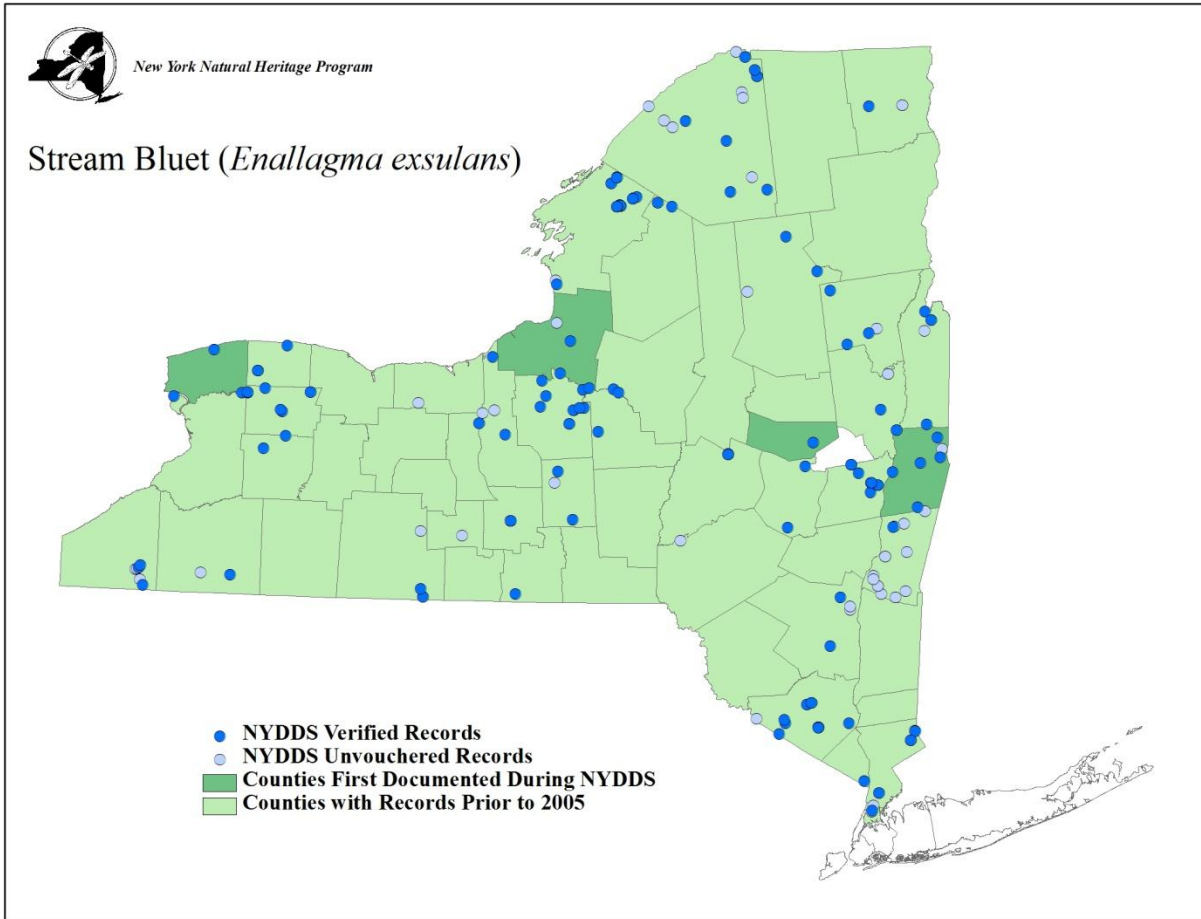
**COENAGRIONIDAE**  
**Marsh Bluet (*Enallagma ebrium*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)



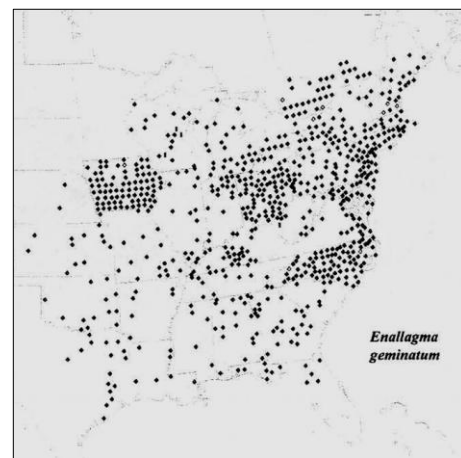
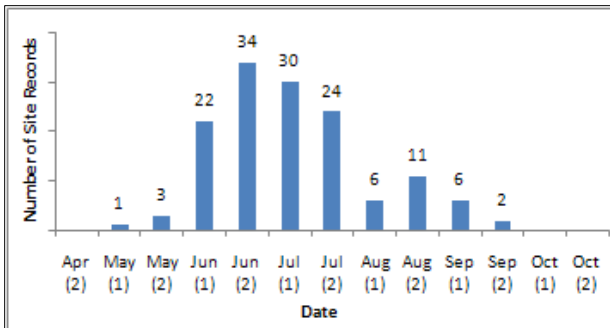
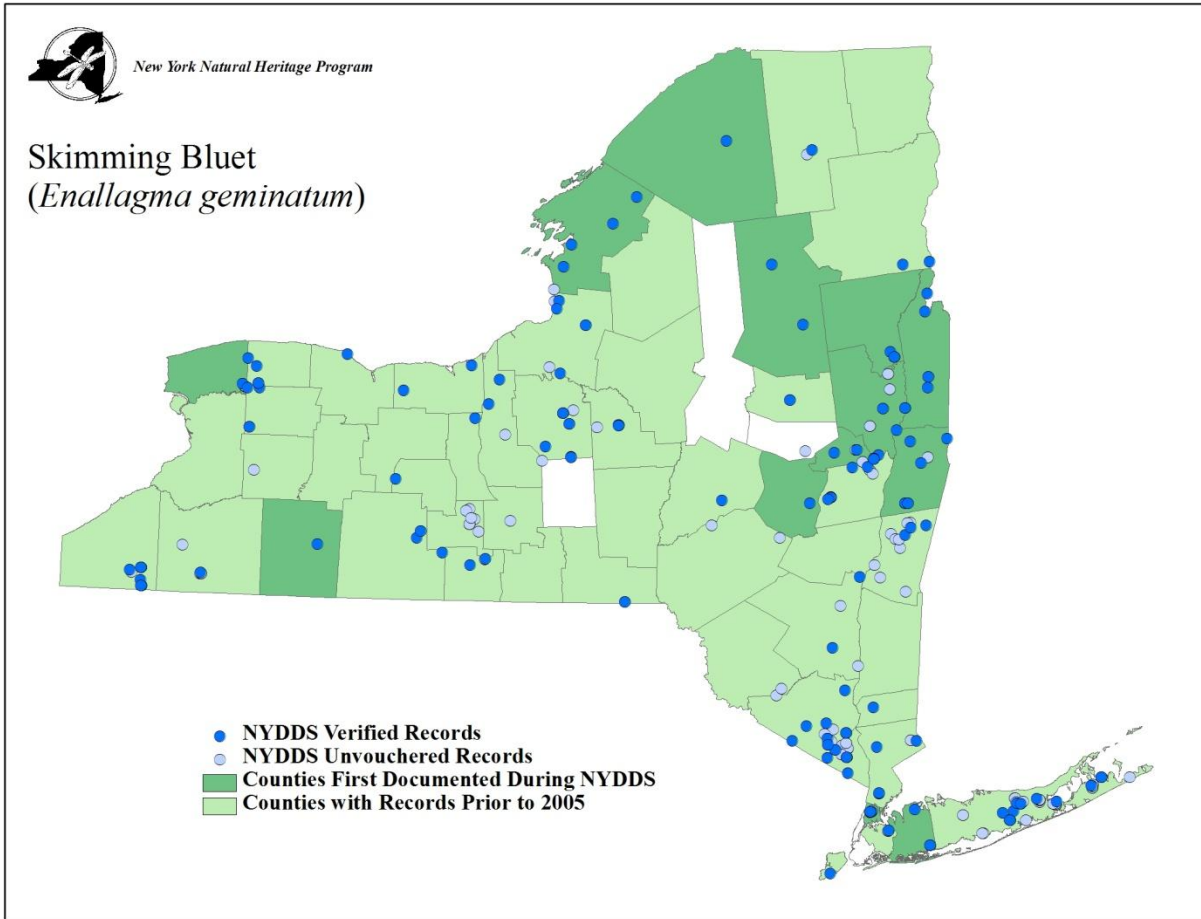
**COENAGRIONIDAE**  
**Stream Bluet (*Enallagma exsulans*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)



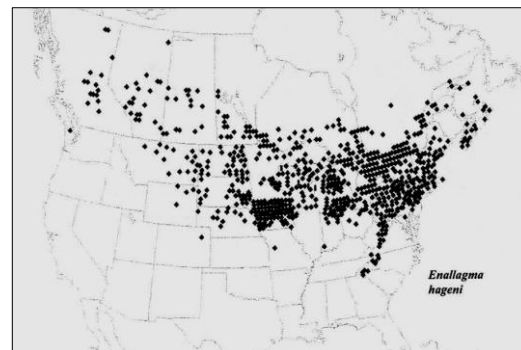
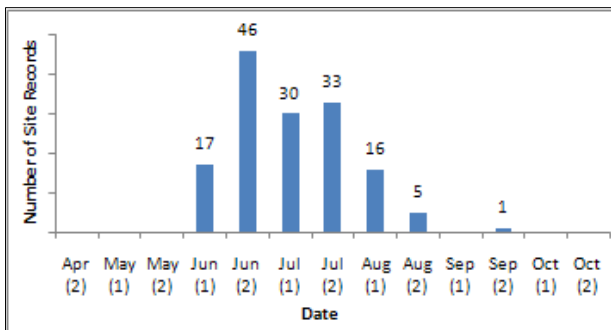
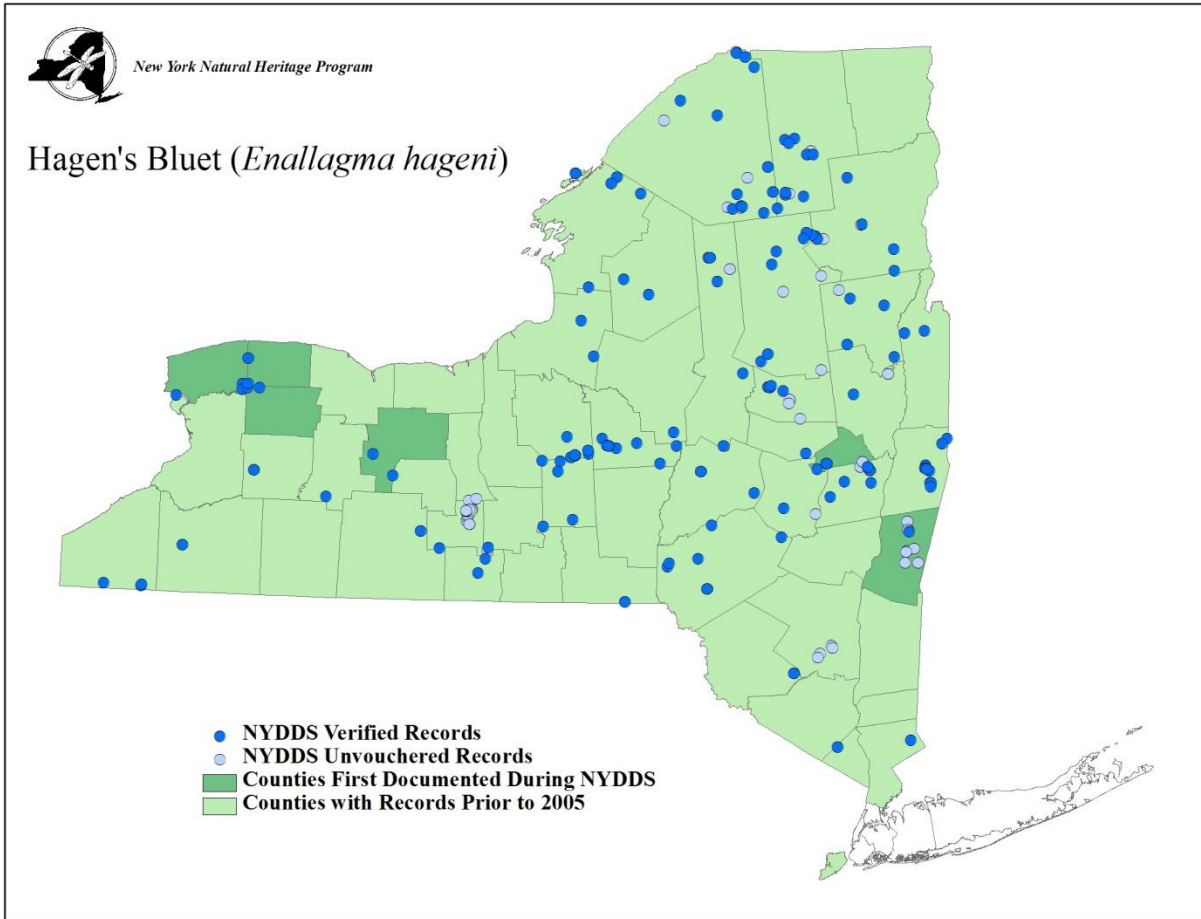
**COENAGRIONIDAE**  
**Skimming Bluet (*Enallagma geminatum*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)



**COENAGRIONIDAE**  
**Hagen's Bluet (*Enallagma hageni*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)





## COENAGRIONIDAE

### New England Bluet (*Enallagma laterale*)

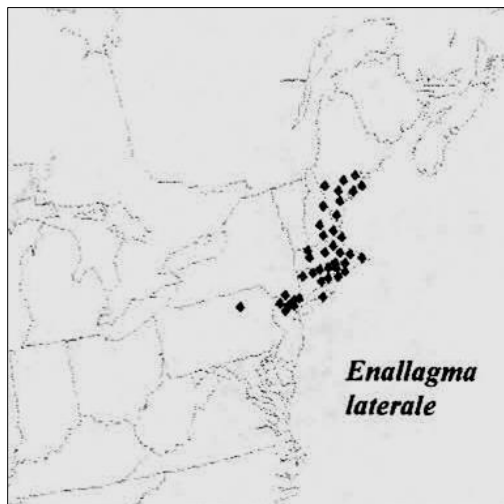
Pre-NYDDS Status: G3G4, S2

Draft Revised Status: S3

**Habitat Characteristics:** Throughout its range, the New England Bluet is known to occur in ponds and lakes with emergent vegetation or boggy margins and sphagnum bogs (Carpenter 1991, Lam 2004, New York Natural Heritage Program 2009g, Butler *et al.* 2005). Gibbons *et al.* (2002) found this species to be associated with *Nuphar variegatum* and *Brasenia schreberi* water lilies on Cape Cod. In New York, it is known from Long Island coastal plain ponds with sandy substrate and also bog-bordered ponds in southern New York away from the coastal plain (New York Natural Heritage Program 2009g, 2010). New York sites often contain emergent vegetation and floating plants at the shorelines and have boggy and shrubby borders (New York Natural Heritage Program 2009g).



Alan W. Wells 2009



(Donnelly 2004b)

**Distribution and Inventory Needs:** *Enallagma laterale* has a small range, found from eastern Pennsylvania east and north along the Atlantic coast of the United States to southern Maine (Butler *et al.* 2005, Abbott 2010). It has recently been documented in Vermont as well (Blust 2008). In New York, it is known to occur in at least 17 locations from the following counties: seven in Orange, one in Rockland, three in Westchester, six in Suffolk (New York Natural Heritage Program 2010). Eleven of the sites were visited during the NYDDS, five of which were first documented during the Survey. All of the locations were first documented between 1990 and 2009 (New York Natural Heritage Program 2010). Many of the sites occur on public, protected lands, but threats to populations include residential

development and water withdrawal, invasive species encroaching on the ponds and herbicide use near the ponds (New York Natural Heritage Program 2010). Known populations should be monitored and new locations should be searched at appropriate habitats within or just outside the species' known range.

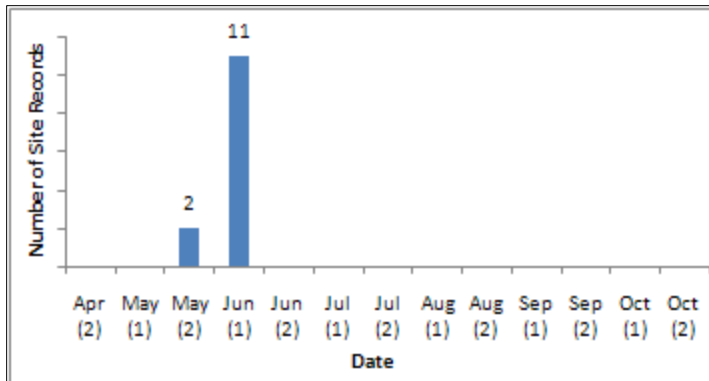
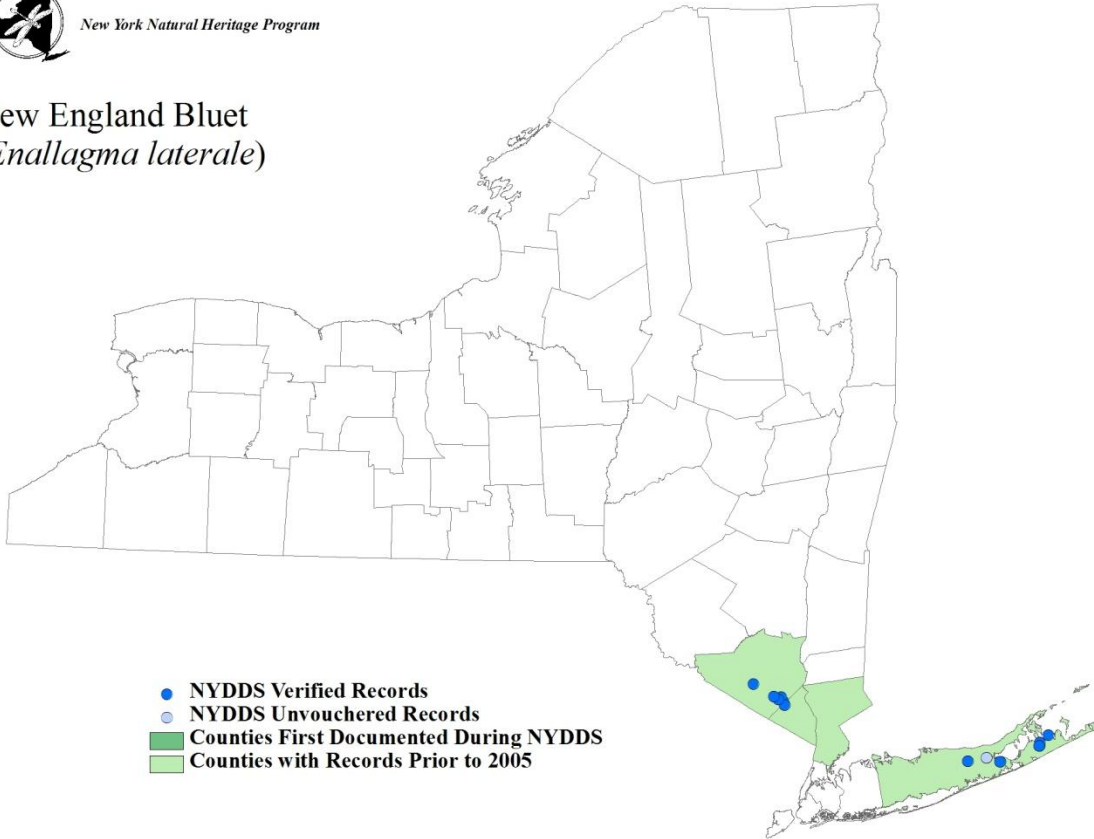
**Phenology:** New York records indicate that this species is on the wing from May 26 through June 23 with most records from mid-June (New York Natural Heritage Program 2010). In New Jersey the flight season is a bit earlier, from 5/12 to 6/28 (Bangma & Barlow 2010). In Massachusetts, known dates range from June 1 through June 24 (Carpenter 1987), and in Maine, the known flight season begins a bit later (June 4) and extends into the third week of July (Brunelle & deMaynadier 2005).





New York Natural Heritage Program

### New England Bluet (*Enallagma laterale*)



## COENAGRIONIDAE

### Little Bluet (*Enallagma minusculum*)

Pre-NYDDS Status: G3G4, S1,

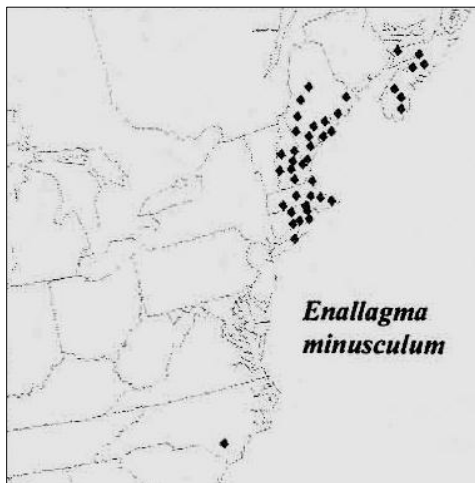
State Threatened

Draft Revised Status: S1



Ellen Pehek 2008

**Habitat Characteristics:** Little Bluets are known to inhabit ponds and lakes with sandy substrate, mainly in coastal plain ponds with emergent vegetation along the shoreline (Carpenter 1991, Lam 2004). The largest Long Island population is known from a coastal plain pond which contains the following emergent plants: Three-square Bulrush (*Schoenoplectus pungens*), Jointed Rush (*Juncus articulatus*), Many-flowered Pennywort (*Hydrocotyle umbellata*), Seven-angle Pipewort (*Eriocaulon aquaticum*), and Golden Hedge-hyssop (*Gratiola aurea*). The pond is surrounded by a wooded upland as well as residences (New York Natural Heritage Program 2010).



(Donnelly 2004b)

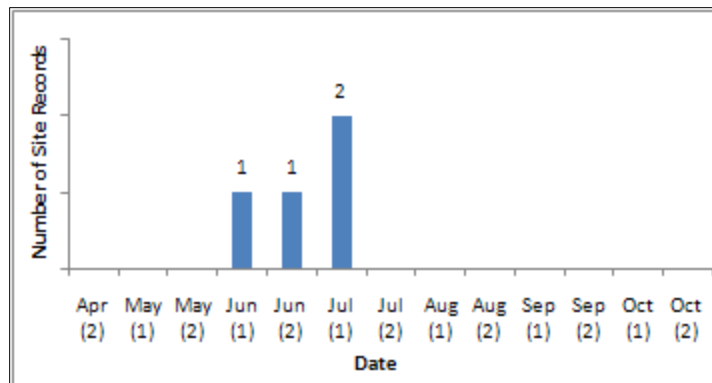
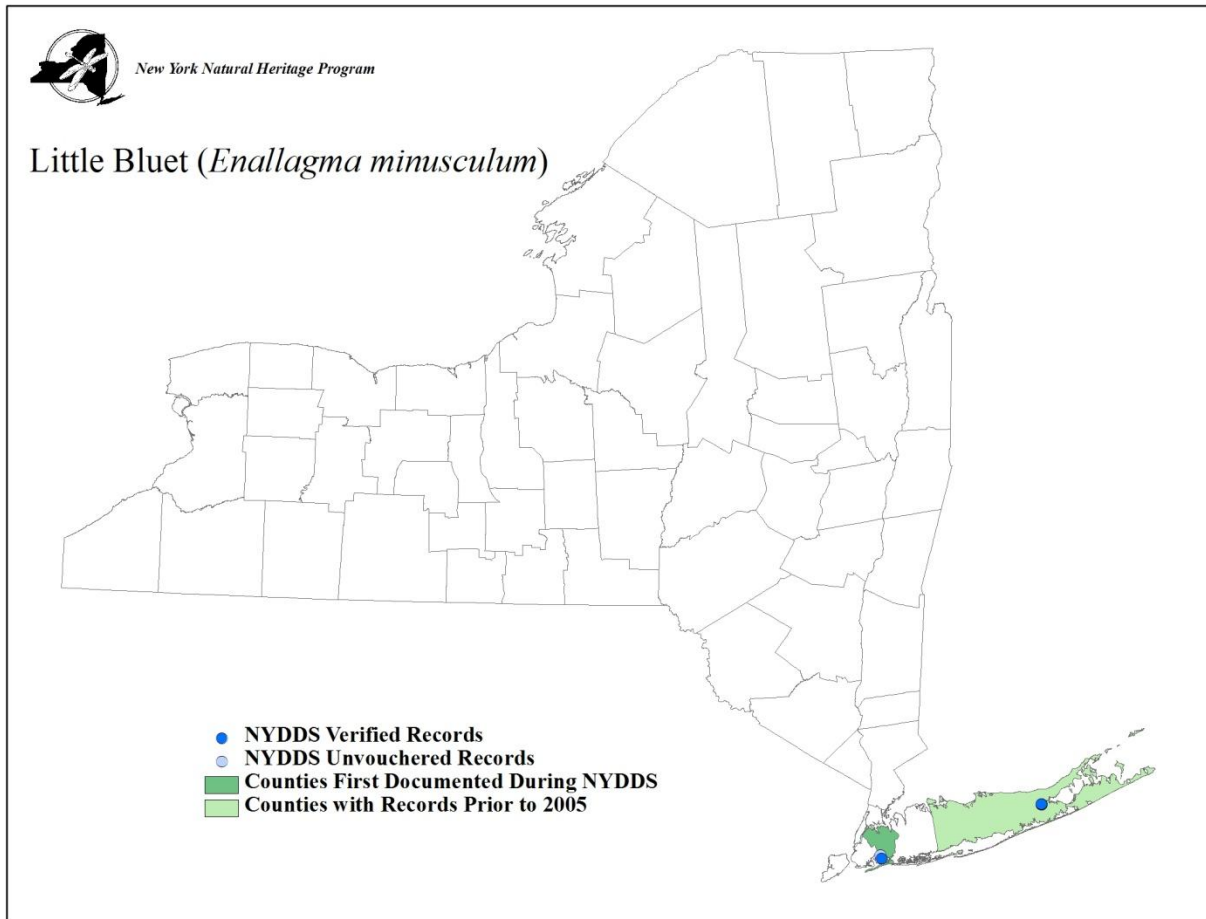
**Distribution and Inventory Needs:** The distribution for Little Bluet is North Carolina, the northeastern United States, and southeastern Canada (Nikula *et al.* 2003). More specifically, they are known from North Carolina, New York, Connecticut, Rhode Island, Massachusetts, New Hampshire, Maine, New Brunswick, Nova Scotia, and Prince Edward Island (NatureServe 2009b, Abbott 2010). In New York, *Enallagma minusculum* is now known to occur at three locations, two in Suffolk county and one in Queens county (New York Natural Heritage Program 2010). Two of the locations were investigated as part of a special NYDDS effort (see page 295); the third site in Queens County was documented by NYC Parks staff in 2008. Little Bluets are uncommon throughout most of

their range (NatureServe 2009b). Threats to the Long Island populations could include runoff from development, trampling of vegetation by recreationists, and nutrient loading from fertilizers and septic systems; the largest known population's habitat has residential development surrounding it and is used for recreation (New York Natural Heritage Program 2010). In 2009, invasive Asiatic clams (*Corbicula corbicula*) were found at this location and suggested monitoring the site every two years with an assessment of these threats to the species (Brown 2009b). There are two known locations in Suffolk county, one where Little Bluet was first documented in 2008 and another where it has not been seen since 2003, despite a re-visit in 2009 (Brown 2009a). Specific sites are not listed due to the species' Threatened status in New York. Monitoring known sites would be beneficial to the protection of the species in New York as well as searching for additional populations.

**Phenology:** In Maine, *E. minusculum*'s flight season is from mid-June through late August (Brunelle & deMaynadier 2005). Connecticut reports adults from early June through mid-August



(Lam 2004) and New York dates for confirmed observations span from June 4 to July 14 (New York Natural Heritage Program 2010).



## COENAGRIONIDAE

### Scarlet Bluet (*Enallagma pictum*)

Pre-NYDDS Status: G3, S1,

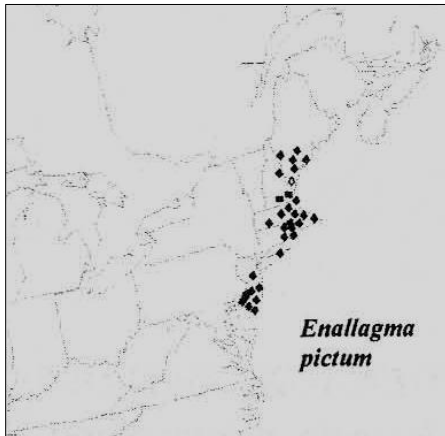
State Threatened

Draft Revised Status: S2

**Habitat Characteristics:** Scarlet Bluets are found at acidic, sandy, coastal plain ponds with water lilies (Nikula *et al.* 2003, Lam 2004). Habitats are also known to include Bayonet Rush (*Juncus militaris*) along the shoreline (Gibbons *et al.* 2002, New York Natural Heritage Program 2010), and Gibbons *et al.* (2002) found that they are mainly in habitats with White Water Lily (*Nymphaea odorata*) on Cape Cod. Most known habitats in New York seem to include water lilies, pickerelweed, shorelines of emergent grasses, rushes, or sedges or margins that are boggy (New York Natural Heritage Program 2010).



Steve Walter 2009



(Donnelly 2004b)

**Distribution and Inventory Needs:** *Enallagma pictum* has a total known range from New Jersey, New York, Connecticut, Rhode Island, Massachusetts, New Hampshire, and southern Maine (NatureServe 2009b, Abbott 2010). In New York, there are 10 known locations where the species occurs in Suffolk county (New York Natural Heritage Program 2010). Locations were investigated as part of a special NYDDS effort (see page 295). Due to the species' Threatened status in New York, specific sites are not listed. Threats to the species at Long Island sites include residential development and the resulting groundwater withdrawal, and invasive species like *Phragmites* on pond shores which crowd out native emergent rushes and floating plants that are required for

successful reproduction (New York Natural Heritage Program 2010). The Massachusetts NHESP (2003a) notes that maintaining natural habitats in the upland areas surrounding the ponds is essential to this species' conservation, as newly emerged adults take refuge in these areas for maturing, roosting, and feeding. Many of the known sites on Long Island are located within or on preserves or protected lands, but the above listed threats might be present on adjacent lands.

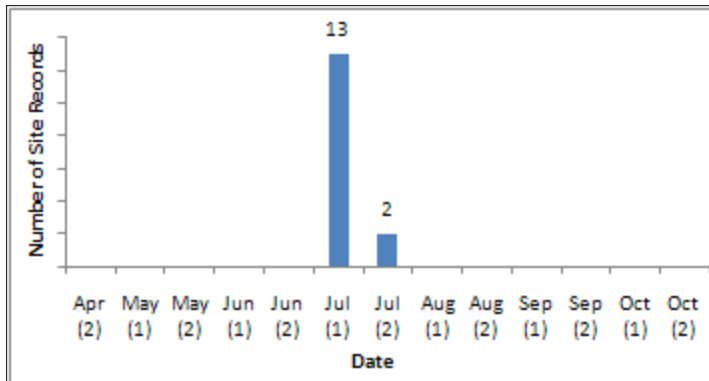
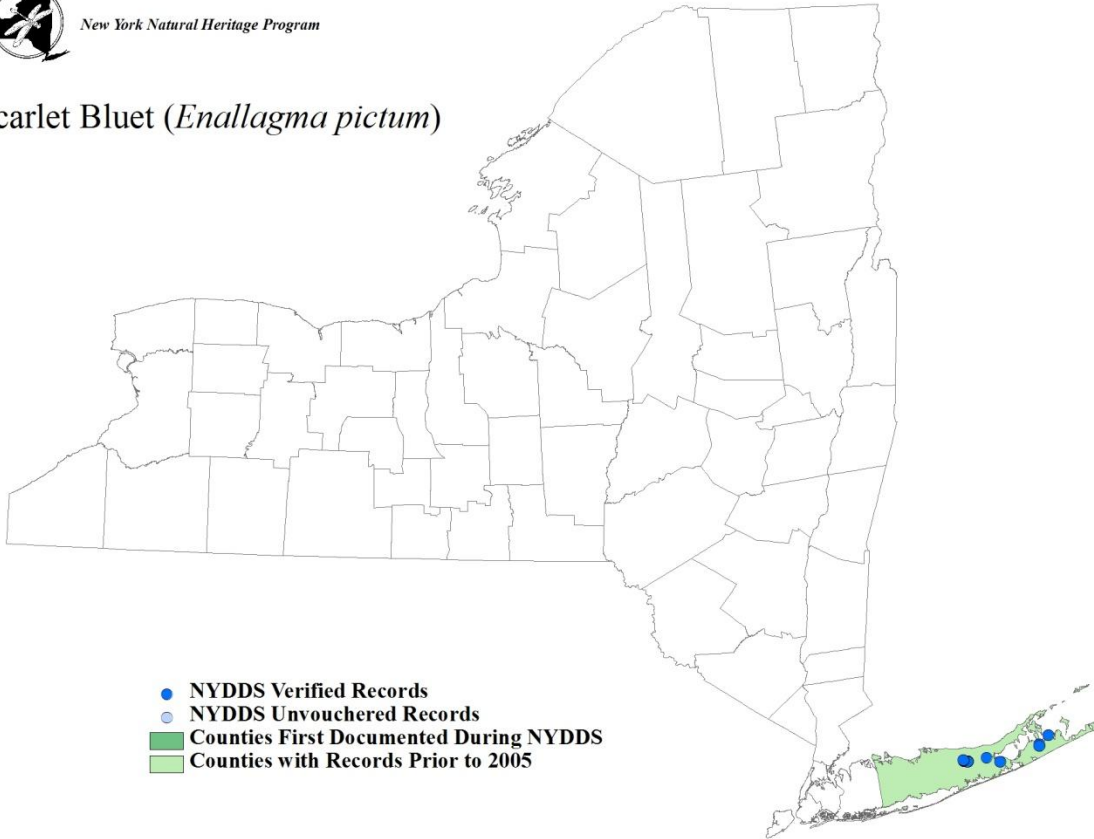
**Phenology:** In New York, most records were documented in mid-July both before and during the NYDDS (New York Natural Heritage Program 2010) and the species is known to fly in New York from June 17 through July 27 (Donnelly 1999). New Jersey flight dates are from mid-May to mid-September (Bangma & Barlow 2010) and at their northern range extent, they are known to fly in Maine from early July to late August (Brunelle & deMaynadier 2005).





New York Natural Heritage Program

### Scarlet Bluet (*Enallagma pictum*)



## COENAGRIONIDAE

### Pine Barrens Bluet (*Enallagma recurvatum*)

Pre-NYDDS Status: G3, S1S2

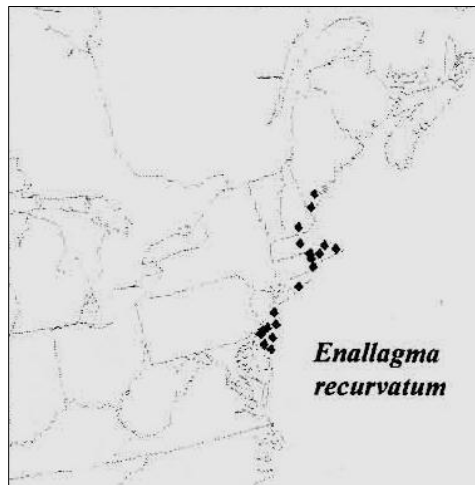
State Threatened

Draft Revised Status: S1

**Habitat Characteristics:** Pine Barrens Bluets are known primarily to inhabit acidic, coastal plain ponds with sandy substrate (Nikula *et al.* 2003, Lam 2004) and emergent vegetation such as Bayonet Rush (*Juncus militaris*) along the shoreline (Massachusetts NHESP 2003) where females oviposit (Carpenter 1991). In New York, this is the case as well, and some sites also have a floating bog mat or the pond has a boggy edge (New York Natural Heritage Program 2010). In New Jersey, they are found in bogs within pine barrens (Bangma & Barlow 2010).



Steve Walter 2009



(Donnelly 2004b)

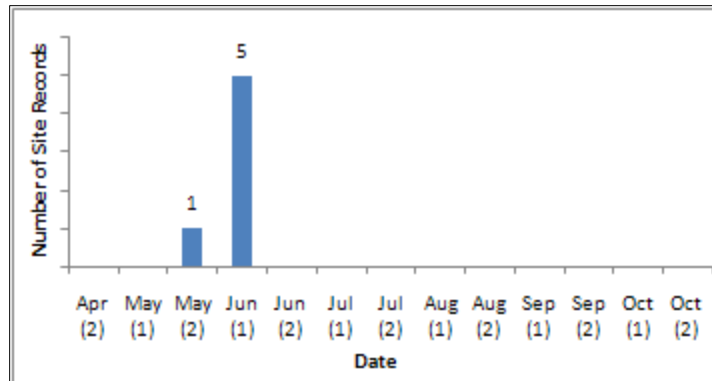
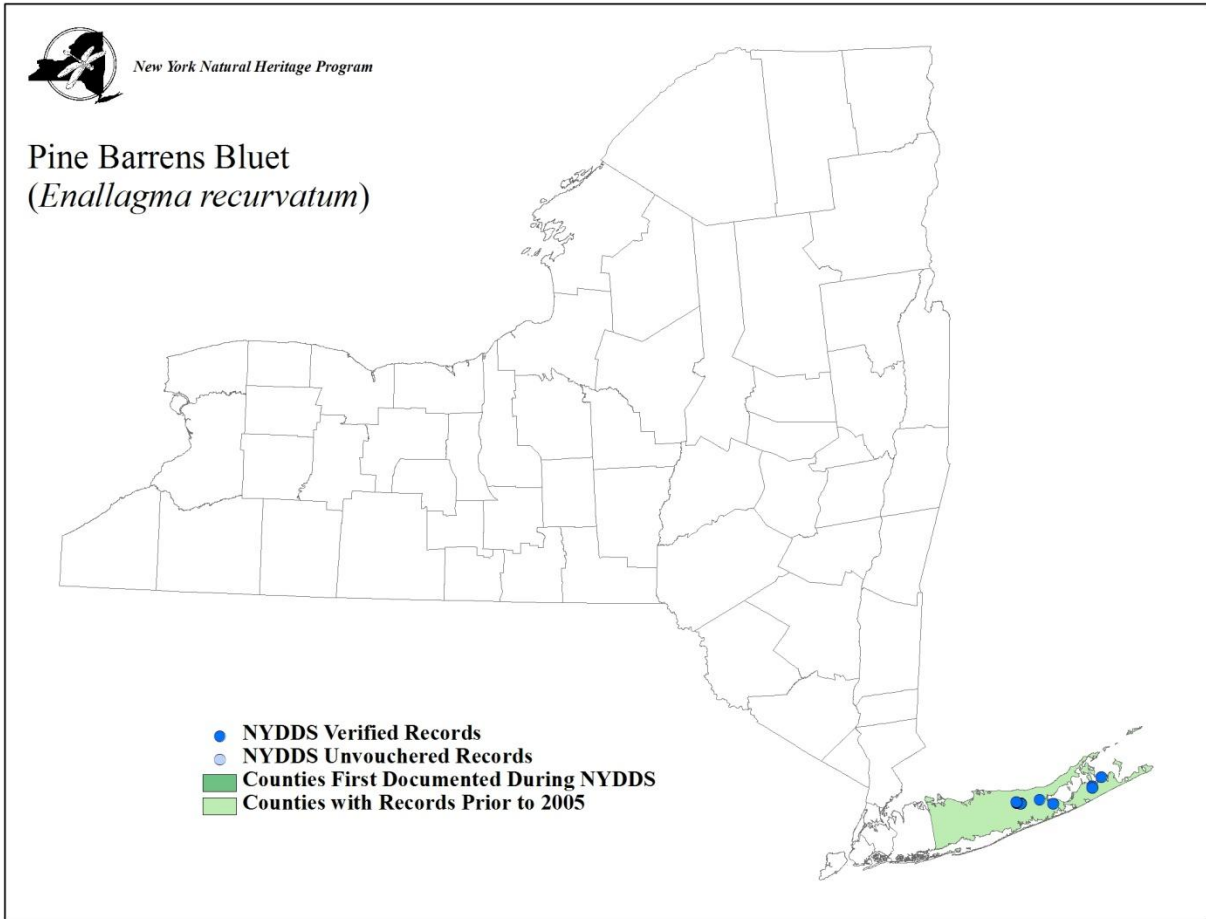
**Distribution and Inventory Needs:** *Enallagma recurvatum* is a regional endemic (Massachusetts NHESP 2003) known only from New Jersey, New York, Rhode Island, Massachusetts, New Hampshire, and southern Maine (Abbott 2010). In New York, it is known from Suffolk county on Long Island from 11 different coastal plain ponds (New York Natural Heritage Program 2010). Locations were investigated as part of a special NYDDS effort (see page 295). Specific sites are not listed due to the species' Threatened status in New York. All but one site have been visited during the NYDDS years, and two ponds that were visited during NYDDS had none observed since 1990 (New York Natural Heritage Program 2010). Threats to the species at Long Island sites

include residential development and the resulting groundwater withdrawal, and invasive species like *Phragmites* on pond shores which crowd out native emergent rushes and floating plants that are required for successful reproduction (New York Natural Heritage Program 2010). Canada geese were also noted as a threat by Virginia Brown on her visits to two of the sites, as she noted the geese may decrease oviposition sites on the *Juncus* or increase egg mortality by overgrazing (New York Natural Heritage Program 2010). The Massachusetts NHESP (2003a) notes that maintaining natural habitats in the upland areas surrounding the ponds is essential to this species' conservation, as newly emerged adults take refuge in these areas for maturing and roosting, as well as feeding. Many of the known sites on Long Island are located within or on preserves or protected lands and threats may be alleviated somewhat, but the above threats might be present on adjacent lands.

**Phenology:** In New York, both pre- and during NYDDS, records for adults have been documented between May 4 and July 6 (Donnelly 1999) with most coming from the first half of June (New York Natural Heritage Program 2010). In Maine, specimens have also been taken in mid to late June (Brunelle & deMaynadier 2005). Adults are known to fly in New Jersey from

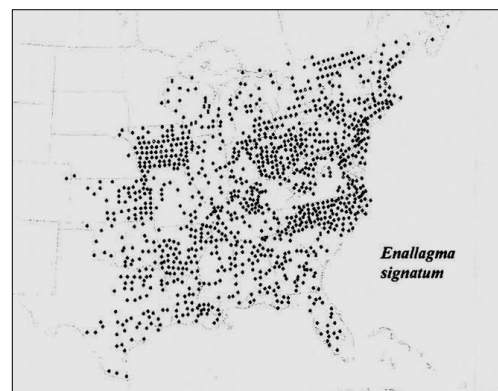
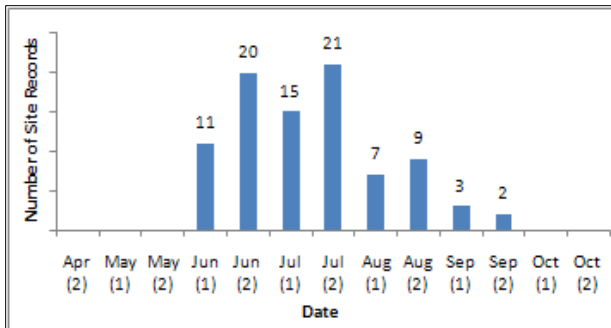
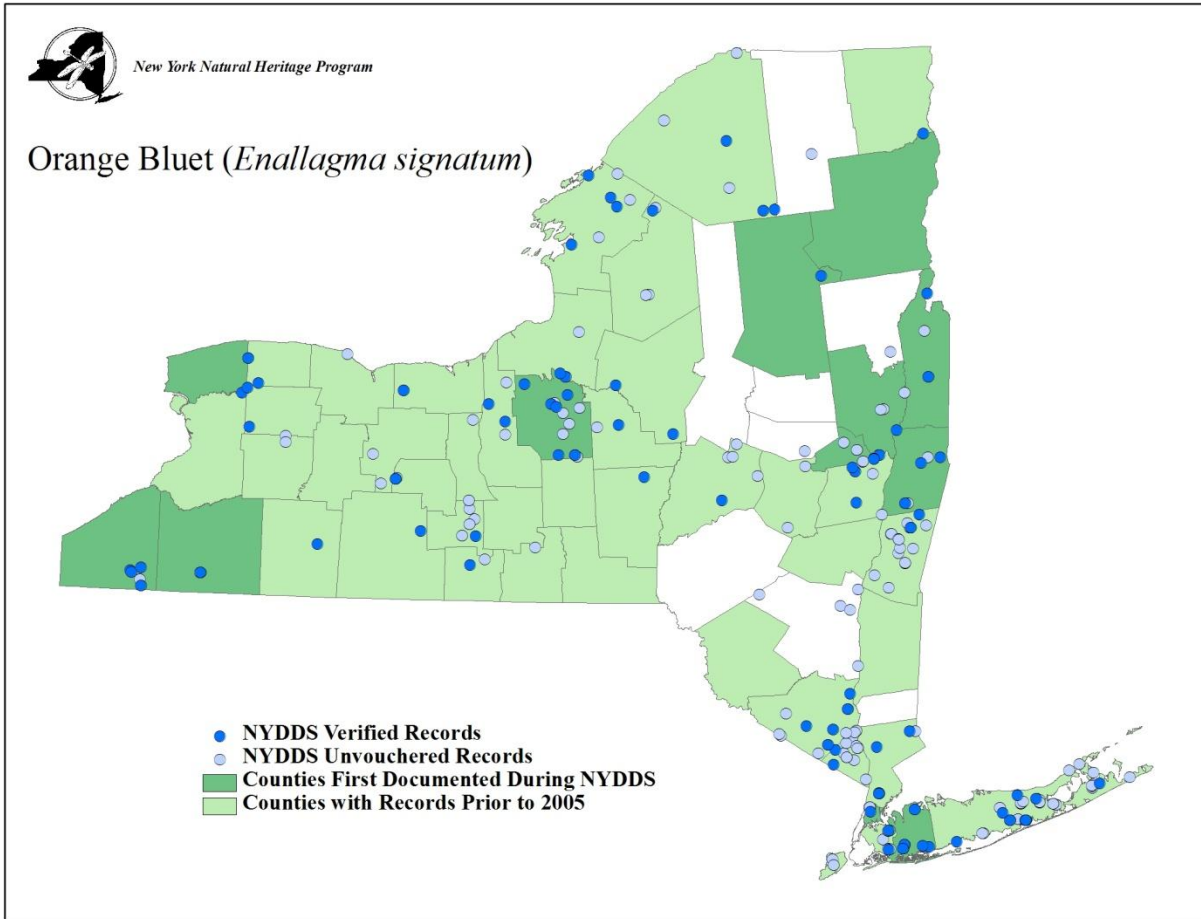


May 8 through June 27 (Bangma & Barlow 2010) and in Massachusetts from late May through early July (Lam 2004). This species has a short and early flight season throughout its range (Carpenter 1991).





**COENAGRIONIDAE**  
**Orange Bluet (*Enallagma signatum*)**  
**Pre-NYDDS Status: G5, S5**



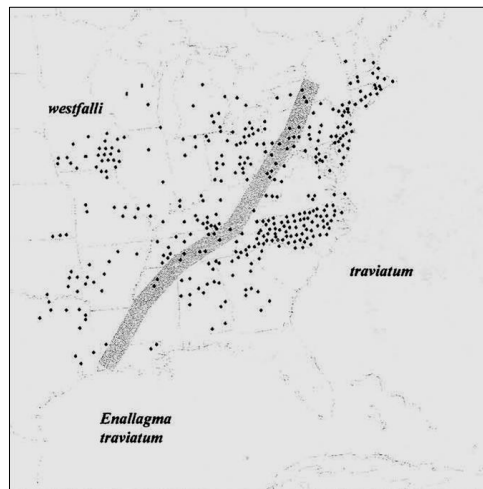
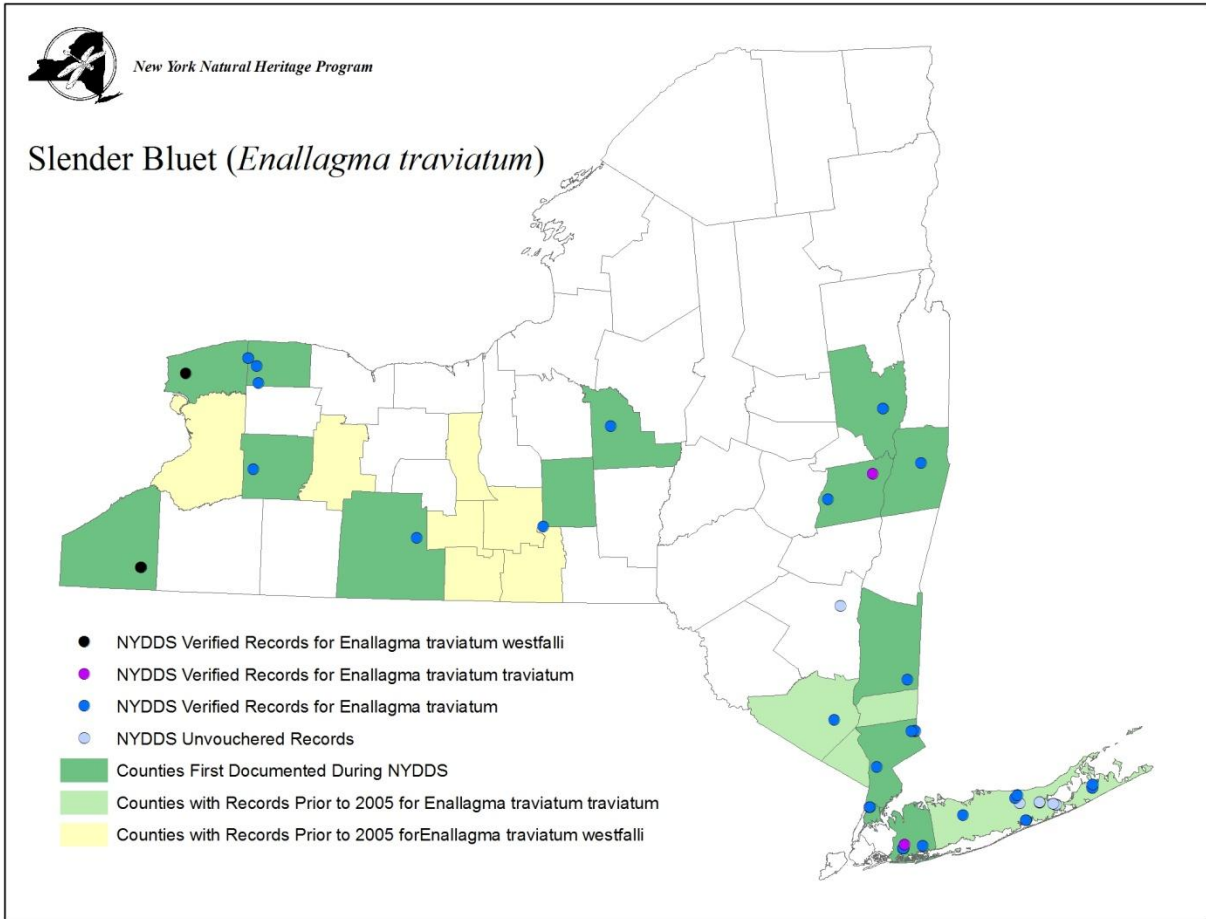
(Donnelly 2004b)



**COENAGRIONIDAE**

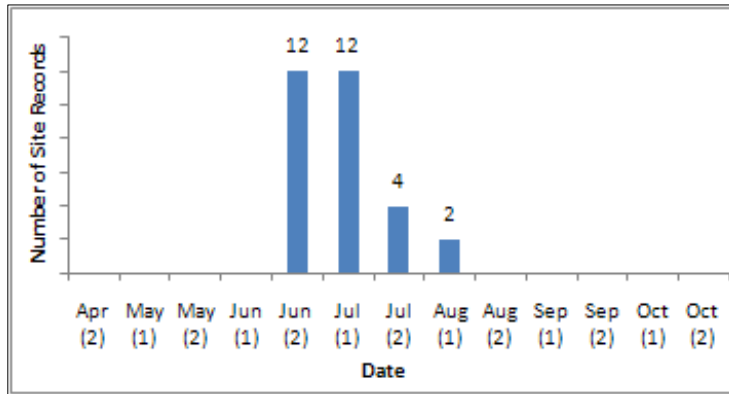
**Slender Bluet (*Enallagma traviatum*)**

**Pre-NYDDS Status: G5, S3**

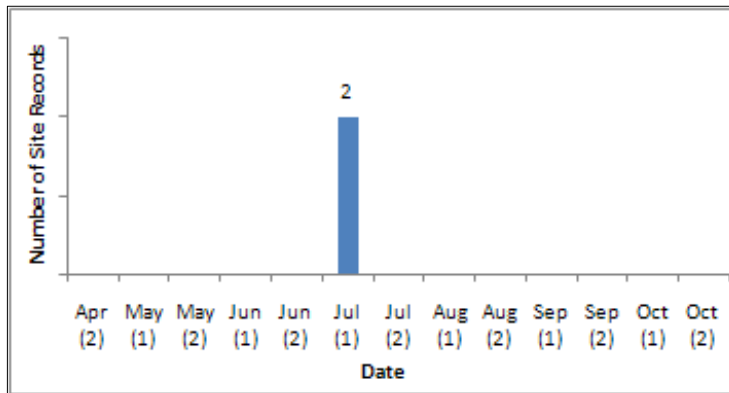


(Donnelly 2004b)

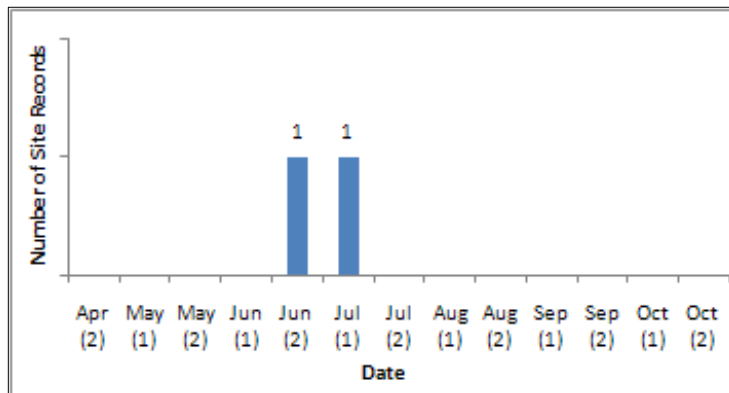




*Enallagma traviatum*



*Enallagma traviatum traviatum*



*Enallagma traviatum westfalli*

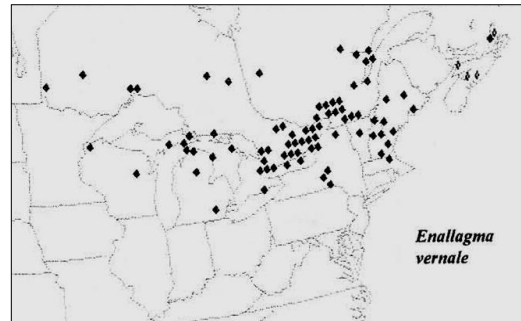
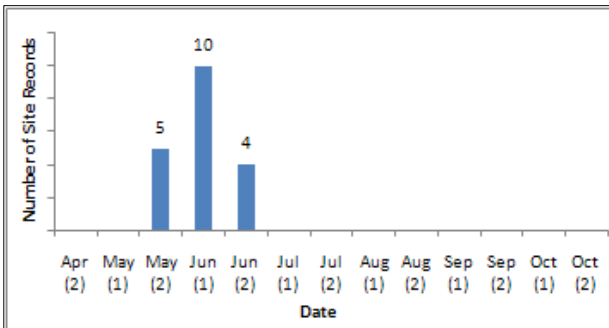
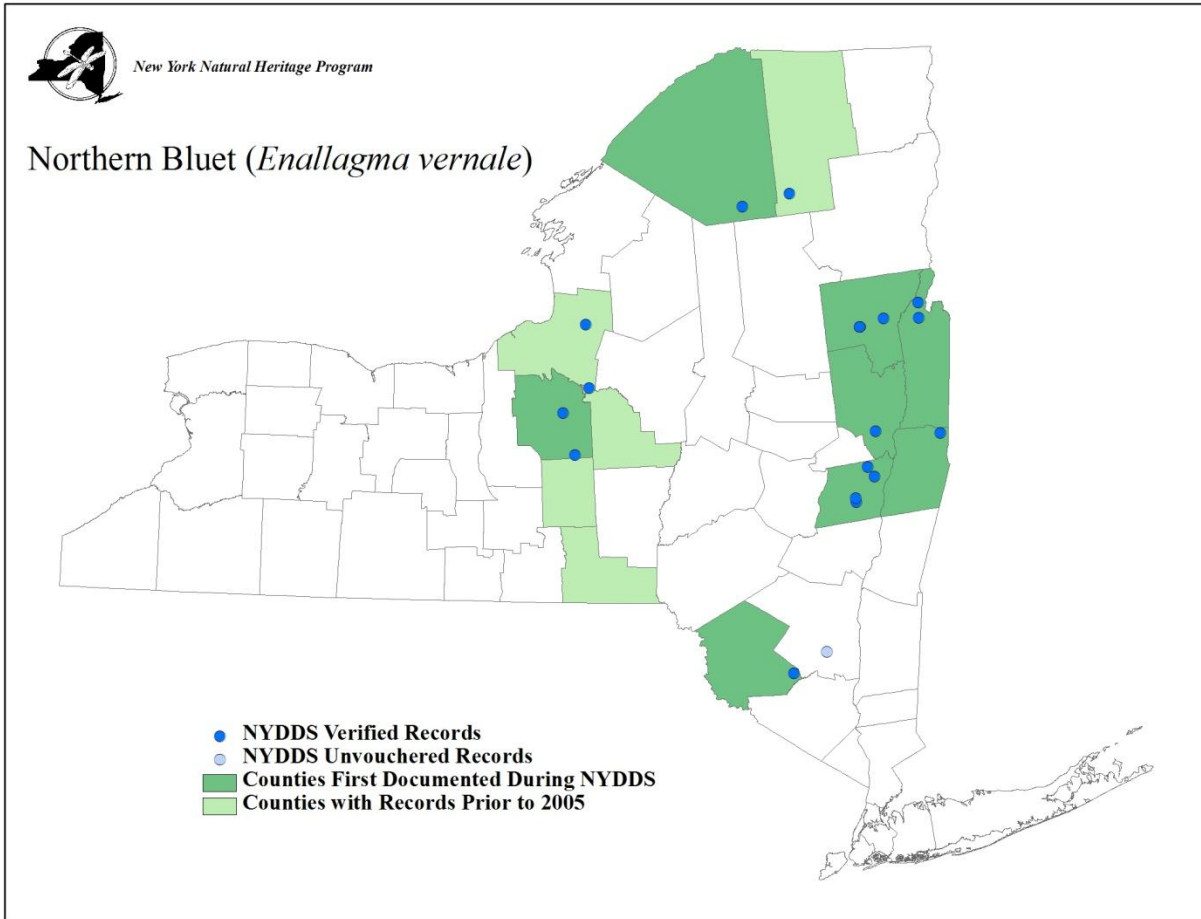


**COENAGRIONIDAE**

**Vernal Bluet (*Enallagma vernale*)**

**Pre-NYDDS Status: G4, SU**

**Draft Revised Status: S3**



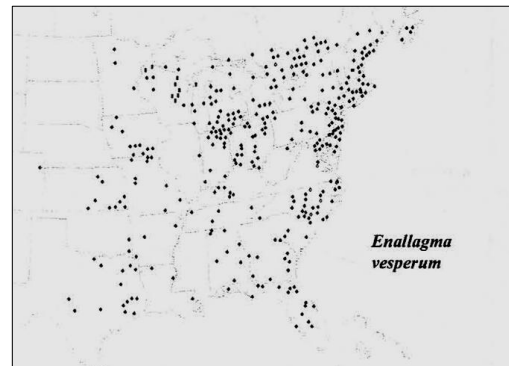
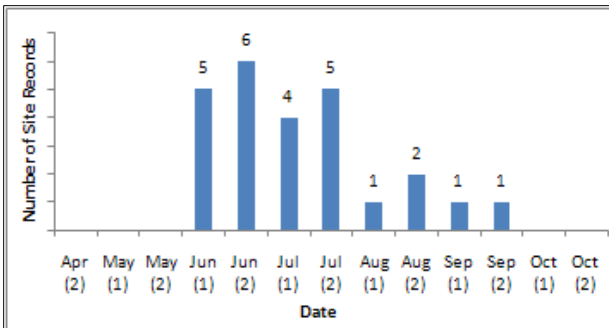
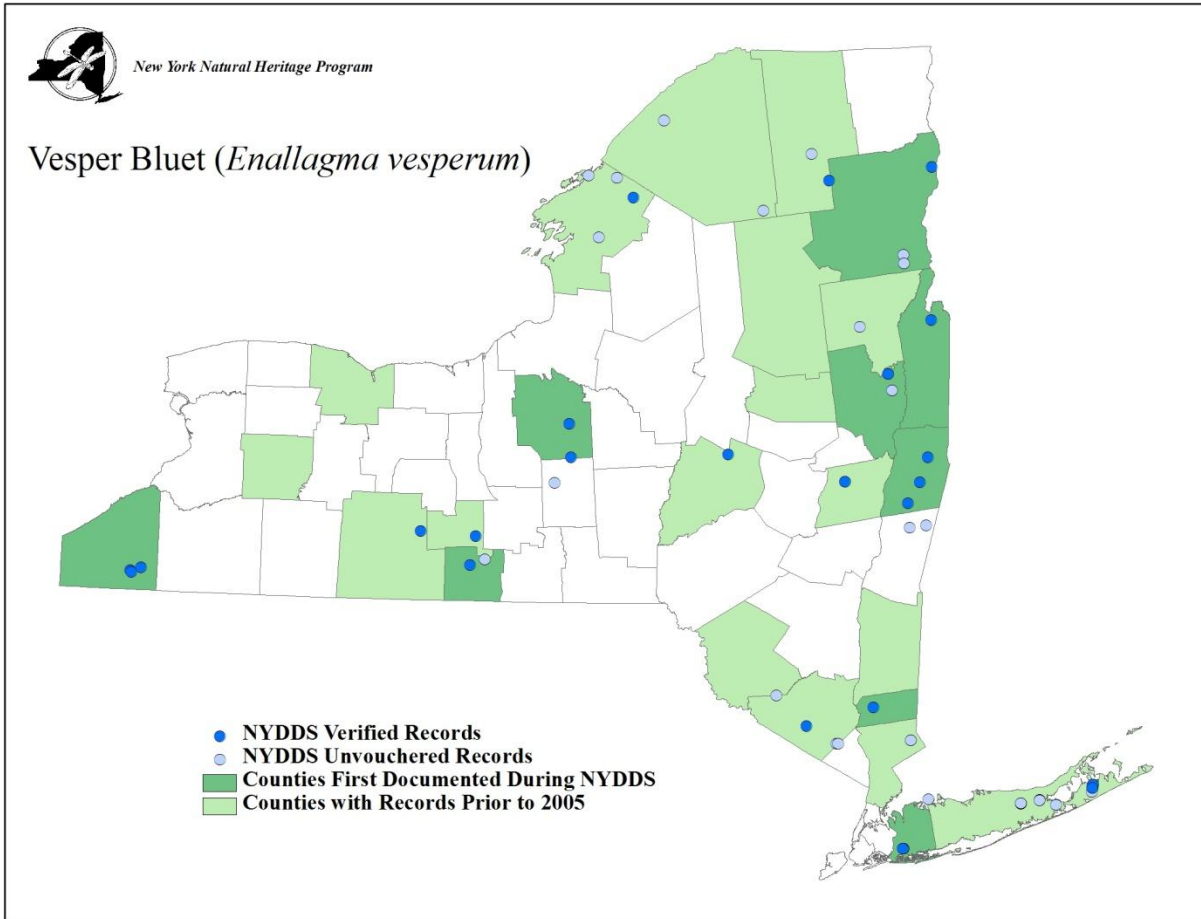
(Donnelly 2004b)



**COENAGRIONIDAE**

**Vesper Bluet (*Enallagma vesperum*)**

**Pre-NYDDS Status: G5, S4**



(Donnelly 2004b)

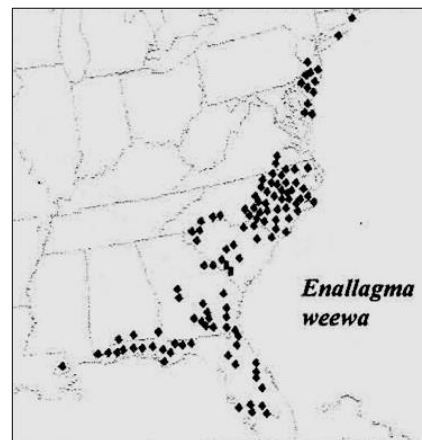
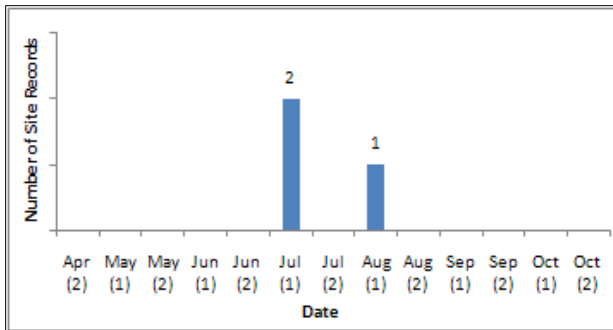
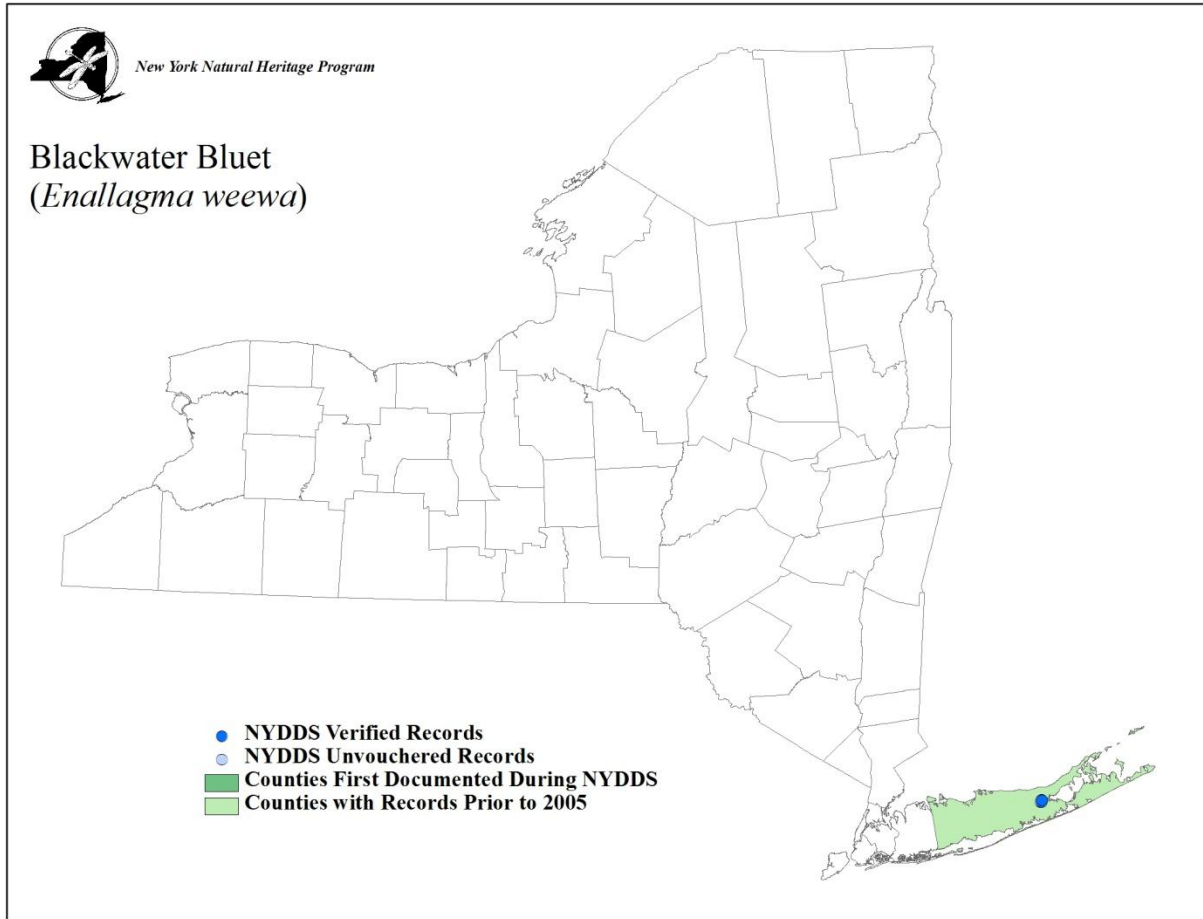


**COENAGRIONIDAE**

**Blackwater Bluet (*Enallagma weewa*)**

**Pre-NYDDS Status: G5, S1**

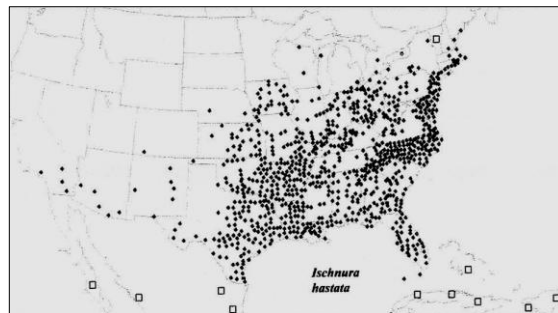
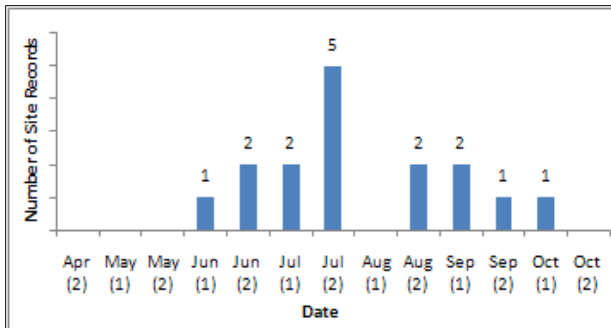
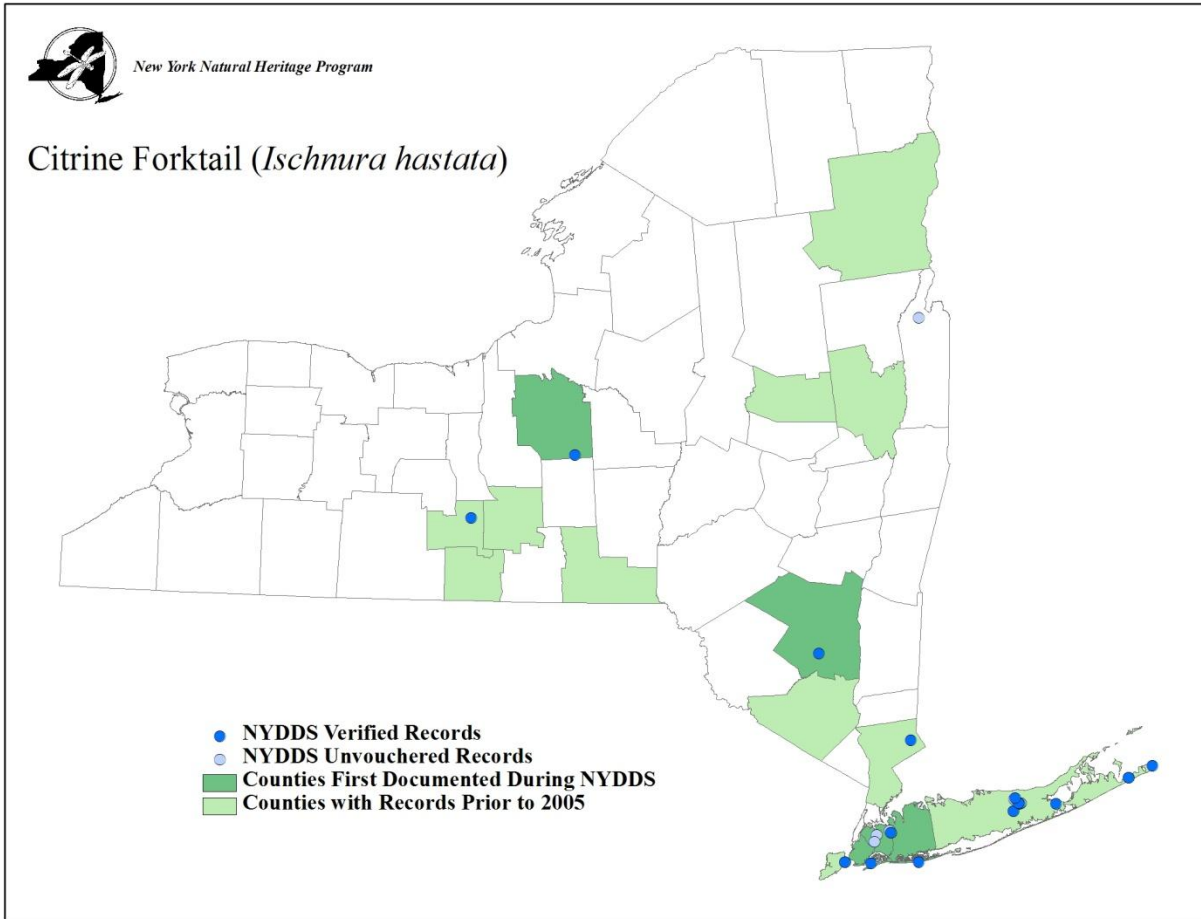
**Draft Revised Status: S1**



(Donnelly 2004b)



**COENAGRIONIDAE**  
**Citrine Forktail (*Ischnura hastata*)**  
**Pre-NYDDS Status: G5, S3**  
**Draft Revised Status: S3**



(Donnelly 2004b)

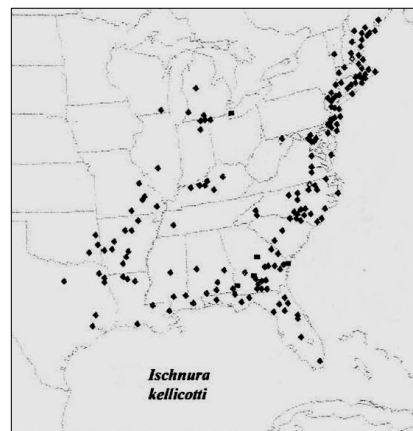
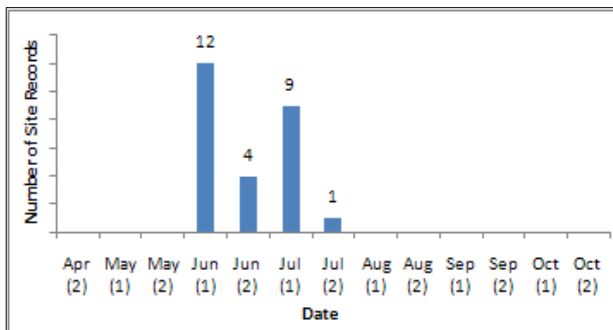
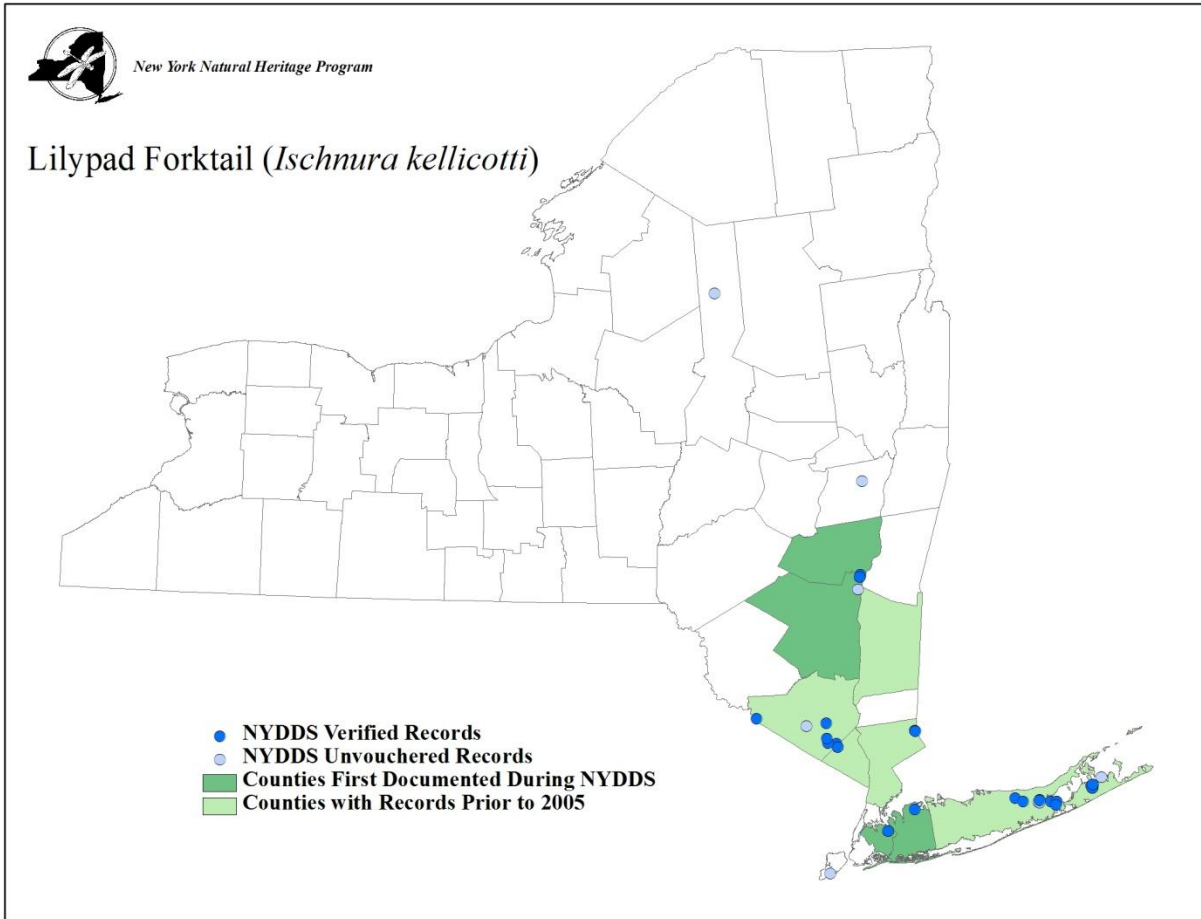


**COENAGRIONIDAE**

**Lilypad Forktail (*Ischnura kellicotti*)**

**Pre-NYDDS Status: G5, S3**

**Draft Revised Status: S3**



(Donnelly 2004b)

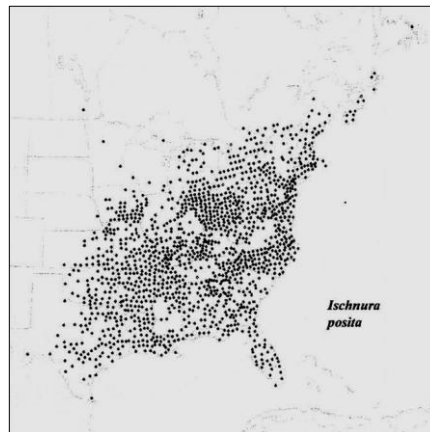
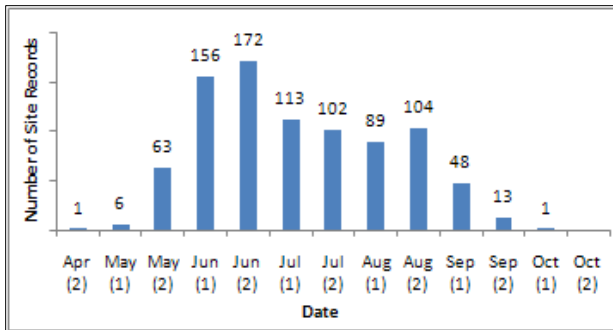
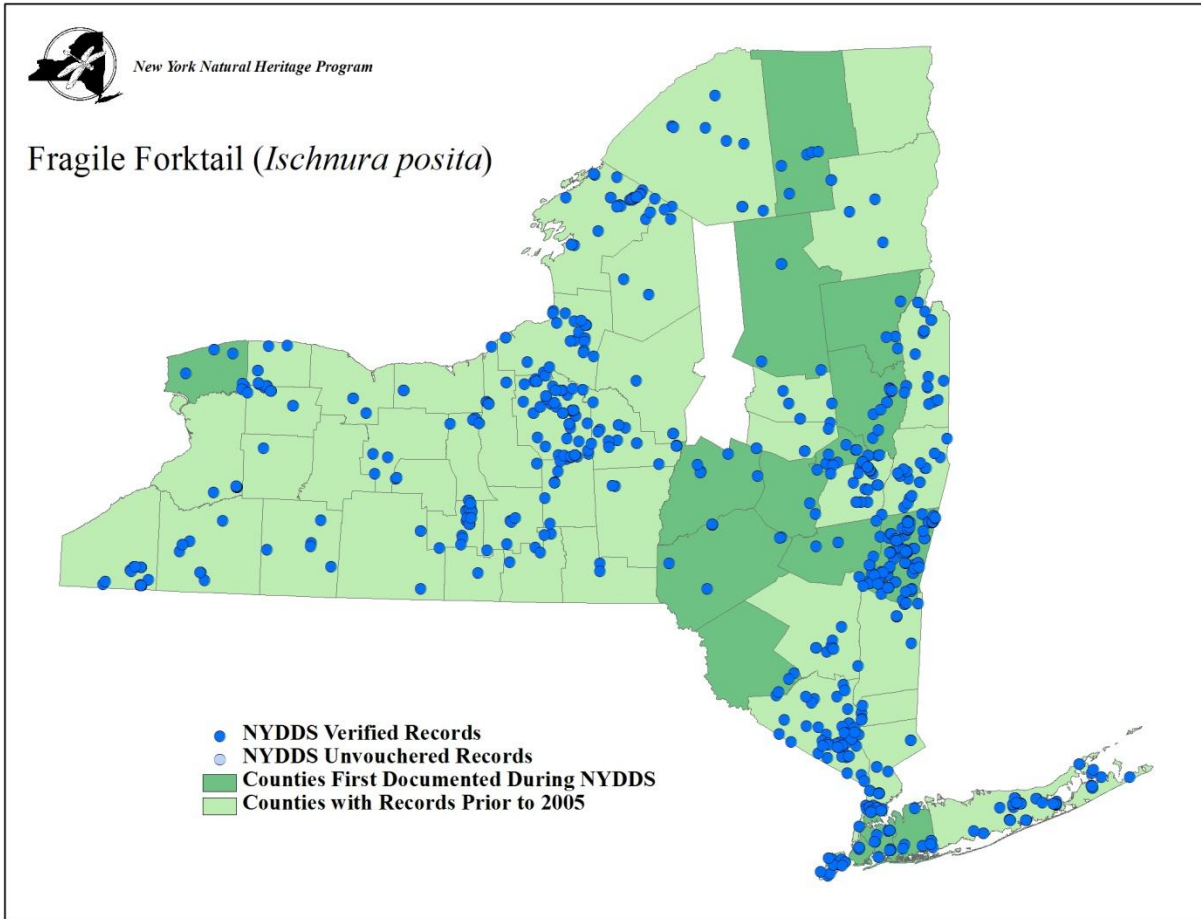




**COENAGRIONIDAE**

**Fragile Forktail (*Ischnura posita*)**

**Pre-NYDDS Status: G5, S5**



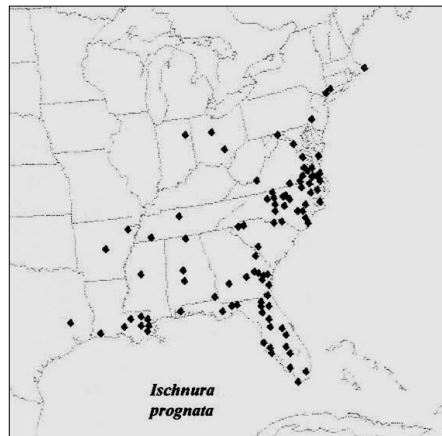
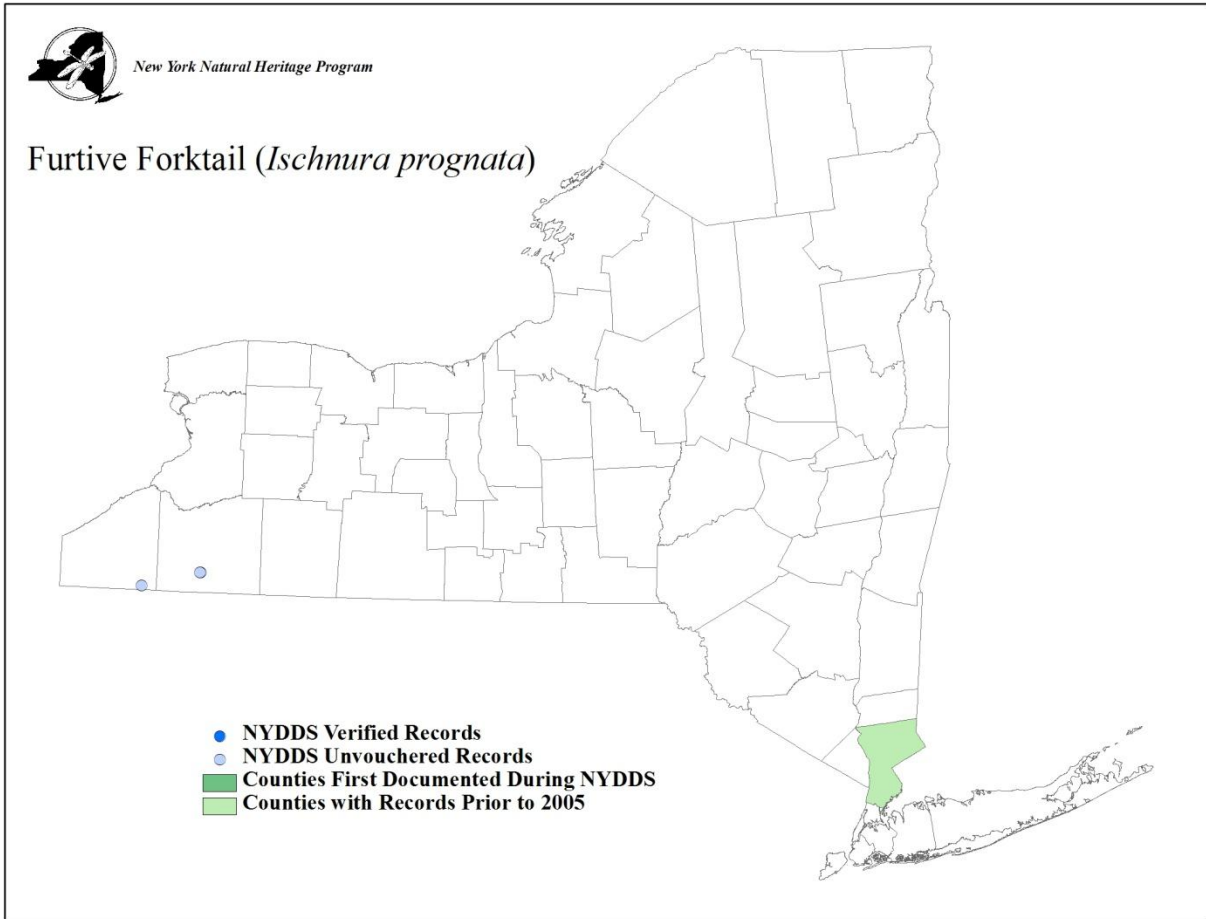
(Donnelly 2004b)



**COENAGRIONIDAE**

**Furtive Forktail (*Ischnura prognata*)**

**Pre-NYDDS Status: G4, SU**



(Donnelly 2004b)



## COENAGRIONIDAE

### Rambur's Forktail (*Ischnura ramburii*)

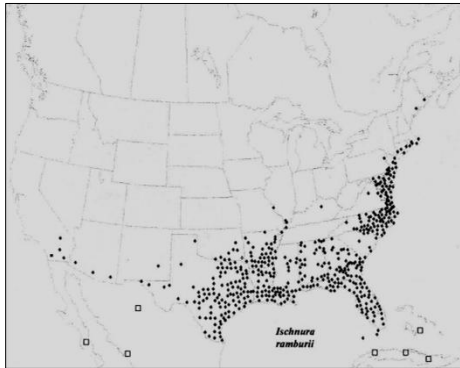
Pre-NYDDS Status: G5, S2

Draft Revised Status: S2S3



Ellen Pehek 2007

**Habitat Characteristics:** In the northeast, Rambur's Forktail is found at coastal plain ponds, lakes, marshes, and slow-flowing rivers or streams, often with brackish water (Nikula *et al.* 2003, Lam 2004). In New York, known habitats also include these habitat types as well as one site on Long Island at an ephemeral pool (New York Natural Heritage Program 2010).



(Donnelly 2004b)

**Distribution and Inventory Needs:** *Ischnura ramburii* has been documented from northern South America northward through Central America and Islands in the Caribbean, the Hawaiian Islands, and the southern United States eastward to the U.S. Atlantic coast and north to Maine (Donnelly 2004b, Abbott 2010). In New York (close to the northern extent of its range), they have been confirmed from Staten Island, Brooklyn, Queens, Nassau, and Suffolk counties since the 1990s (New York Natural Heritage Program 2010). Older records were from Staten Island and Suffolk county prior to the 1990s (Donnelly 1999). The NYDDS effort added at least eight new

locations to the NY Natural Heritage rare Element Occurrence Database (Biotics) and further survey effort is needed to assess threats to known populations. Further inventory may turn up more locations in the above counties, and the new locations in New York during the survey may be due to survey effort rather than a population increase or expansion. The unvouchered record from Cattaraugus County should be explored with further survey effort.

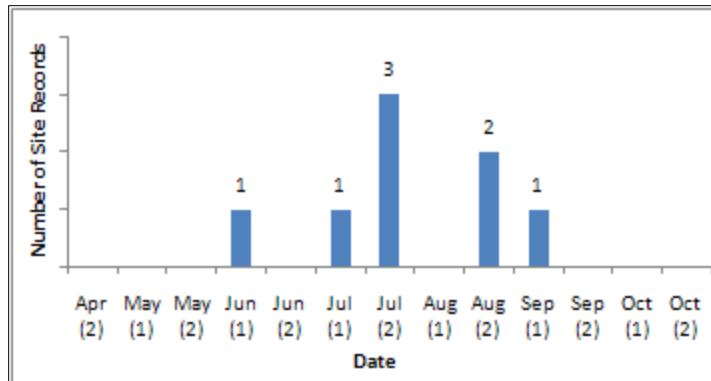
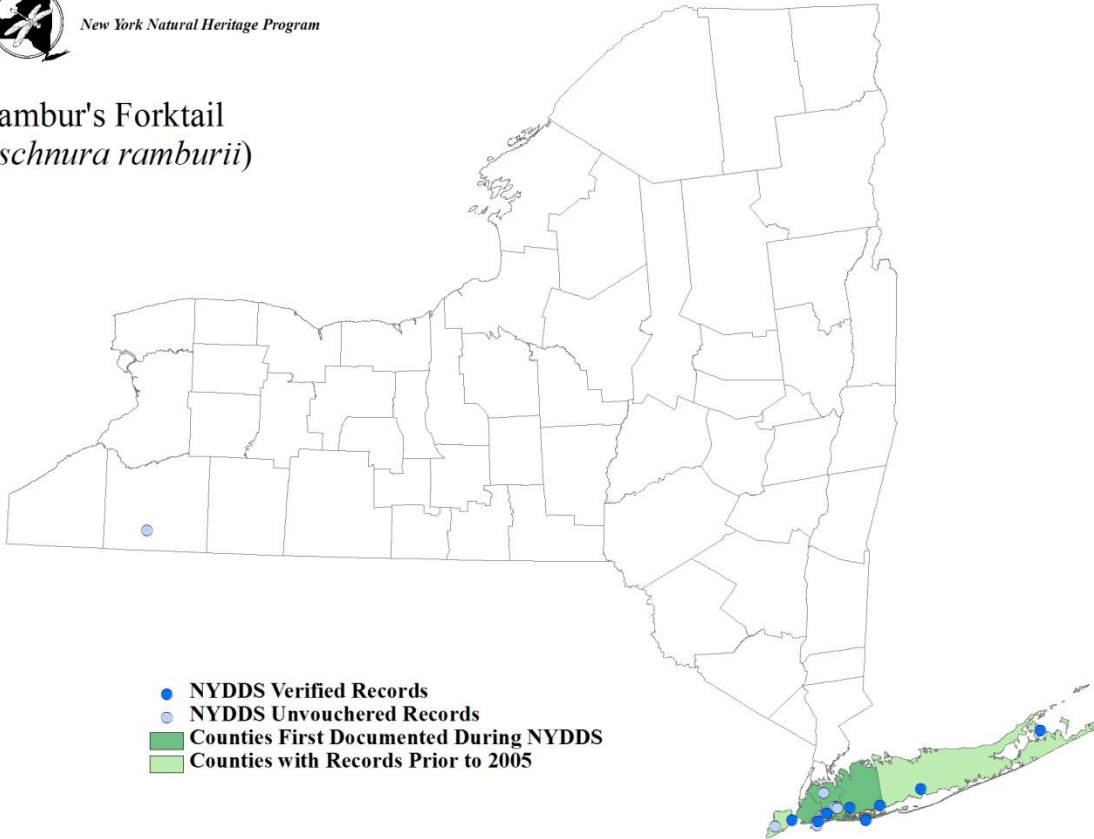
**Phenology:** New York records from the 1990s to present indicate a flight season from June 14 to September 2 (New York Natural Heritage Program 2010). An unvouchered observation was made on 9/14/2009 and older records indicate the species can be observed into October (Donnelly 1999). The species flies from June 8 through November 1 in New Jersey (Bangma & Barlow 2010).



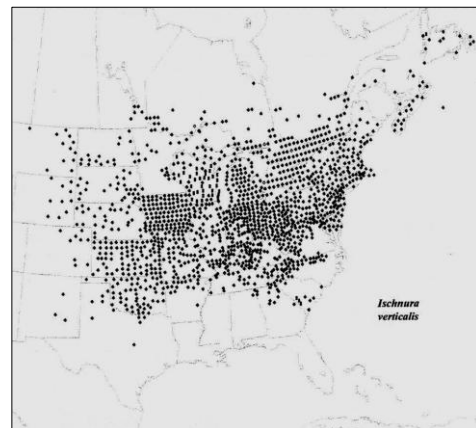
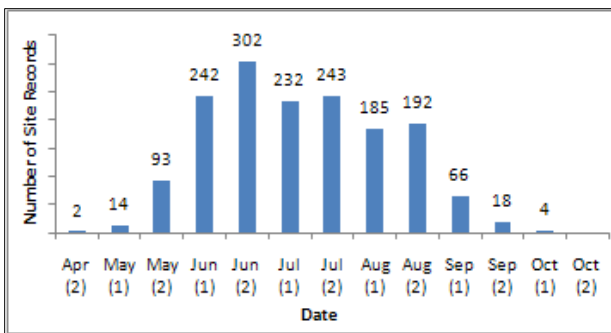
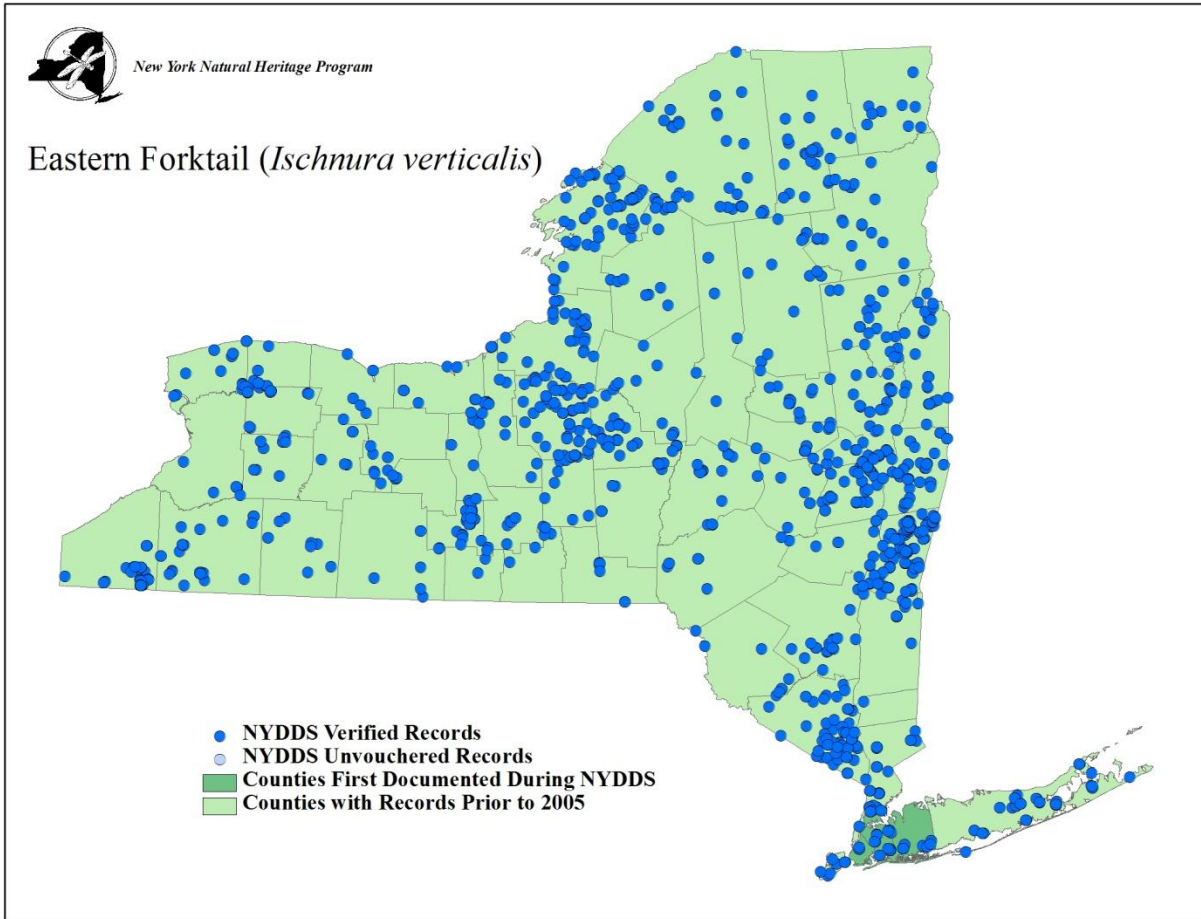


New York Natural Heritage Program

### Rambur's Forktail (*Ischnura ramburii*)



**COENAGRIONIDAE**  
**Eastern Forktail (*Ischnura verticalis*)**  
**Pre-NYDDS Status: G5, S5**



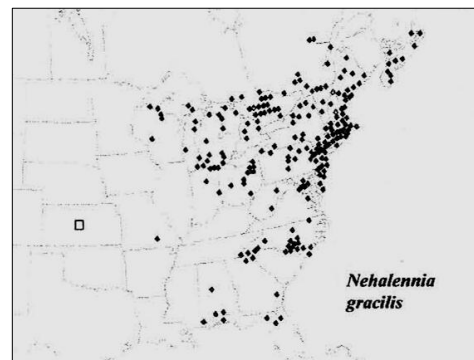
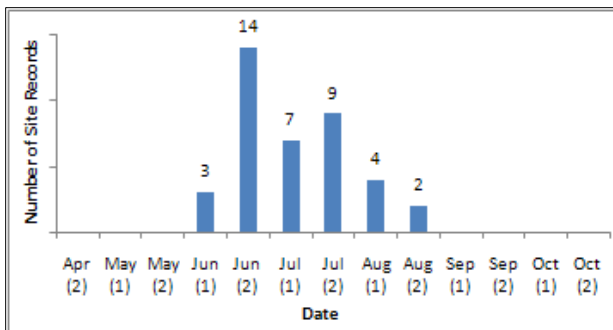
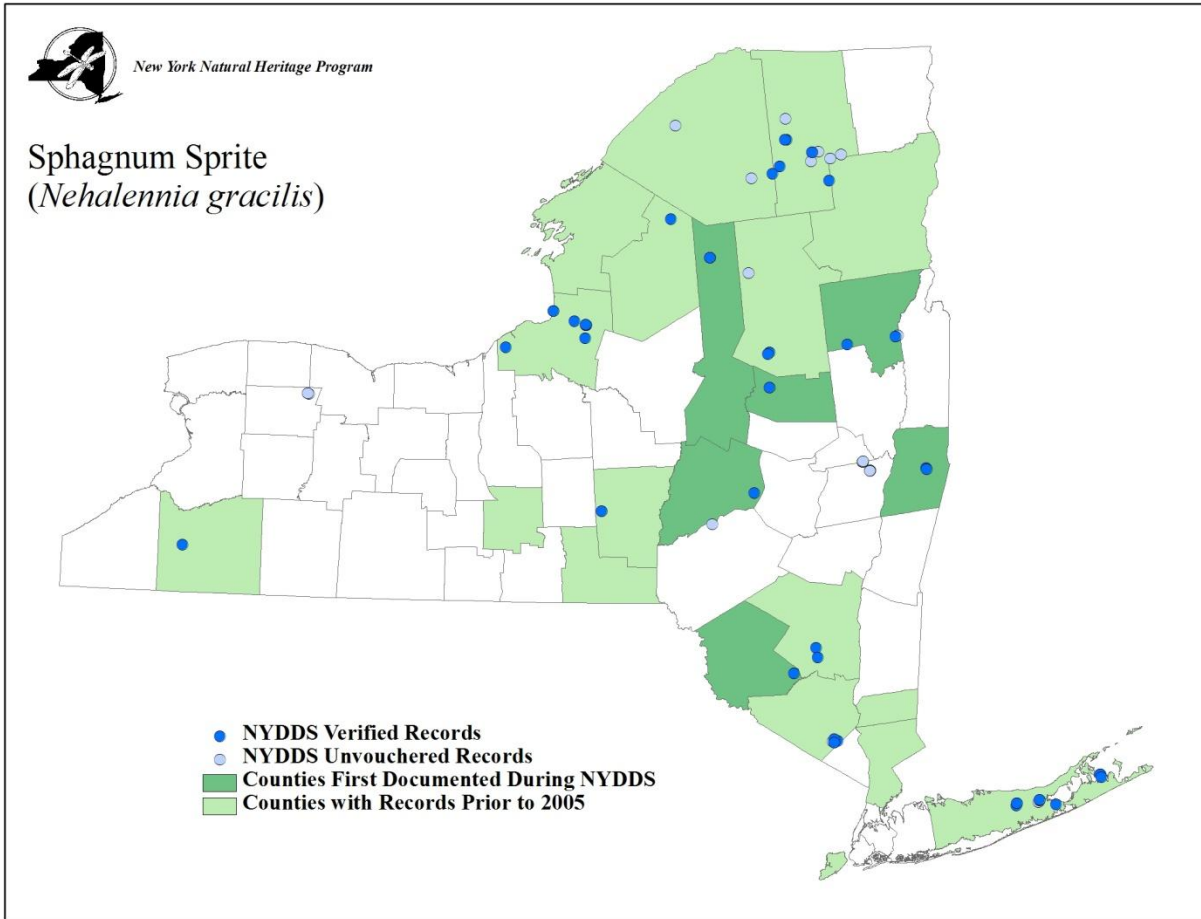
(Donnelly 2004b)



**COENAGRIONIDAE**

**Sphagnum Sprite (*Nehalennia gracilis*)**

**Pre-NYDDS Status: G5, S4**



(Donnelly 2004b)



**COENAGRIONIDAE**

**Southern Sprite (*Nehalennia integricollis*)**

**Pre-NYDDS Status: G5, S1**

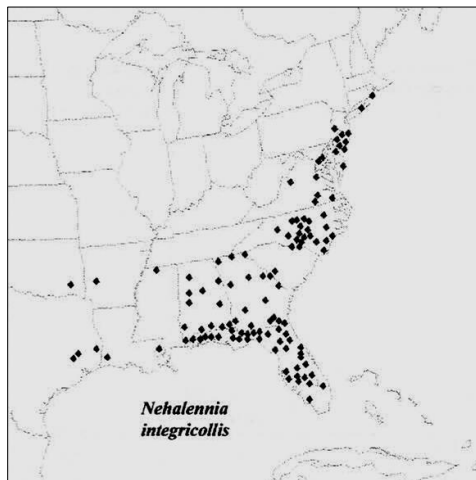
**Special Concern**

**Draft Revised Status: S1**

**Habitat Characteristics:** In the northeast, Southern Sprites are found on the coastal plain at grassy ponds, lakes, marshes, and bogs (Lam 2004, Bangma & Barlow 2010). In New York, known habitats are coastal plain ponds on Long Island (New York Natural Heritage Program 2010).



Steve Walter 2005



(Donnelly 2004b)

**Distribution and Inventory Needs:** The species' known range includes Texas and Oklahoma eastward across the southern United States, then northward along the Atlantic coast to New Hampshire (Donnelly 2004b, Abbott 2010). In New York, there are at least five older records for *N. integricollis* in Suffolk county (Donnelly 1999), and two extant locations in Suffolk county (1995 and 2005) (New York Natural Heritage Program 2010). Suitable habitats should be checked on Long Island during the known flight season and threats should be assessed at known sites. Similar species that occur in New York include Sphagnum Sprites (*N. gracilis*) and Sedge Sprites (*N. irene*), which were fairly common and widely distributed during the NYDDS.

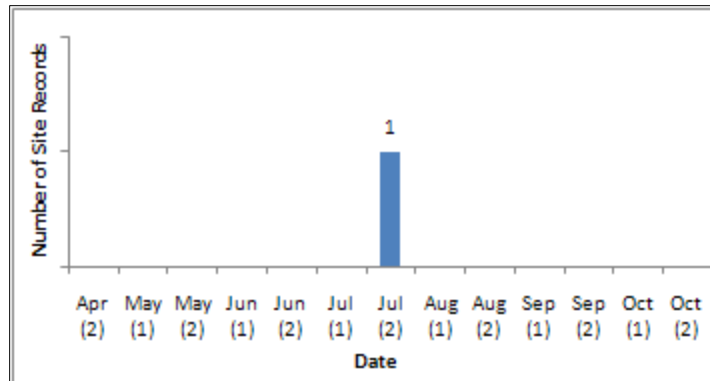
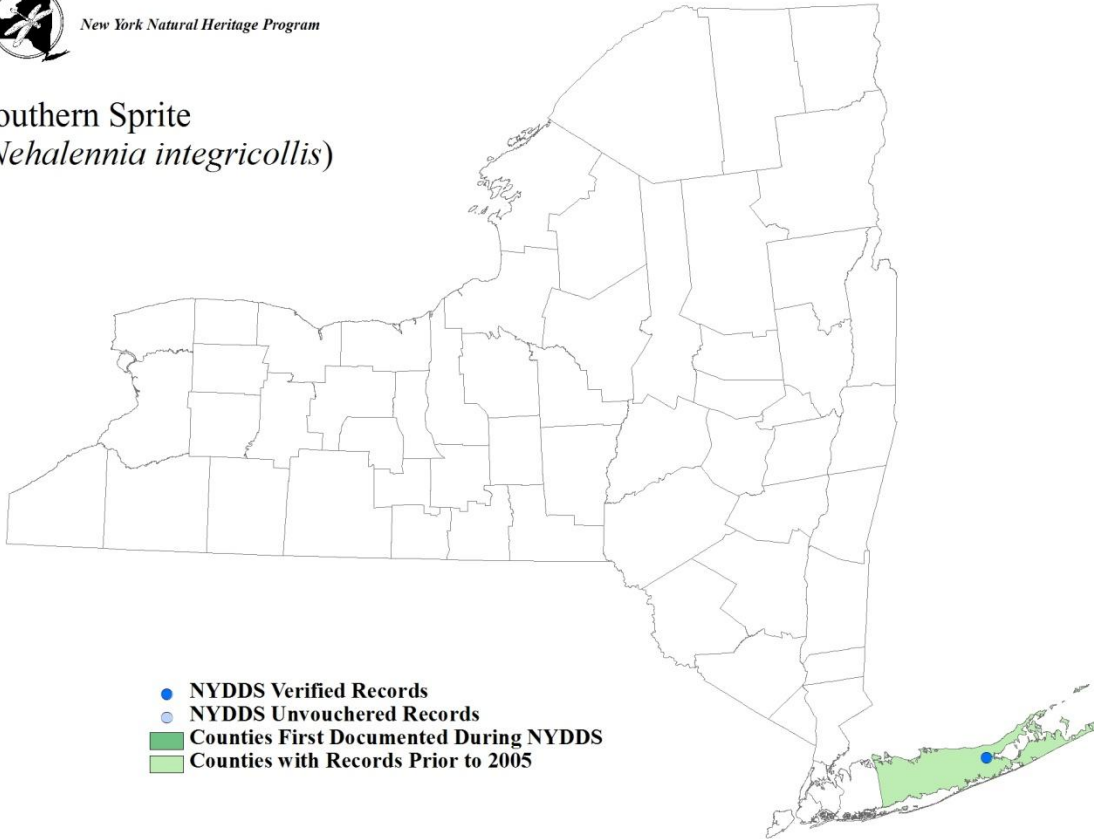
**Phenology:** NYDDS and pre-NYDDS records indicate that the species may be observed on Long Island between June 27 and July 27 (Donnelly 1999, New York Natural Heritage Program 2010). In New Jersey, they have been documented from June 8 through August 11 (Bangma & Barlow 2010).





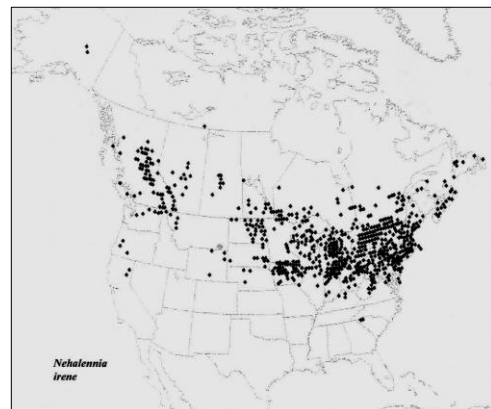
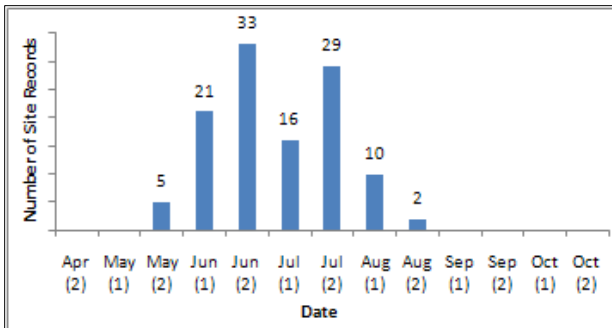
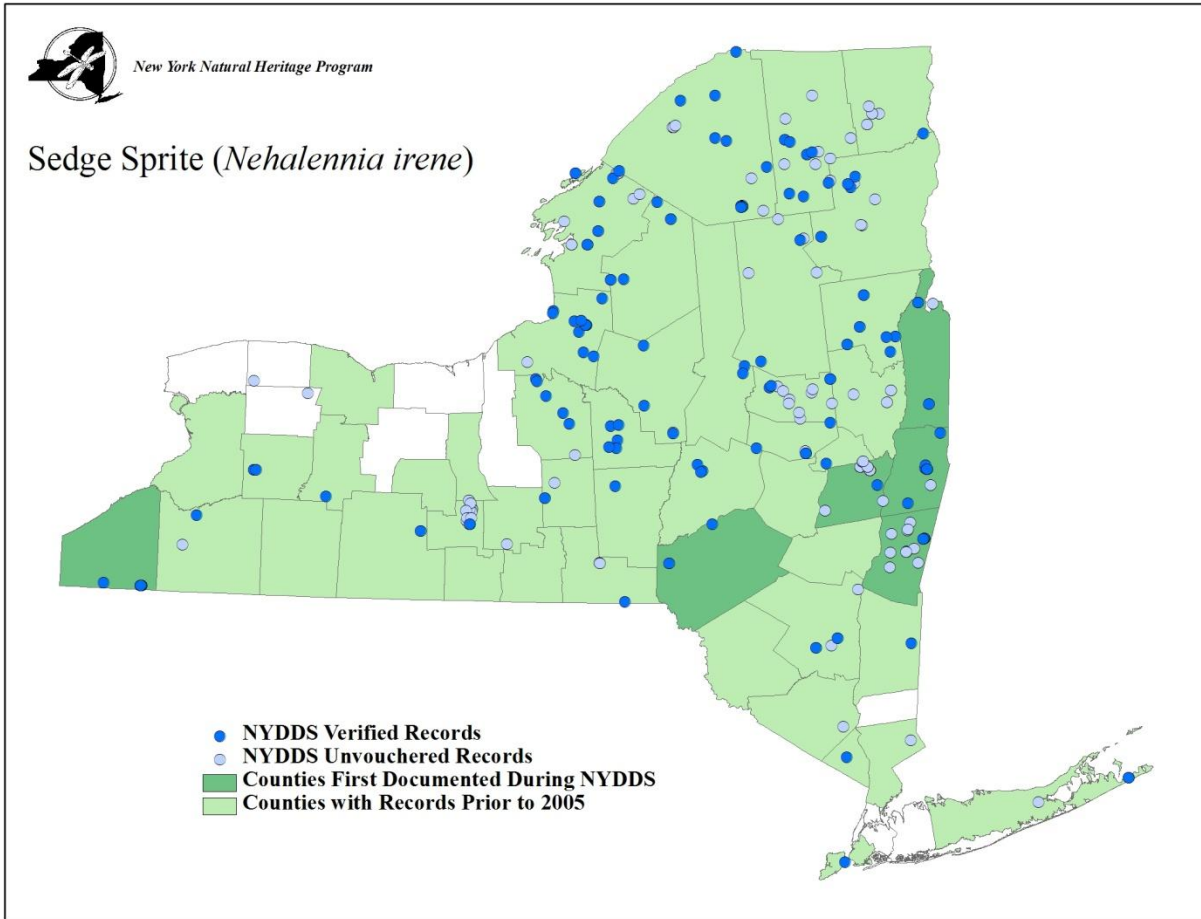
New York Natural Heritage Program

### Southern Sprite (*Nehalennia integricollis*)





**COENAGRIONIDAE**  
**Sedge Sprite (*Nehalennia irene*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004b)



## PETALURIDAE

### Gray Petaltail (*Tachopteryx thoreyi*)

**Pre-NYDDS Status: G4, S2**

**Draft Revised Status: S2**

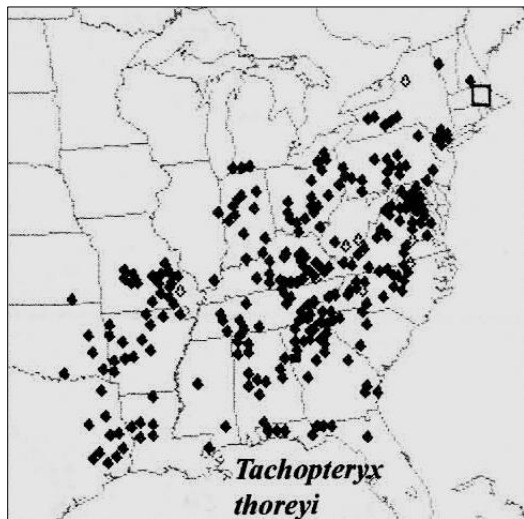
**Special Concern**

**Habitat Characteristics:** The general habitat of the Gray Petaltail is usually described as hillside seeps and fens located in areas of deciduous forest (Dunkle 2000, Nikula *et al.* 2003). In New York, all known populations are found at rocky gorges and glens, with

groundwater fed, hillside seepages feeding into small streams (New York Natural Heritage Program 2010). Larvae inhabit the seepage areas. The adults perch vertically on tree trunks, stumps, or exposed branches in sunny spots within the seepage areas and adjacent woods, defending territories and searching for mating opportunities. At most New York sites, petaltails are often observed as they fly up and down the streams to forage (New York Natural Heritage Program 2010). While quite inconspicuous at times, these large dragonflies are also quite tame and will occasionally land on people (Nikula *et al.* 2003).



Alan W. Wells 2007



Donnelly 2004c

**Distribution and Inventory Needs:** This is principally a southern species whose range extends from northern Florida west to eastern Texas and Oklahoma, and north to southern Illinois, southern Michigan, New York and southern New England (Dunkle 2000, Glotzhober & McShaffrey 2002). Overall, the statewide range for this species is quite broad, with nearly all records coming from counties across the southern portion of the state including the lower Hudson Valley, the southern Finger Lakes, and the Lake Erie portion of the Great Lakes drainage. There is a reliable site record from one location on the Tug Hill in 1990 that may represent a disjunct portion of the species range in New York, as well as unvouchered records from St. Lawrence county in 2007 and 2008. Despite this broad

distribution in New York, the Gray Petaltail has very specialized habitat requirements leading to an especially localized distribution. It is known from just over a dozen sites in New York, with apparent population clusters in the Finger Lakes region and in Letchworth State Park.

Just three sites were photo documented for the Gray Petaltail during the NYDDS (including four separate photos from one site), while observation only reports were obtained from five additional locations. Two of the observation only records were from previously known populations which were also documented with photographic records. A third observation was from a new location in Letchworth State Park and was at a hillside seepage area where one adult was observed resting on a sunny tree trunk in early July. This location is within one mile of two



sites documented prior to the NYDDS. The two remaining sight only records submitted for the NYDDS are especially intriguing as both would represent new county records (Sullivan and St. Lawrence), including one even further north than the 1990 Tug Hill record. While few locations for this state-listed Special Concern species were documented, it should be noted that its particular seep/spring/gorge habitat is difficult to describe and was visited less than other habitat types during the project. Although seep/spring habitat was visited across a number of southern counties where Gray Petaltails might have been expected, just 19 separate survey site locations during the project were specifically described as seep/spring. There were about 20 surveys completed in the proximity of the of the 1990 Tug Hill location during this project; at least two surveys were in suitable habitat specifically targeting this species. Future effort could determine if there is an extant population in that area. Old pre-NYDDS records listed by Donnelly (1999) from West Point and Fort Montgomery in Orange County were also not visited during the NYDDS, although Ken Soltesz conducted extensive, general odonate survey efforts throughout the West Point Military Reservation in years prior to the NYDDS and did not encounter petaltails. Efforts should be made to verify the Sullivan and St. Lawrence County locations reported during NYDDS with additional observations, photographs, or a specimen. The Gray Petaltail should also be sought at additional seep/spring/creek locations in Letchworth State Park and other gorges in the Finger Lakes region. A better understanding of geological conditions in New York that lead to suitable habitat for this rare species would be valuable for identifying other areas for future surveys. An informative distribution model (New York Natural Heritage Program 2009c) found that environmental variables associated with topographic position (topographic index and surficial geology) were the most informative parameters in defining suitable habitats for this species.

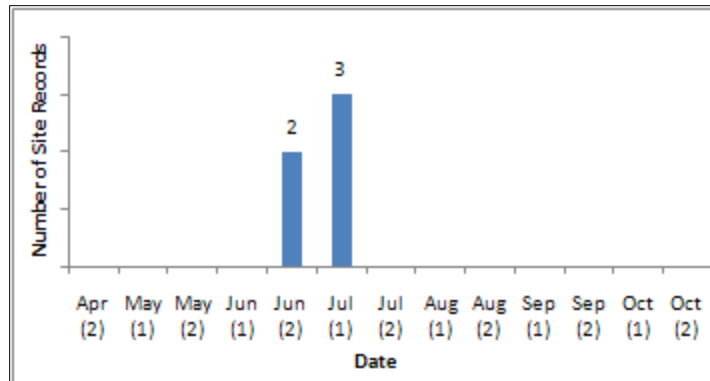
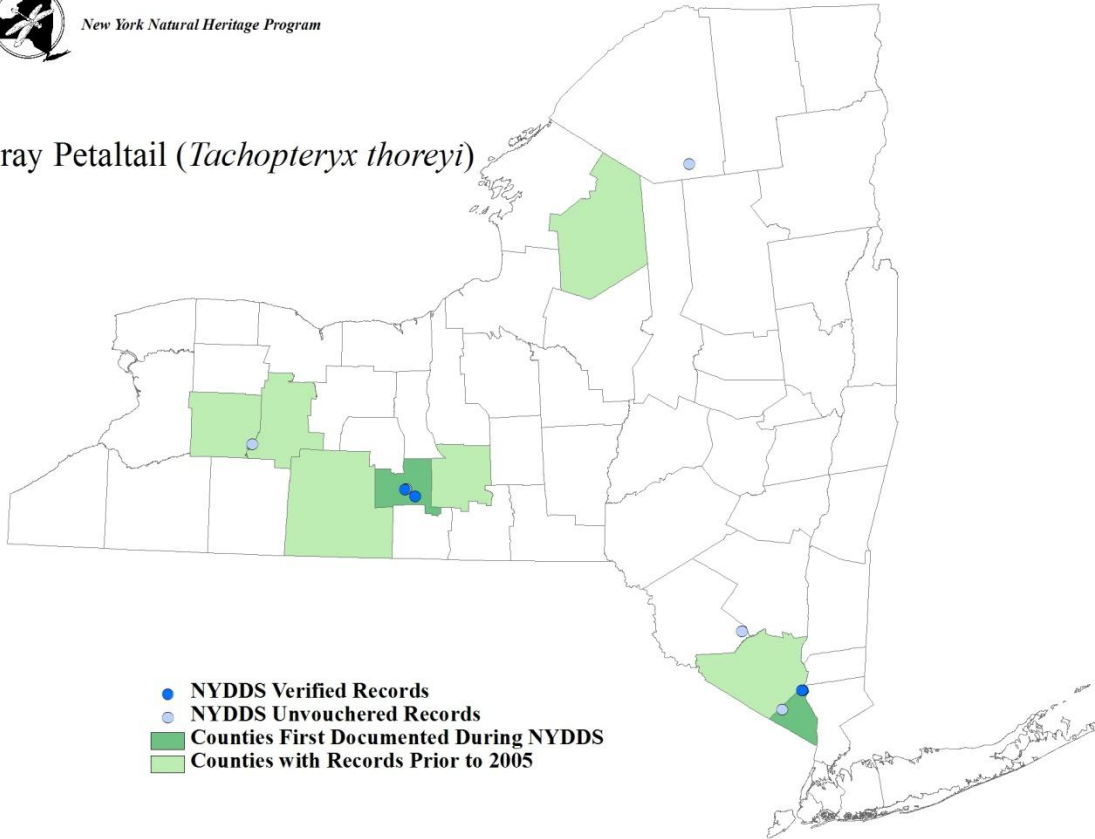
**Phenology:** The Gray Petaltail flight season for New Jersey has been reported as early June to mid August (Dunkle 2000). Donnelly (1999) shows previously recorded New York Gray Petaltail dates from June 7- July 15. An examination of 37 records, including observations and museum specimens, in the database of the New York Natural Heritage Program prior to the NYDDS, shows 38% of the records from June 1-15, 35% of the records from June 16-30, 21% of the records from July 1-15, and just 5% of the records from July 16-30. The NYDDS records documented by photographs, or based on observations from sites also documented by photographs or in close proximity to other known sites, show a noticeably different percentage with 33% from June 16-30 and 66% from July 1-15. The difference in the number of early June records based upon these two sources may reflect the timing of targeted search efforts for Gray Petaltail at various New York State Parks from 1998-2004, as part of a multi-year Biodiversity Inventory Project (Evans & VanLuven 2005). Early June likely represents the beginning of the flight period in New York, a time when the petaltails may be most closely tied to the seep/spring habitat for mating, whereas late June and early July probably represents the peak of the flight period. Unless seepage areas are previously identified, petaltails are probably most likely to be observed in mid-summer when they may spend less time closely tied to the breeding habitat. While Dunkle (2000) shows the New Jersey flight season extending into mid August, the only New York records from August include the 1990 Tug Hill record and the Sullivan and St. Lawrence County observations obtained during the NYDDS. All three of these records are sight only records, with the Tug Hill and St. Lawrence County observations from the northern portion of the state. While all three of these records are from experienced observers, the timing of those observations provides yet another reason to target those areas for further surveys.





New York Natural Heritage Program

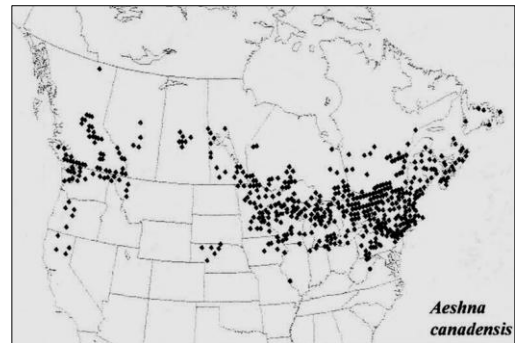
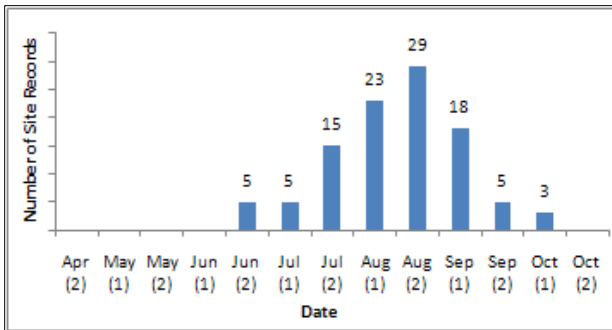
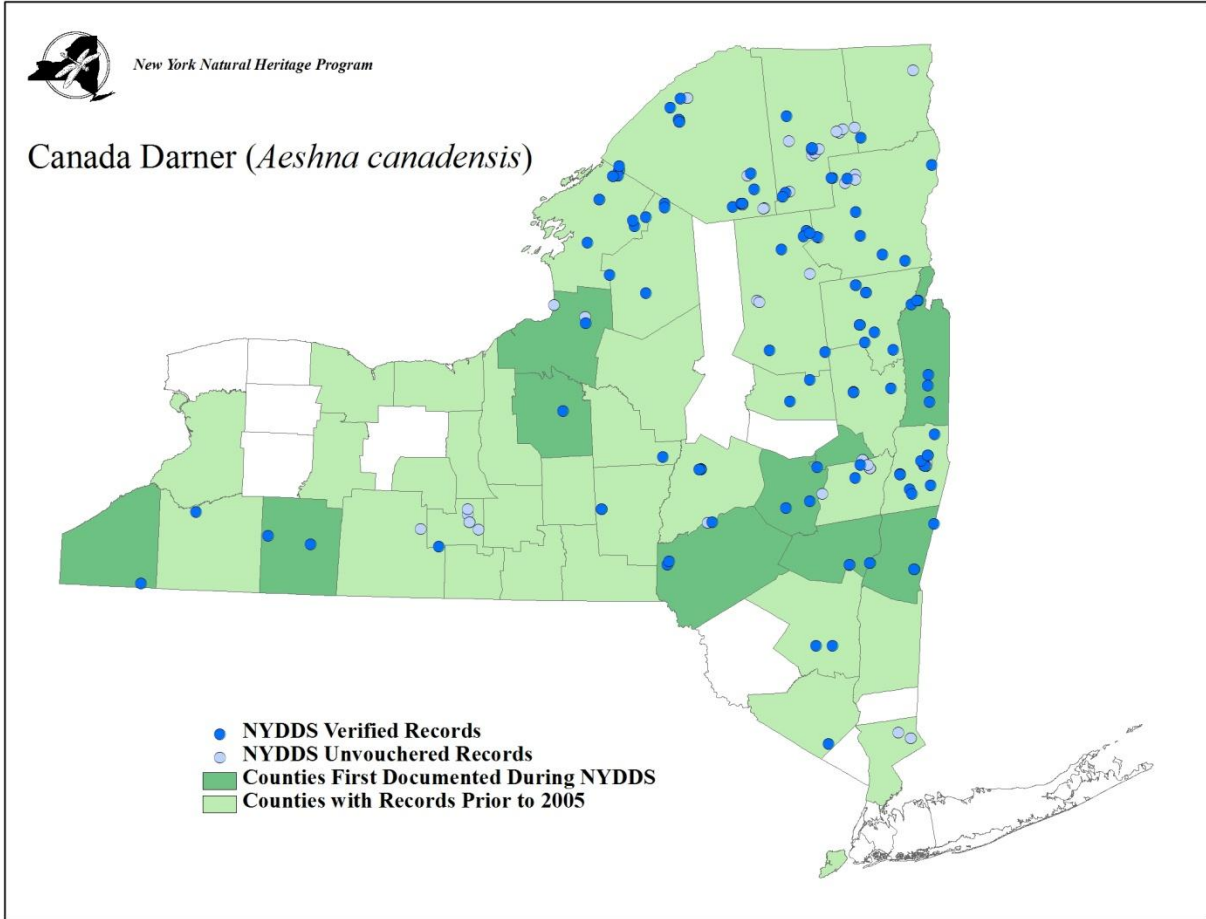
### Gray Petaltail (*Tachopteryx thoreyi*)



**AESHNIDAE**

**Canada Darner (*Aeshna canadensis*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004c)



## AESHNIDAE

### Mottled Darner (*Aeshna clepsydra*)

Pre-NYDDS Status: G4, S2S3

Draft Revised Status: S4

**Habitat Characteristics:** As elsewhere, in New York this species occupies coastal plain ponds, small lakes, or bays of larger lakes with marshy or boggy edges

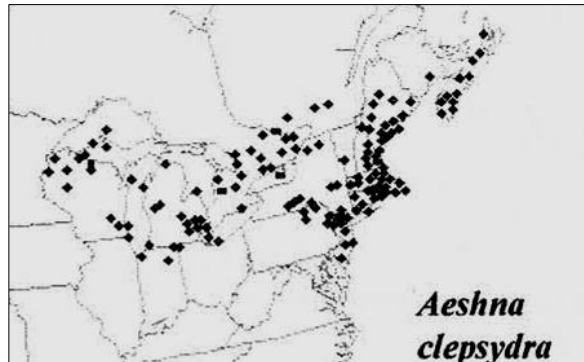


Jeff Corser 2009

and water lilies and clear water (Dunkle 2000, Mead 2003). Nymphs are found in beds of emergent plants along the borders of shallow ponds or bays (Walker 1958). Most of the recent records during NYDDS came from small inland lakes and especially ponds with floating bog vegetation. It is likely that there are particular qualities, such as water depth, bottom substrate type, amount and type of aquatic vegetation, and pH, that make some lakes and ponds suitable as larval habitat while

others are not. The adults of this species are usually found patrolling vegetated shorelines, but sometimes can be seen feeding in open fields (Walker 1958) with other *Aeshnas* or perched on trees.

**Distribution and Inventory Needs:** *Aeshna clepsydra* has the center of its distribution in southeastern Ontario in the Eastern Forest-Boreal Transition ecoregion, ranging east to Nova Scotia, west to Wisconsin and south to northern Indiana and Delaware. New York lies in the center of its range where its current distribution is confined to the upper and lower Hudson River watershed, with the exception of one new locale along the eastern Lake Ontario shoreline. The species was not found in south-central New York, where a cluster of pre-NYDDS records from the Susquehanna, and southeast Lake Ontario watersheds were formerly known. Here, further inventory is warranted at boggy ponds. Known sites including Jam Pond in Chenango County (last observed in 1990, but a possible hybrid with *A. canadensis* was captured in mid-September 2009), Marsh Pond in Broome County (last observed in 1991), and Cinnamon Lake in Steuben County (last observed in 1941--18 adults collected) were visited numerous times over the past five years, without success.



(Donnelly 2004c)

**Phenology:** This species has about a six-week flight season in New York. Reports came from around the last week of July to mid-September, with the bulk of observations from the end of August into the first week of September.



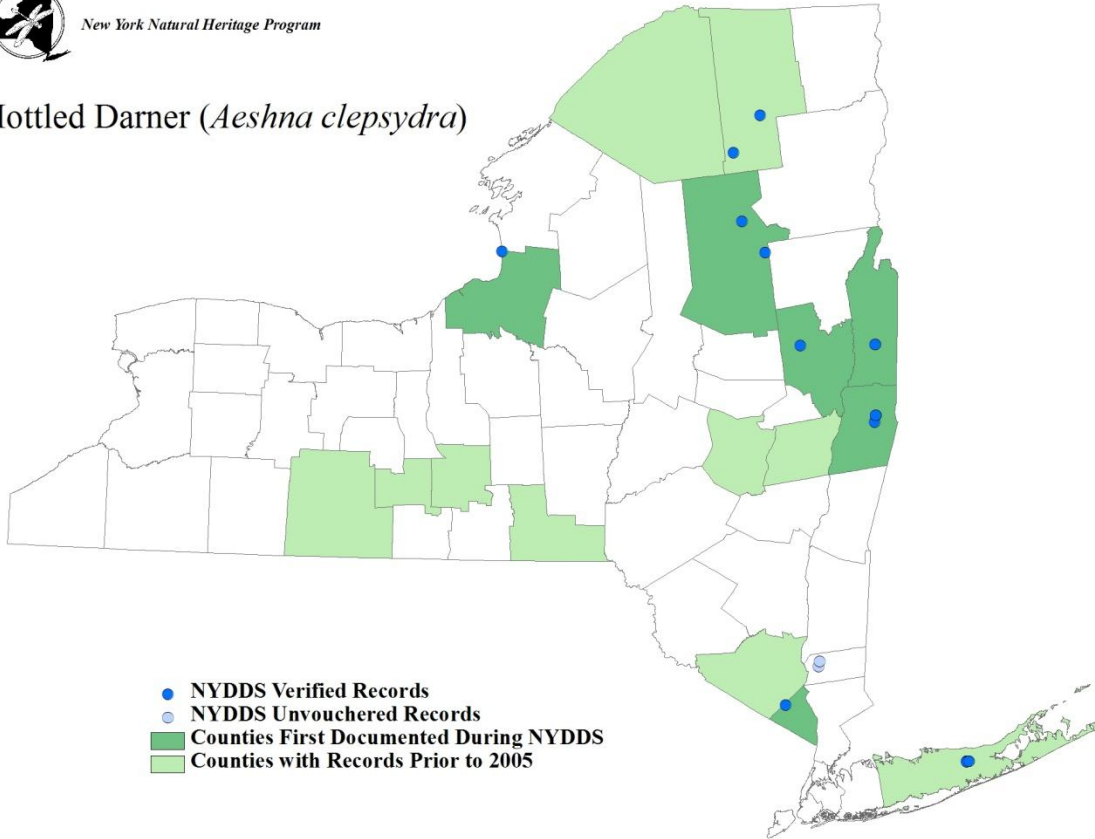
Alan W. Wells 2009



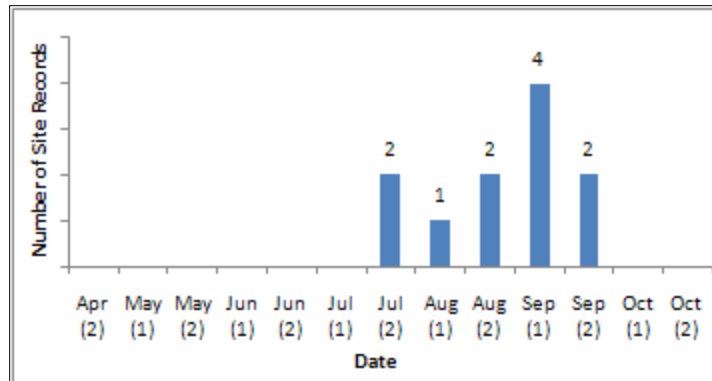


New York Natural Heritage Program

### Mottled Darner (*Aeshna clepsydra*)



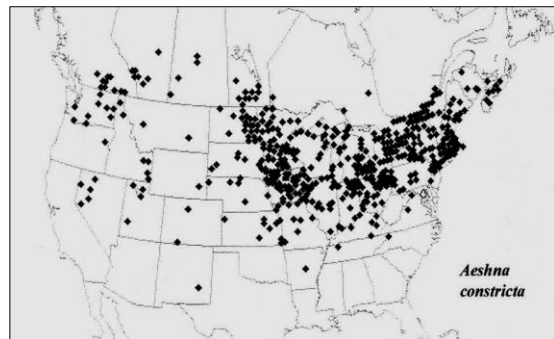
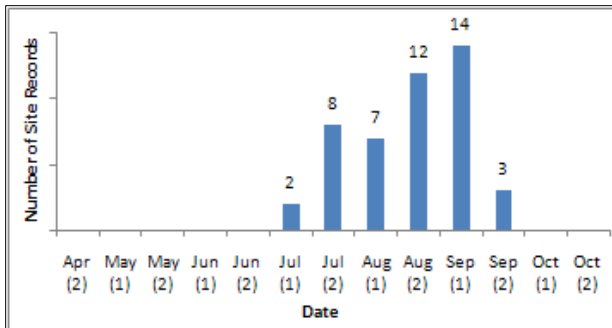
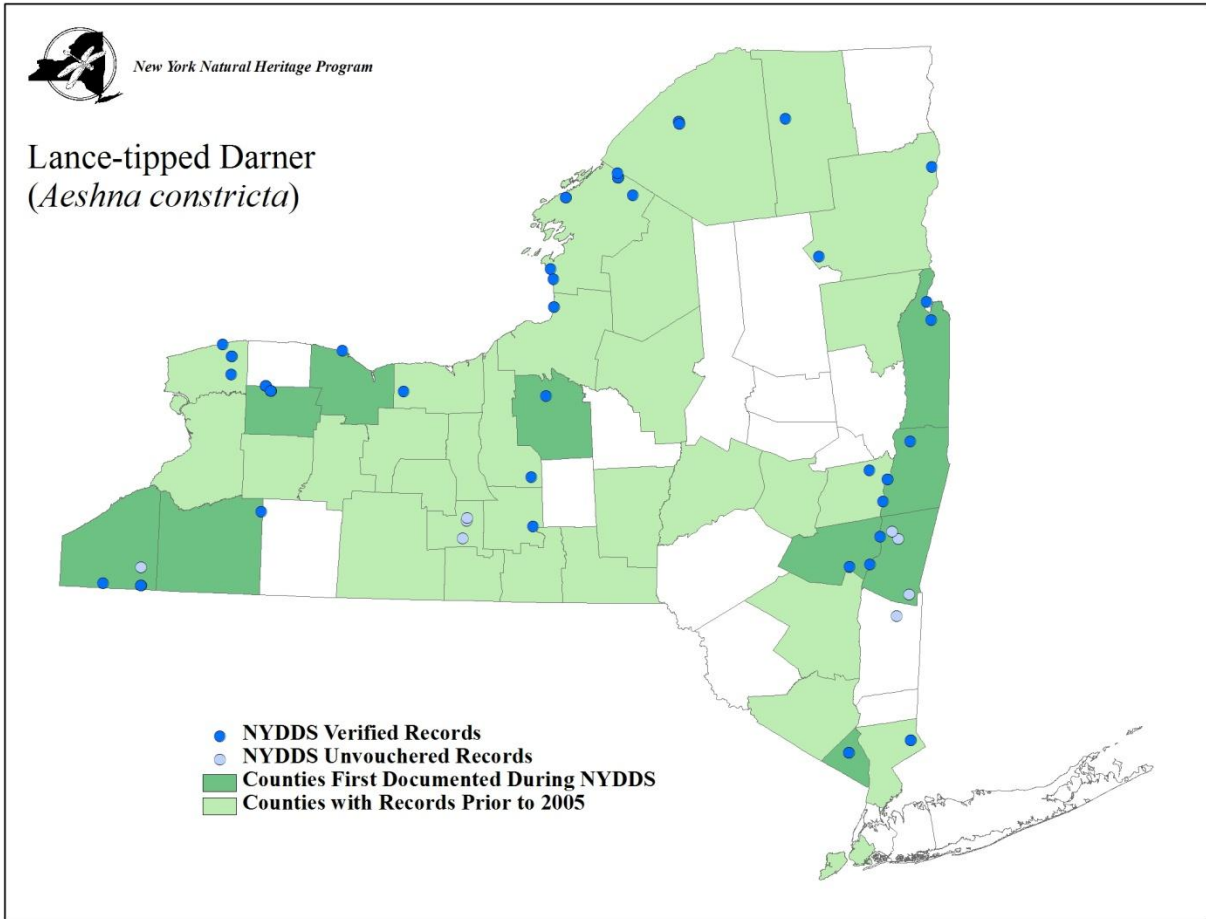
- NYDDS Verified Records
- NYDDS Unvouchered Records
- Counties First Documented During NYDDS
- Counties with Records Prior to 2005



**AESHNIDAE**

**Lance-tipped Darner (*Aeshna constricta*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004c)

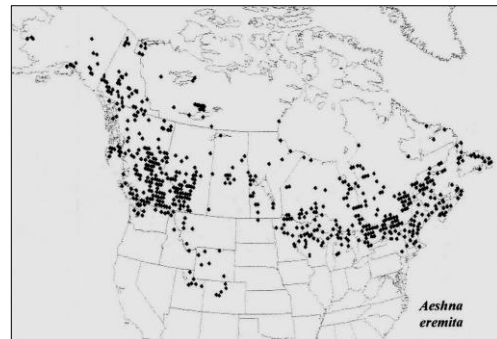
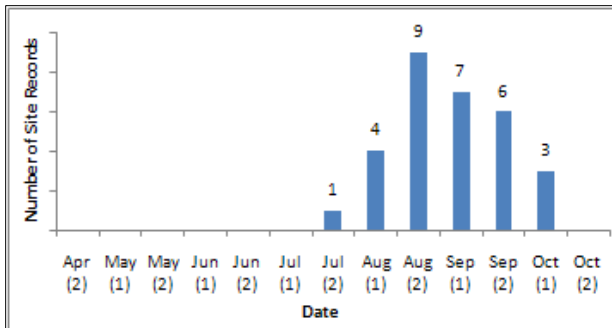
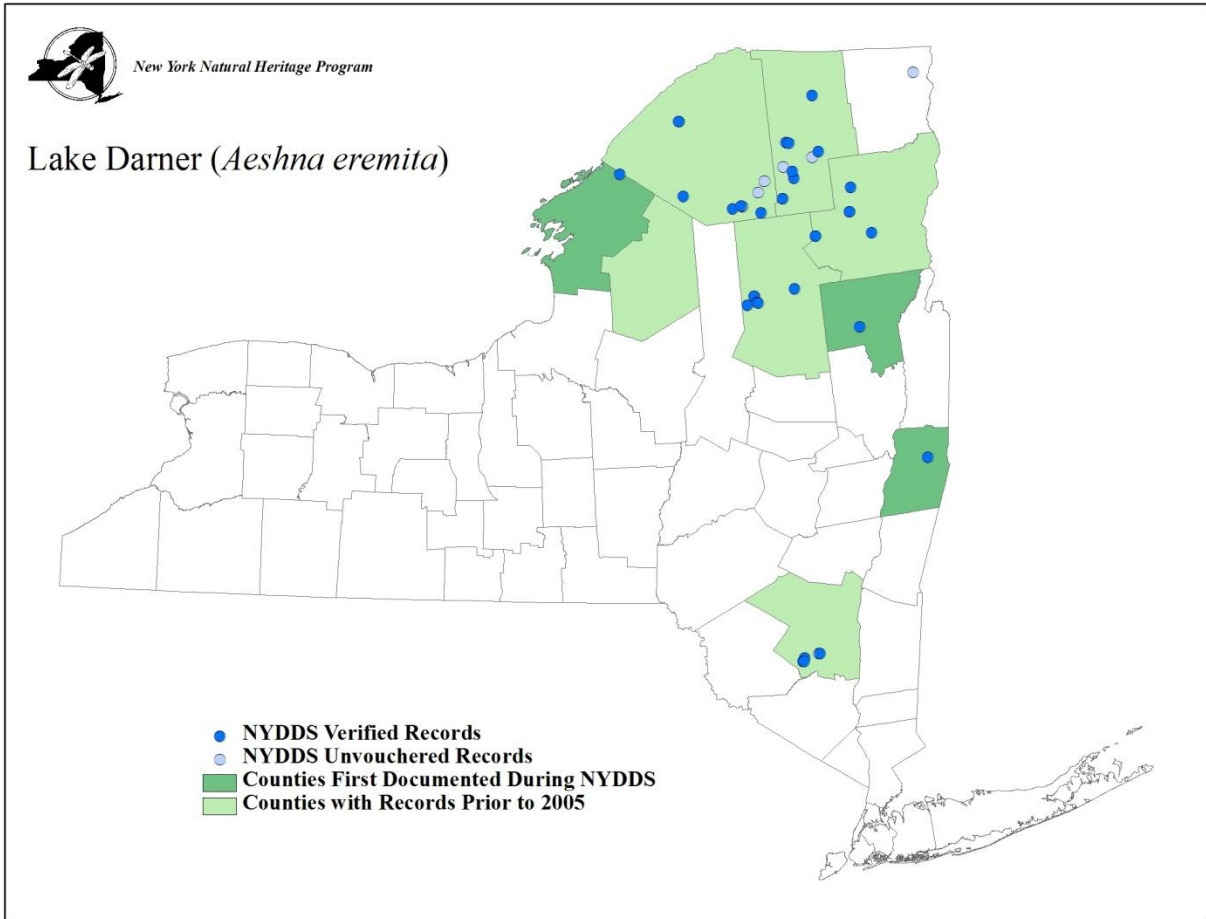




**AESHNIDAE**

**Lake Darner (*Aeshna eremita*)**

**Pre-NYDDS Status: G5, S3S4**



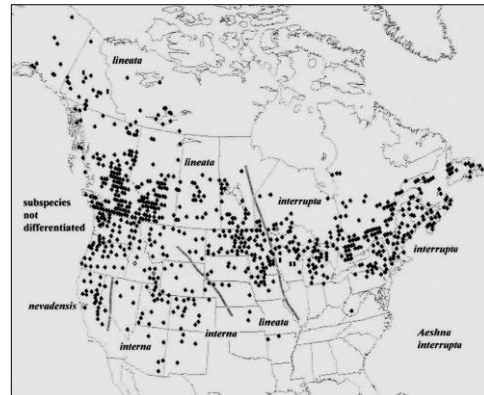
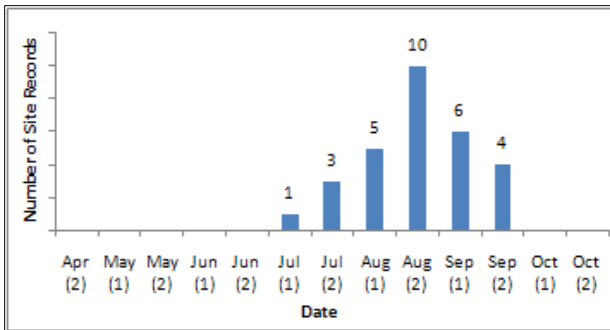
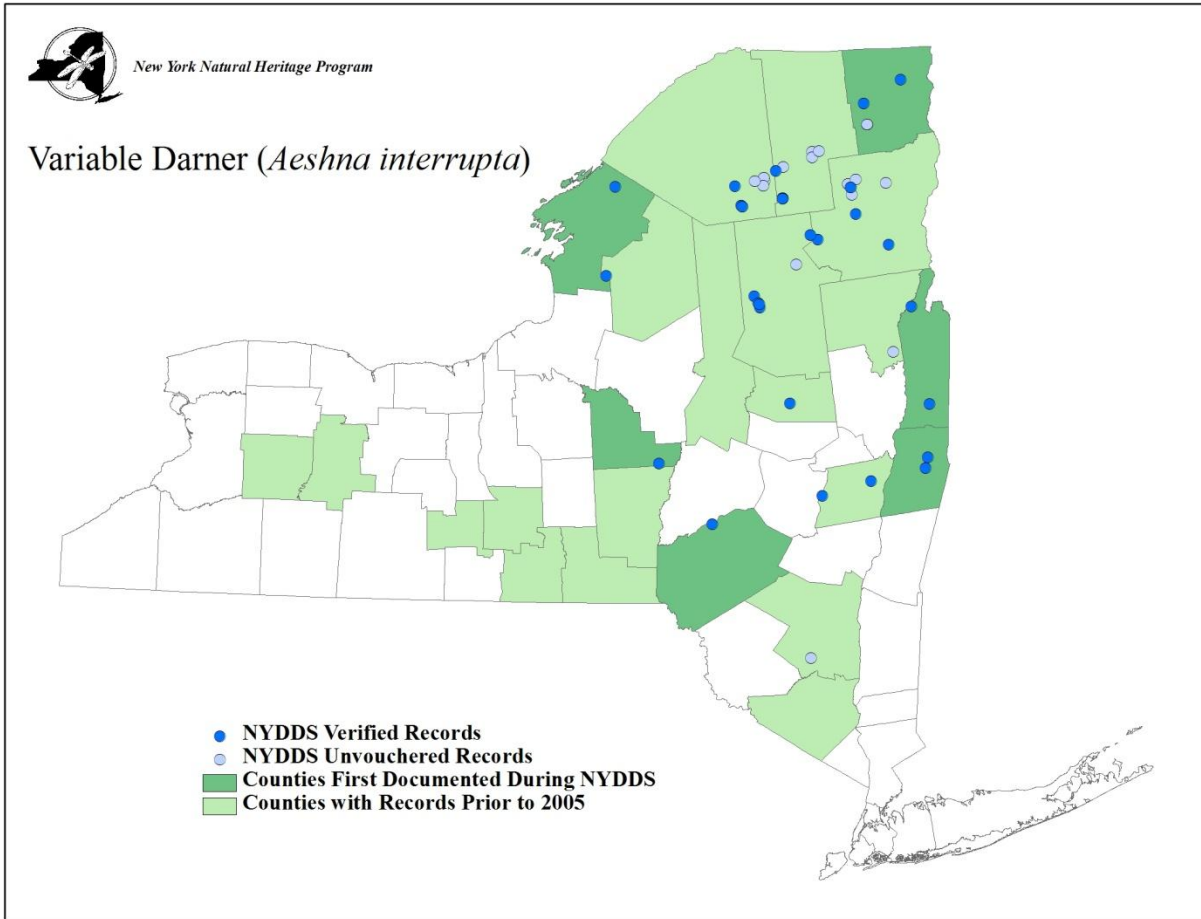
(Donnelly 2004c)



**AESHNIDAE**

**Variable Darner (*Aeshna interrupta*)**

**Pre-NYDDS Status: G5, S4**



(Donnelly 2004c)

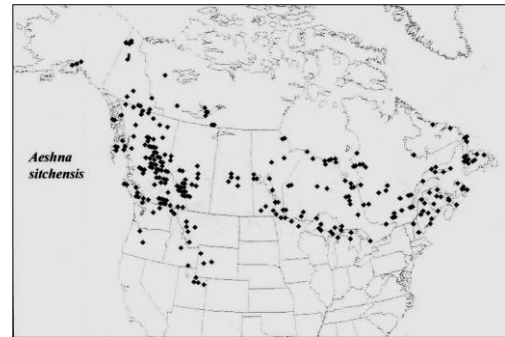
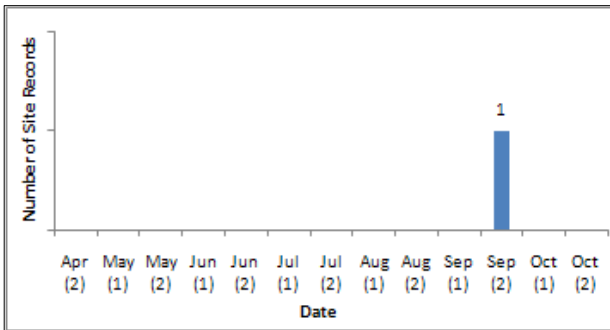
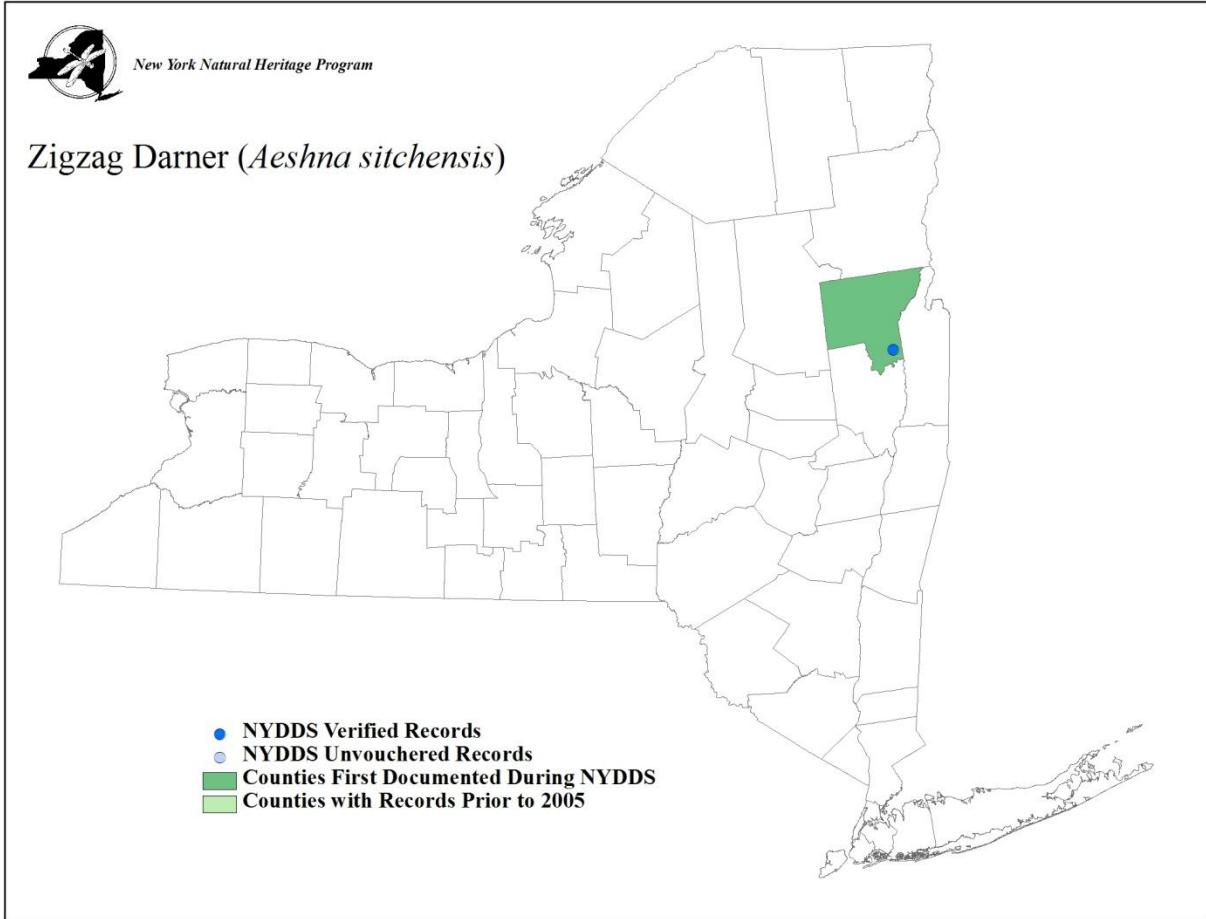


**AESHNIDAE**

**Zigzag Darner (*Aeshna sitchensis*)**

**Pre-NYDDS Status: G5, SU**

**Draft Revised Status: S1**



## AESHNIDAE

### Subarctic Darner (*Aeshna subarctica*)

Pre-NYDDS Status: G5, S1

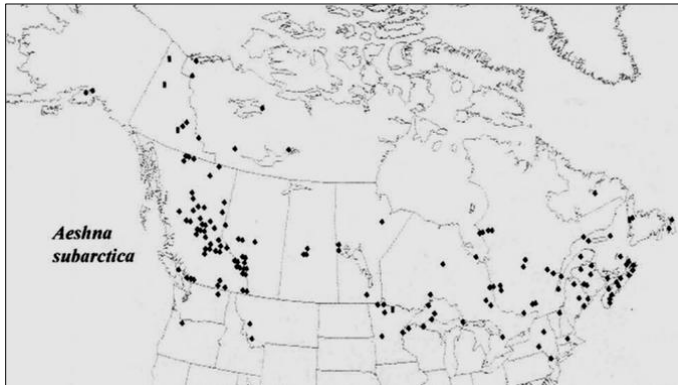
Draft Revised Status: S1



© John Gregoire, Kestrel Haven Avian Migration Observatory

**Habitat Characteristics:** In northwestern Canada, this species' larval habitat is restricted to sphagnum bogs and deep fens that are dominated by aquatic moss but are not necessarily overly acidic (Cannings & Cannings 1994). The habitat in the upper midwest is muskeg ponds, bogs, and northern swamps (Mead 2003), whereas Nikula *et al.* (2003) describe the habitat in Massachusetts as sphagnum bogs and deep fens with wet sphagnum. The sole extant breeding location for this species in New York is a wetland mosaic that includes areas of black spruce-tamarack bog, highbush blueberry bog thicket, and inland poor fen. Here, males may be seen flying low over wet areas and pools and hunting in open areas away from the breeding habitat (New York Natural Heritage Program 2009d).

**Distribution and Inventory Needs:** The Subarctic Darner is a circumpolar boreal species of northern latitudes with the center of its North American range near the shore of Hudson Bay in the southern Hudson Bay Taiga ecoregion (Donnelly 2004c). Its principal range extends from Canada to north central Europe and across Siberia to Japan (Mead 2003). In Canada, it is found from the Yukon, Northwest Territories and western provinces eastward to Ontario, Quebec, and the Atlantic provinces. In addition to Alaska, this darner has been found in a number of northern states including Maine, Massachusetts, New Jersey, New York, Minnesota, Wisconsin, Montana, Oregon, and Washington (Needham *et al.* 2000). Although this species is still very spottily distributed and exceedingly rare in these northern states, until the 1990s it was only known from three records in the U.S. (including one in New York), whereas today there are upwards of 20 U.S. records (New York Natural Heritage Program 2009d; Donnelly 2004c). For instance,



(Donnelly 2004c)

it was recently located in Massachusetts (Nikula *et al.* 2001) and the distribution in Maine expanded three-fold during recent Atlas efforts (Brunelle & deMaynadier 2005). Because this boreal species was probably much more widespread during colder times in the recent past, these glacial relict populations along the southern range margin are more likely the result of increased collecting effort, rather than a recent southward range expansion.

New York lies at this southern range extent and the southernmost known record in the species' entire range is in Sussex County New Jersey (Bangma & Barlow 2010), very near the New York border. In New York, this species is known from a single, persistent (1973 to 2009) population at Jam Pond in Chenango County, and a 1947 record from the summit of Blue Mountain (nonbreeding habitat), Hamilton County in the Adirondacks (Donnelly 1999). Whether



there are undocumented populations present in the Adirondacks is unclear since none were found during NYDDS, despite the fact that sphagnum bogs are much more common there than in other parts of the state. The Jam Pond locale in southern New York is peculiar and it is likely that some combination of local environmental conditions make this a very cold, boreal type habitat with a very short growing season (Beatty & Beatty 1968). A distribution model created by NY Natural Heritage did not find any other locales in the state that had a high probability of similar habitat conditions as Jam Pond. That this marginal population has persisted for at least 40 years far from the core of suitable habitat (i.e., sources of immigrants) is a testament to the sustainability of even highly isolated *Aeshna* populations. If this species is to be found elsewhere in New York, it will likely come by chance, perhaps at a bog/fen near Blue Mountain.

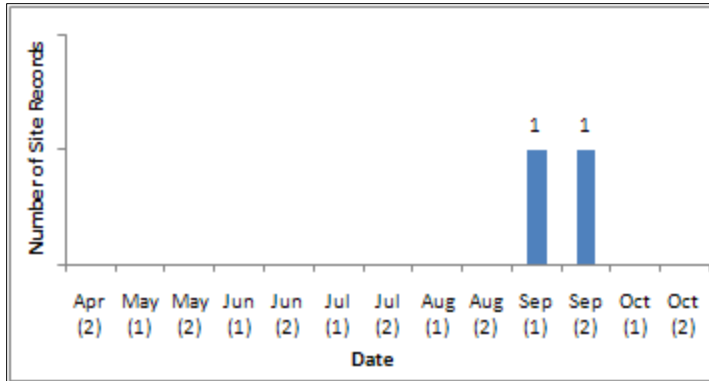
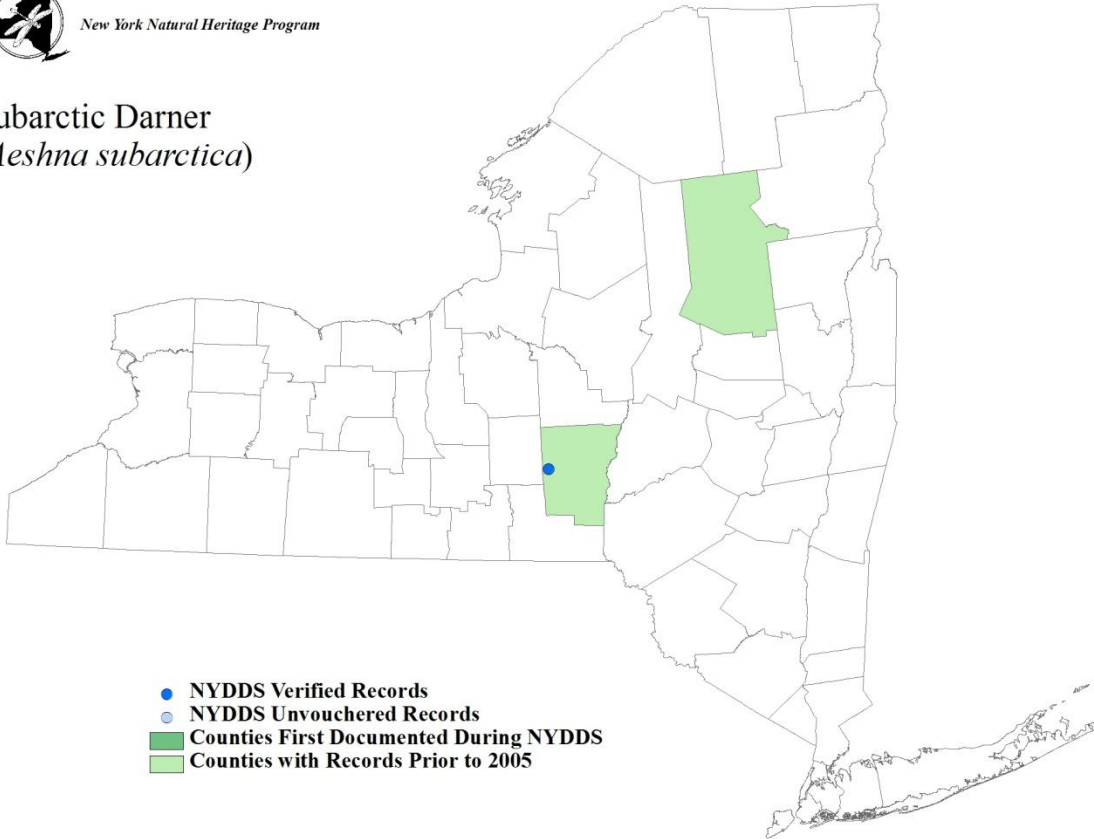
**Phenology:** Flight dates for this species in Massachusetts and Maine are from mid-July to mid-September (Nikula *et al.* 2003; Brunelle & deMaynadier 2005), whereas flight dates in the western Great Lakes states extend to the end of September (Mead 2003). Walker (1958) reported the flight season in Ontario and Quebec from July 7 to September 11. The few observations for New York are from late August (23<sup>rd</sup>) to early September (11<sup>th</sup>), but the full flight season is probably similar to that listed above for other states.





New York Natural Heritage Program

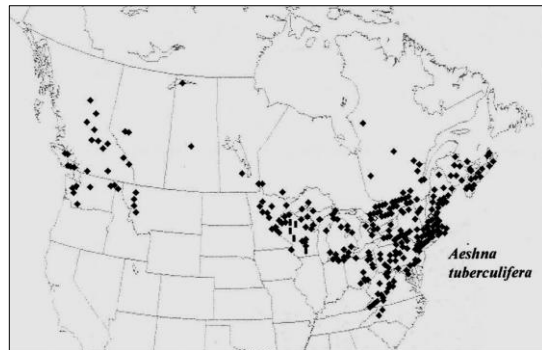
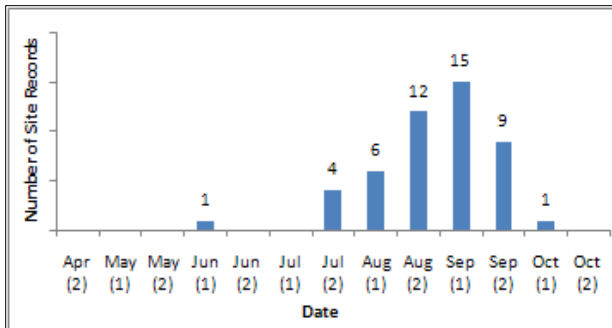
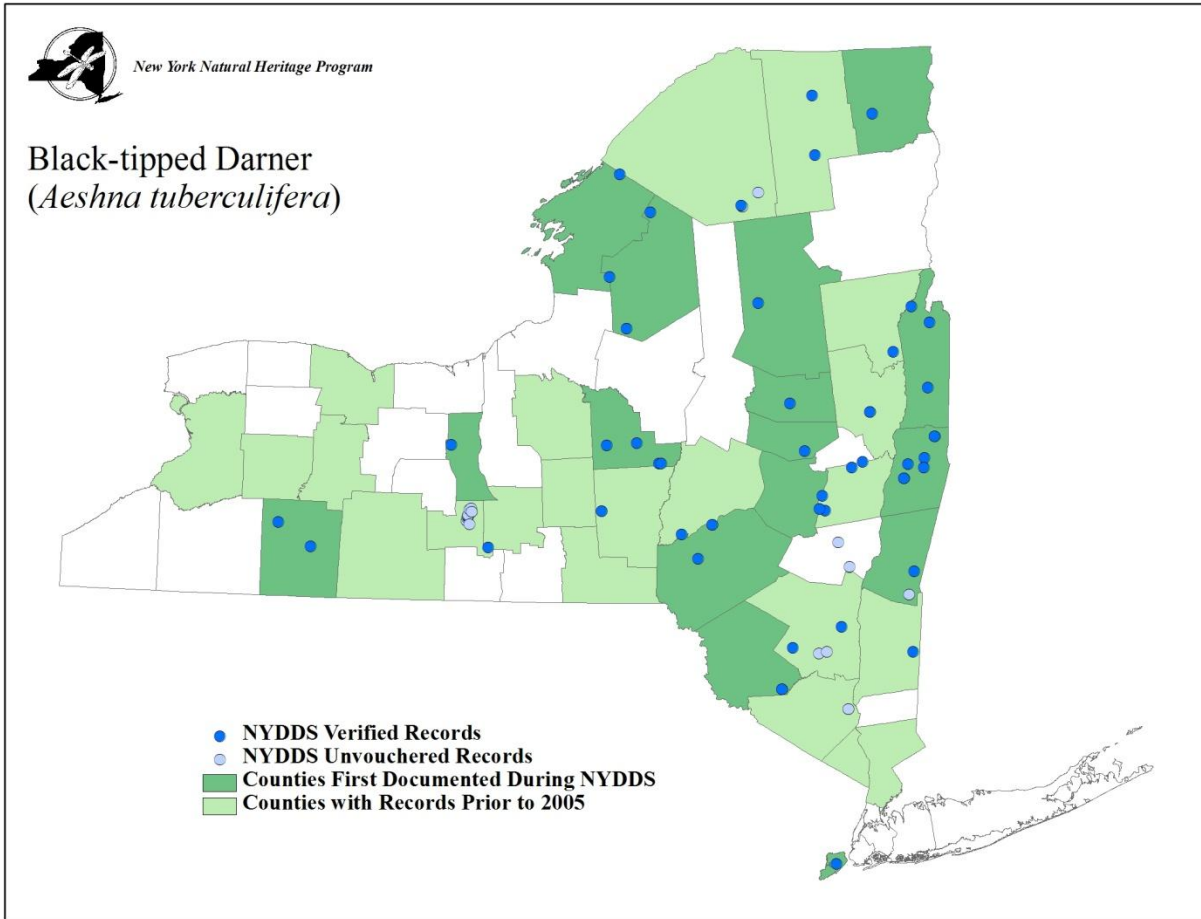
### Subarctic Darner (*Aeshna subarctica*)



**AESHNIDAE**

**Black-tipped Darner (*Aeshna tuberculifera*)**

Pre-NYDDS Status: G4, S4



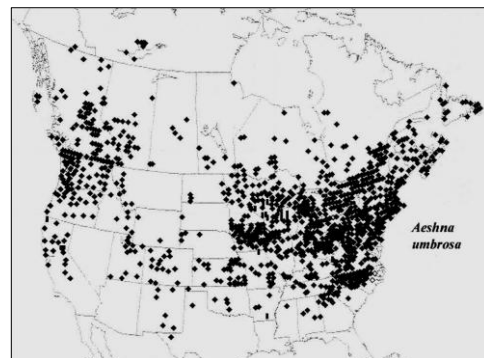
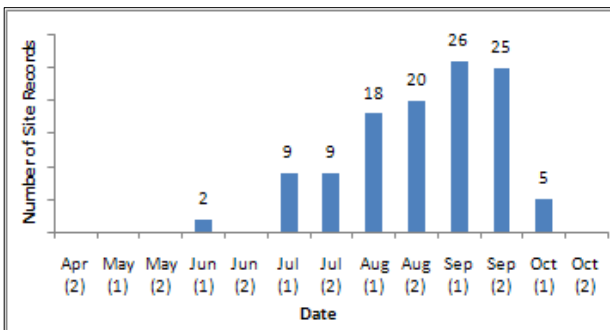
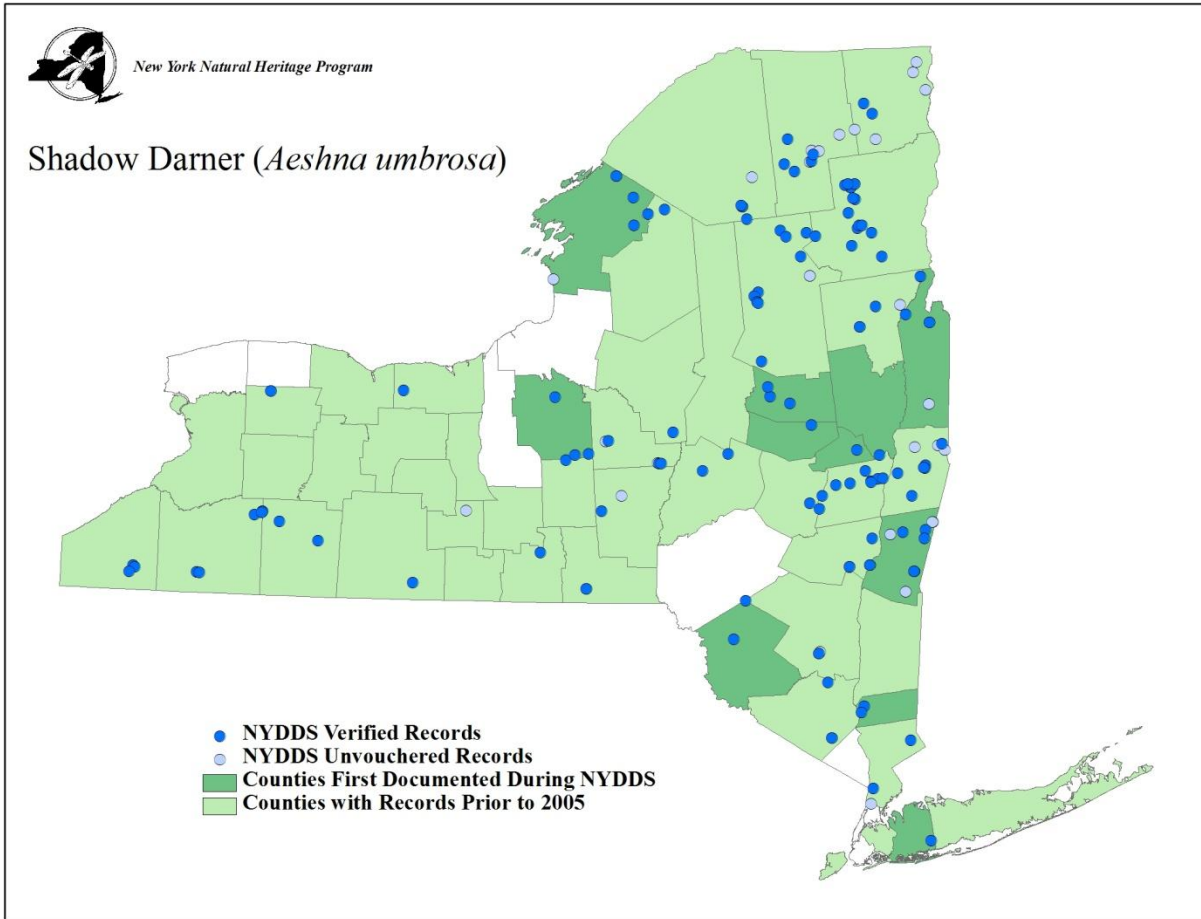
(Donnelly 2004c)



**AESHNIDAE**

**Shadow Darner (*Aeshna umbrosa*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004c)

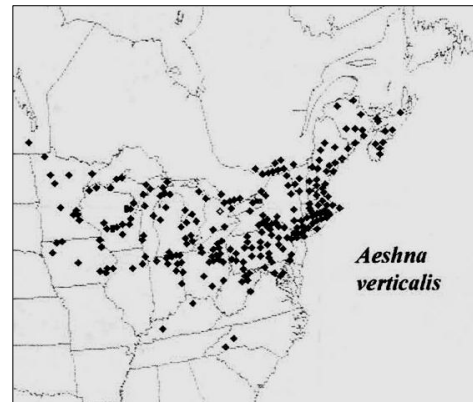
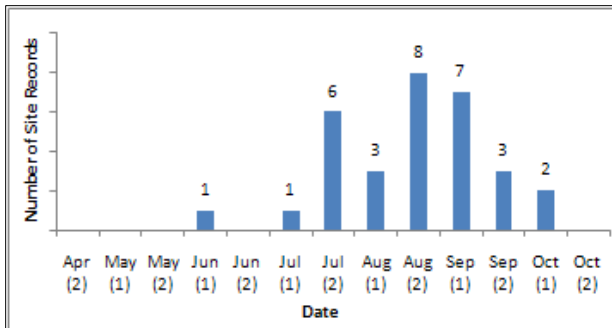
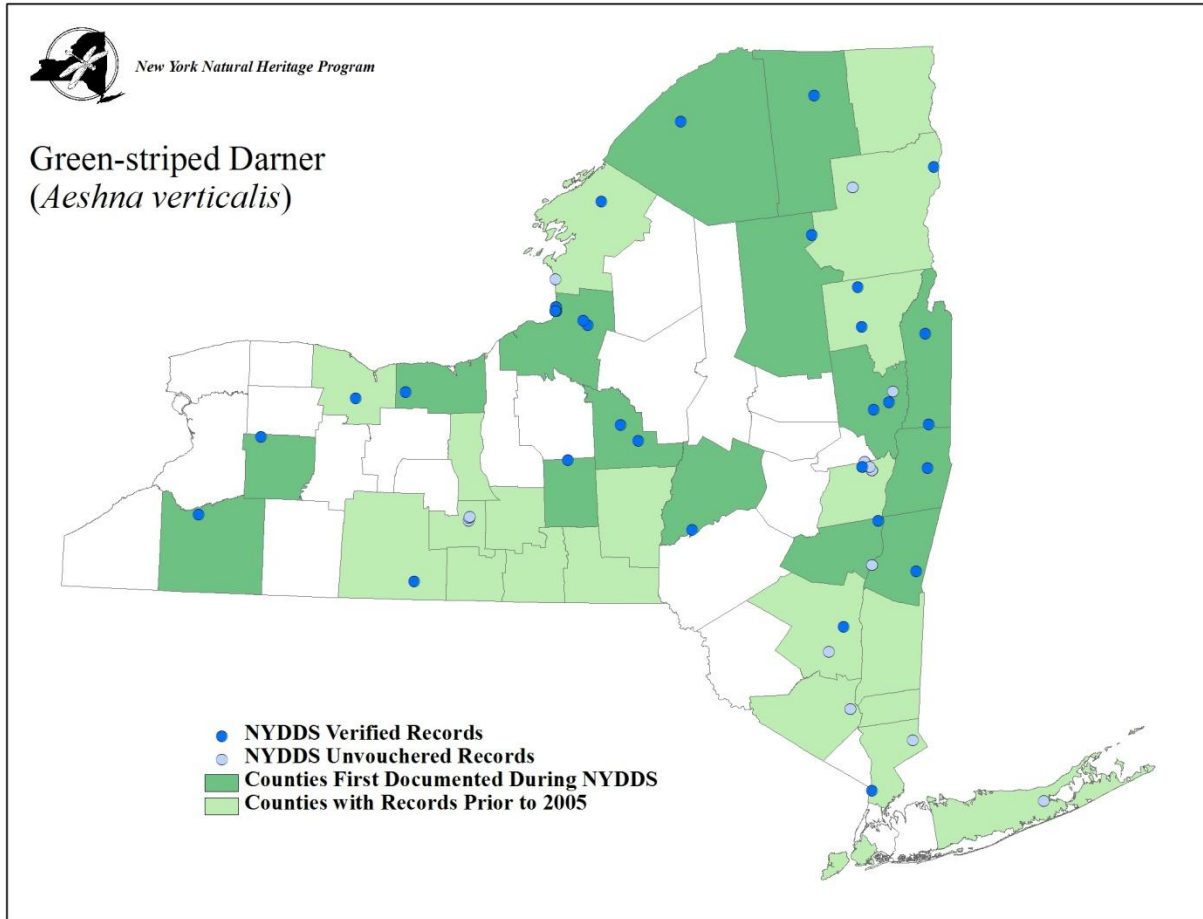




**AESHNIDAE**

**Green-striped Darner (*Aeshna verticalis*)**

**Pre-NYDDS Status: G5, S5**



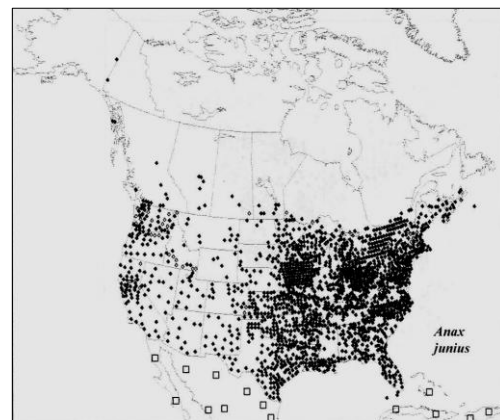
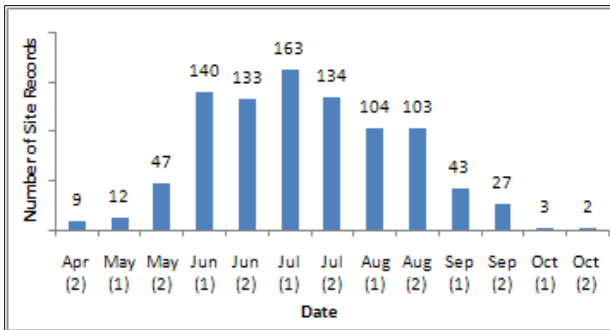
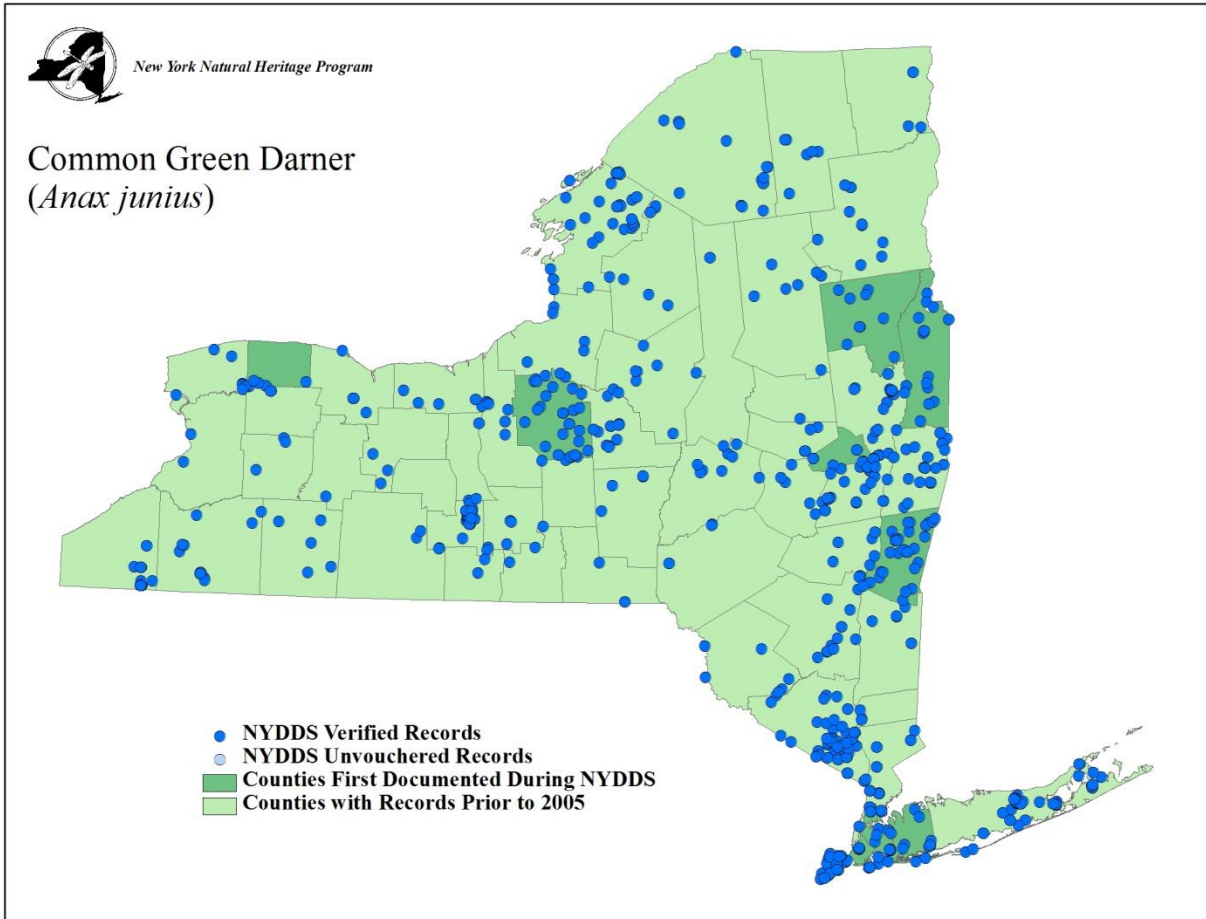
(Donnelly 2004c)



**AESHNIDAE**

**Common Green Darner (*Anax junius*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004c)



## AESHNIDAE

### Comet Darner (*Anax longipes*)

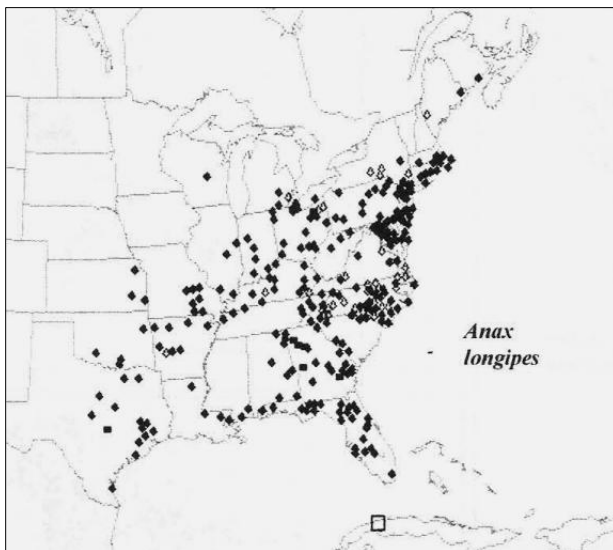
Pre-NYDDS Status: G5, S2

Draft Revised Status: S2S3

**Habitat Characteristics:** In New York and elsewhere this species inhabits a wide variety of small lakes, and especially ponds, including coastal plain ponds, vernal pools, natural rocky ponds, and even farm ponds. The common habitat feature seems to be that the water body is well vegetated with both floating and submerged aquatic macrophytes (Massachusetts NHESP 2003), and possibly fishless (Dunkle 2000). Gregoire and Gregoire (2006) described the colonization of a 18' deep constructed fish pond in the Finger Lakes region which is well-covered with submerged aquatic vegetation (*Chara*) and fringed by cattail and sedges. One year, over 85 individuals emerged from this single pond and adults were presumably found at farm ponds up to a mile away (Gregoire & Gregoire 2007). The Comet Darner often co-occurs with a large suite of other common pond Odonate species (Shiffer & White 1995, Roble 1999), and is often observed flying above open water, but sometimes far from natal sites (Massachusetts NHESP 2003).



Jen Schlick 2006



(Donnelly 2004c)

**Distribution and Inventory Needs:** *Anax longipes* is considered a tropical species (Hine 1913) and the center of its North American distribution lies in southern Kentucky in the Central Hardwood Forest ecoregion. It ranges north to New Brunswick, south to Cuba and west to Texas and Wisconsin (Donnelly 2004c). However, it has traditionally been thought of as a Coastal Plain species and since it wanders over long distances, many outlying records (especially in the north) could be vagrants and not indicative of established breeding populations (Donnelly 1999). Likewise, the New York stronghold is on Long Island, it has been known from around New York City since the late 1800s, and there are numerous

coastal plain ponds on Long Island where the species currently is found. It ranges northward through the Hudson Valley (which is essentially an inland extension of the Coastal Plain) north to Albany County, where a persistent breeding colony has occupied a farm pond since the mid 1990s (Donnelly 1999). Although not present in every year, a population of *A. longipes* has persisted at Ten Acre Pond in central Pennsylvania for over five decades (Shiffer & White 1995, Gregoire & Gregoire 2006).

Further inland, the species has also been reported from the Susquehanna watershed in both New York and Pennsylvania since at least the early 1970s (Donnelly 1999, 2004a) and a number of verified NYDDS reports were from constructed ponds in Schuyler County (Gregoire



& Gregoire 2006) as well as the more boggy Jam Pond in Chenango County. A notable range extension to the west (Allegheny watershed) was documented in 2006, when an adult male was photographed from a pond in Jamestown (see above photo), and since there are also several records from adjacent Pennsylvania and northeastern Ohio (Donnelly 2004c), it is likely that *A. longipes* is well established in western New York as well. Further inventory at suitable ponds in the southern half of the state is likely to turn up additional records.

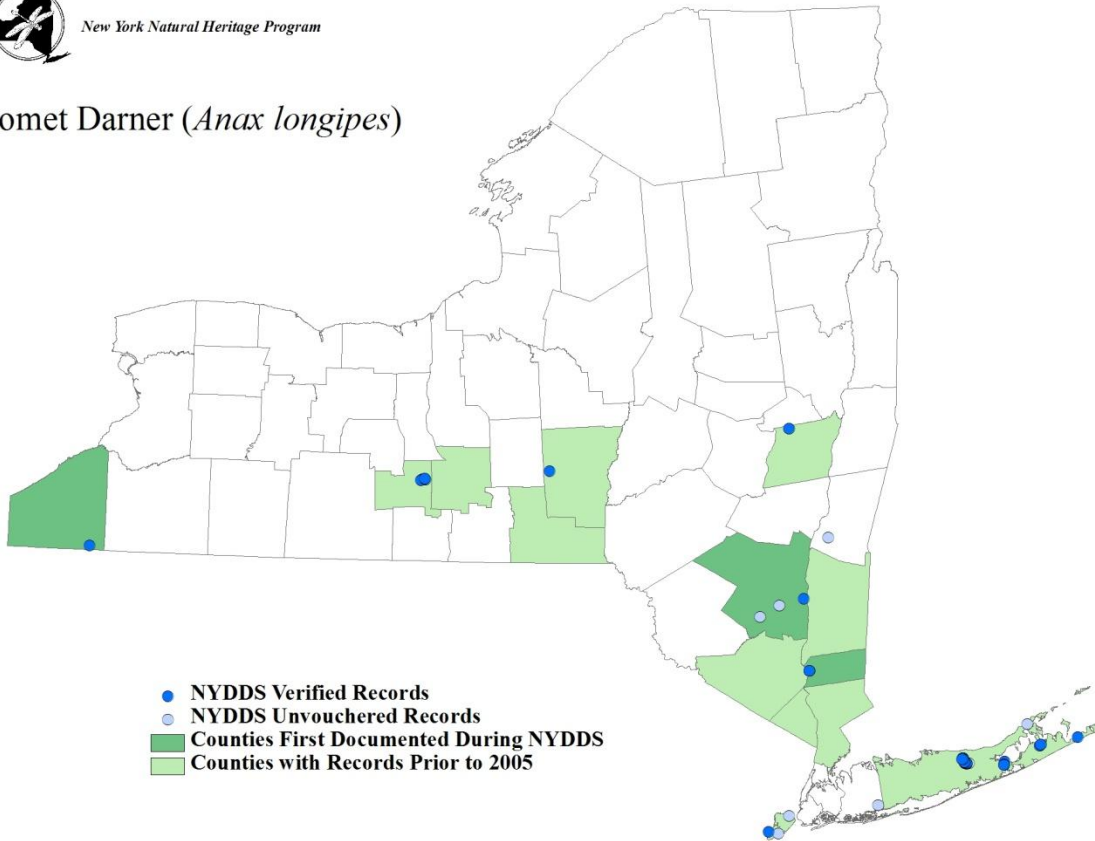
**Phenology:** This species has an extended flight season in New York, from June 5 to September 17, with the majority of records coming during July. At a constructed pond in Schuyler County Gregoire and Gregoire (2007) reported emergence dates of June 16 to August 26 with a peak in late June.



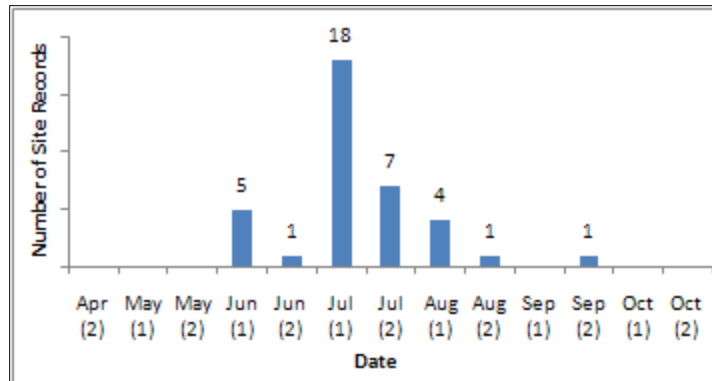


New York Natural Heritage Program

### Comet Darner (*Anax longipes*)



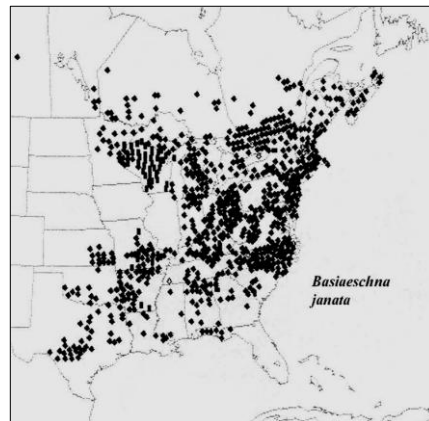
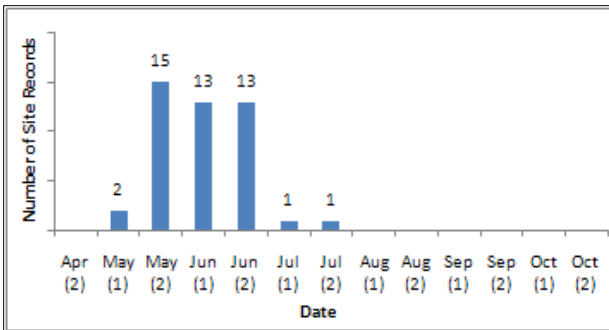
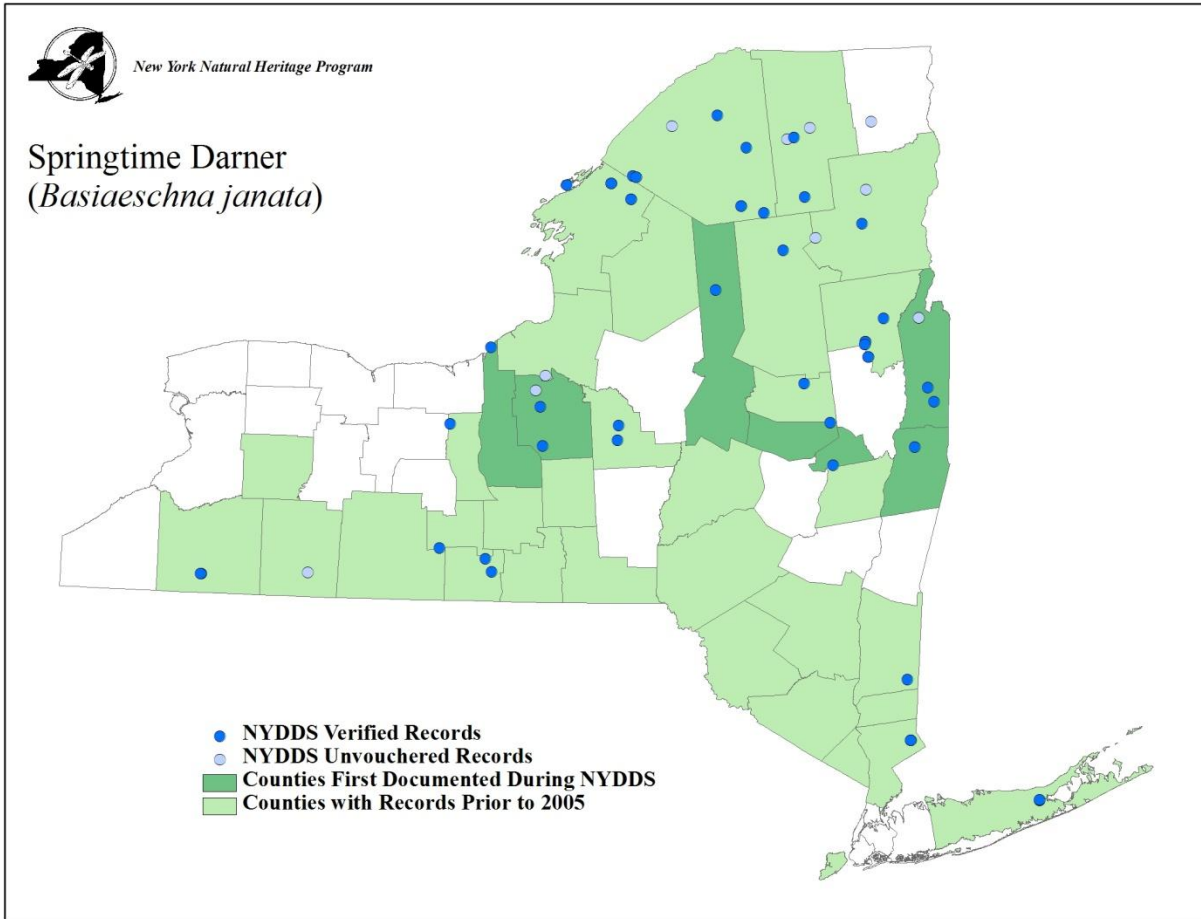
- NYDDS Verified Records
- NYDDS Unvouchered Records
- Counties First Documented During NYDDS
- Counties with Records Prior to 2005



**AESHNIDAE**

**Springtime Darner (*Basiaeschna janata*)**

**Pre-NYDDS Status: G5, S5**



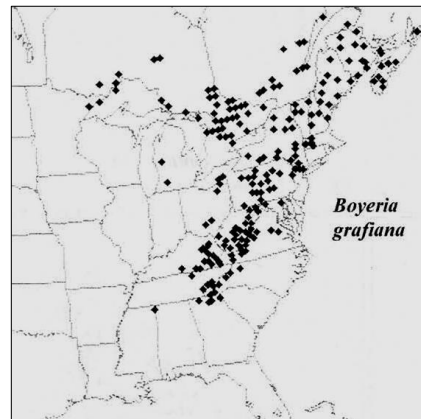
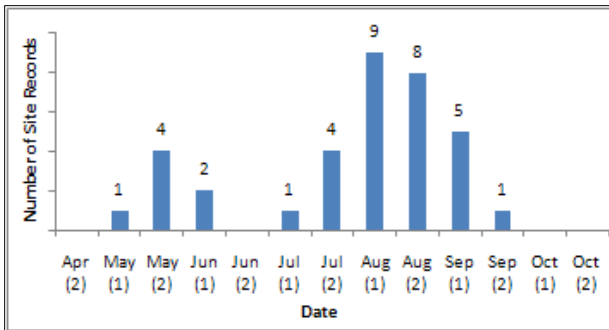
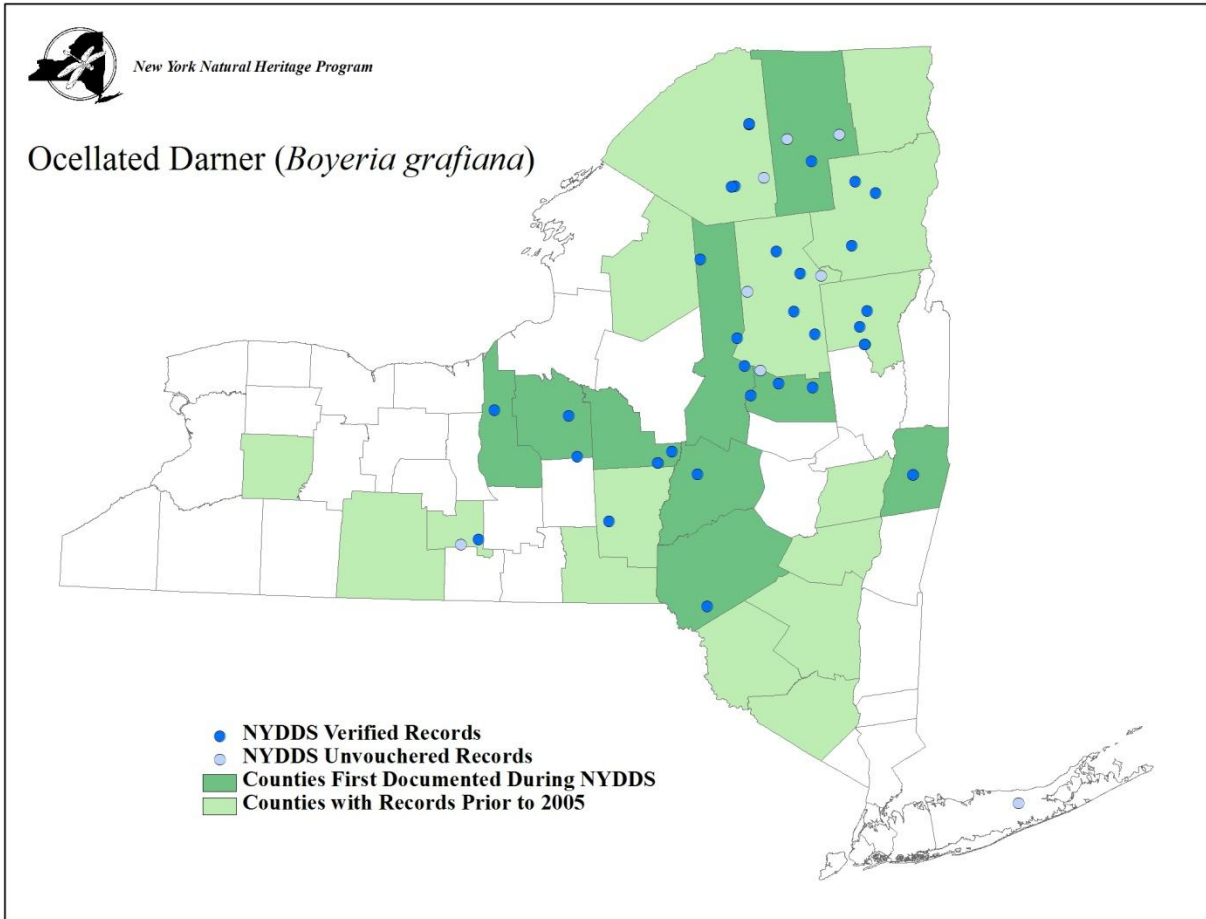
((Donnelly 2004c))



**AESHNIDAE**

**Ocellated Darner (*Boyeria grafiana*)**

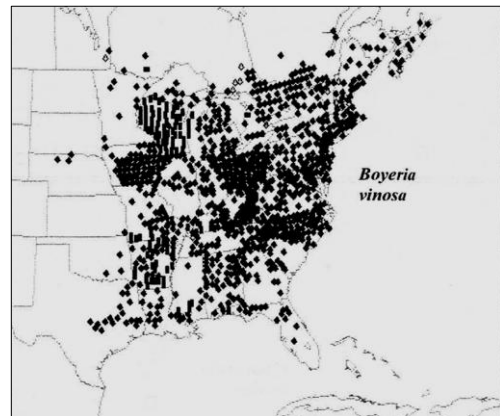
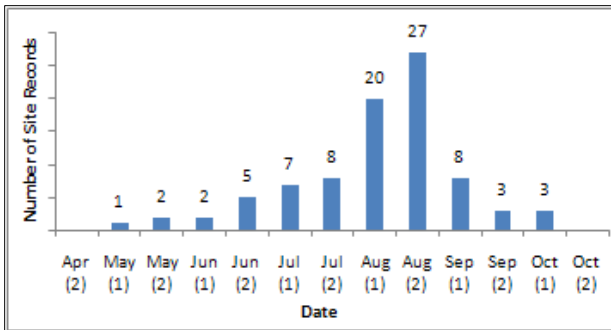
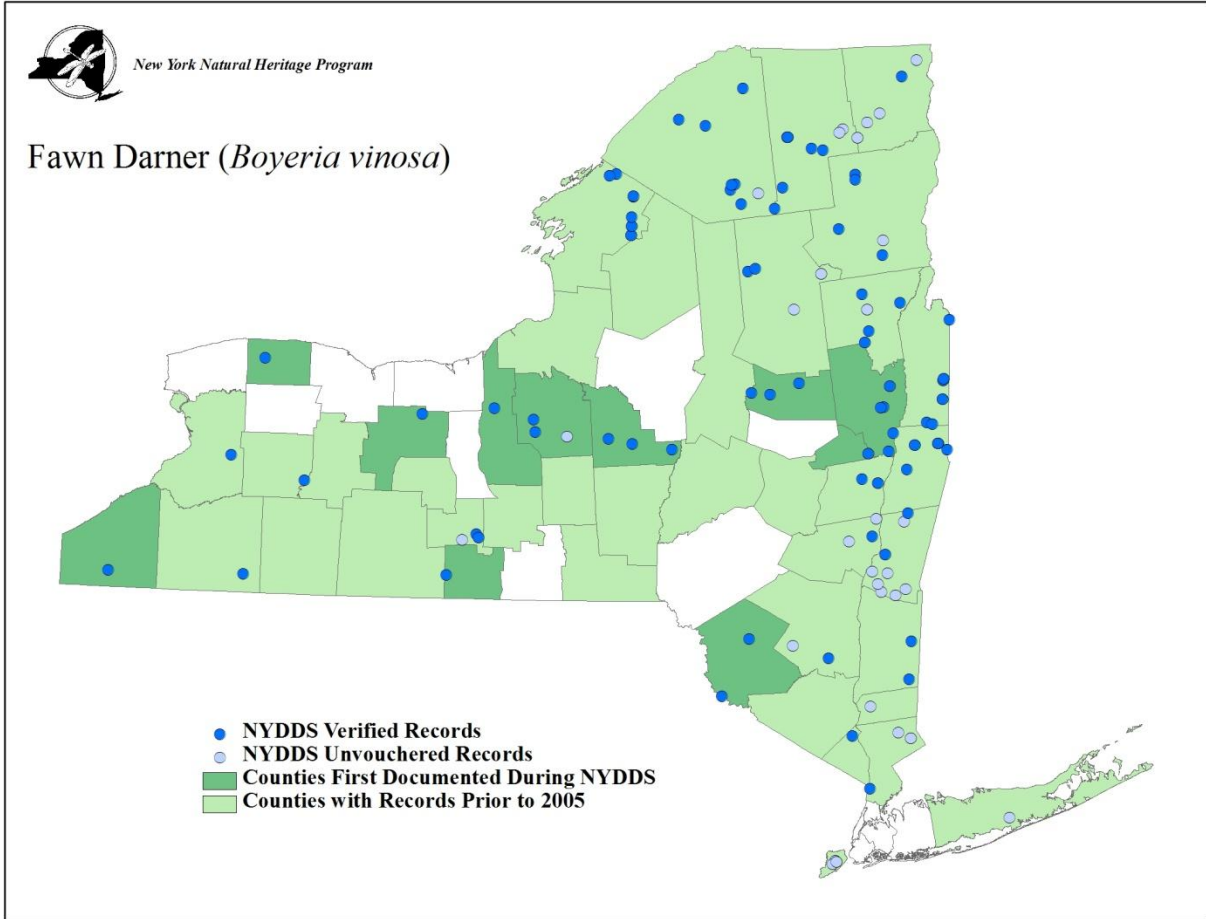
**Pre-NYDDS Status: G5, S3S4**



(Donnelly 2004c)



**AESHNIDAE**  
**Fawn Darner (*Boyeria vinosa*)**  
**Pre-NYDDS Status: G5, S5**



(Donnelly 2004c)



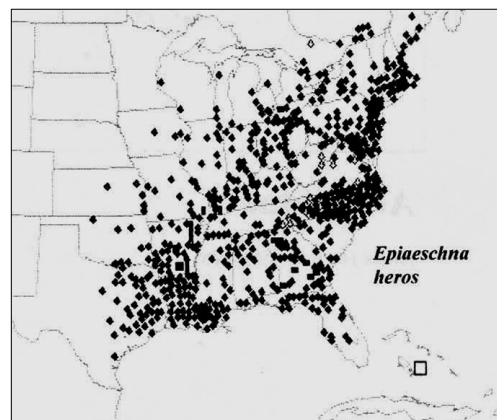
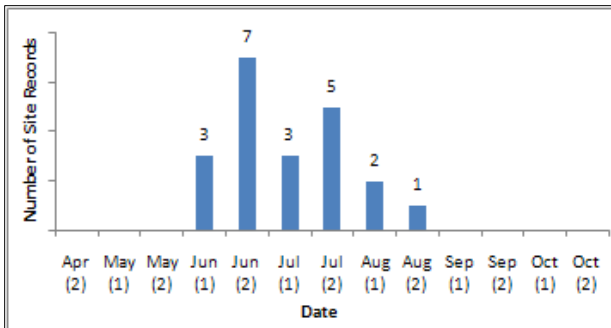
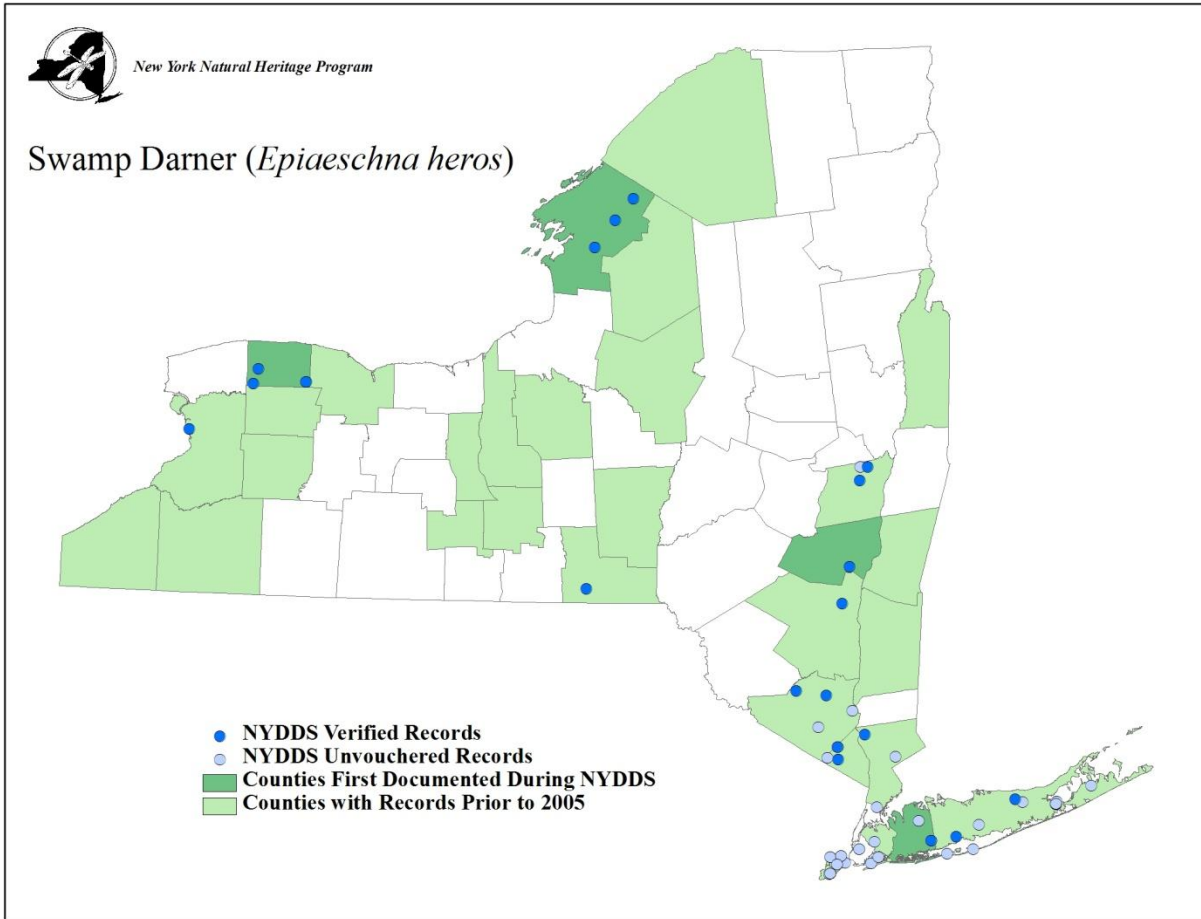


**AESHNIDAE**

**Swamp Darner (*Epiaeschna heros*)**

**Pre-NYDDS Status: G5, S4S5**

**Draft Revised Status: S3**



(Donnelly 2004c)



## AESHNIDAE

### Taper-tailed Darner (*Gomphaeschna antilope*)

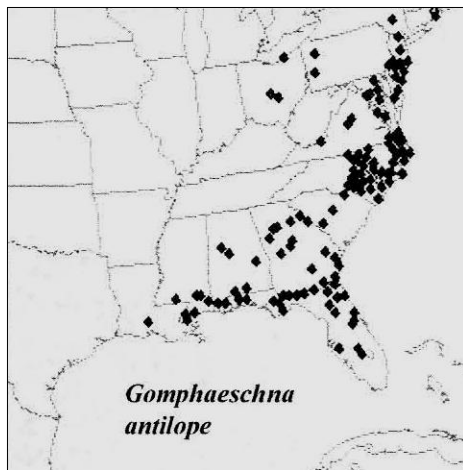
Pre-NYDDS Status: G4, SNA

Draft Revised Status: S1 if confirmed breeding

**Habitat Characteristics:** The general habitat description for this little-known species is sphagnum bogs, swamps, and fens (Nikula *et al.* 2003). The single record from possible breeding habitat in New York fits this description: a 50-acre glacial origin wetland grading into a hemlock hardwood swamp that in turn surrounds a red maple tamarack peat swamp. The species is thought to be somewhat nocturnal and has been found at lights.



Steve Walter 2006



(Donnelly 2004c)

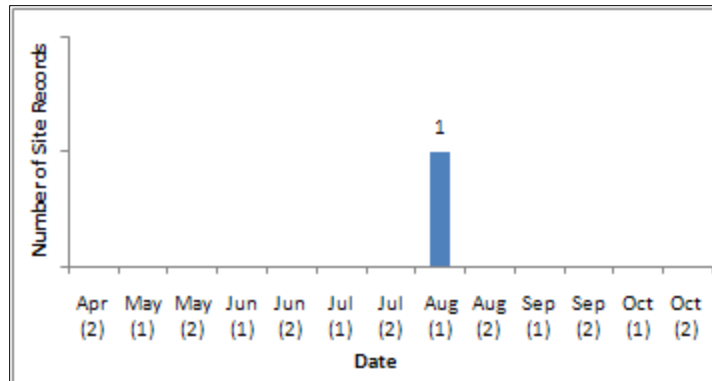
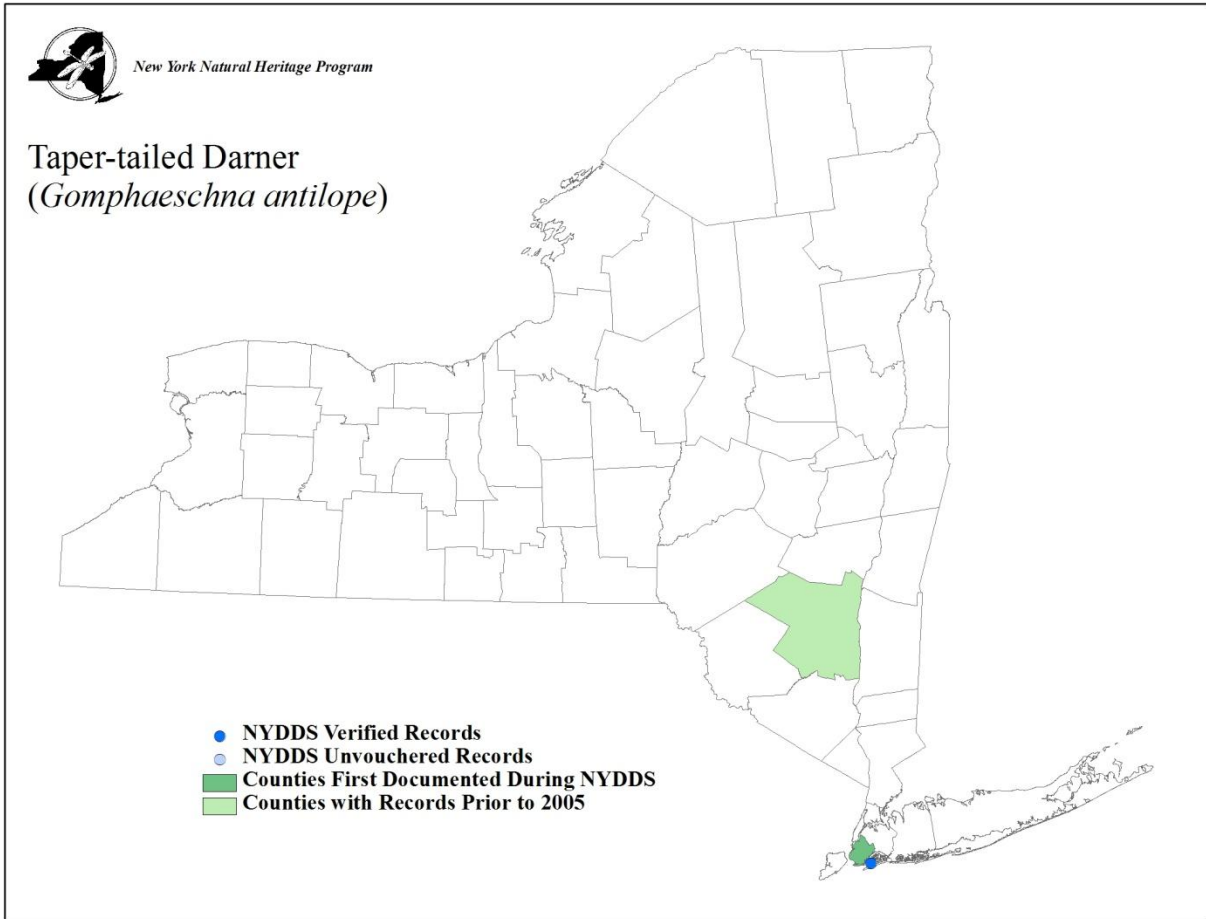
**Distribution and Inventory Needs:** The distributional center of *G. antilope* lies in the vicinity of the Great Smoky Mountains in the Blue Ridge ecoregion, extending south to Louisiana, and north to New York and Massachusetts. Ancient 58 million year old fossils closely related to this genus were unearthed in Alberta Canada and its current North American distribution is believed to be relictual, and may have originated during the Jurassic period in Gondwana, before the breakup of the continents (Wighton & Wilson 1986). This species is normally considered to be a coastal plain inhabitant (Bangma & Barlow 2010), yet many records occur far inland through the Piedmont and lower Great Lakes. There has been some debate over the degree of migratory behavior in this species (Nikula

*et al.* 2001) and many records along the northeastern coast are often considered vagrants. New York lies at the northern range extent and the single NYDDS record from an airfield in New York City in August 2006 is clearly a vagrant. A record from Pacama Vly (The Vly) in Ulster County from 1994 is the northernmost known record for this species (Donnelly 2004c). This record was considered a vagrant by odonate expert Nick Donnelly, as the species is known to migrate and vagrants can pop up at inland locations (Heil pers. Comm.). On this basis, the species was removed from the Active Inventory List in 2006 (Walter pers. Comm.). However, this inland record was found in appropriate habitat during the breeding season; therefore, future survey work is suggested at this location to determine if there is a permanent, breeding population there. The species was not found at the remote Pacama Vly during a survey on May 20, 2008, but the survey was probably too early, and potentially suitable habitat is extensive, so it may be that a population occurs there. Other similar swamps and bogs in the Catskills, and possibly southwestern New York could also hold additional populations.

**Phenology:** In New Jersey, the flight season is from May 28 to July 14 (Bangma & Barlow 2010) and in Massachusetts from mid-June to mid-July (Nikula *et al.* 2003). Records in Ohio



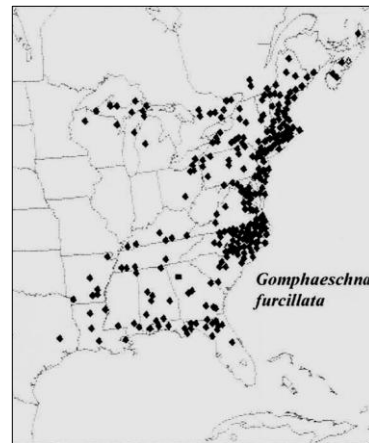
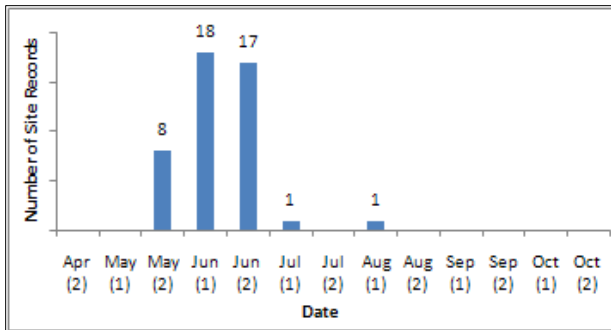
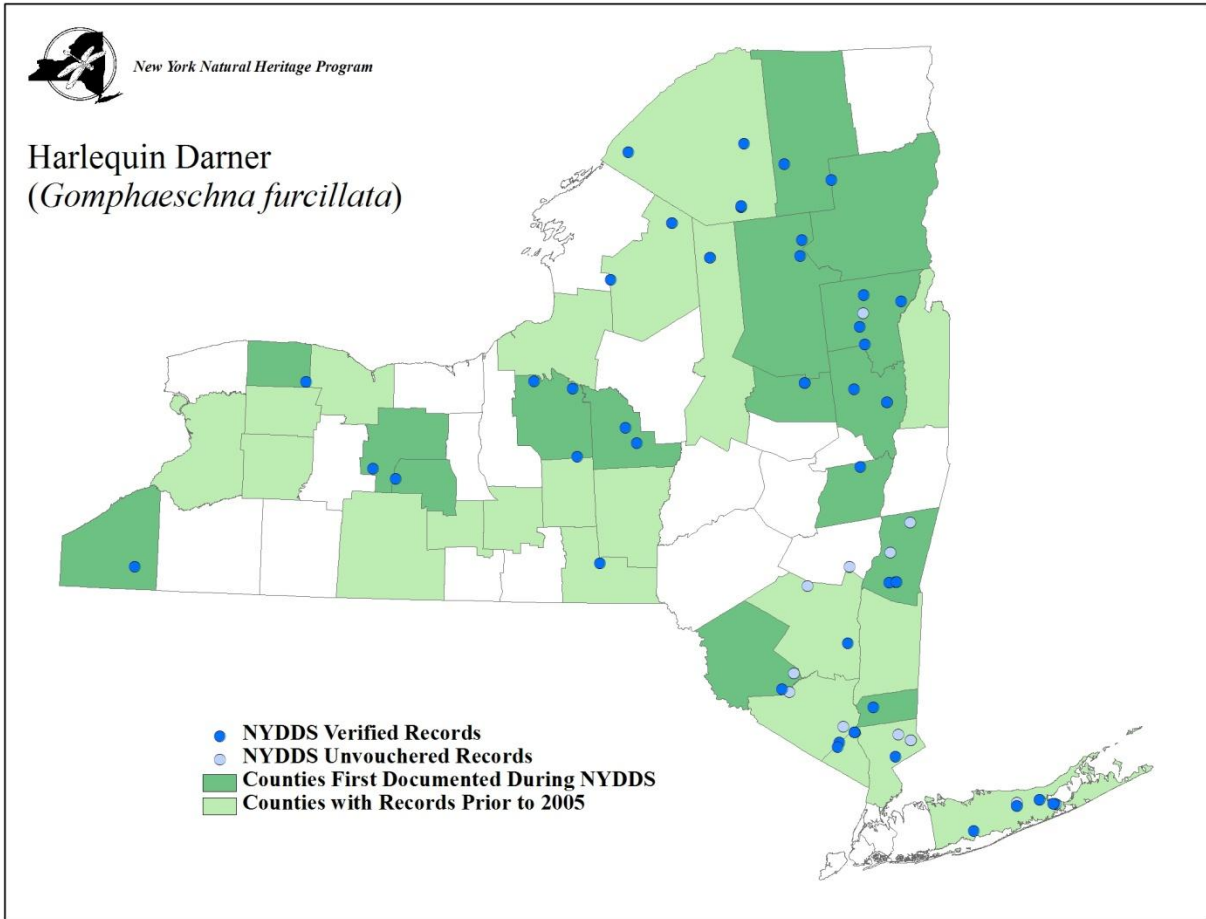
(The Ohio Odonata Society 2000) have come only during the second half of June, and the single New York breeding record was found in early June.



**AESHNIDAE**

**Harlequin Darner (*Gomphaeschna furcillata*)**

**Pre-NYDDS Status: G5, S4**



(Donnelly 2004c)

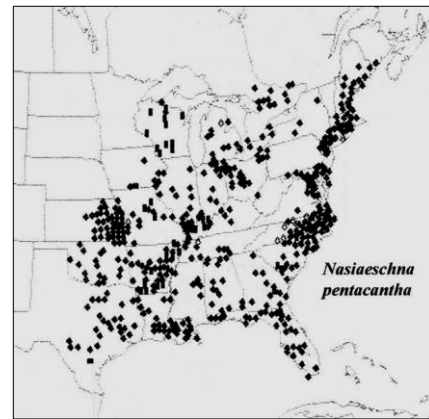
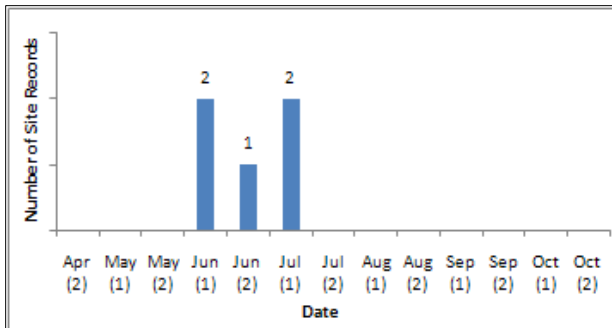
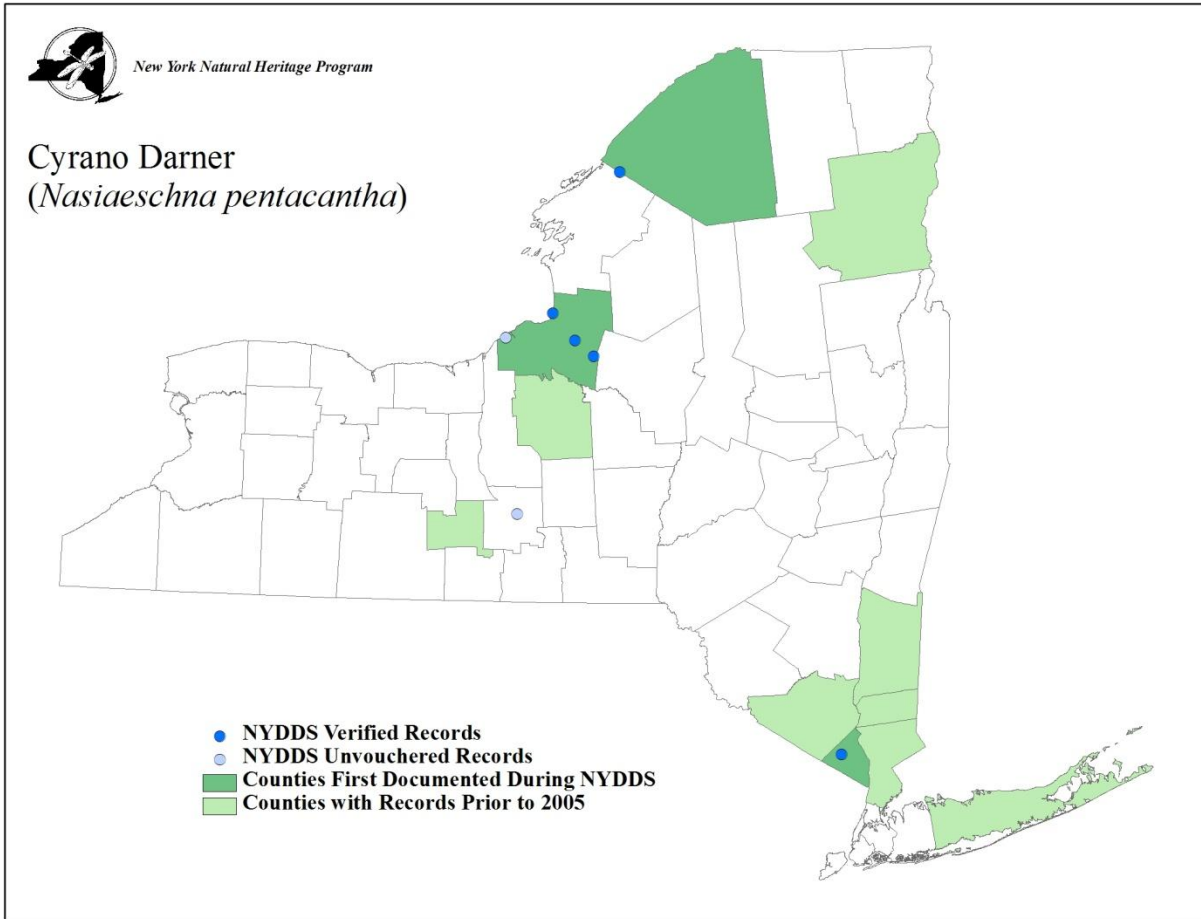


**AESHNIDAE**

**Cyrano Darner (*Nasiaeschna pentacantha*)**

**Pre-NYDDS Status: G5, S3**

**Draft Revised Status: S2S3**



(Donnelly 2004c)



## AESHNIDAE

### Spatterdock Darner (*Rhionaeschna mutata*)

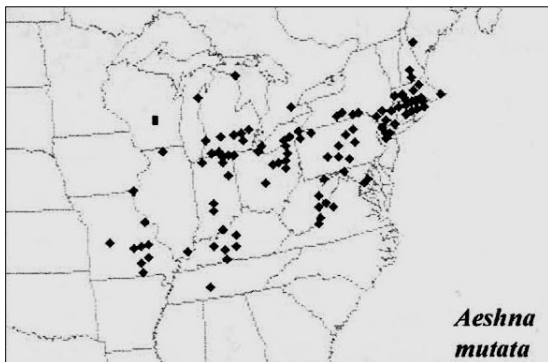
Pre-NYDDS Status: G4; S2

Draft Revised Status: S2S3

**Habitat Characteristics:** The habitat of this lentic generalist has been described as "fishless ponds, usually with water lilies" (Dunkle 2000) or "vegetated ponds and pools, open marshes and bogs, often with spatterdock" (Nikula *et al.* 2003). Most New York locations are rather small, shallow ponds with abundant emergent and submerged vegetation, sometimes, but not always including spatterdock (*Nuphar* or Yellow Water lily). Many of the occupied waterbodies are heavily vegetated, older, man-made ponds where *R. mutata* co-occurs with a large suite of more common Odonata (e.g., Shiffer & White 1995; Roble 1999). There is a lack of information on whether New York sites for this species contain fish (New York Natural Heritage Program 2009h). Adults hunt along forest edges, dirt roads, and fields, often in the vicinity of the breeding wetland. Females lay their eggs on the undersides of aquatic and emergent vegetation, especially spatterdock (Massachusetts NHESP 2003). As with other darners, they rest by hanging vertically on tree trunks or high in the canopy, often later on in the day (Walker 1958), where they can be difficult to detect (Nikula *et al.* 2003). Shiffer & White (1995) reported populations of this species at Ten Acre Pond in Pennsylvania in three out of every four years over four decades, but noted reductions following drought years when the pond dried up. Since there were no nearby occupied ponds to serve as colonizers, Beatty & Beatty (1969) speculated that nymphs of this species were drought tolerant.



Jennifer Schlick 2007



(Donnelly 2004c)

**Distribution and Inventory Needs:** The distributional center of *R. mutata* lies in central Ohio in the Appalachian Mixed Mesophytic Forest ecoregion, extending northwest to northern Michigan and Wisconsin, south to Tennessee, and northeast to western Maine. It is yet unclear whether a recently reported record from Nova Scotia (Cook & Bridgehouse 2005) represents an established breeding population, because individuals in this genus are known to wander over long distances (Beatty & Beatty 1969) and the nearest record in western Maine has not been

observed since 1998 (Brunelle & deMaynadier 2005; Cook & Bridgehouse 2005). *Rhionaeschna* is a tropical genus, with the majority of species residing in South America, *R. mutata* being the only representative in eastern North America. It was re-named from *Aeshna mutata* in 2003, and it is believed to be a relict species which had colonized northward during Eocene times over 30 million years ago and since retracted during the Miocene and Pliocene leaving the current relict distribution (Von Ellenrieder 2003). Clearly, many locales in the eastern U.S. have been colonized post-glacially (Beatty & Beatty 1969) and some have suggested the species' range is currently expanding northward (Cook & Bridgehouse 2005). The temporal pattern of distribution in New York seems to support this scenario since it was not known in the state until 1939 when



it was collected from Cinnamon Lake in the southern Tier (this population was still extant in 2005). Records were not added again until the late 1980s, when additional southern tier sites were located. During the 1990s, it was discovered at several locations in southeastern New York, and likewise during the NYDDS, its range continued to expand west and northward to Montgomery County, which is currently one of the northernmost extant locales in the northeast (Donnelly 2004c). This pattern could also arise from increased survey efforts; however, during recent atlas efforts in Maine (Brunelle & deMaynadier 2005), no new locales were added, and the species has not been observed north of extreme southwest Ontario since the mid 1980s, despite increased survey efforts (Ontario Natural Heritage Information Centre 2010a). A dramatic increase in records in Massachusetts coincided with heightened survey efforts in the 1990s (Massachusetts NHESP 2003). The recent (2007) record in Chataqua County was not unexpected since several records are known from nearby Pennsylvania and Ohio (Donnelly 2004c), and it is likely that additional locales in western New York such as Waterman Swamp in Cattaraugus County and wetlands associated with French Creek in Chataqua County await discovery. A distribution model created by NY Natural Heritage pinpointed a pond on Lassellville State Forest in Fulton County as a potential site for further northward expansion (New York Natural Heritage Program 2007b).

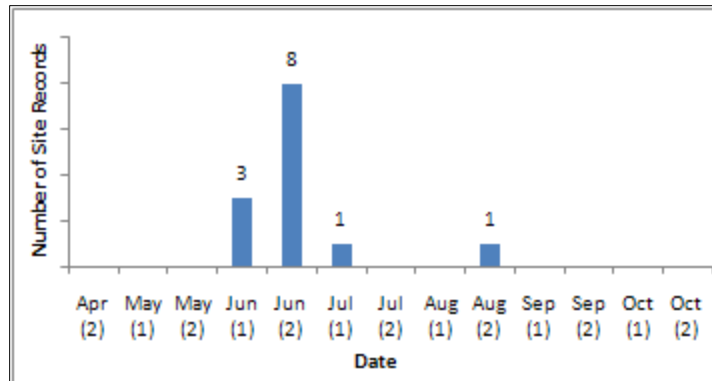
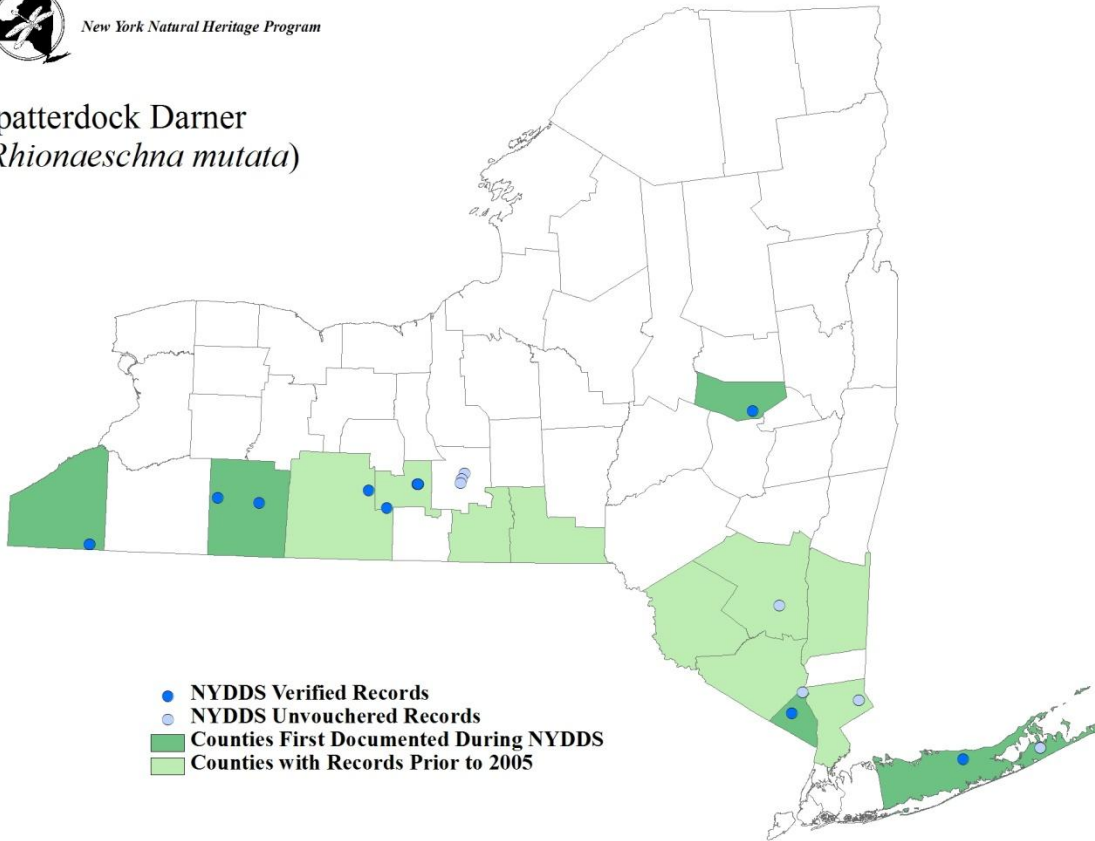
**Phenology:** Early June to mid-July (New York Natural Heritage Program 2009h) is the reported flight season in New York which is somewhat shorter than Massachusetts (Nikula *et al.* 2003) and Pennsylvania (Shiffer & White 1995), but similar to New Jersey (Bangma & Barlow 2010). Our phenology data, both from database records, as well as the newer NYDDS sightings, supports a somewhat shorter six-week flight season in New York, from May 27 to July 9, with 83% of the records coming during the month of June. One extra-limital record should be mentioned: on August 21, 2008 when a specimen was captured at a cattle pond in Allegany County. Other late season records have been reported, and these could possibly represent wind-blown vagrants (Cook & Bridgehouse 2005).





New York Natural Heritage Program

### Spatterdock Darner (*Rhionaeschna mutata*)



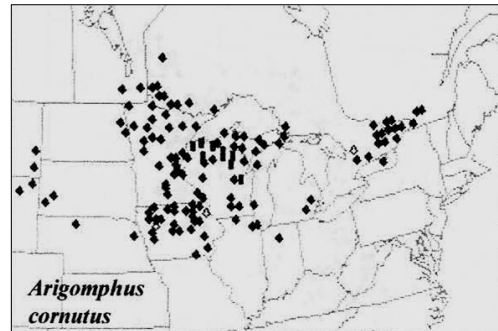
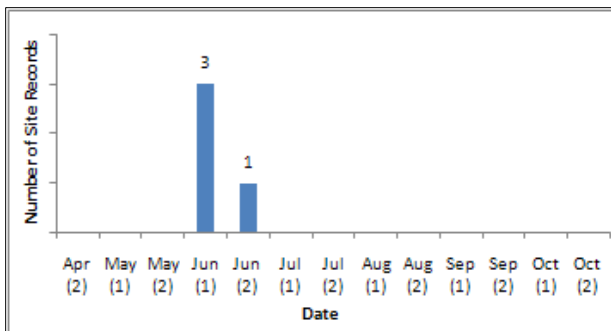
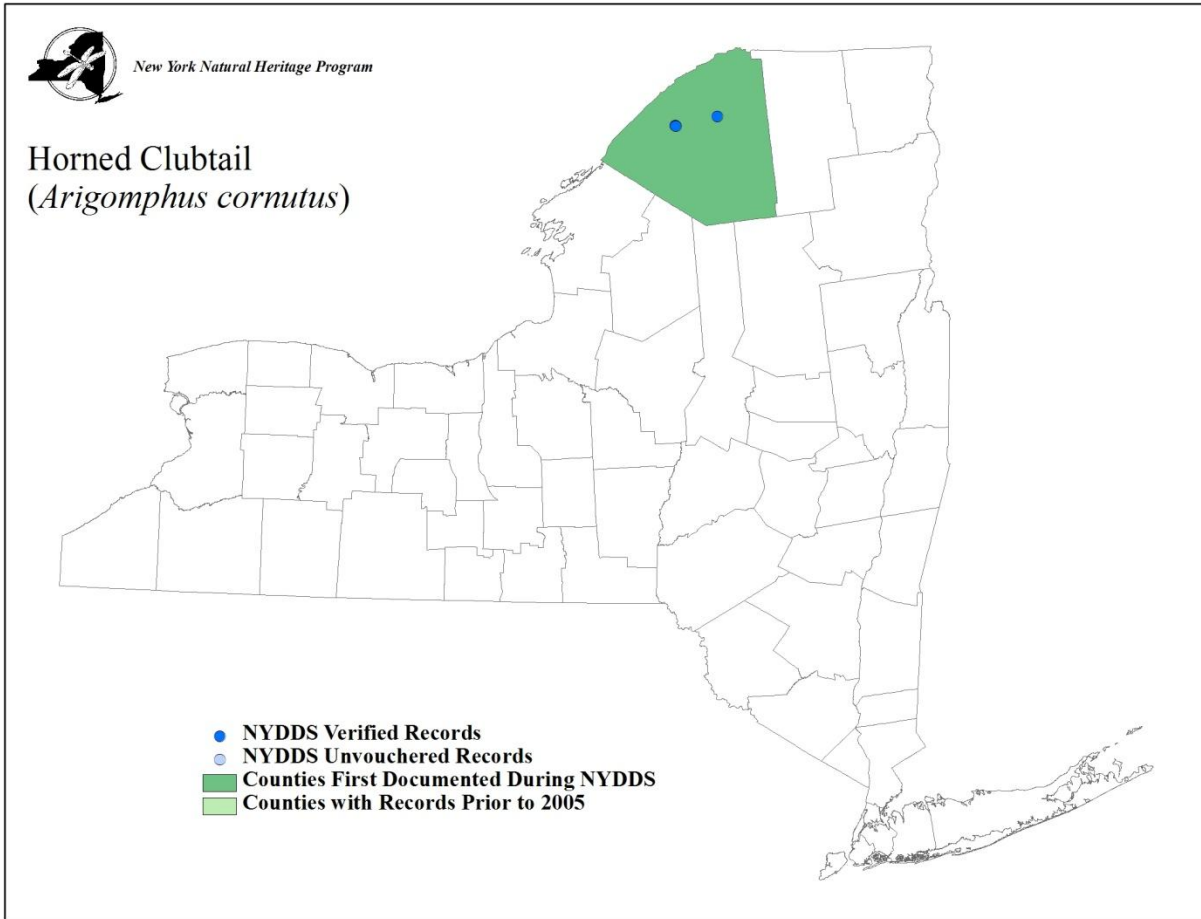


**GOMPHIDAE**

**Horned Clubtail (*Arigomphus cornutus*)**

**Pre-NYDDS Status: G4, SU**

**Draft Revised Status: S1**



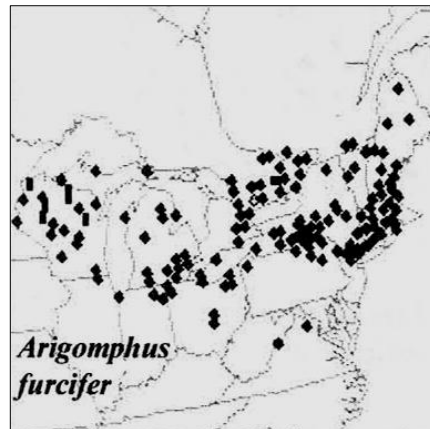
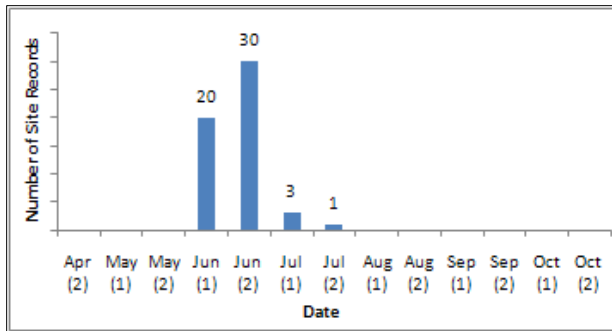
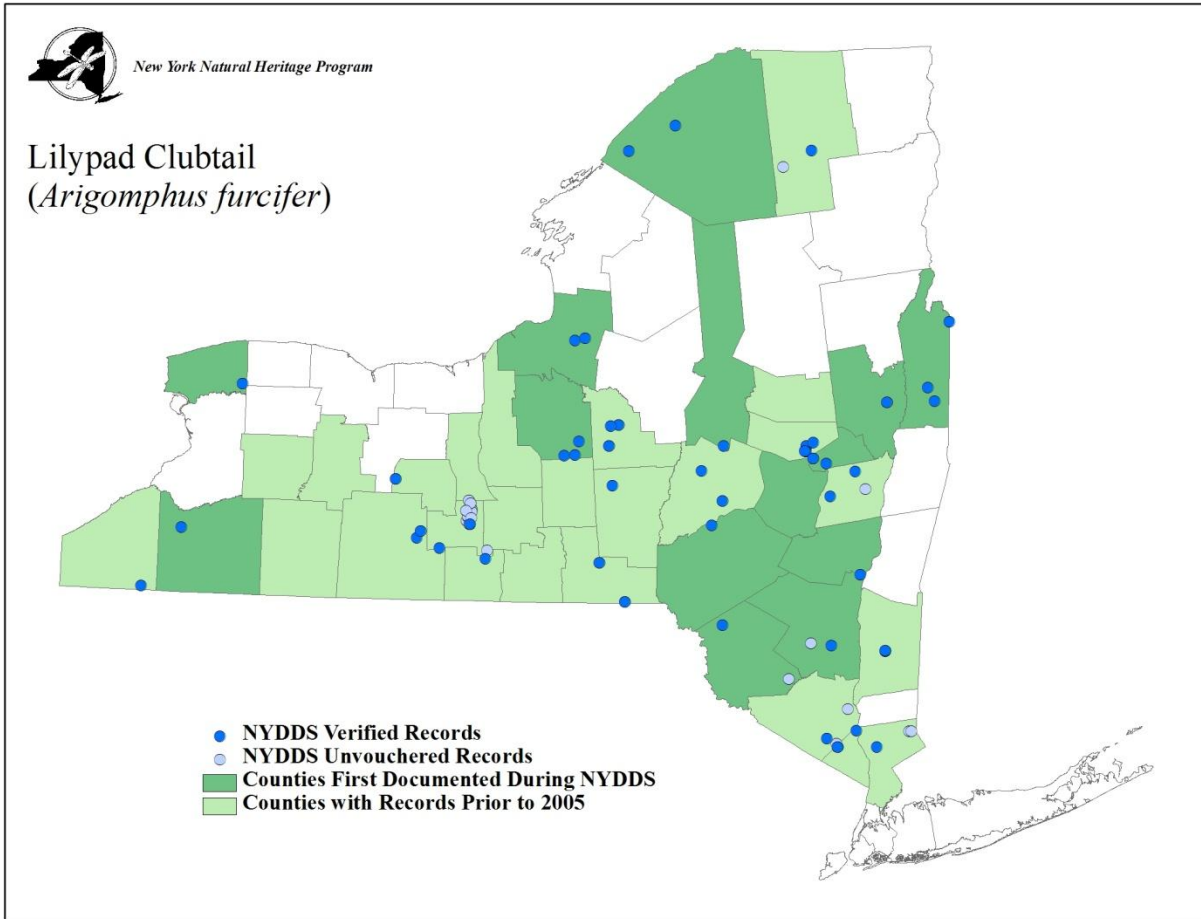
(Donnelly 2004c)



**GOMPHIDAE**

**Lilypad Clubtail (*Arigomphus furcifer*)**

**Pre-NYDDS Status: G5, S4S5**



(Donnelly 2004c)

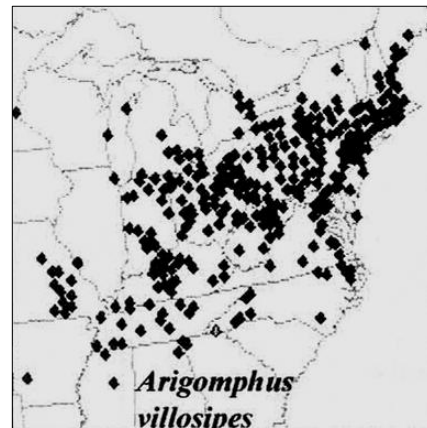
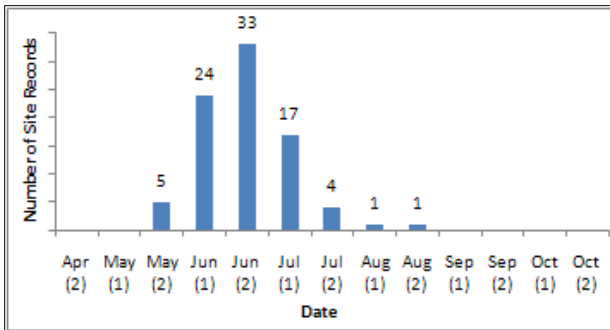
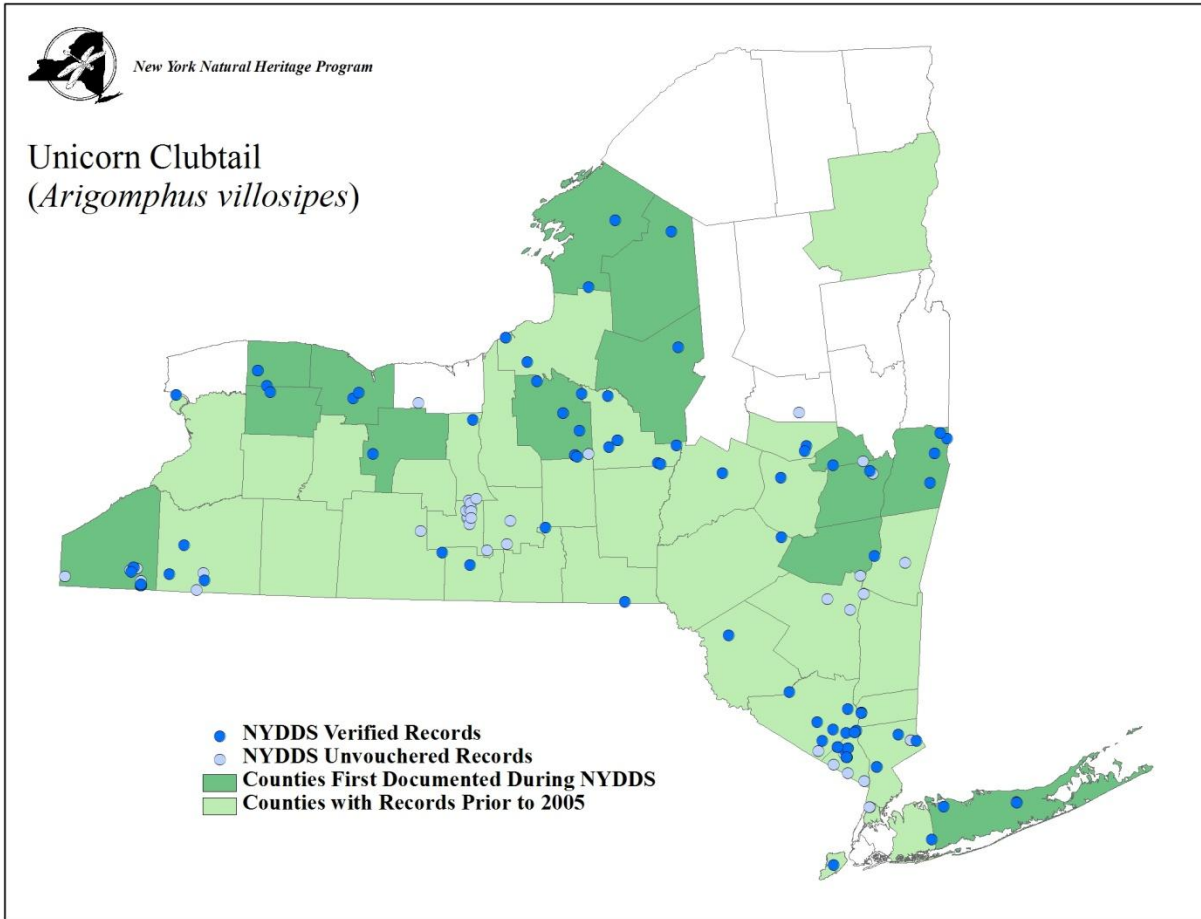


**GOMPHIDAE**

**Unicorn Clubtail (*Arigomphus villosipes*)**

**Pre-NYDDS Status: G5, S5**

**Draft Revised Status:**



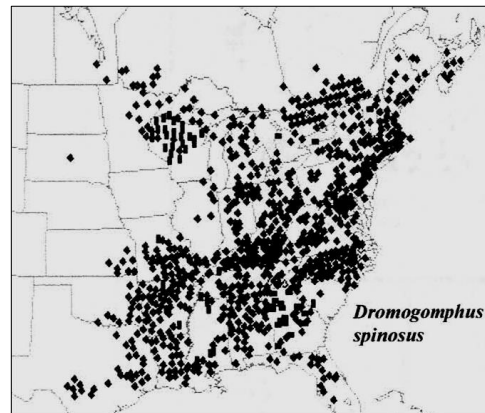
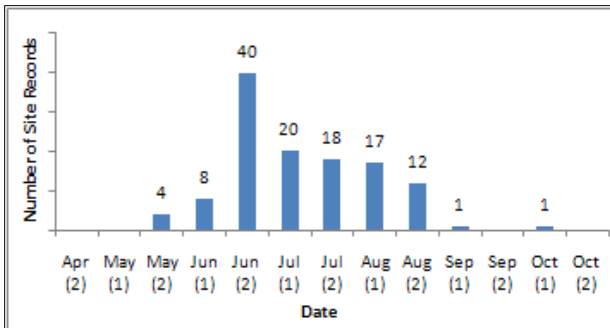
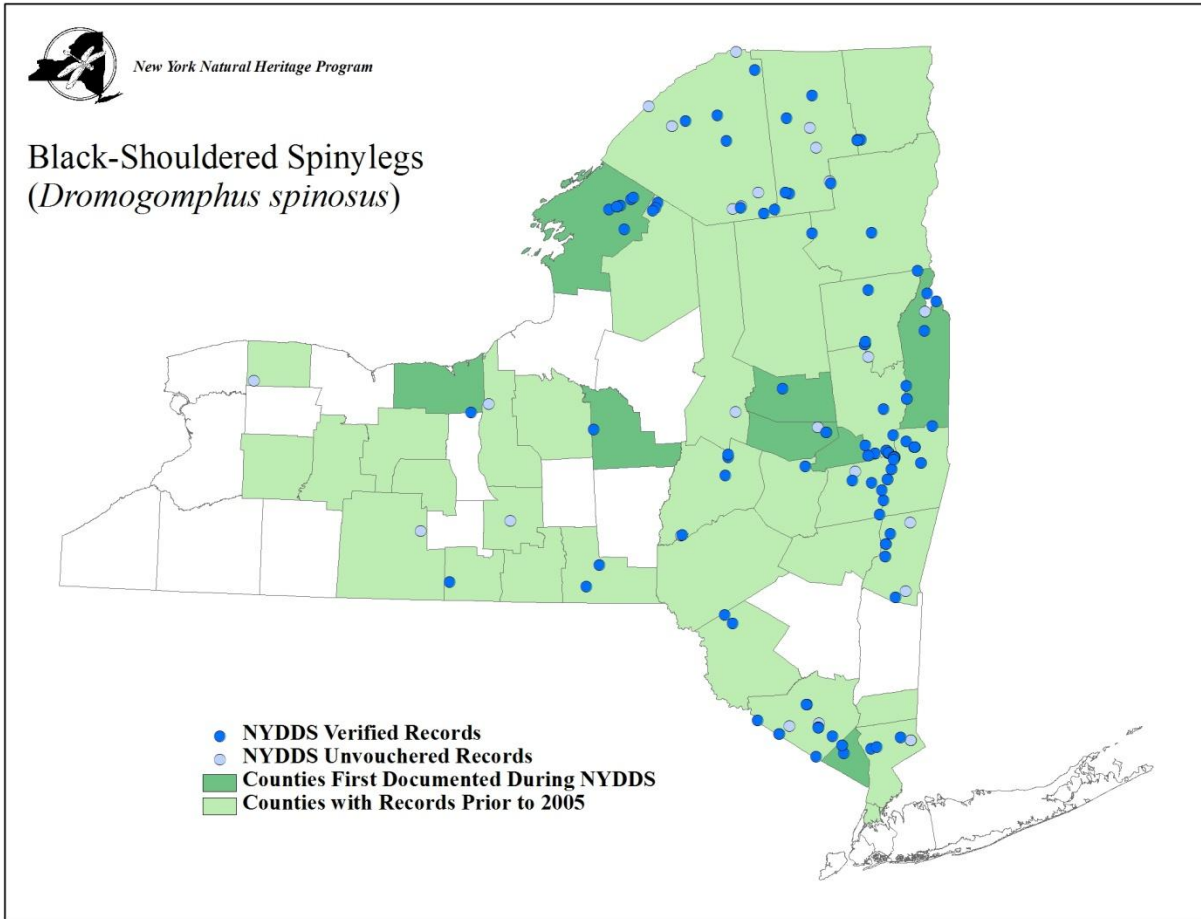
(Donnelly 2004c)



**GOMPHIDAE**

**Black-shouldered Spinyleg (*Dromogomphus spinosus*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004c)



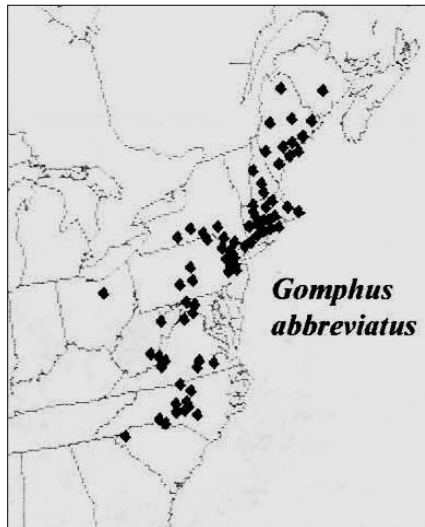
## GOMPHIDAE

### Spine-crowned Clubtail (*Gomphus abbreviatus*)

Pre-NYDDS Status: G3G4, S2S3

Draft Revised Status: S1

**Habitat Characteristics:** Spine-crowned Clubtails inhabit clean, medium to large streams with sandy or rocky substrates and larger rivers containing muck deposits (Dunkle 2000, Nikula *et al.* 2003). Larvae are shallow burrowers in fine sediments, and newly emerged adults are secretive, presumably spending time feeding and maturing high in tree-tops. When mature, they can be found on sandy stretches of shoreline and perched on rocks in the stream, or on overhanging vegetation, often some distance from the shoreline (Massachusetts NHESP 2003).



(Donnelly 2004c)

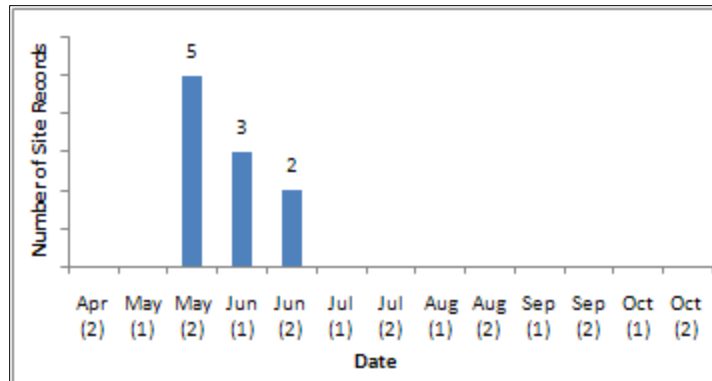
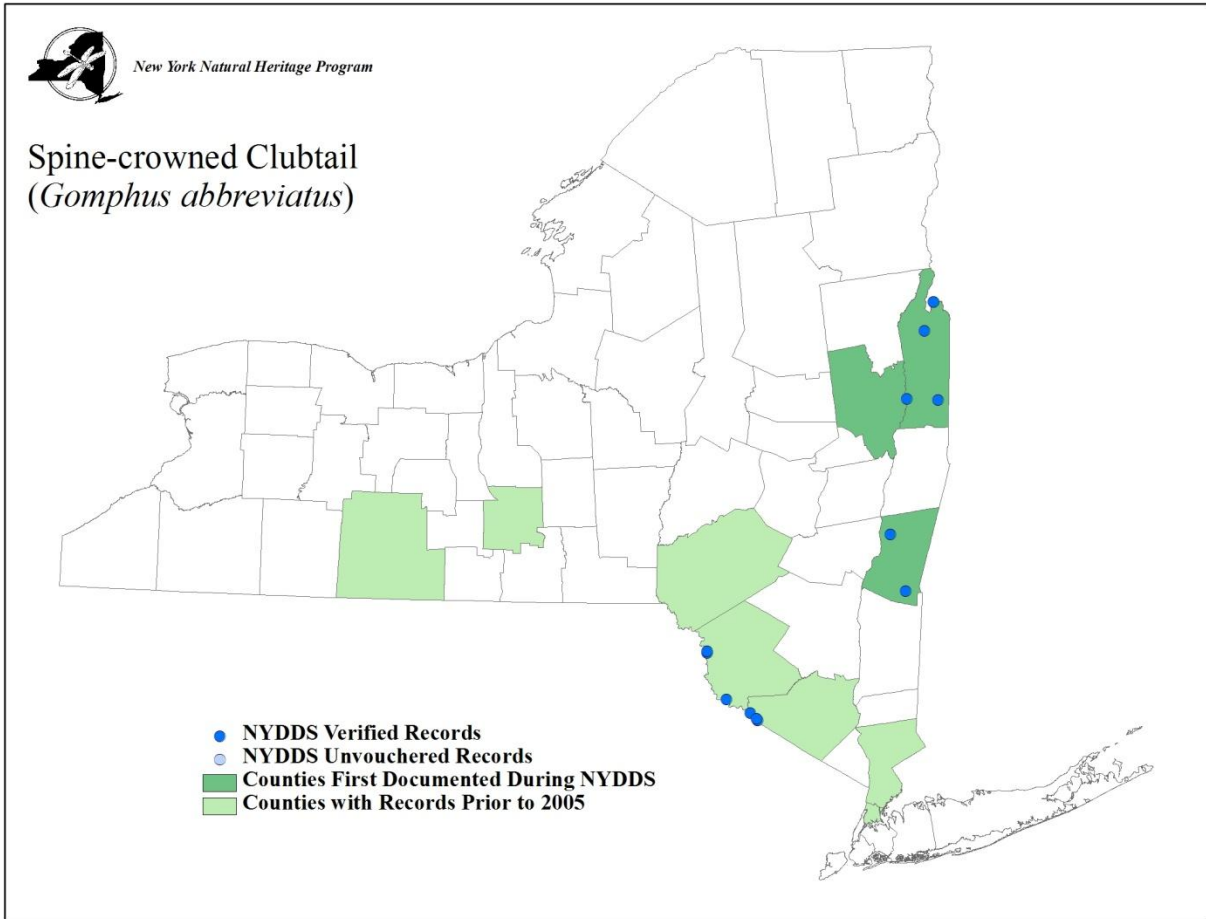
**Distribution and Inventory Needs:** The distributional center of *G. abbreviatus* lies in the Appalachian Blue Ridge region of northeastern Pennsylvania. The species ranges along the Appalachians, north to New Brunswick, and south to northern South Carolina (Donnelly 2004c). An old record in central Ohio has not been confirmed since the late 1930s (The Ohio Odonata Society 2000). New York lies in the center of the species' distribution and currently it is confined to the south-central and eastern portions of the state. Pre-NYDDS records in the southern tier on the Tioga and Chenango Rivers, as well as from Tompkins County, have not been confirmed in recent years. However, several new finds of exuviae during the NYDDS extended the known range eastward to the upper Hudson and Lake Champlain watersheds. Due to the extreme difficulty of separating *Gomphus abbreviatus* from *Gomphus adelphus* as larvae or

exuviae, the following records for exuviae should be confirmed with adult presence: the Battenkill in Washington County, Roeliff Jansen Kill in Columbia County, and the Hudson River and Champlain Canal. The following new locations have been confirmed with adult specimens: Kinderhook Creek in Columbia County and the Poultney River in Vermont on the border with Washington County. This species could also be expected on rivers or larger creeks draining into Lake Champlain in Essex and Clinton Counties. A large, apparently healthy population found in 1993 (confirmed extant in 2009) occurs on the Delaware River from north of Lordville in Delaware County, south to central New Jersey (Bangma & Barlow 2010). Additional inventory on southern tier rivers is critical to ascertain whether the species still occupies the Susquehanna watershed.

**Phenology:** This species has a brief month-long flight season; adults and exuviae have been found in New York (pre- and NYDDS) from about May 26 – June 27, with the bulk of observations coming from the end of May into mid June. This flight season is shorter than in



other northeastern states (Maine, Massachusetts) where this clubtail can be found throughout July (Massachusetts NHESP 2003, Brunelle & deMaynadier 2005).

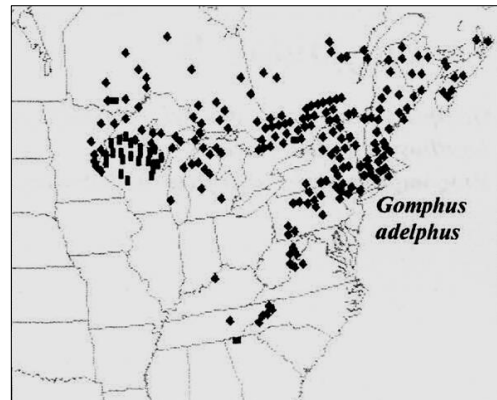
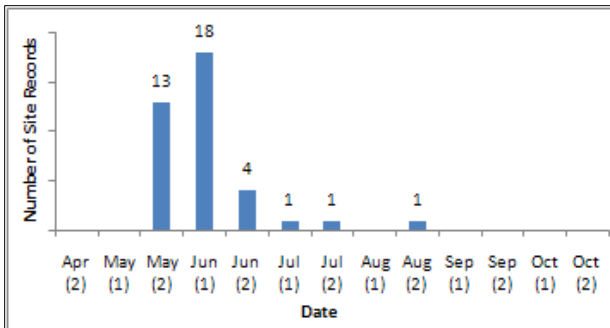
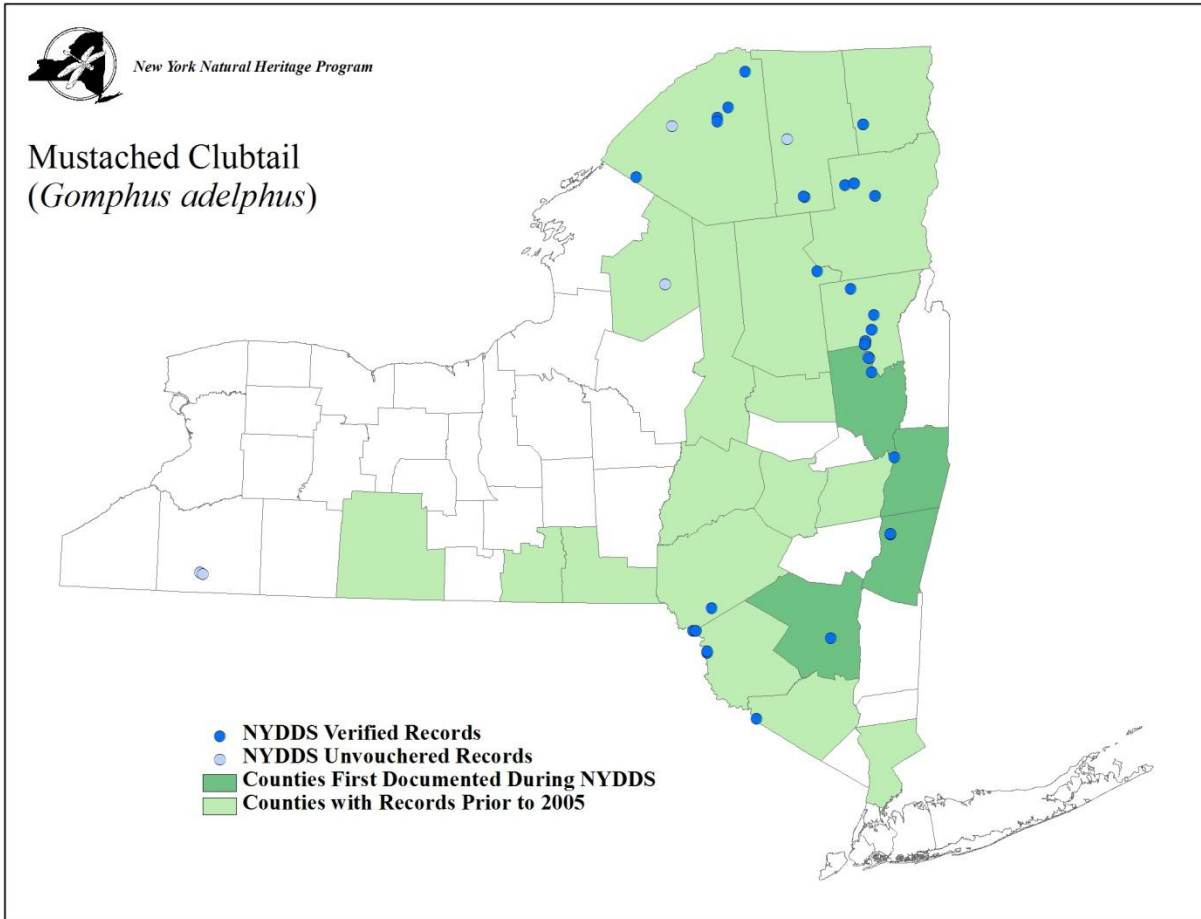


**GOMPHIDAE**

**Mustached Clubtail (*Gomphus adelphus*)**

**Pre-NYDDS Status: G4, S3S4**

**Draft Revised Status: S2S3**



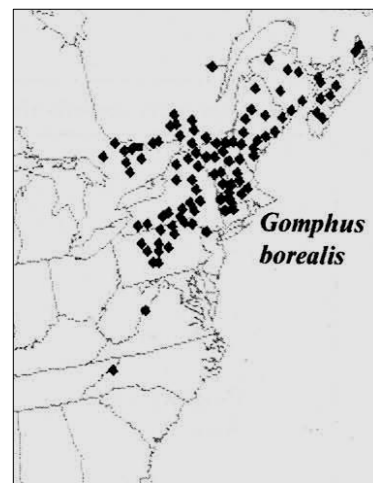
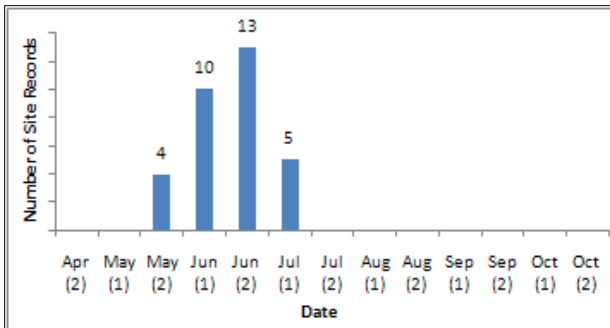
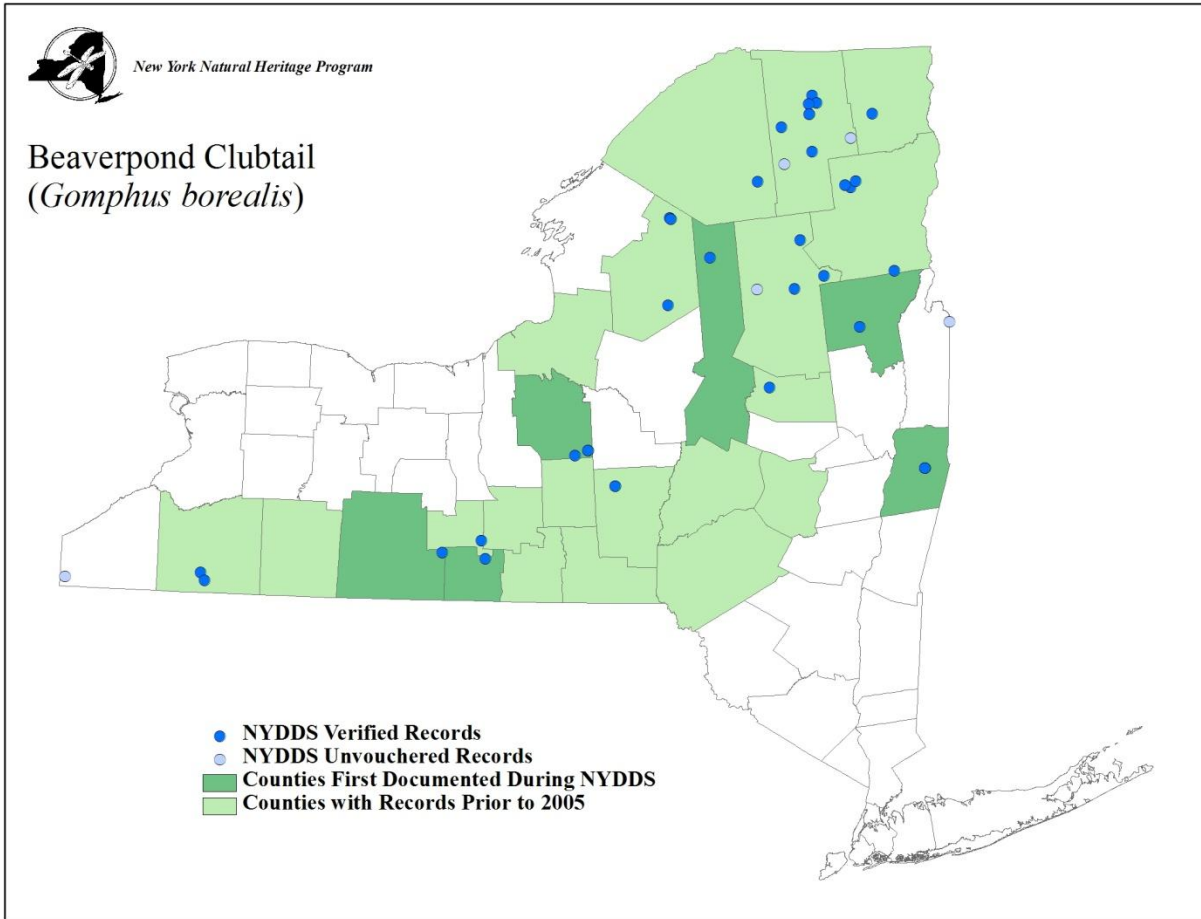
(Donnelly 2004c)



**GOMPHIDAE**

**Beaverpond Clubtail (*Gomphus borealis*)**

**Pre-NYDDS Status: G4, S4**



(Donnelly 2004c)



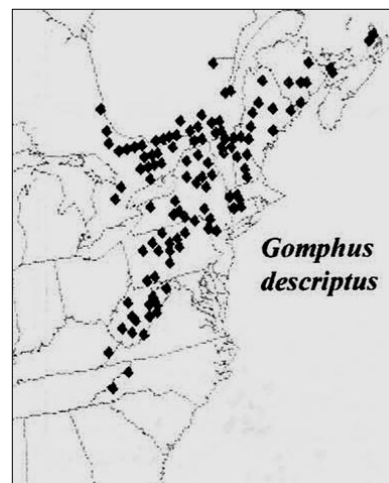
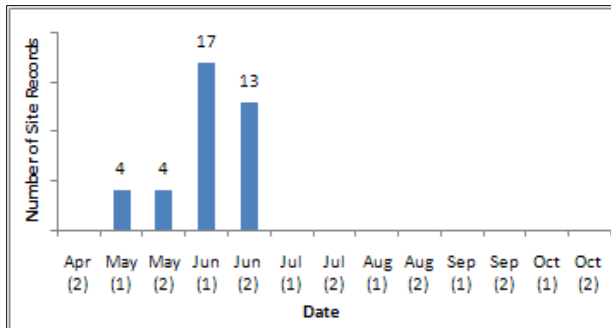
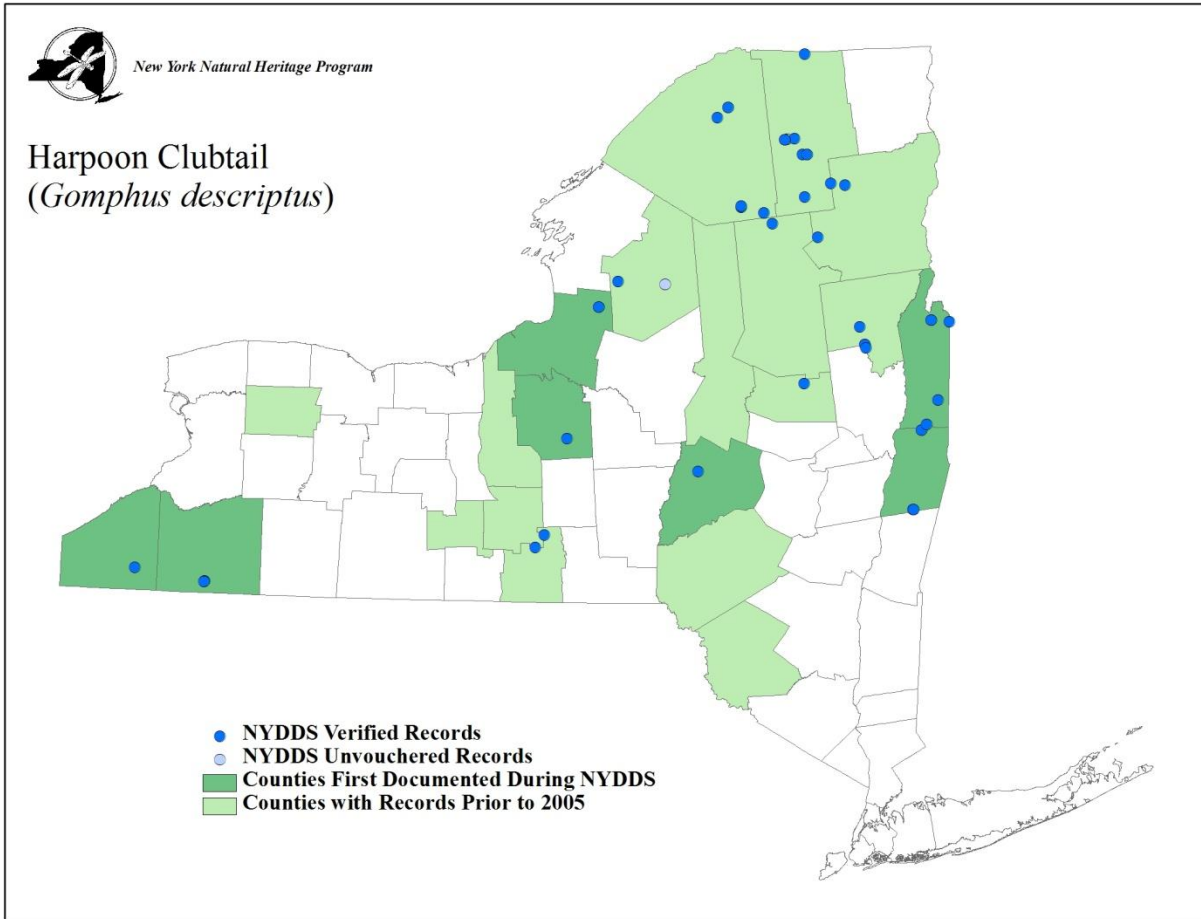


**GOMPHIDAE**

**Harpoon Clubtail (*Gomphus descriptus*)**

**Pre-NYDDS Status: G4, S3S4**

**Draft Revised Status: S3**



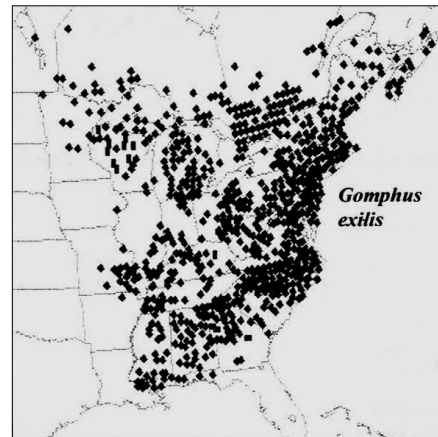
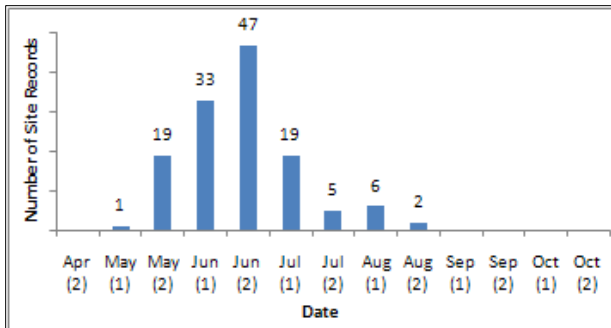
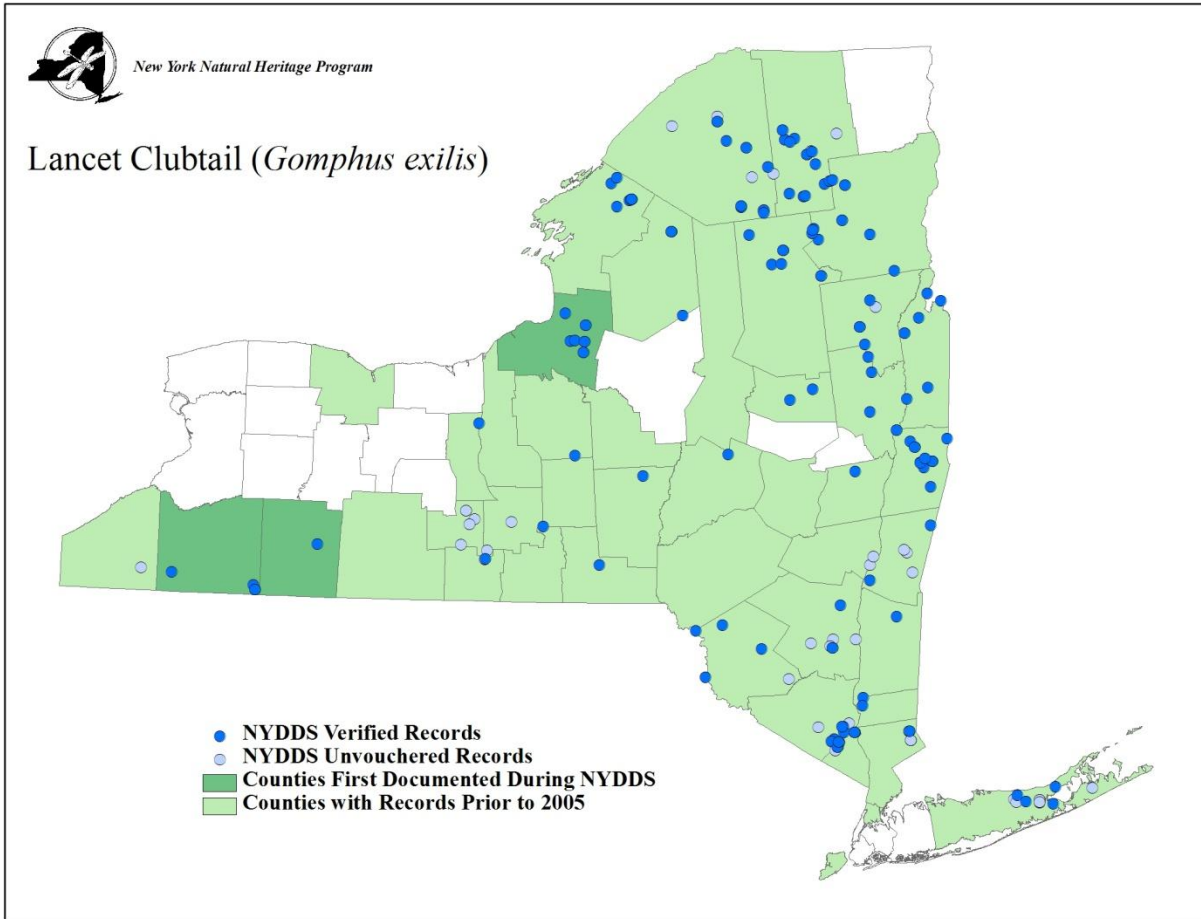
(Donnelly 2004c)



**GOMPHIDAE**

**Lancet Clubtail (*Gomphus exilis*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004c)



## GOMPHIDAE

### Midland Clubtail (*Gomphus fraternus*)

Pre-NYDDS Status: G5, S1S3

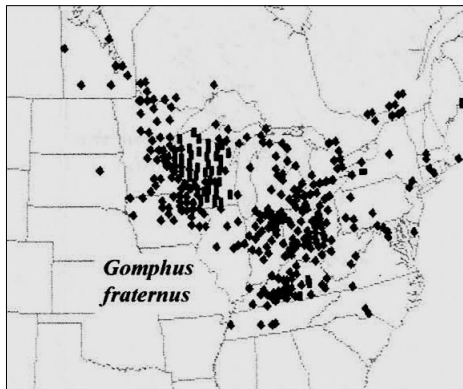
Draft Revised Status: S3

**Habitat Characteristics:** Throughout its range, the Midland Clubtail inhabits medium to large, moderately to rapidly flowing rivers and streams with sandy and muddy substrates. It is also found in and around large lakes with emergent vegetation (Nikula *et al.* 2003). In New York, it appears that two distinct

habitat types are occupied in different parts of the state. In the east (as well as in Connecticut and Massachusetts), the species occurs primarily on larger rivers (and river-sized portions of lakes) with high wave action, and windswept shores where the larvae burrow shallowly in fine sand and nutrient-rich, alkaline mud and clay substrates (Wagner *et al.* 1995, Massachusetts NHESP 2003). Along the Ottawa River in Quebec, large numbers of larvae emerged from heavily impacted areas with stone walls along the shoreline and some aquatic plants, debris, and sand/mud substrates (Hutchinson & Ménard 1999). The adults perch on the ground on fine-sediment beaches and in shoreline trees, and fly out over the water. In western New York, less is known about habitat requirements, but the species was not found on sandy beaches along large rivers, but rather on smaller, well vegetated streams containing cobble bars.



Jeremy Martin 2006



(Donnelly 2004c)

**Distribution and Inventory Needs:** The distributional center for *G. fraternus* is in western lower Michigan in the Southern Great Lakes Forest ecoregion, and extends northwest to Manitoba and northeast to Maine (although Brunelle & deMaynadier (2005) did not report it from Maine) and south to Tennessee (Donnelly 2004c). This species seems to be expanding its range eastward because new state records have recently been reported in Connecticut (Wagner *et al.* 1995), Vermont (NYDDS), Delaware (Heckscher & White 2005), and New Jersey (Bangma & Barlow 2010). In contrast, a large population (tens of thousands) apparently was extirpated

along the Lake Erie shoreline in southern Ontario prior to 1960 (Catling 2001). And it was formerly known in some abundance on the Niagara River (Van Duzee 1897).

Eastern U.S. populations are apparently morphologically distinct from those in the central U.S. (Catling & Hughes 2008). Potentially different habitat preferences in western and eastern New York raise further questions of species status because of the disjunct distribution in the far eastern (upper Hudson and Lake Champlain watersheds) and western (Lake Erie and Allegheny watersheds) parts of the state, suggesting post-glacial colonization via separate pathways (Beatty & Beatty 1968). Additional inventory is needed in these areas to clarify the distribution and habitat affinities, and in the vicinity of Rome Sand Plains in Oneida County, which lies midway between the two. A large population on the Wallkill River at Stony Ford in Orange County was confirmed before 1999 and at least one individual was observed at this location in 2006. The



species may also occur on the New Jersey (Sussex County) side of the upper Delaware River (Bangma & Barlow 2010). It might also be looked for along northern Lake Champlain and/or the St. Lawrence River because there are several records from the Ontario/Quebec border very close to New York.

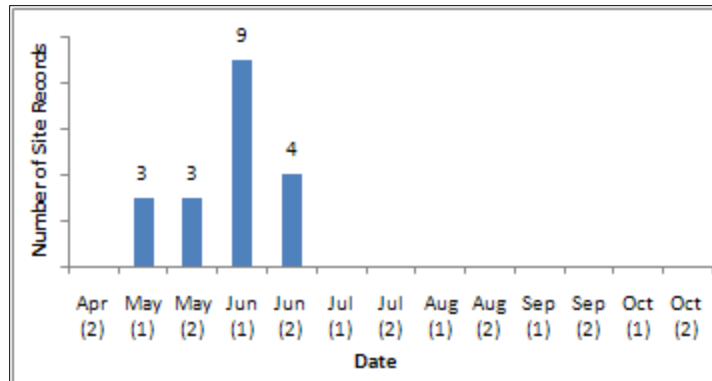
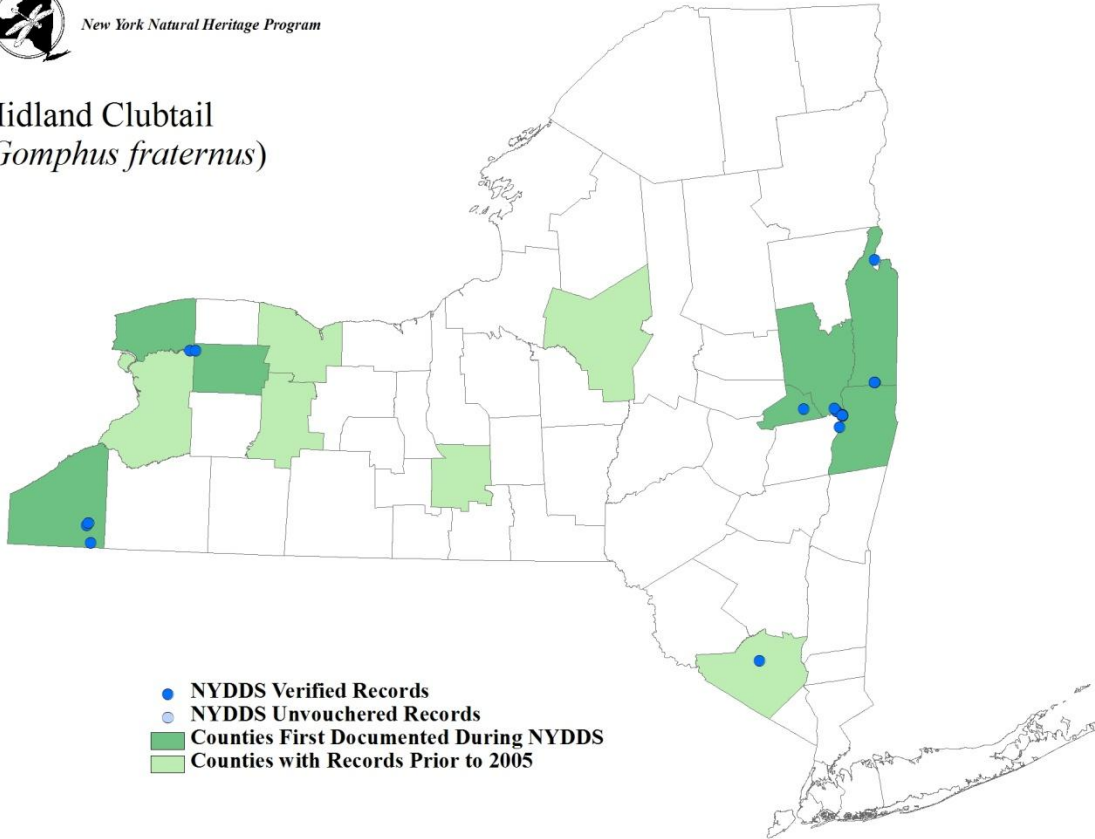
**Phenology:** This species (exuviae and adults) has been observed in New York for about a three-week period between May 28 and June 18, with the bulk of observations during the first half of June. Larva collected in early spring and reared to adults in an indoor tank emerged earlier (1<sup>st</sup> half of May) than those in the wild.





New York Natural Heritage Program

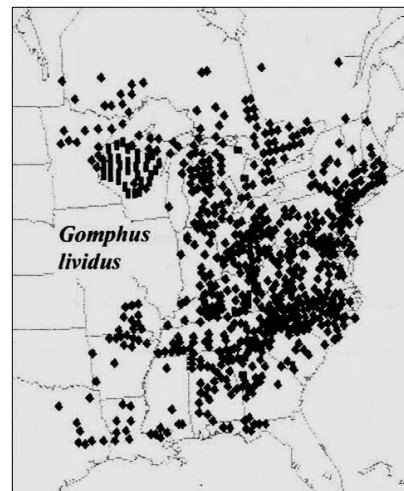
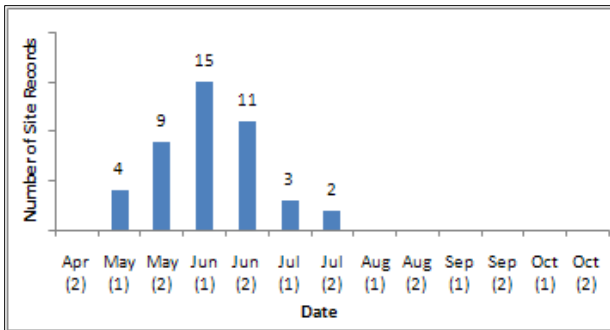
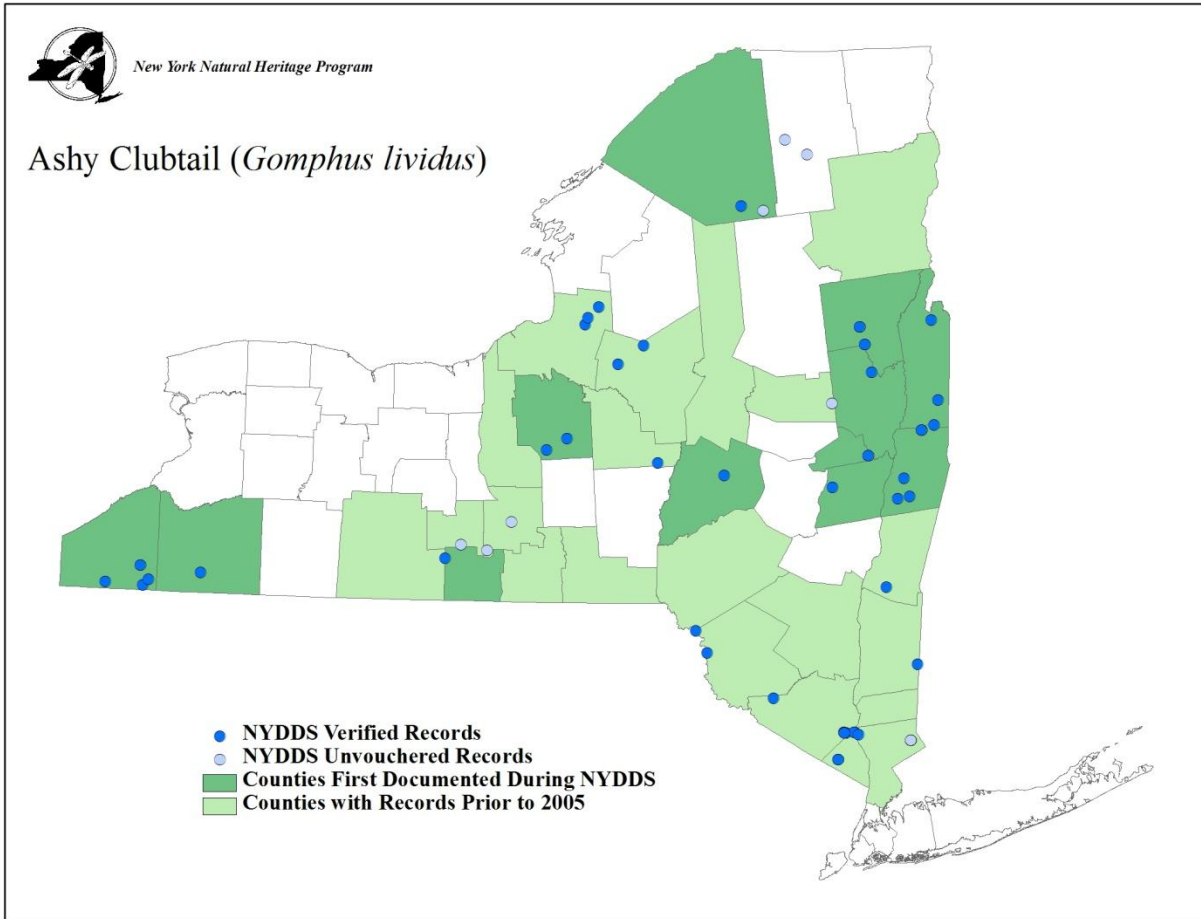
### Midland Clubtail (*Gomphus fraternus*)



**GOMPHIDAE**

Ashy Clubtail (*Gomphus lividus*)

Pre-NYDDS Status: G5, S5



(Donnelly 2004c)



## GOMPHIDAE

### Rapids Clubtail (*Gomphus quadricolor*)

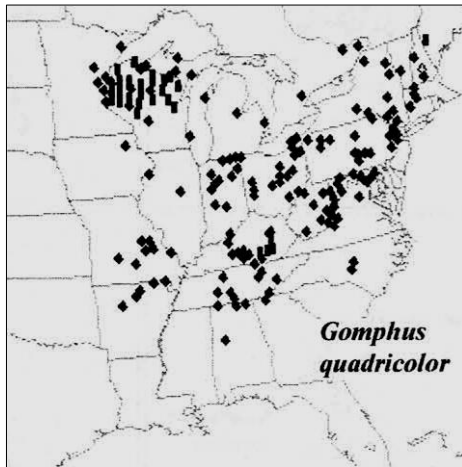
Pre-NYDDS Status: G3G4, S1S2

Draft Revised Status: S3

**Habitat Characteristics:** Larvae live in muddy pools in clear, cool streams where they have drifted from oviposition sites in rapids. Adult males perch on rocks in rapids or on sunny bare patches some distance from shore, while adult females inhabit forests on the riverbanks, moving to the rapids when ready to breed (Walker 1958; COSEWIC 2008). In New York, most NYDDS records came from medium-sized to larger creeks and rivers having relatively clean water and riffle/run reaches.



Stephen Diehl and Vici Zaremba 2009



(Donnelly 2004c)

**Distribution and Inventory Needs:** The center of distribution for *G. quadricolor* is in western Ohio in the southern Great Lakes forest ecoregion. New York lies near the northeastern range extent, with known populations extending to the northern New Hampshire/Maine border (Donnelly 2004c), although it was not found in Maine during a recent Atlas (Brunelle & deMaynadier 2005). This species is confined to the eastern part of New York in the northeast Lake Ontario/St. Lawrence, Champlain and upper Hudson watersheds. Widely scattered populations occur in nine counties from Rondout Creek in central Ulster County, northwestward to the Indian and Oswegatchie Rivers, and eastward to the upper Hudson River, and the Poultney and Mettawee Rivers along the Vermont

border. Additional inventory is warranted in the Susquehanna and Delaware watersheds, where the species was known historically, and in extreme southwestern New York since there are multiple records in adjacent Pennsylvania (Donnelly 2004c).

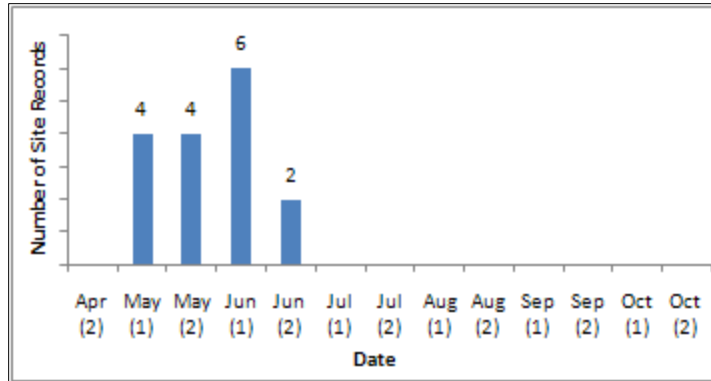
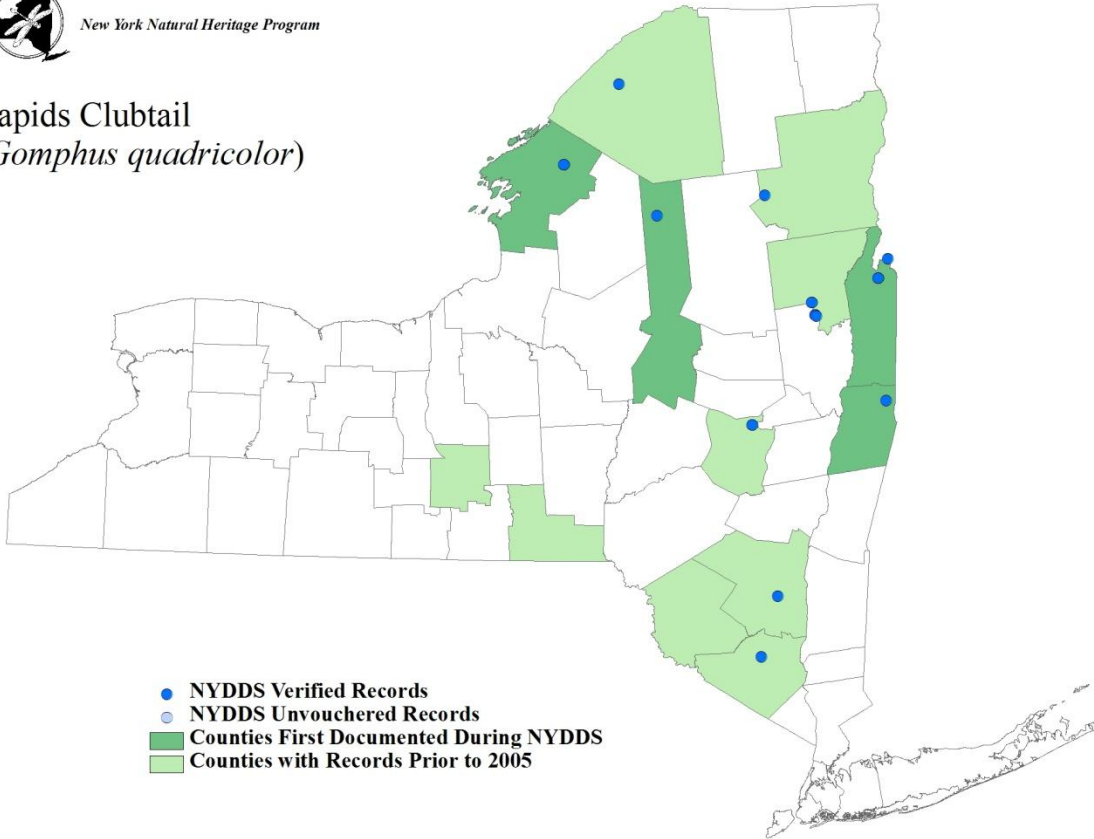
**Phenology:** Larvae emerge toward the end of May into early June and adults are observed throughout the month of June in New York. Larva collected in early spring and reared to adults in an indoor tank emerged earlier (1<sup>st</sup> half of May) than adults in the wild.





New York Natural Heritage Program

### Rapids Clubtail (*Gomphus quadricolor*)





## GOMPHIDAE

### Sable Clubtail (*Gomphus rogersi*)

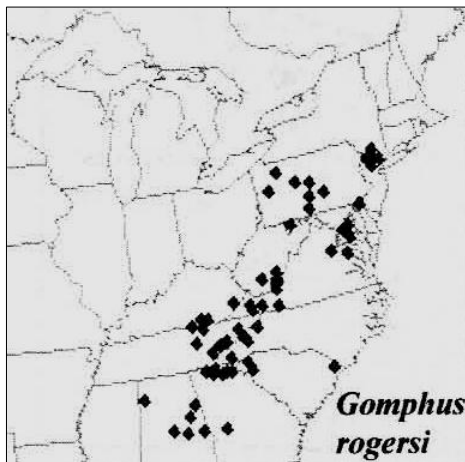
Pre-NYDDS Status: G4, S1

Draft Revised Status: S1

**Habitat Characteristics:** Sable Clubtails inhabit clear, moderately flowing small forest streams and brooks with a sand, silt or rocky substrate. Adults forage at forest edges, and perch on rocks, overhanging grass and floating plants (Dunkle 2000). In New York, an extant site occupied since 1995 is a cold headwater brook that runs through a mixed hardwood forest with occasional sunny and marshy openings. The brook is alternately wide (approximately 8 feet) and deep, and narrow (1-3 feet) with shallow, rocky riffles. In the sunny areas, the bank is lined with ferns and nettles. Boulders or moss-covered rocks line the stream in other areas. In places the stream bank is elevated 1-5 feet above the stream surface. New York's other known site is also a heavily forested stream outlet of gentle gradient connecting a small pond to a larger lake.



Tom Murray



(Donnelly 2004c)

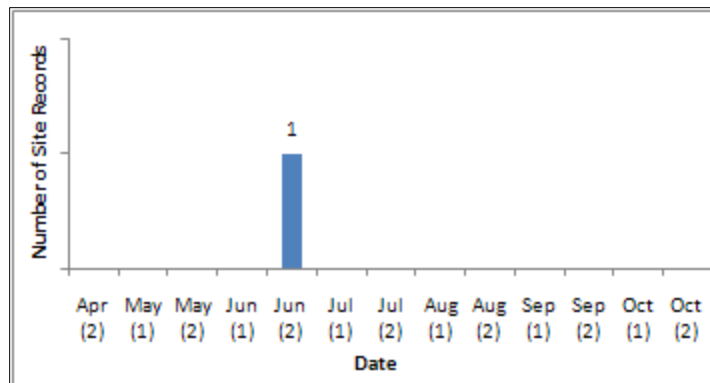
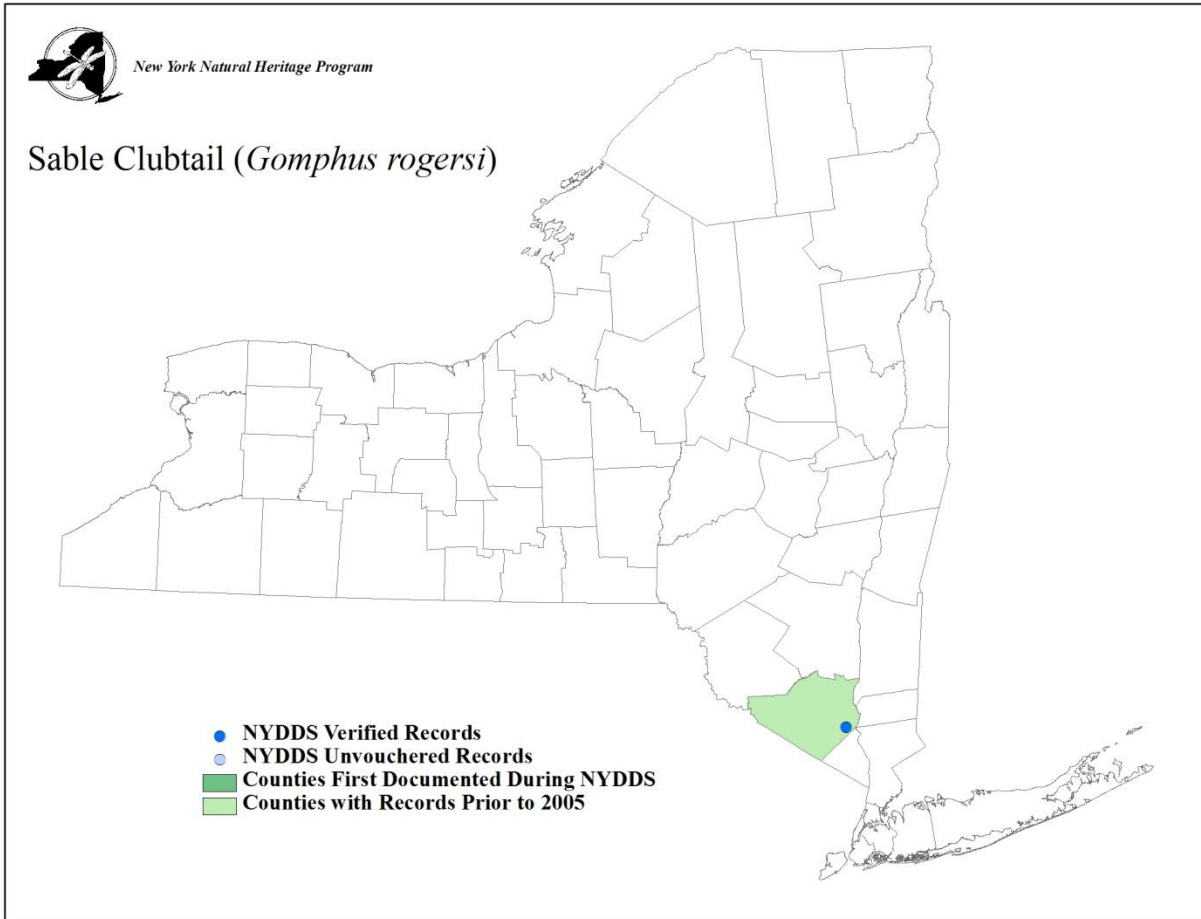
**Distribution and Inventory Needs:** The distributional center of *G. rogersi* occurs along the southern West Virginia/Virginia border in the Appalachian Blue Ridge ecoregion, extending south to central Alabama and north to the New Jersey/New York border. The northernmost locale in the species' entire range occurs on Deep Hollow Brook (last observed in 2008) at Harriman State Park and at nearly the same latitude in western Pennsylvania (Donnelly 2004c). These northwestern Pennsylvania records are over 35 years old, however, and more recently this species has been found in southern Pennsylvania only (Pennsylvania Natural Heritage Program 2010b). It is possible that this central Appalachian species is temperature-limited at its

northern range margin (Beatty & Beatty 1968), so a possible range contraction southward seems counter-intuitive in a warming climate.

New York's only two known populations appear to be rather stable since the northernmost occurrence has been extant for 15 years, and it was noted as "common" at the other site (Little Cedar Pond outlet) in Sterling Forest near the New Jersey border. However, the status of this population has not been re-confirmed since it was first found in 1989. The current status of the New Jersey sites adjacent to New York is unknown. It seems likely that this species occurs on additional favorable streams in Orange and Rockland Counties, especially in the heavily forested Harriman and Sterling Forest State Parks. An informative distribution model created by NY Natural Heritage also predicted potentially suitable habitat in central Ulster County, at the Ward Pound Ridge Reservation in Westchester County, and in the Hudson Highlands State Park on the Dutchess/Putnam County border (New York Natural Heritage Program 2007a).



**Phenology:** This species could have a very narrow flight season in New York—all of the few (<1/2 dozen) sightings, both pre-NYDDS and during, fell between June 23-27, and it was not seen at a known site on July 11<sup>th</sup>. In northern New Jersey, its flight season is about a month long, from May 23-June 24 (Bangma & Barlow 2010).



## GOMPHIDAE

### Septima's Clubtail

(*Gomphus septima delawarensis*)

Pre-NYDDS Status: G2, S1

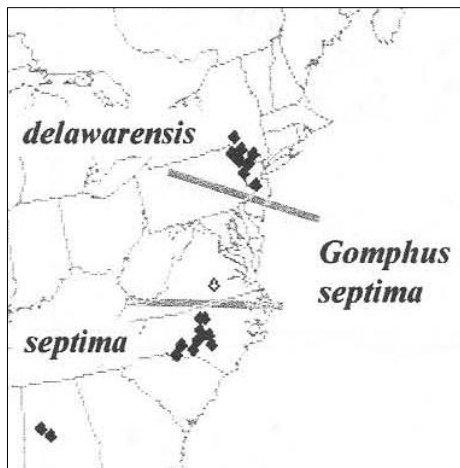
Special Concern

Draft Revised Status: S1



Steve Walter 2008

**Habitat Characteristics:** This species requires clean, rocky rivers with muddy and silty reaches. In the Delaware River, larvae inhabit relatively deep (> 1 meter) pools either immediately downstream of rapids or downstream of a tributary, especially where large amounts of mixed fine sediments have been deposited. Adults frequent regions of turbulent rapids with large emergent boulders, on which they often perch. They also spend much time at open areas away from the water and adults have been found perched on the ground or in low trees and shrubs especially along railroad rights-of-way. Emergence occurs farther up on the river banks (1-2 meters) than most other Gomphids (Soltesz 1995b; Donnelly & Carle 2000).



(Donnelly 2004c)

**Distribution and Inventory Needs:** *G. septima septima*, known only from Alabama (recently rediscovered) and North and South Carolina was first discovered in the 1930s (Westfall Jr 1956) while the Delaware River endemic *G. s. delawarensis* was discovered in 1993 (Donnelly & Carle 2000). It is not clear why this dragonfly was overlooked for so long, but Donnelly & Carle (2000) stated that it was different enough from its close relative *G. septima* that it could have been described as a full species, rather than a subspecies. It is endemic to only in the Delaware River in New York, Pennsylvania and New Jersey from Mercer County New Jersey (Bangma & Barlow 2010), north to the Pepacton Reservoir on the East Branch of the Delaware in Delaware County, a stretch of about

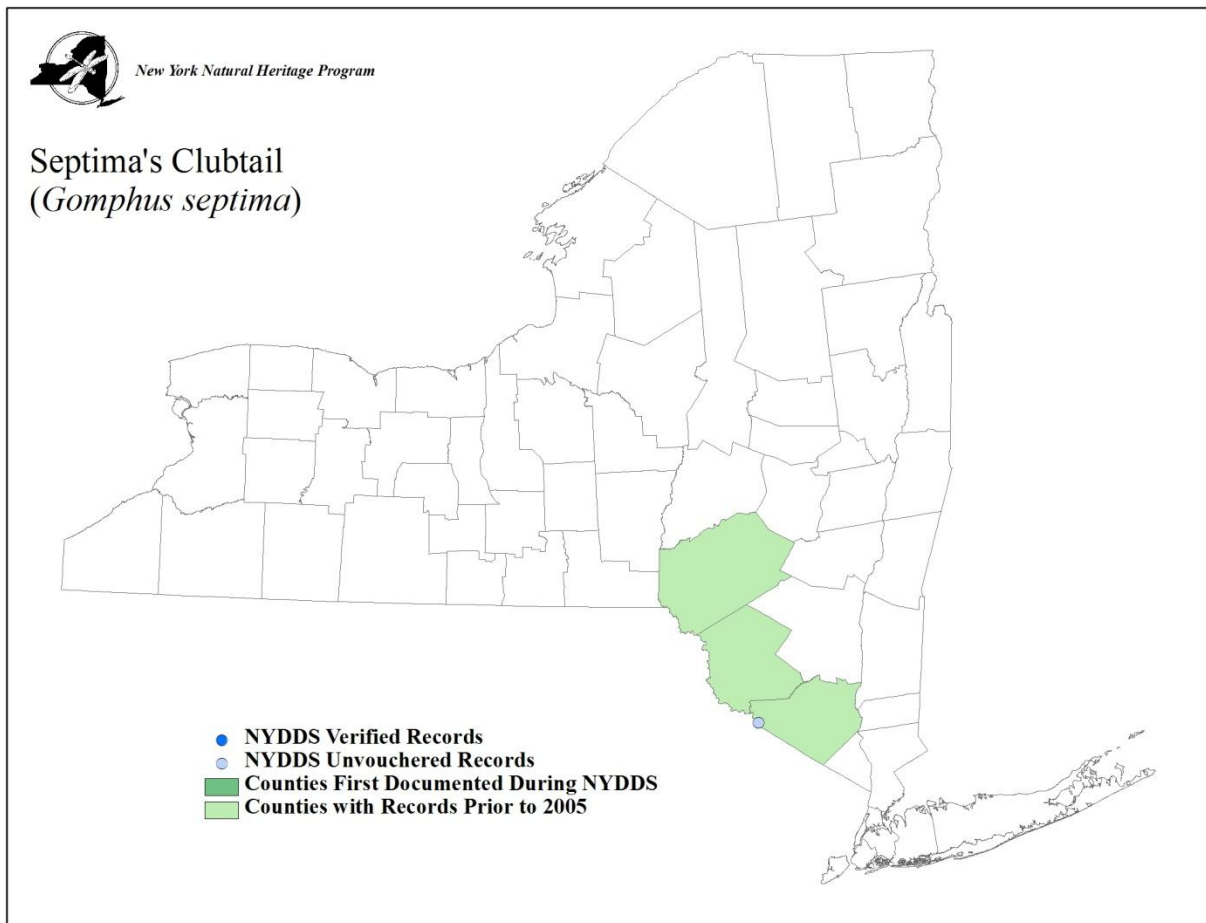
360 km.

Specific locations in New York include Port Jervis, Barryville, Minisink Ford, Tusten, Narrowsburg, Skinner's Falls, Cohecton, and Callicoon. Most specimens were found in 1994 and 1995 along a 50-km reach between Barryville and Callicoon, in Sullivan County when intensive collecting (~80 adults collected) was done for Donnelly & Carle's (2000) subspecific description. Upwards of 50 adults were taken over 20 days in 1994 (Bick 2003). The species has not been seen from 1996 to 2007 New York along the upper Delaware. On June 7, 2008 a single adult female was photographed at Port Jervis along the Delaware River. While the photo (above) is slightly uncertain since it could not be separated from *G. fraternus* by experts, it is a probable *G. septima* based on the location (Donnelly pers. Comm.) and the experience of the observer. Its status on the New Jersey side of the upper Delaware is unknown. There is a presumed uninhabited stretch of about 65 km between Callicoon, the northern-most known locale on the upper Delaware, to Downs ville in Delaware County on the east Branch, where a male and a



female were collected in 1995 (Donnelly 1999; Donnelly & Carle 2000). Further inventory along this stretch as well as along the west Branch, north of Hancock and the Beaverkill (upstream of the confluence with the East Branch) is urgently needed. The species was not detected in 2008 in the vicinity of Long Eddy, or in 2009 between Hankins to Cohecton and at Port Jervis (although weather conditions were poor in 2009).

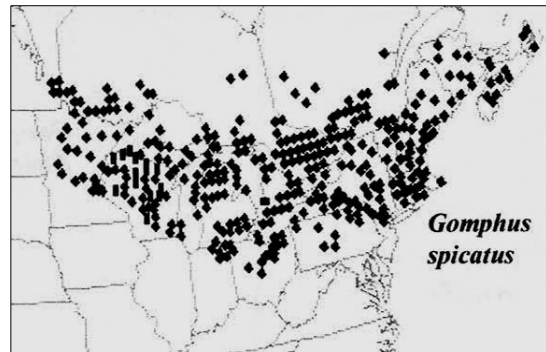
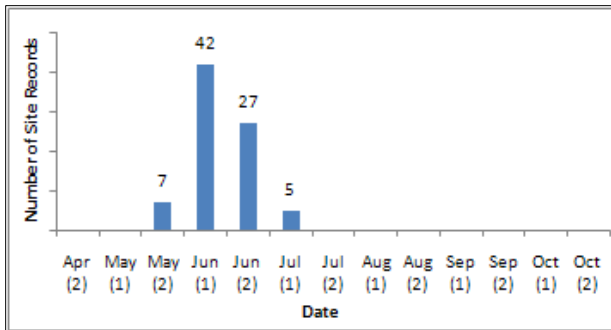
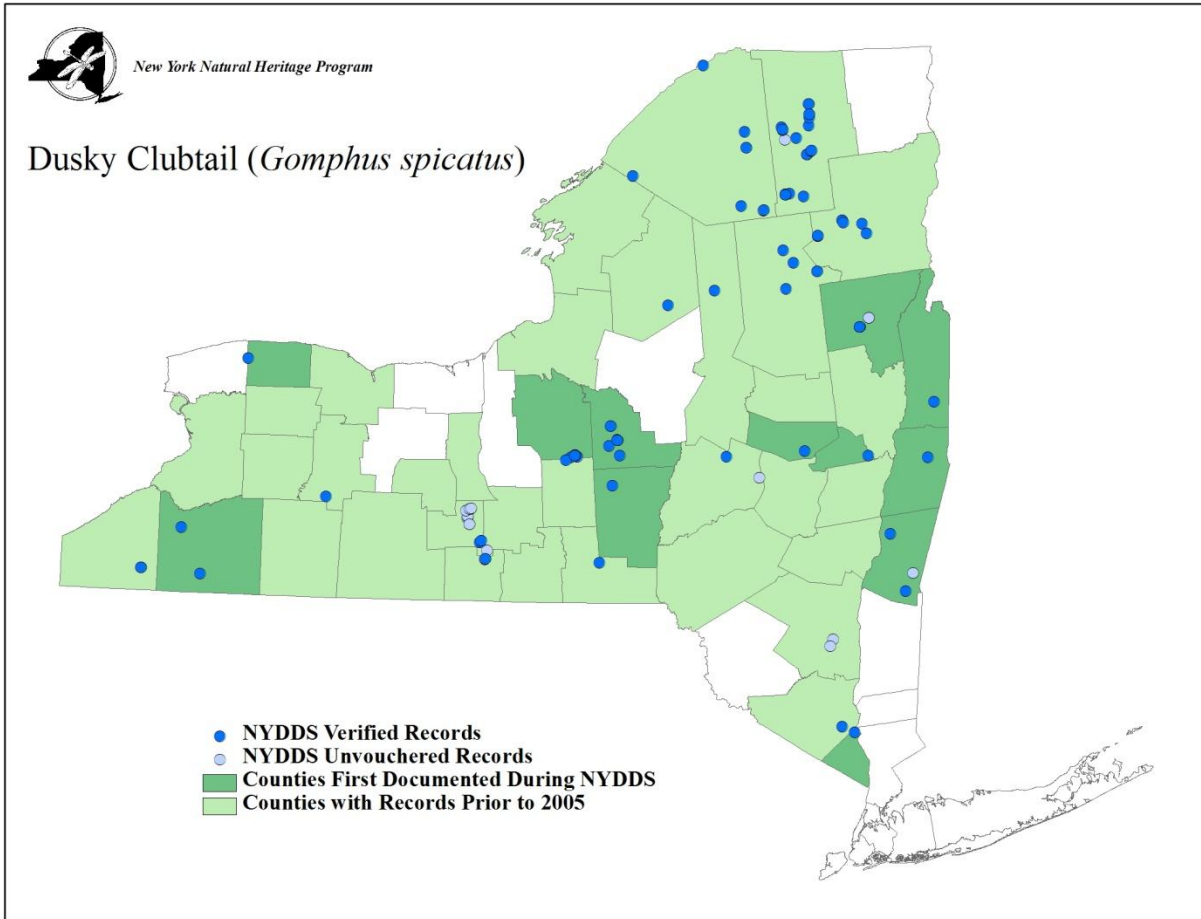
**Phenology:** Exuviae and adults have been collected along the upper Delaware from May 24-June 25, with the great majority of records (> 2/3) coming during the first half of June (Soltesz 1995b). The photo from 2008 was taken on June 7.



**GOMPHIDAE**

**Dusky Clubtail (*Gomphus spicatus*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004c)



## GOMPHIDAE

### Cobra Clubtail (*Gomphus vastus*)

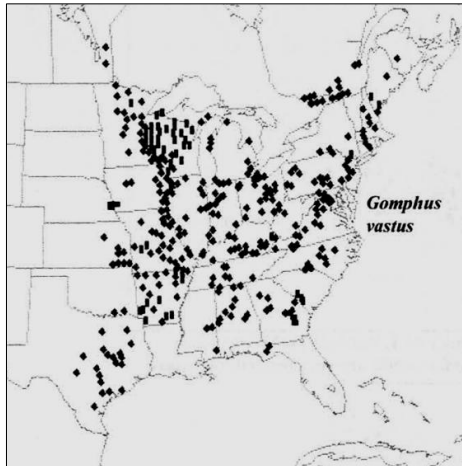
Pre-NYDDS Status: G5, SH

Draft Revised Status: S1

**Habitat Characteristics:** Cobra Clubtails inhabit large forested sandy-bottomed rivers with alternating stretches of sand and gravel and more rarely large wind-swept lakes. Along the Ottawa River in Quebec, large numbers of larvae emerged from heavily impacted areas with stone walls along the shoreline and some aquatic plants, debris, and sand/mud substrates (Hutchinson & Ménard 1999). Adults are believed to take refuge high up in large trees along the shoreline or in nearby uplands since they are seldom observed after emergence. During breeding mature males can be seen resting on sandy stretches of shoreline, or perched in overhanging vegetation (Massachusetts NHESP 2003).



Jeffrey Phippen 2008



(Donnelly 2004c)

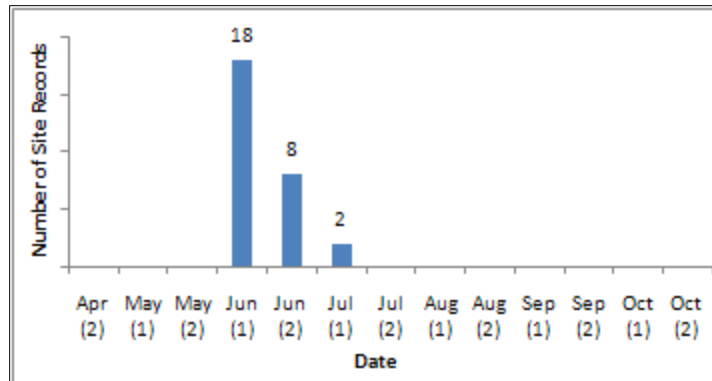
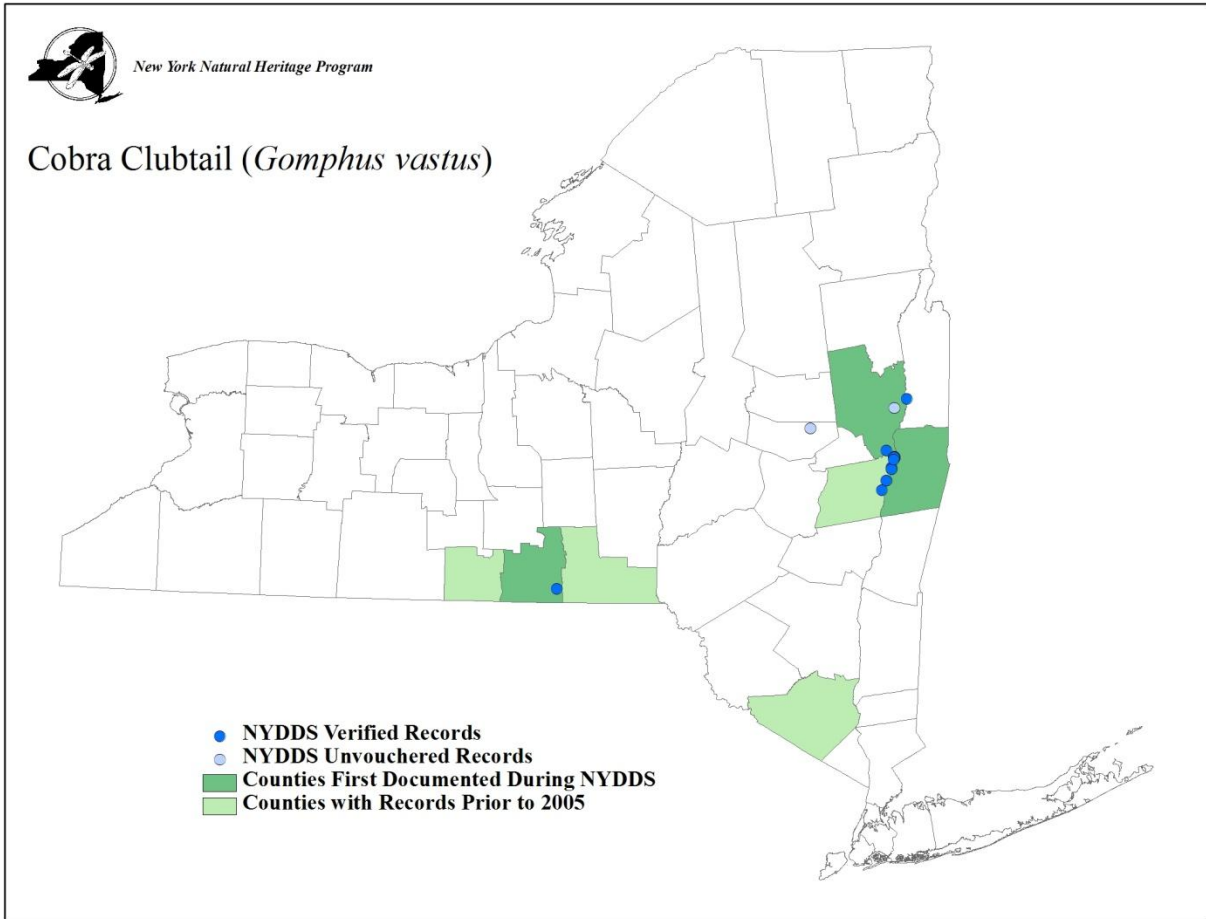
**Distribution and Inventory Needs:** This species is widely distributed in the eastern half of the US, with a distributional center along the Ohio River in southern Indiana in the southern Great Lakes forest ecoregion. It ranges northwest to Lake Winnipeg in southern Manitoba, east to New Brunswick, and south to Florida and Texas. New York is near the northeastern range extent (Donnelly 2004c) where the species was known historically only from the Hudson and Chemung Rivers. During the NYDDS, a large population was rediscovered along the mid Hudson River from around Albany north to Schuylerville and a short distance up the Mohawk River. The Susquehanna watershed population, known since 1940, is also apparently extant, as exuviae were found along the Susquehanna River

near Apalachin in Tioga County in 2009. This species also may occur in the Delaware River since exuviae have been collected on the New Jersey side of the river (Bangma & Barlow 2010), as well as farther upriver on the Mohawk where an unverified adult was reported near Lock 12 in Montgomery County. A pre-NYDDS vague record from Orange County (Donnelly 2004a) may have come from the Wallkill River. The species might also be looked for along northern Lake Champlain and/or the St. Lawrence River since there are several records from the Ontario/Quebec border very close to New York. A cluster of records in northwestern Pennsylvania suggests that additional inventory in the Allegheny watershed in southwestern New York is warranted.

**Phenology:** The great majority of records during the NYDDS were of exuviae; however, a few adults were collected. All of the encounters were primarily during the month of June, with one collection of an adult on July 10. This corresponds well with the flight season in Wisconsin (Wisconsin Odonata Survey 2009) and New Jersey (Bangma & Barlow 2010); however, in



Massachusetts (Massachusetts NHESP 2003) and Ohio (The Ohio Odonata Society 2000), it is seen through July and into August.



## GOMPHIDAE

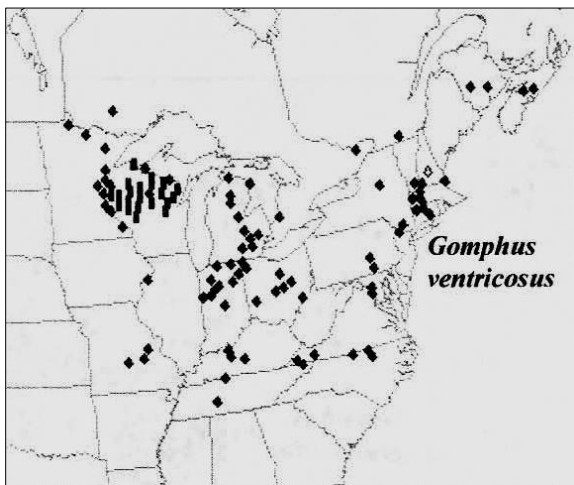
### Skillet Clubtail (*Gomphus ventricosus*)

Pre-NYDDS Status: G3, SH

Draft Revised Status: S1

**Habitat Characteristics:** Throughout its range, this species prefers small to large turbid rivers with partial mud bottoms, but good water quality. In the Midwest, it can sometimes be found on clean lakes with sand or sand-marl (calcium-rich) bottoms. An older locale in Pine Island of Orange County

(Donnelly 1999), presumably along the upper Wallkill River, was a slow moving creek with a muddy/muck bottom and stained/turbid water and grasses and woody shrubs along the banks. The newly documented Raquette River population occupies a rocky, deep river with clear water and a sand/gravel substrate.



(Donnelly 2004c)

Massachusetts and Connecticut as well as smaller rivers near the border with New York such as the Housatonic (Massachusetts NHESP 2003) suggest that it should occur in eastern New York. Extensive searches along the mid-Hudson during NYDDS however, failed to turn it up. It was formerly known in New York from two pre-1926 records, one from Pine Island, probably the upper Wallkill River (where it still occurs in New Jersey), and another from Old Forge, probably on the Moose River. A survey of the Moose River near Old Forge in 2009 turned up empty, but more inventory there is needed. In 2007 and 2008, a new population was documented in New York along the Raquette River between Potsdam and Massena on the northeast Lake Ontario/St. Lawrence Plain. Other large rivers draining the Adirondacks to the north including the Grass, Oswegatchie, St. Regis, and Chateaugay may also hold populations on their lowland reaches.

**Phenology:** Adults were collected in northern New York between June 8 and 25. In Massachusetts and Wisconsin (Massachusetts NHESP 2003, Wisconsin Odonata Survey 2009) the species is observed from late May to mid July, with the bulk of records coming in June.



Jan Trybula 2007

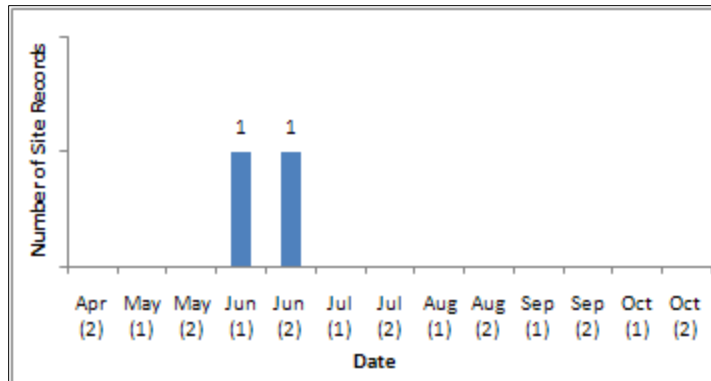
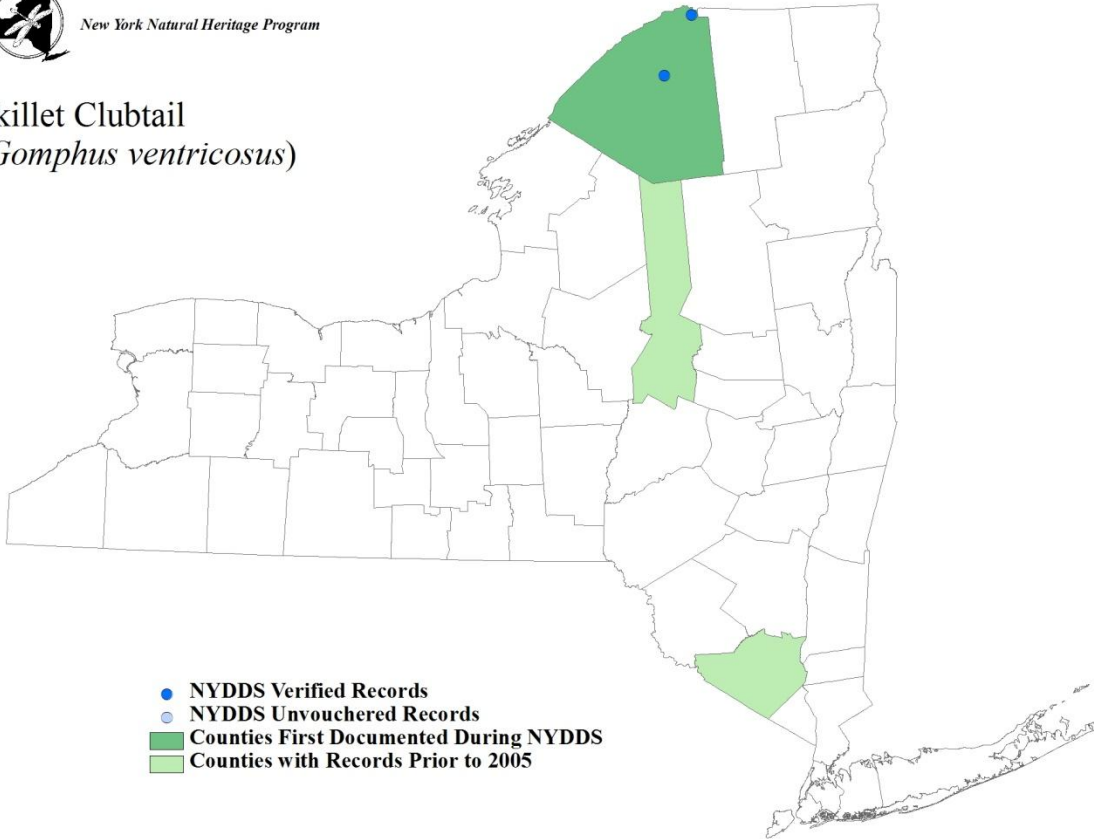






New York Natural Heritage Program

### Skillet Clubtail (*Gomphus ventricosus*)



## GOMPHIDAE

### Green-faced Clubtail (*Gomphus viridifrons*)

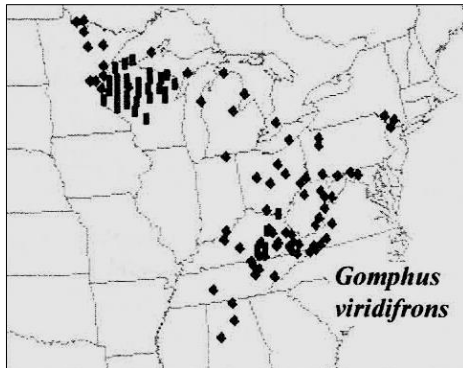
Pre-NYDDS Status: G3, S1

Draft Revised Status: S1

**Habitat Characteristics:** This species inhabits clean medium-sized rocky forest streams and small rivers with gravel/sand substrates and lightly silted rocks (Dunkle 2000). Adults fly 1-3 meters above the water surface, about 3-10 meters out from the shore often hovering near the head of riffles and rapids, or perching on shoreline vegetation and exposed rocks (Evans 2002). In New York a single larva was dredged from a sandy, pool-like backwater on the back side of an island in the Delaware River near Port Jervis. The main flow of the river is west of the island and the river is rapid, shallow, rocky and about 100 meters wide.



Tom Murray



(Donnelly 2004c)

**Distribution and Inventory Needs:** *G. viridifrons* is rare throughout its range (Walker 1958) and the center of its distribution is in the southern Great Lakes forest ecoregion, along the northern Ohio/Indiana border, ranging north to northern Minnesota and south to central Alabama (Donnelly 2004c). A cluster of three records from the Delaware River in New York (Sullivan, Orange Counties) and New Jersey (Sussex County) constitute the northeasternmost occurrence of this species (New York Natural Heritage Program 2007c). Here, adults have not been observed since 1940 and just a single larva collected from Port Jervis was reared to emergence

in 1994, while only exuviae have been found in nearby New Jersey (Bangma & Barlow 2010). Further inventory along the Upper Delaware River may yet prove fruitful because it is rather remote, although unsuccessful surveys have been conducted over the past five years, including in the vicinity of Port Jervis. A cluster of records in the Allegheny National Forest in northwestern Pennsylvania (Evans 2002) suggests that additional inventory in the Allegheny watershed in southwestern New York is warranted. Bier & Rawlins (1994) found thriving populations of larvae and adults from the main stem of the Clarion River; prior to this, the species was thought to have been extirpated from Pennsylvania.

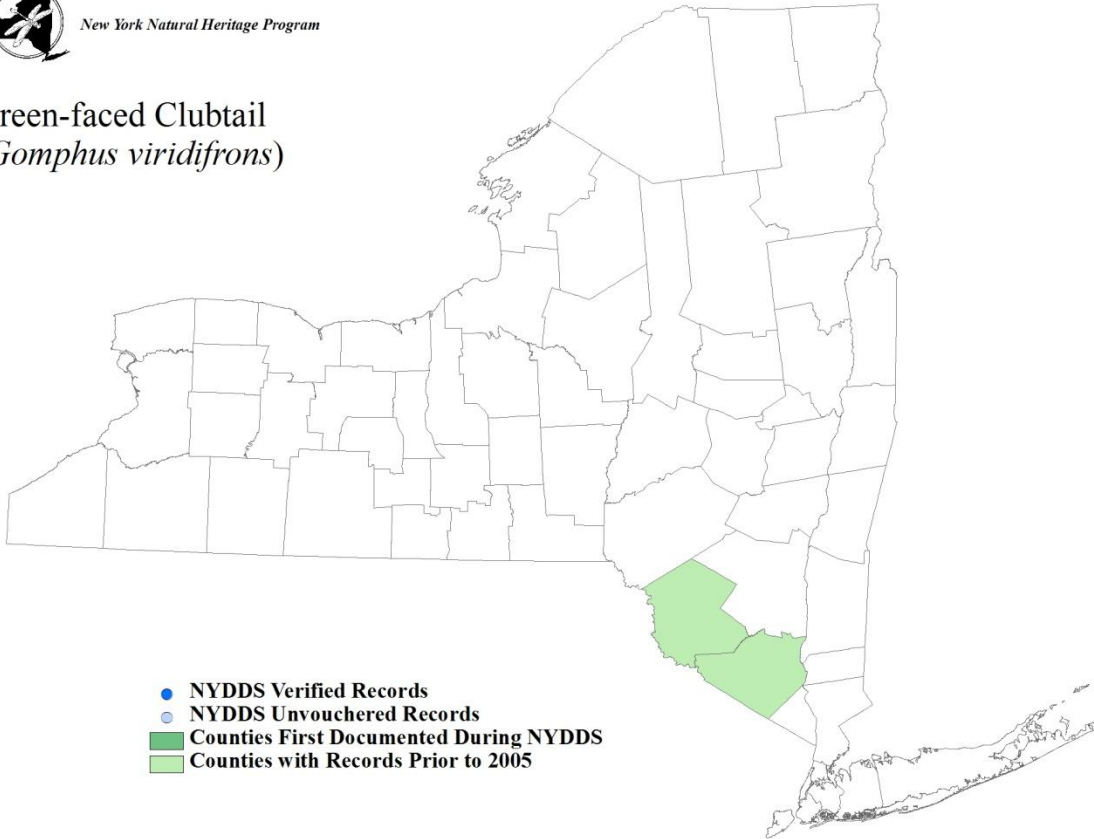
**Phenology:** No phenology chart was generated for this species since it was not found during the NYDDS. Only a single adult has ever been taken in New York, at Barryville along the Upper Delaware on July 23. Exuviae have been collected on the New Jersey side of the river between June 9 and 25 (Bangma & Barlow 2010). The flight season in the midwest (western Pennsylvania, Ohio and Wisconsin) is from late May to late July, with the bulk of records coming in mid-June (The Ohio Odonata Society 2000, Evans 2002; Wisconsin Odonata Survey 2009).





New York Natural Heritage Program

### Green-faced Clubtail (*Gomphus viridifrons*)



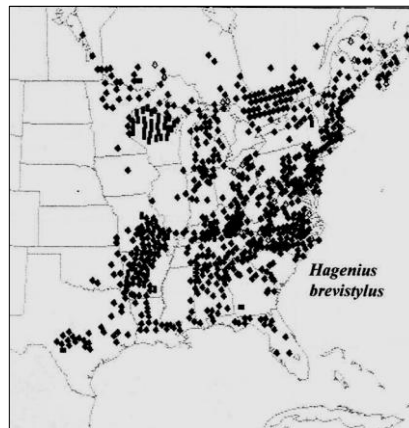
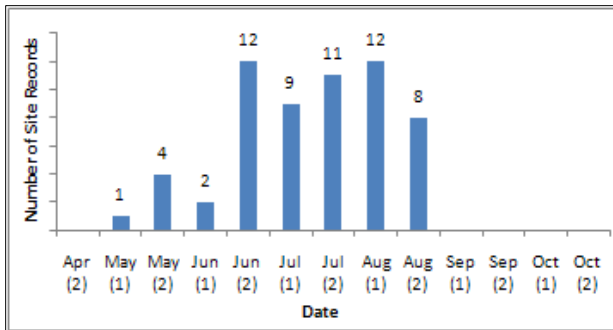
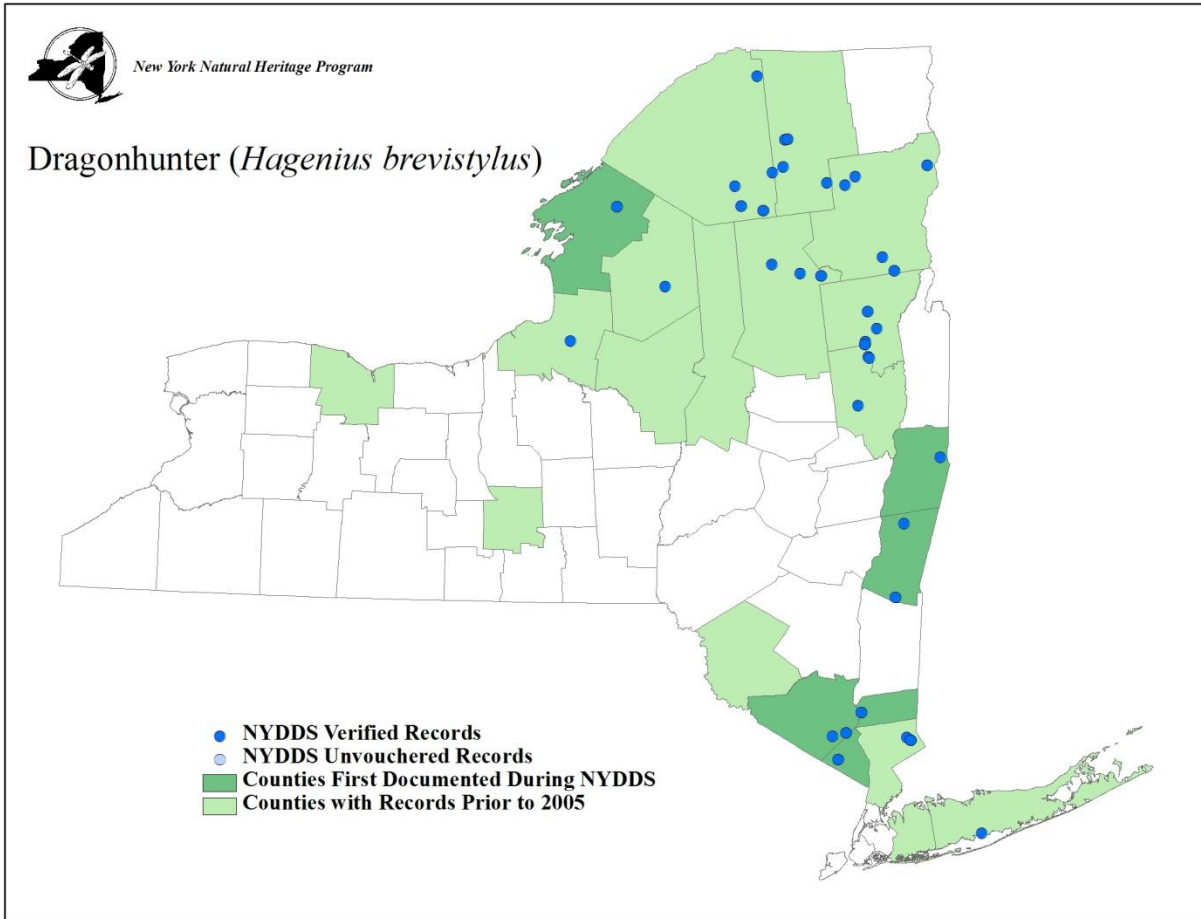
- NYDDS Verified Records
- NYDDS Unvouchered Records
- Counties First Documented During NYDDS
- Counties with Records Prior to 2005



**GOMPHIDAE**

**Dragonhunter (*Hagenius brevistylus*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004c)

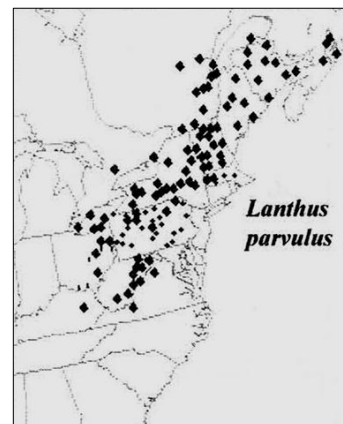
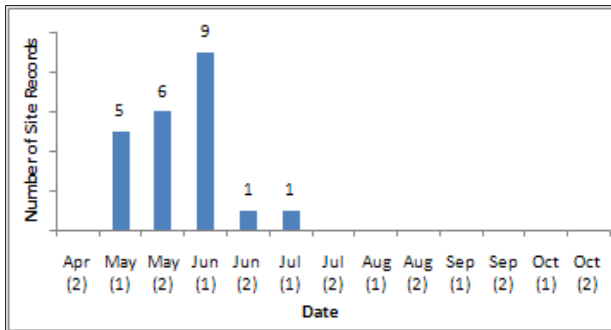
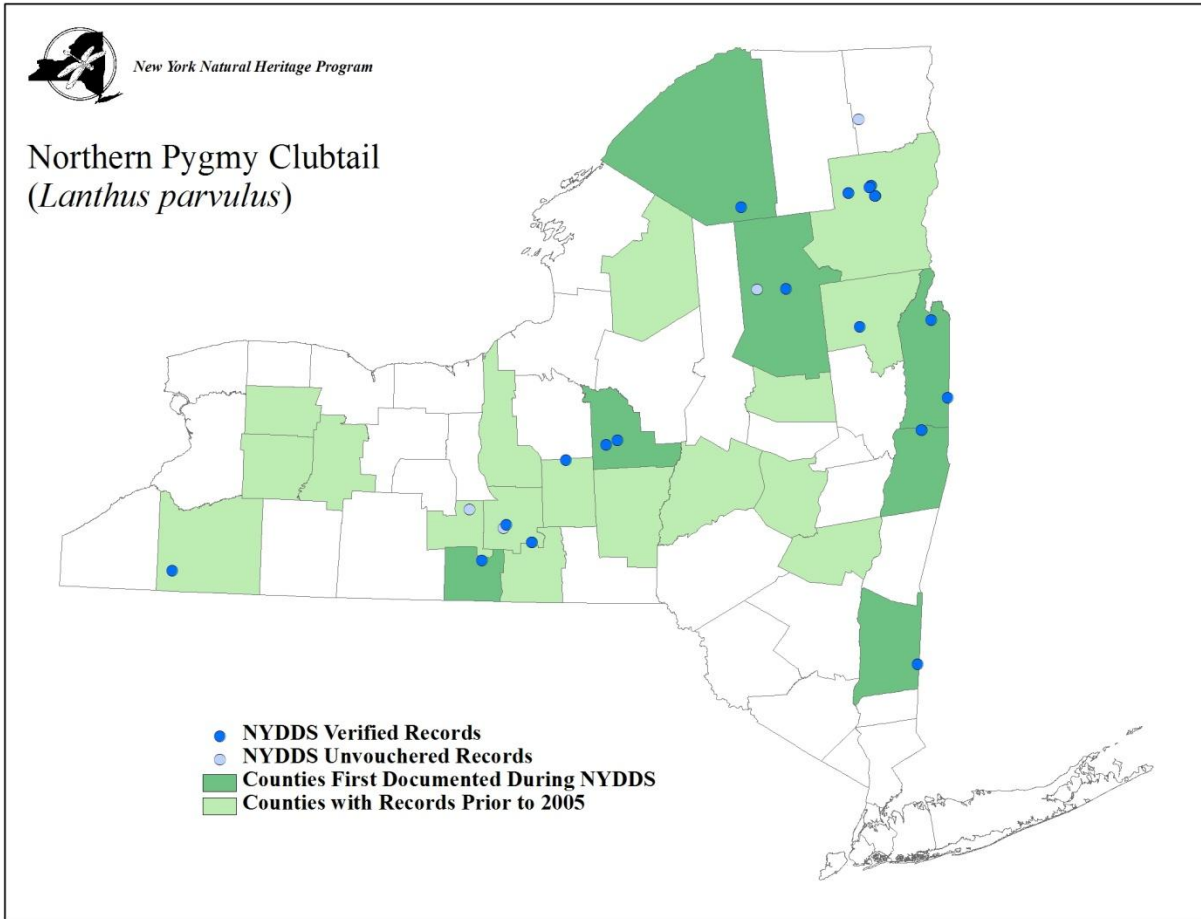


**GOMPHIDAE**

**Northern Pygmy Clubtail (*Lanthus parvulus*)**

**Pre-NYDDS Status: G4, S3,S4**

**Draft Revised Status: S3**



(Donnelly 2004c)

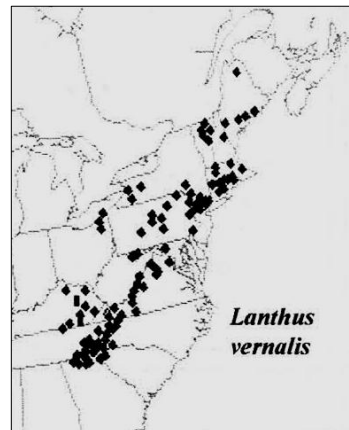
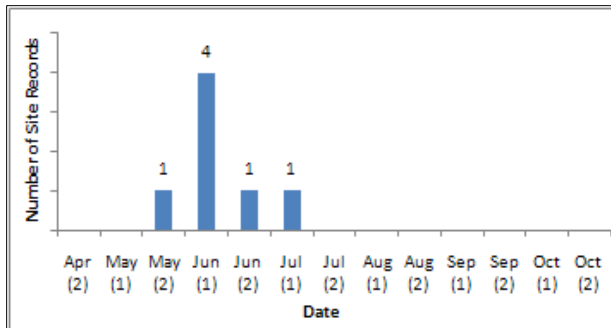
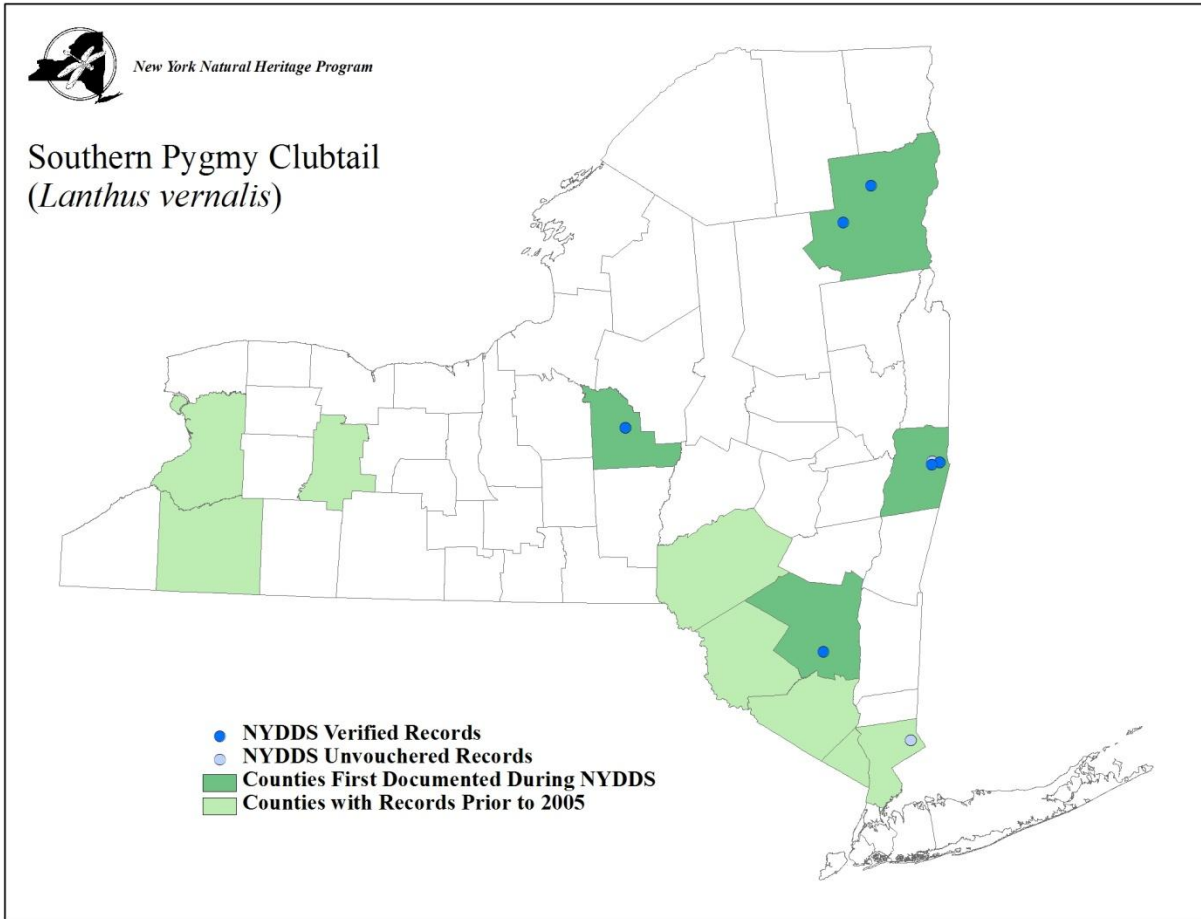


**GOMPHIDAE**

**Southern Pygmy Clubtail (*Lanthus vernalis*)**

**Pre-NYDDS Status: G4, SU**

**Draft Revised Status: S1**



(Donnelly 2004c)



## GOMPHIDAE

### Extra-striped Snaketail (*Ophiogomphus anomalus*)

Pre-NYDDS Status: G4, S1

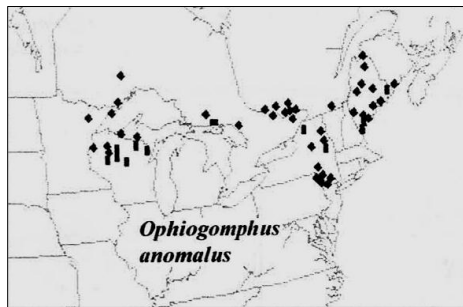
Special Concern

Draft Revised Status: S2S3

**Habitat Characteristics:** Like the Pygmy Snaketail, the Extra-striped Snaketail, is typically a species of medium sized and larger rivers. The rivers where it occurs may be rocky, gravelly or quite sandy, and are typically clear and cool with a moderate or fast flow, areas of riffle/run, and bordered by forested landscapes (New York Natural Heritage Program 2010). In the Delaware River, Soltesz found exuviae at sites of swift, but not turbulent, current, and with sand and/or gravel on the downstream side of boulders or among cobbles (Soltesz 1995b).



Denis A. Doucet



(Donnelly 2004c)

**Distribution and Inventory Needs:** The Extra-striped Snaketail is a northern species, occurring from eastern Minnesota and Wisconsin into southern Ontario, southern Quebec, Maine, New York, and in New Jersey and Pennsylvania, on the Delaware River (Donnelly 2004c). Prior to 1993, this species was known in New York from a single specimen collected in 1951 at Port Jervis, which is located at the junction of the Delaware and Neversink Rivers, in Orange County. The Extra-striped Snaketail was a possible candidate for federal

listing in the early 1990s at which time the New York Natural Heritage Program began survey efforts for this species. A single exuviae was collected on the Delaware River at Cochecton in 1993. Additional exuviae were collected in 1994, 1995, and 1997 and the species was discovered on the upper Hudson River north of Warrensburg in 1995 (New York Natural Heritage Program 2010). Extensive, subsequent surveys of the Upper Hudson revealed a large population occupying a stretch of some 27 miles, from Lake Luzerne north to Riparius (Novak 1998) and also occurring just downstream of the Spier Falls dam below Lake Luzerne in Saratoga County. The Moose River (Oneida County) and the Raquette River, St. Regis River, and West Branch St. Regis River (St. Lawrence County) were added to the state distribution in 2001, 2002, 2003, and 2003 respectively (New York Natural Heritage Program 2010), bringing the total number of rivers for New York to six. An Essex County record on the Ausable River (Donnelly 1999), was subsequently determined to be a possible error.

During the NYDDS, Extra-striped Snaketails were recorded many times on the upper Hudson River, as this river was utilized on a few occasions to train volunteers in the collection of exuviae and larvae, and to search for specimens of *Ophiogomphus* that may represent a new species or subspecies (Donnelly 2008b). In addition to the Upper Hudson, this species was again recorded on the West Branch of the St. Regis River, but no new rivers were added to the known distribution of the Extra-striped Snaketail in New York over the course of the NYDDS. The exuviae of this species is very distinctive and efforts to locate new populations of this state Special Concern species should continue at any medium to large-sized rivers where exuviae



collection did not take place during the NYDDS. Rivers with clean water, some finer substrates, and a forested buffer should be the highest priority for future surveys.

**Phenology:** The flight season in the north central states extends from mid May into early August (Mead 2003). This corresponds quite well with the records documented during the Maine Dragonfly and Damselfly Survey which shows the earliest date as May 25, and the latest date as July 26, but with nearly 75% of all records from the three middle weeks of June (Brunelle & deMaynadier 2005). A study of co-occurring Snaketail species in Maine (Bradeen 1996, Gibbs *et al.* 2004), and collection of exuviae in New York and elsewhere, indicate Extra-striped Snaketails emerge en masse in early summer as do the other species of snaketails, with this species among the earliest to emerge. During a 1997 study on the upper Hudson River in New York, no exuviae were found during surveys on June 3 and June 6, with the first exuviae encountered on June 9 and large numbers encountered on June 10 (Novak 1998). Adult Extra-striped Snaketails, like Pygmy Snaketails, apparently spend much of their time in the tree canopy (Mead 2003), and lesser amounts of time at the water. This behavior, in combination with its rarity, lead to a paucity of adult Extra-striped Snaketail records during the NYDDS, with nearly all records for the project being based on the collection of exuviae, or the rearing of larvae. Larva collected in early spring and reared to adults in an indoor tank emerged earlier (2nd half of May) than adults in the wild. Although diligent searching turned up exuviae in August, these are almost certainly persistent from emergence earlier in the summer. However, the adult flight season in New York may well extend into August as indicated for the north central states by Mead (2003).

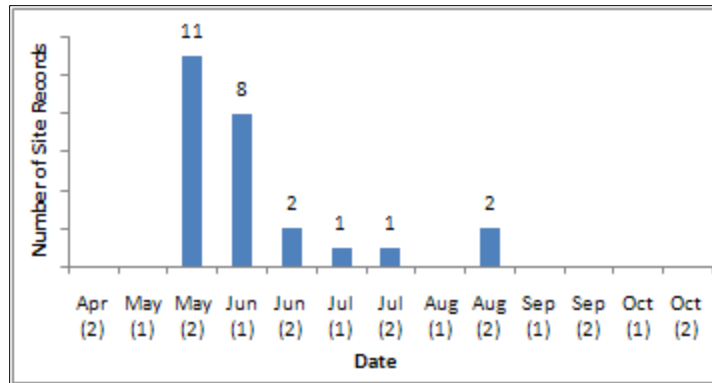
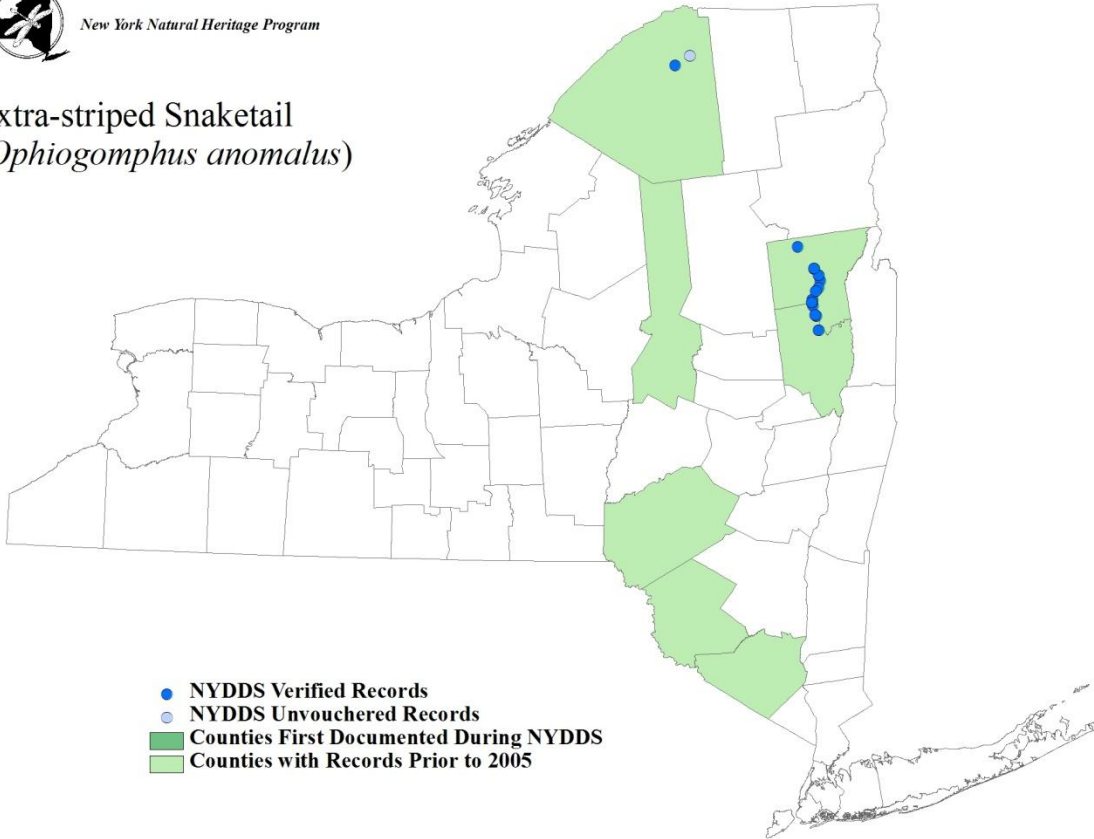






New York Natural Heritage Program

### Extra-striped Snaketail (*Ophiogomphus anomalus*)



## GOMPHIDAE

### Brook Snaketail (*Ophiogomphus aspersus*)

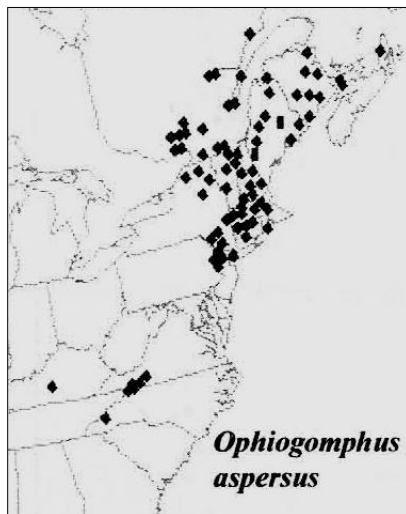
Pre-NYDDS Status: G3G4, S2

Draft Revised Status: S3

**Habitat Characteristics:** Throughout its range, the Brook Snaketail inhabits clear, rapid-flowing streams that are shallow with sandy and rocky substrate (Dunkle 2000, Needham *et al.* 2000). It is often found near riffles at open areas of streams where the banks are brushy (Dunkle 2000). It may also be found in fast-flowing areas of larger rivers with similar substrate (New York Natural Heritage Program 2010). These habitat descriptions correspond well with records obtained during the NYDDS, where either sand/gravel or rock/boulder were listed as the substrate at all of the sites where this species was recorded. The majority of sites were bordered by woods, as would have been expected based on New York records from prior to the NYDDS, but interestingly, adjacent agriculture was noted at several sites, all of which were outside of the Adirondacks.



Stephen Diehl and Vici Zaremba 2009



(Donnelly 2004c)

**Distribution and Inventory Needs:** The Brook Snaketail is a northeastern species, occurring from New Brunswick, Nova Scotia, and Quebec, south through New England and New York and into the Appalachians in Virginia, North Carolina, and Kentucky (Abbott 2010). Within that range the species has been described as spottily distributed or localized (Nikula *et al.* 2003). Older records of the Brook Snaketail in New York suggested this clubtail might be restricted to the Adirondacks and the Delaware River/Catskills area (Donnelly 1992), but it was subsequently found in Columbia County as well (Donnelly 1999). During the NYDDS, Warren, Washington, Rensselaer, Dutchess and Montgomery Counties were added to New York's distribution. While these records indicate the Brook Snaketail is more widespread in New York than previously believed, it is undoubtedly more common in the Adirondacks than

elsewhere in the state. The Brook Snaketail was not found in the lake plains and southern tier counties of western New York and it is quite likely absent from these regions as dozens of streams, creeks, and rivers in those parts of the state were surveyed. Unlike some of the other snaketails, the Brook Snaketail spends considerable time perching on rocks and shoreline shrubs, and can be netted with patience and perseverance. The collection of exuviae or larvae reared to emergence offer an excellent means of locating this species and a number of the new locations were identified with these methods. The Brook Snaketail should be sought on other Adirondack and Delaware/Catskill waters as well as on the creeks of the heavily wooded Tug Hill Plateau. The Schoharie Creek, Montgomery County record is intriguing. This creek flows north out of the Catskills, emptying into the Mohawk River and raising the possibility of additional locations farther west in lower elevations of the Mohawk Valley.



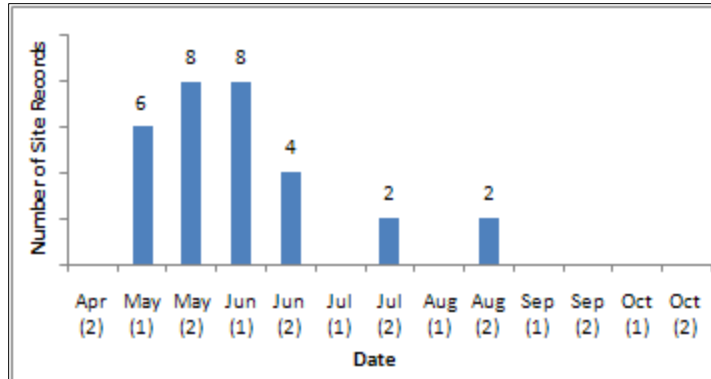
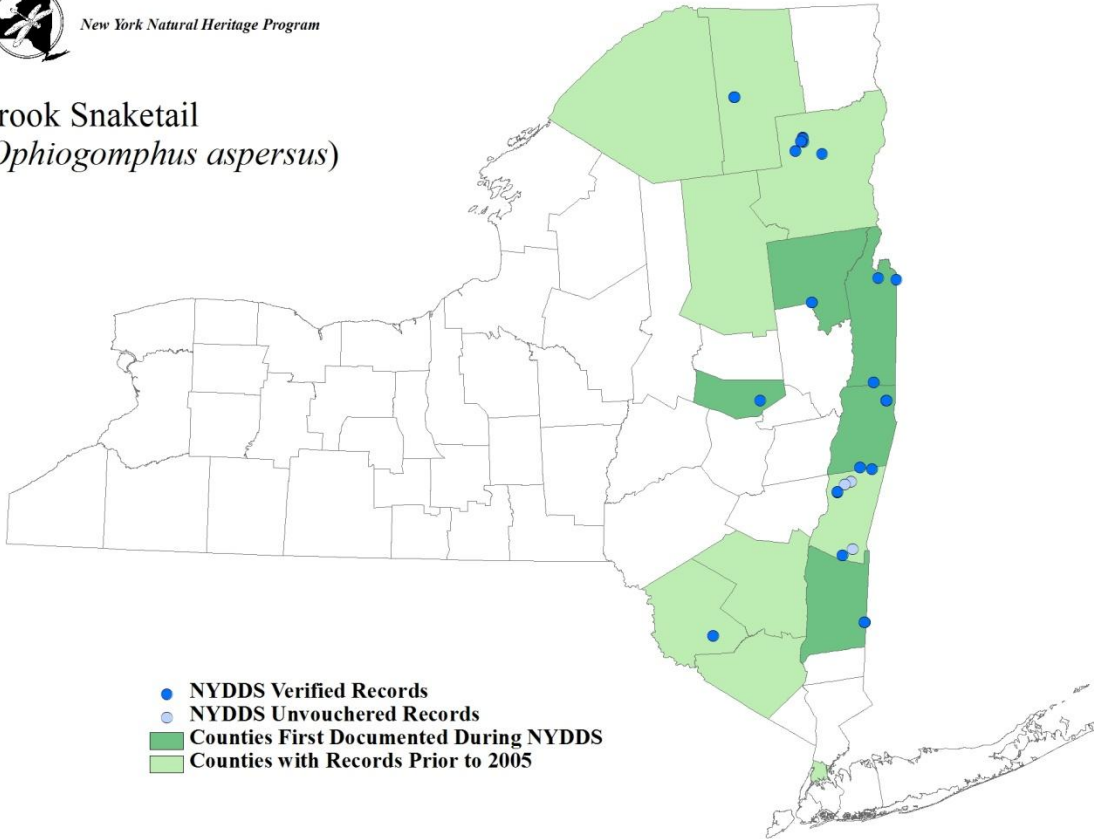
**Phenology:** Nikula *et al.* (2003) shows a flight season extending from early June into very early September, while Donnelly (1999) shows a range of dates from June 11 through August 18 for New York. Most of the May dates represent tank-reared specimens that were collected and reared to adult in early spring. However, an exuvia was collected on May 23 from Columbia county. Brook Snaketails emerge en masse in early summer as do the other species of snaketail. A study of co-occurring Snaketail species in Maine (Bradeen 1996, Gibbs *et al.* 2004) indicated that Brook Snaketails tend to emerge somewhat later than several of the other snaketail species. In New York, Brook Snaketail exuviae are typically first encountered in early June. As with other clubtail species, recently emerged adults use sunny openings away from the streams for at least a few days before reappearing at the waterside. Similar to the dates shown in Donnelly (1999), adult records from the NYDDS are spread across the majority of the summer into August. The August dates suggest that this species may fly a bit later in the summer than some of the other snaketail species, which would be in keeping with the slightly later emergence dates found by Bradeen (1996).





New York Natural Heritage Program

### Brook Snaketail (*Ophiogomphus aspersus*)

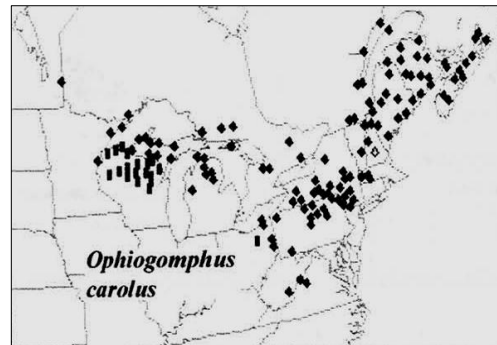
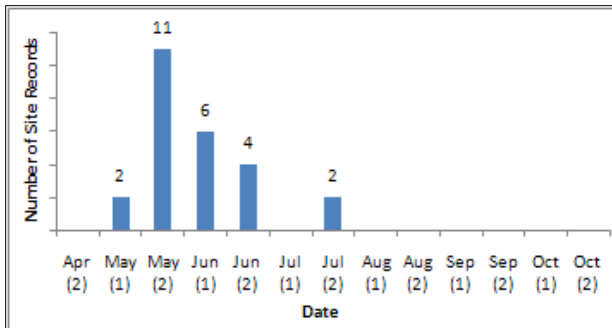
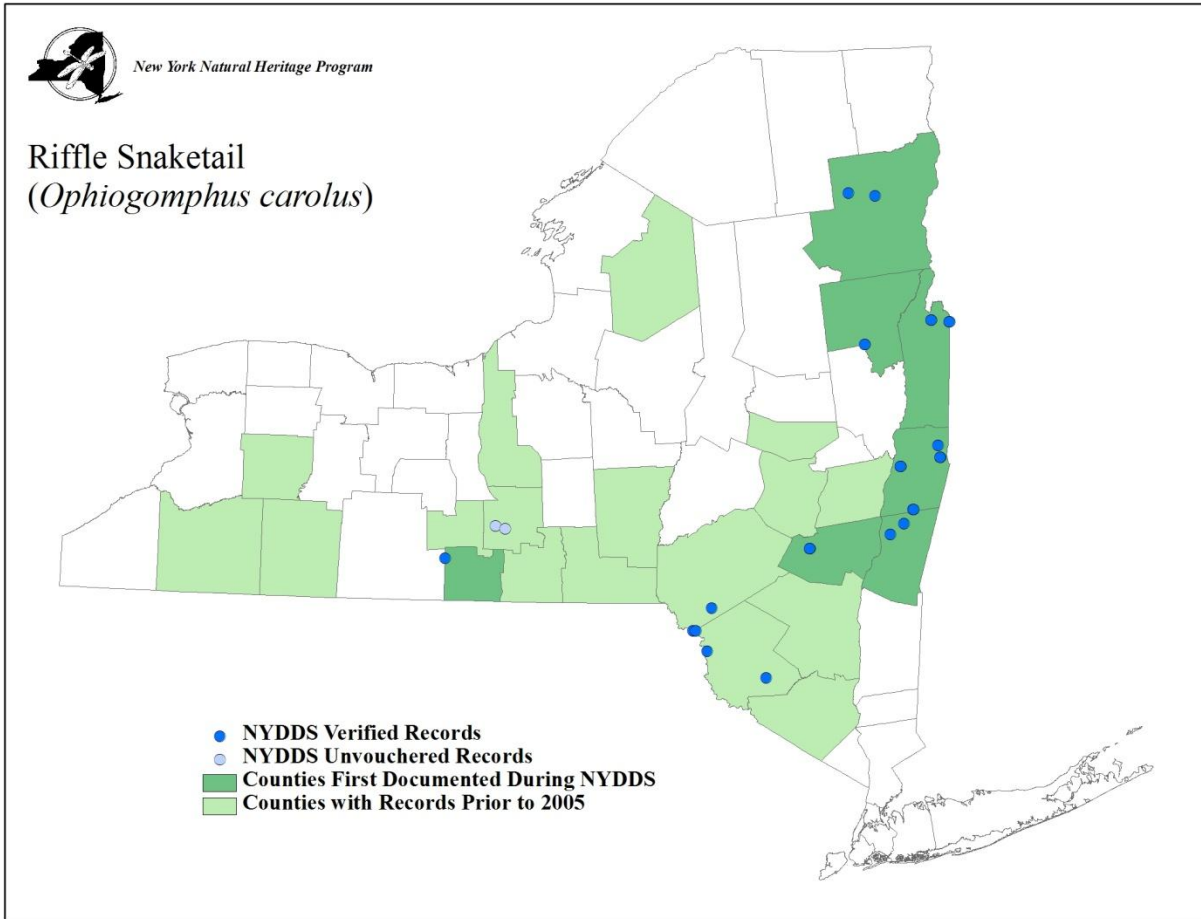


**GOMPHIDAE**

**Riffle Snaketail (*Ophiogomphus carolus*)**

**Pre-NYDDS Status: G5, S4**

**Draft Revised Status: S2S3**



(Donnelly 2004c)



## GOMPHIDAE

### Boreal Snaketail (*Ophiogomphus colubrinus*)

Pre-NYDDS Status: G5, S1

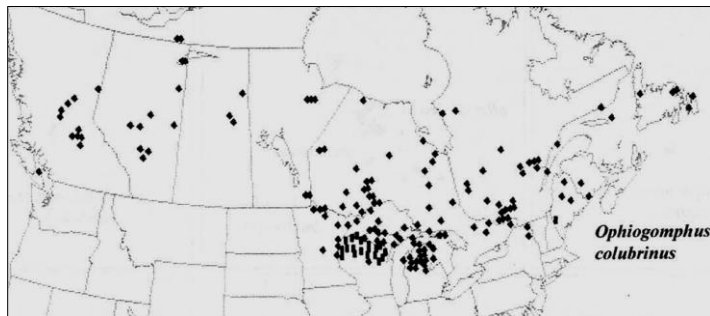
Draft Revised Status: S1

**Habitat Characteristics:** The Boreal Snaketail inhabits clear, rapid, streams and rivers with gravel substrate (Dunkle 2000, Mead 2003), but has also been found on lakes with gravel or sand bottoms (Jones *et al.* 2008). Adults may be found patrolling areas of moving water or perched on rocks, logs, sandy beaches, or bushes (Harding *et al.* 1998, Mead 2003), whereas juveniles have been noted perching in tree canopies (Mead 2003).

The previously recorded locations for the Boreal Snaketail in New York are also on rivers, principally nearer to the headwaters where the rivers are rapid and shallow with sand, gravel, rock, and boulder substrate, and are primarily bordered by trees and shrubs (New York Natural Heritage Program 2010). Associated species flying with the Boreal Snaketail in these New York locations include Superb Jewelwing (*Calopteryx amata*), Maine Snaketail (*Ophiogomphus mainensis*), Brook Snaketail (*Ophiogomphus aspersus*), Mustached Clubtail (*Gomphus adelphus*), and Zebra Clubtail (*Stylurus scudderii*).



Denis A. Doucet



(Donnelly 2004c)

### Distribution and Inventory Needs:

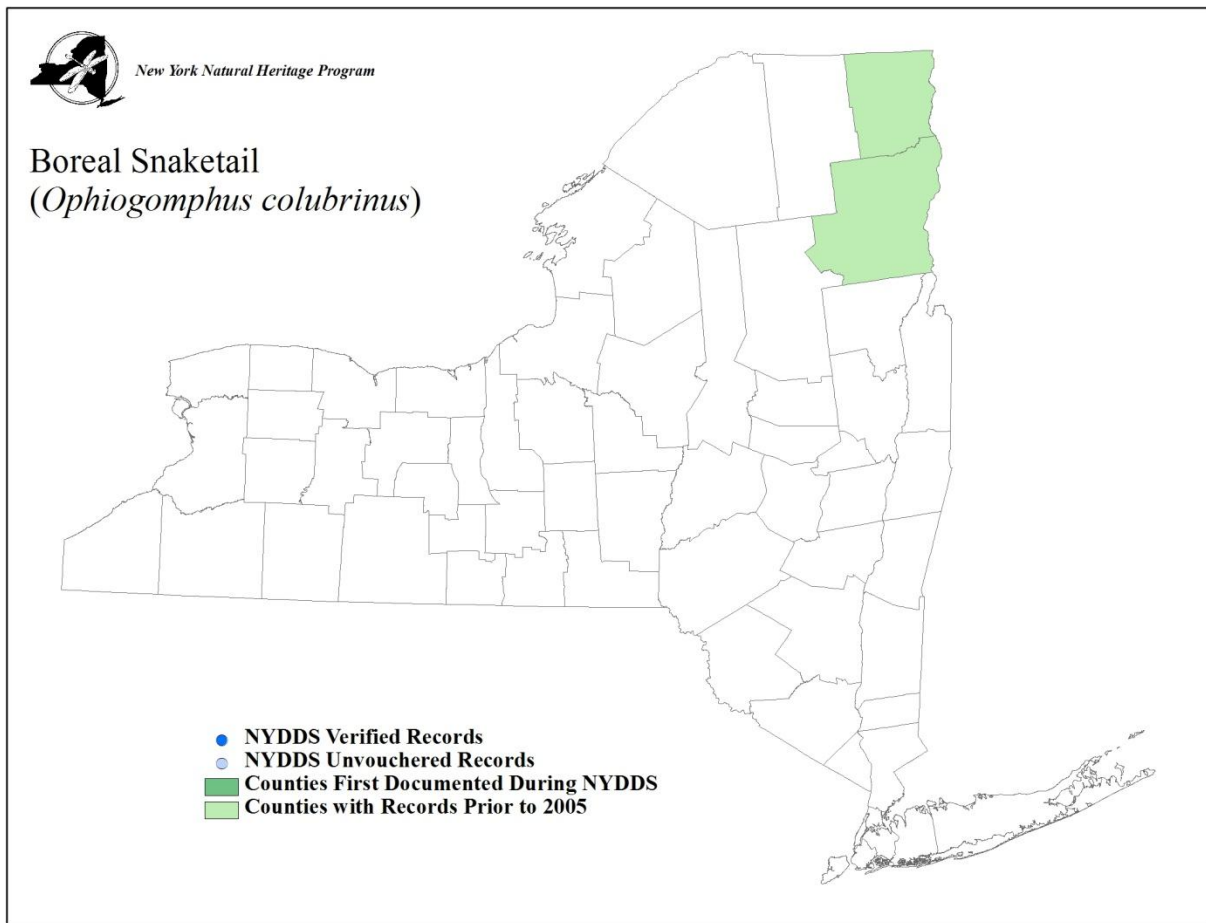
As its name implies, the Boreal Snaketail is a species of northern distribution, and it has the most northern range of any clubtail (Mead 2003). The range extends from the western provinces of British Columbia and Alberta, eastward across Canada, to Ontario, Quebec, and New Brunswick. In the United States, it occurs in Maine, New

Hampshire, and New York, as well as in Michigan, Wisconsin, Minnesota, and Wyoming (Needham *et al.* 2000). The Boreal Snaketail was first documented in New York in 1995, with a number of subsequent records in 1996. All of these records are from the Ausable River in the central Adirondacks, including both the East and West Branch. Some of the recorded locations were documented only by the collection of exuviae. Although the original New York location, the Ausable River along Riverside Drive near Lake Placid, and nearby stretches of the Ausable was searched on several occasions, no Boreal Snaketails were documented during the NYDDS. There is no evidence that changes have occurred in the Ausable River in the vicinity of the previously documented records, so additional surveys would be desirable to confirm the continued presence of this species in New York.

**Phenology:** Mead (2003) shows the adult flight season for the Boreal Snaketail in the Minnesota/Wisconsin/Michigan area to be from approximately mid-June through August. Needham *et al.* (2000) show extreme dates of May 9 and September 3 from Ontario, but these



dates are well outside the mid-June through August dates shown by both Mead (2003) and Jones et al. (2008). The initial specimen for New York was collected on June 29, with a number of additional adults recorded at the same location the following year on July 19. Donnelly (1999) also lists a date of August 14, and while not specified as such, this date is likely an adult record as opposed to an exuvia. All New York records fit in well with other published information, showing a flight season in New York running largely from mid-June through August.



## GOMPHIDAE

### Pygmy Snaketail (*Ophiogomphus howei*)

Pre-NYDDS Status: G3, S1

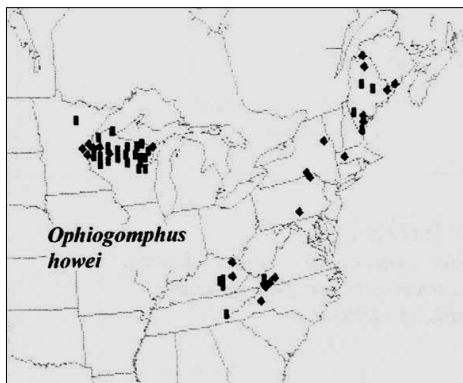
Special Concern

Draft Revised Status: S1



Denis A. Doucet

**Habitat Characteristics:** More so than the other snaketails, the Pygmy Snaketail appears to be restricted to large, clear rivers with gravelly or sandy substrates and bordered by forested habitats (Dunkle 2000, Nikula *et al.* 2003, Mead 2003). In New York, the section of the upper Hudson River where it occurs in greatest abundance, is particularly sandy in nature. Interestingly, it co-occurs with the Common Sanddragoon (*Progomphus obscurus*), as well as all five of New York's other Snaketails, in this river reach. Although both Mead (2003) and Dunkle (2000) indicate this species does not breed in sections of river immediately downstream of dams, Pygmy Snaketail exuviae in emergence posture/attachment were found in the upper Hudson River immediately downstream of the Spier Falls Dam at Corinth in 1999 (New York Natural Heritage Program 2010). The river remains clear with sandy/gravelly substrate in this section, and while it is possible the larvae floated down from upstream and emerged below the dam, it is equally possible that the dragonflies are indeed ovipositing in this stretch of river below the dam.



(Donnelly 2004c)

**Distribution and Inventory Needs:** The Pygmy Snaketail has a disjunct range, with populations occurring in the eastern and north-central United States. The eastern range extends from Maine and Massachusetts into eastern New York, south in the Appalachians through eastern Pennsylvania into Tennessee, Virginia, and Kentucky. The western range is smaller, including only northern Wisconsin, the western part of Michigan's Upper Peninsula and eastern Minnesota (Needham *et al.* 2000, Mead 2003). The species is very localized in both the eastern and western portions of its' range.

Initially described from specimens collected on the Susquehanna River in Pennsylvania in 1924, an earlier record from the Susquehanna River in Broome County, New York had been overlooked. This record, based on a specimen in the Museum of Comparative Zoology at Harvard University, was collected by Nathan Banks. Although the year is not included with the label data, it can be assumed to be circa 1890s as that was when Banks was most active as a collector (Soltesz 1995a). In 1967, Donnelly found the Pygmy Snaketail on the Susquehanna River upstream of Binghamton, just inside Pennsylvania, not far from the New York State line (Soltesz 1995b, Donnelly 1999). A number of surveys on the Susquehanna were conducted in 1996, but was unable to locate the species in the New York stretch of the river (New York Natural Heritage Program 2010). The Pygmy Snaketail was rediscovered in New York in 1995 when exuviae were collected from two sites on the upper Hudson River just north of





Warrensburg, by Bob Barber. Subsequent surveys on the upper Hudson indicated the Pygmy Snaketail occurs from Lake Luzerne north to The Glen, a stretch of approximately 27 miles (Novak 1998). In 1999, it was found on the upper Hudson south of Lake Luzerne, just downstream of the Spier Falls Dam, as well as on the Schroon River which flows into the upper Hudson at Warrensburg. The NYDDS re-confirmed Pygmy Snaketails on the Upper Hudson in the Lake Luzerne area and one new location between Lake Luzerne and the Spier Falls location, at Corinth, but limited surveys on the Schroon River failed to re-confirm the species there. Widespread survey efforts on other southern tier and Adirondack rivers, did not reveal the Pygmy Snaketail on any new rivers during the NYDDS. However, not all of those surveys included early summer collection of exuviae. Nearly all New York records for this species, both pre-NYDDS and during the project, stem from the collection of exuviae. Fortunately, the small exuviae are very distinctive and easily identified. Surveys downstream of the Spier Falls Dam to determine if this species is ovipositing in that area would be valuable and complete surveys of the Schroon River are also in order. Although the number of suitably large and sandy rivers in New York may be limited, exuvial collections, especially from early June, may yet reveal additional populations.

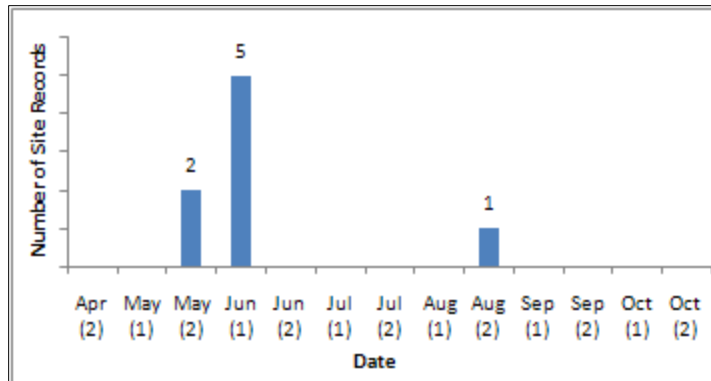
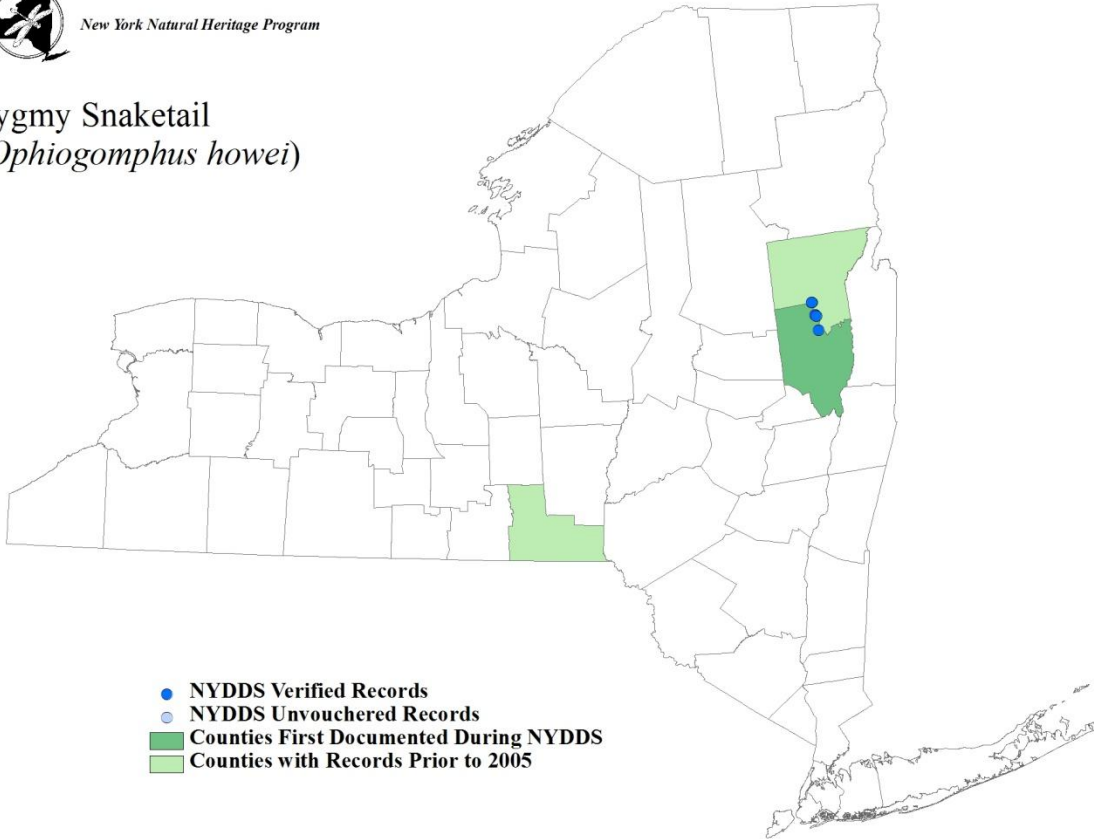
**Phenology:** The flight season in the central portion of the Pygmy Snaketail range is listed as mid-June to mid-July (Mead 2003). This corresponds quite well with the records documented in Maine during the Maine Dragonfly and Damselfly Survey which shows the earliest date as May 25, and the latest date as July 7, but with nearly 75% of all records during the second half of June. A study of co-occurring Snaketail species in Maine (Bradeen 1996, Gibbs *et al.* 2004), and collection of exuviae in New York and elsewhere, indicate Pygmy Snaketails emerge en masse in early summer as do the other species of snaketail. Adult Pygmy Snaketails apparently spend much of their time in the tree canopy (Nikula *et al.* 2003, Mead 2003), and lesser amounts of time at the water. This behavior, in combination with the species rarity in New York, lead to a paucity of adult Pygmy Snaketail records, where virtually all adult records are based on individuals observed or collected, during, or just after, emergence. Exuviae have been collected as early as June 4 (New York Natural Heritage Program 2010). During intensive exuviae collection efforts on the upper Hudson River in 1997, the first Pygmy Snaketail exuvia was collected on June 10, but the vast majority were not collected until June 12 and 15 (Novak 1998). Larva collected in early spring and reared to adulthood in an indoor tank emerged earlier (2nd half of May) than adults in the wild. There was at least one exuvia collected on August 19 during the NYDDS, presumably from a May or June emergence.





New York Natural Heritage Program

### Pygmy Snaketail (*Ophiogomphus howei*)

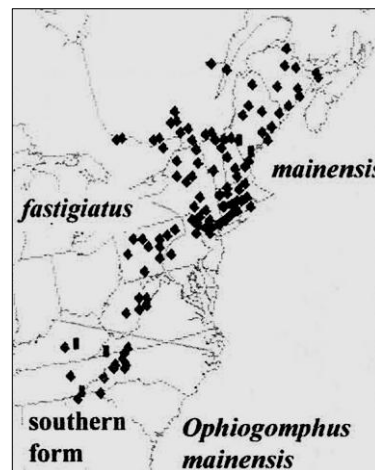
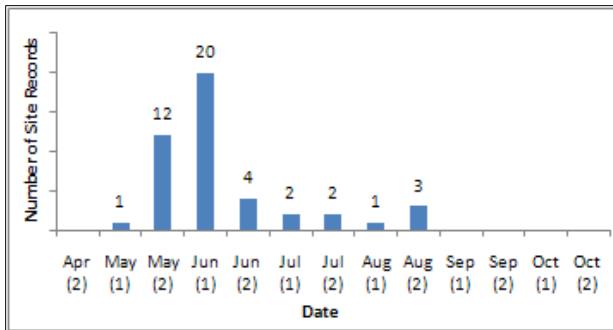
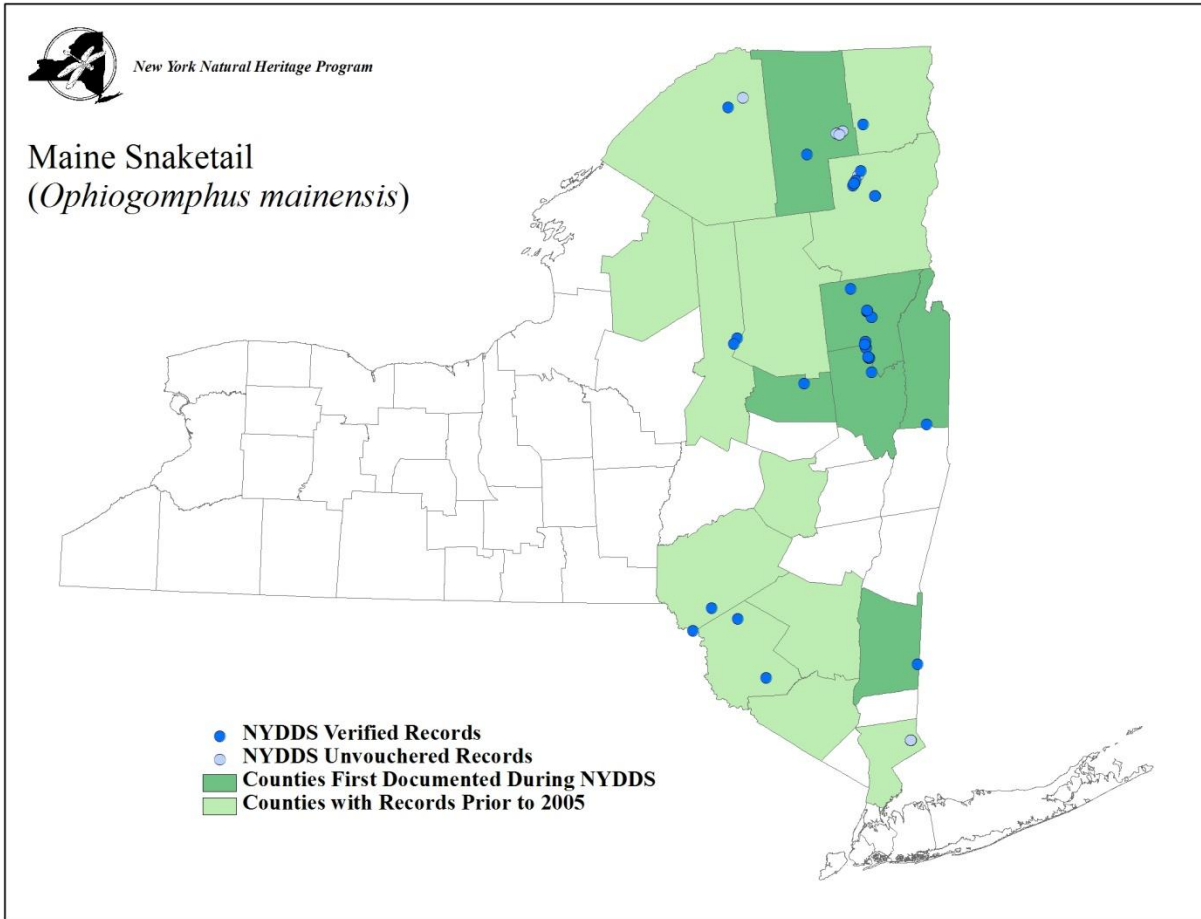


**GOMPHIDAE**

**Maine Snaketail (*Ophiogomphus mainensis*)**

**Pre-NYDDS Status: G4, S3**

**Draft Revised Status: S3**



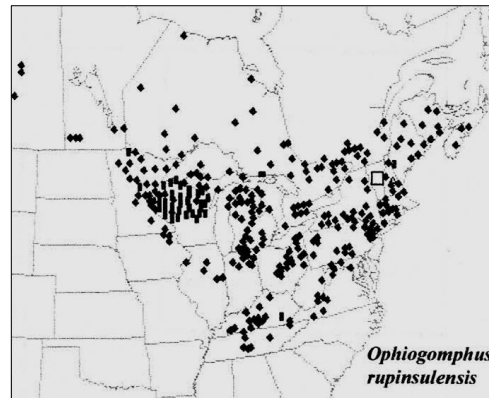
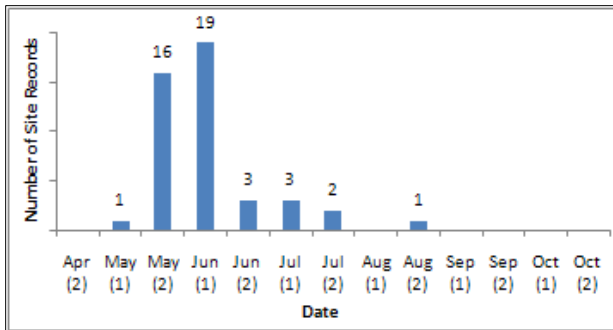
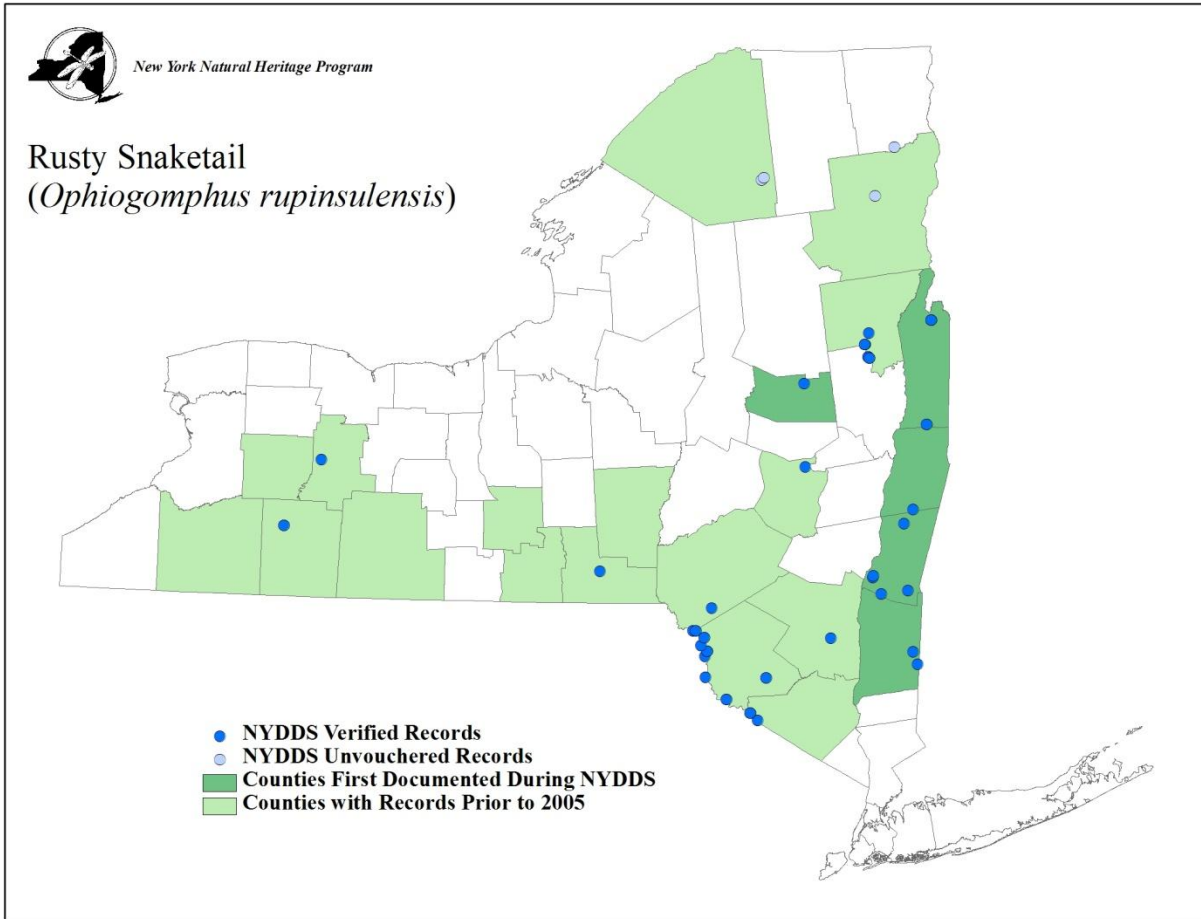
(Donnelly 2004c)



**GOMPHIDAE**

**Rusty Snaketail (*Ophiogomphus rupinsulensis*)**

**Pre-NYDDS Status: G5, S3S4**



(Donnelly 2004c)



## GOMPHIDAE

### Common Sanddragon (*Progomphus obscurus*)

Pre-NYDDS Status: G5, S1

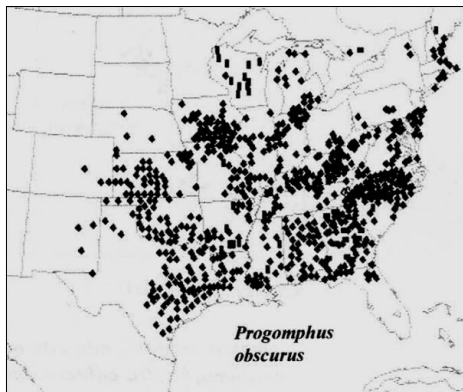
Special Concern

Draft Revised Status: S1

**Habitat Characteristics:** True to their name, Sanddragon larvae are burrowers (< 2 cm deep) found primarily in shifting sandbars in small streams and the sandy shallows of wide lakes. The nymphs show a preference for sand particle sizes from 0.625-1.0 mm (Huggins & DuBois 1982) and they emerge on sandy beaches (Phillips 2001). At breeding sites, males perch on sandy ground or in vegetation and hover very low over the water (Nikula *et al.* 2003). Both lentic and lotic habitats are occupied in different parts of New York. On Long Island, this species is found in small, shallow, sand-bottomed ponds (kettleholes) with shoreline beaches and emergent vegetation. In the upper Hudson watershed, forested medium-sized clean rivers with sandbars, moderate flow, and few boulders are the preferred habitat.



Jeffrey Phippen 2005



(Donnelly 2004c)

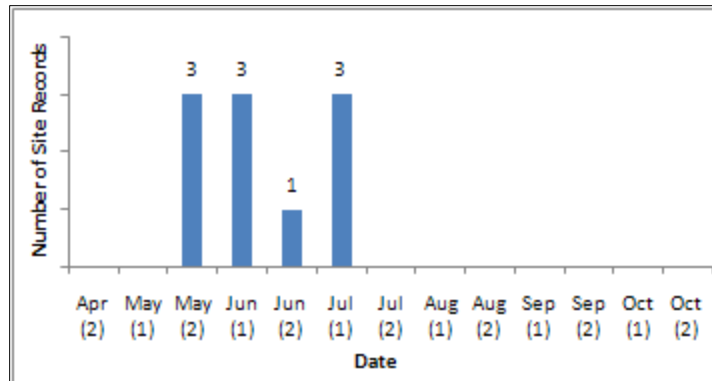
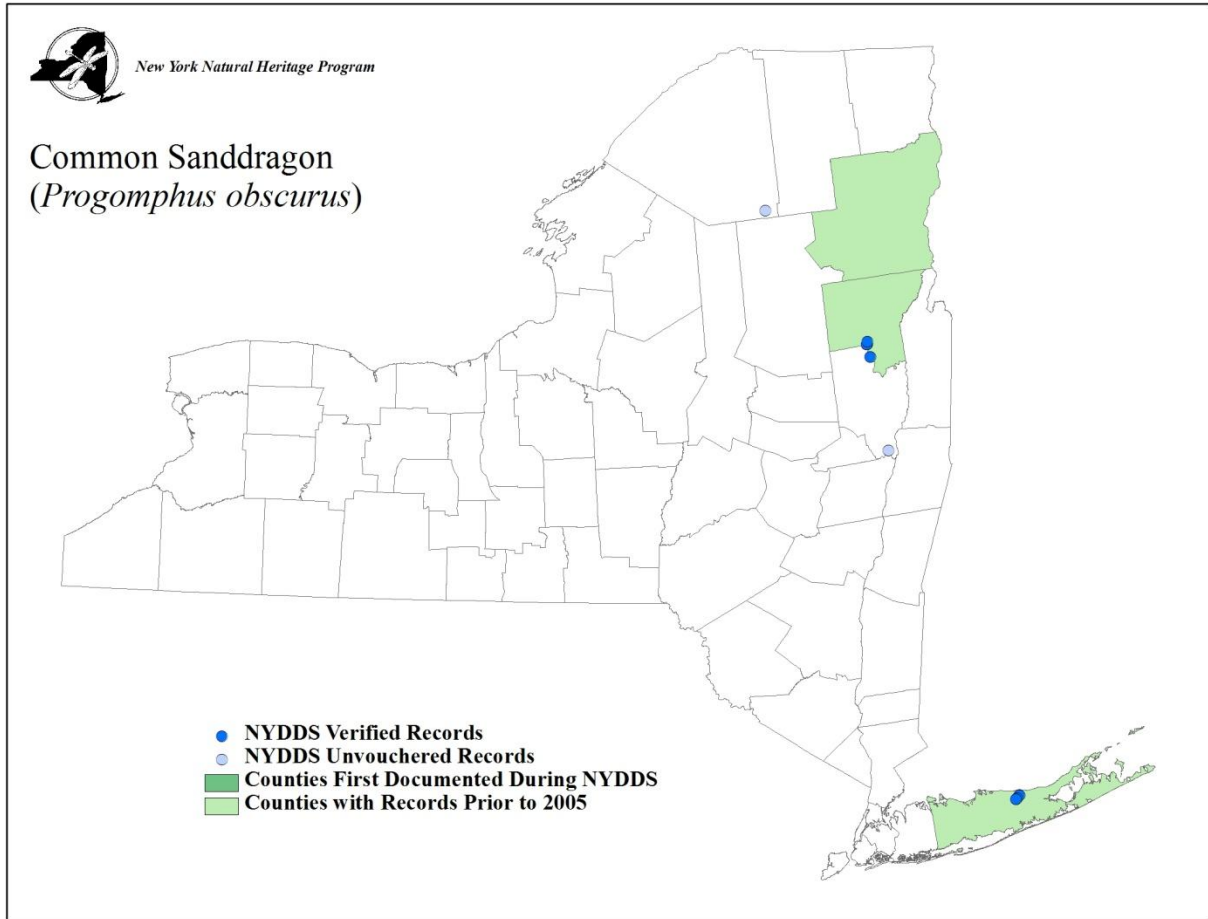
**Distribution and Inventory Needs:** The distributional center of *P. obscurus* lies along the Ohio River in southern Illinois in the Central Hardwood Forest ecoregion. The species ranges widely across the eastern US, west to Colorado, northwest to northern Wisconsin, east to the Maine/New Hampshire border and south to Florida and Texas (Donnelly 2004c). New York is near the northeastern range extent and it was known historically from Suffolk County Long Island and the Hudson and Schroon Rivers. Older occurrences were verified as extant in those watersheds during the NYDDS (and the Schroon River population was last documented in 1996), and an additional nearby pond in

Suffolk County was added. In general, adults were found at the Long Island Ponds, while exuviae and larvae were observed for the upstate river records (except on the Schroon River where adults were observed). There was one unvouchered sighting of an adult from the Mohawk River near its confluence with the Hudson, and an unvouchered record from the Bog River in the Northeast Lake Ontario-St. Lawrence watershed. Further surveys on any large, sandy tributaries of the Hudson, Mohawk, and Lake Champlain may prove fruitful, as well as further searching on the Bog River and nearby rivers, and any sandy kettlehole ponds on Long Island.

**Phenology:** Larvae that have been collected on the upper Hudson on May 22, emerge around the 9<sup>th</sup> or 12<sup>th</sup> of June, which may be earlier than can be expected in the wild. Adults on Long Island are mostly observed during July, with one record pre-NYDDS observed on July 29. Thus, the entire flight season in New York is about two months long from June to the end of July, possibly ending significantly sooner than in other northern states (The Ohio Odonata Society 2000;



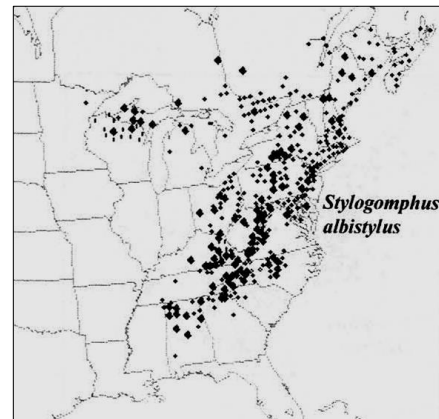
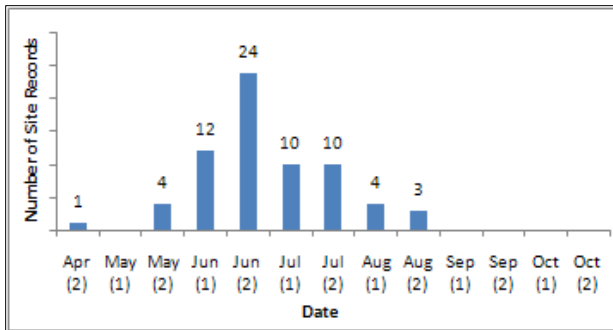
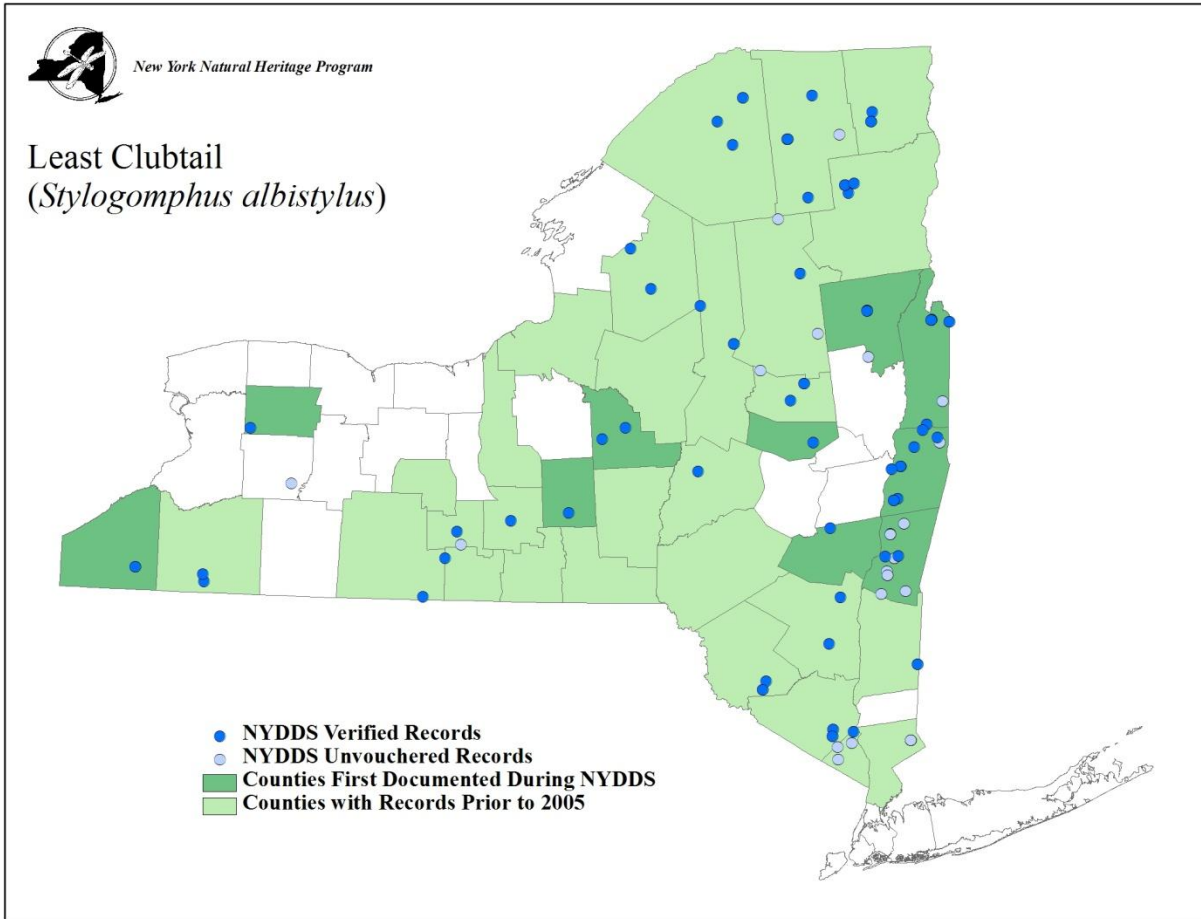
Brunelle & deMaynadier 2005; Wisconsin Odonata Survey 2009) where they can often be observed throughout August .



**GOMPHIDAE**

**Least Clubtail (*Stylogomphus albistylus*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004c)



## GOMPHIDAE

### Riverine Clubtail (*Stylurus amnicola*)

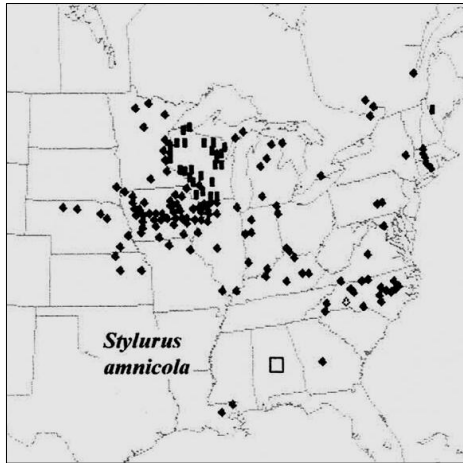
Pre-NYDDS Status: G4, SH

Draft Revised Status: SH

**Habitat Characteristics:** Habitat characteristics for this species are unknown in New York, but in nearby Connecticut and Massachusetts this species occurs only on the Connecticut River. Here, it emerges on fine sand/clay beaches on a very wide (500 m) tidal portion of the river. The adults are believed to spend much of their time high in treetops, and are seldom seen (Massachusetts NHESP 2003, Wagner *et al.* 1995). In Michigan the species is associated with clear, medium to large rivers of swift current with sand, gravel, or mud benthos, and adults are observed in vegetative undergrowth along the shoreline (Gehring 2006).



Tom Murray 2005



(Donnelly 2004c)

**Distribution and Inventory Needs:** *S. amnicola* has its distributional center in the southern Great Lakes forest ecoregion along the Illinois/Indiana border. New York is near the northeastern range extent (Donnelly 2004c), where the species is widely distributed, and quite rare. It has not been seen in New York for at least 80 years, when Needham (1928) reported a single specimen from the Hudson River at Bethlehem. The habitat at this general location is similar to the Connecticut River locales, but extensive searches for both exuviae and adults along the mid Hudson River during NYDDS, did not turn it up. Besides the Hudson, other large rivers with forested shorelines and fine sediment beaches such as the Delaware, St. Lawrence, Susquehanna, and Niagara would be good places to look.

**Phenology:** In Connecticut and Massachusetts, larvae emerge from late June through late July and are on the wing for about five weeks until mid-late August (Wagner *et al.* 1995, Massachusetts NHESP 2003). In Michigan, adults can be found from late May through mid-September (Gehring 2006).

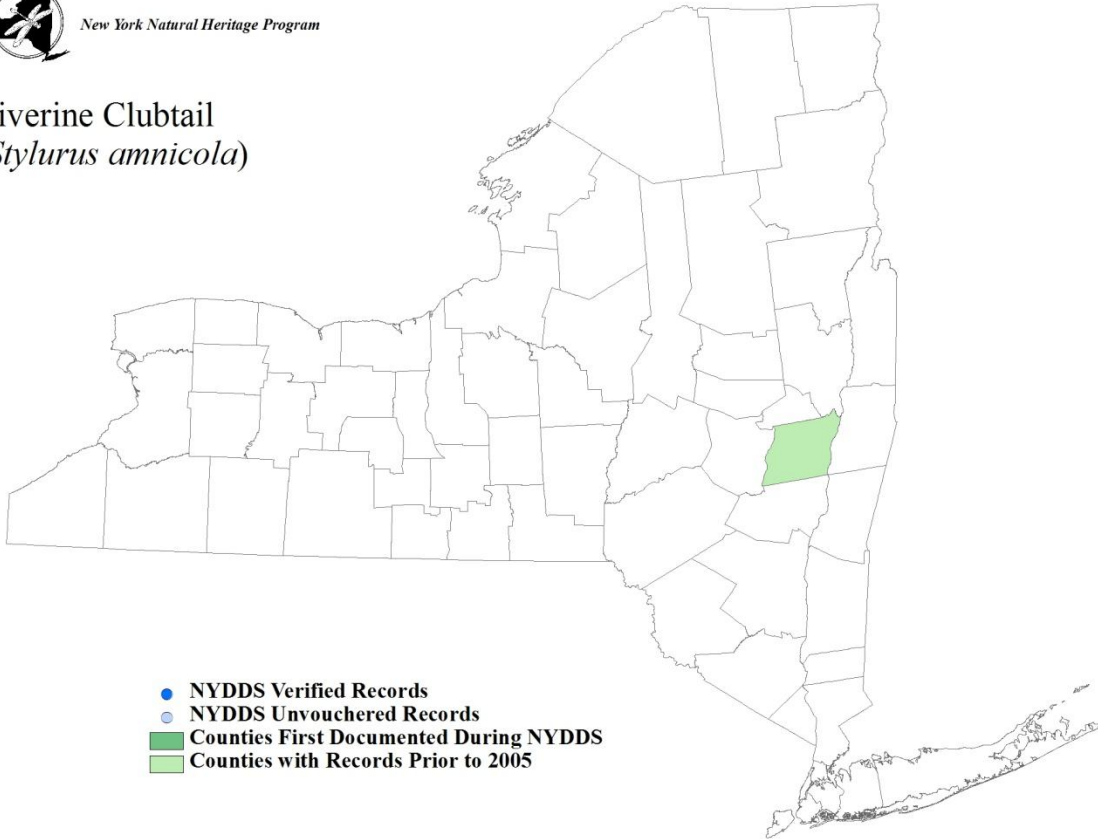






New York Natural Heritage Program

### Riverine Clubtail (*Stylurus amnicola*)



## GOMPHIDAE

### Elusive Clubtail (*Stylurus notatus*)

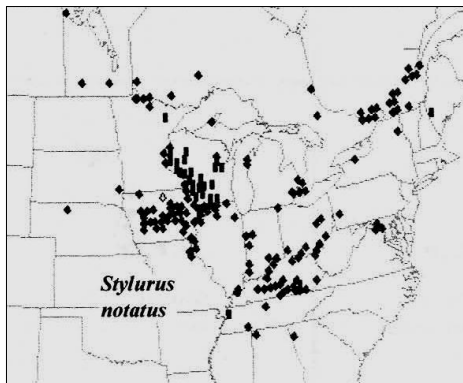
Pre-NYDDS Status: G3, SH

Draft Revised Status: SH

**Habitat Characteristics:** Habitat characteristics for this species are unknown in New York, but two old records were from lakes. In the midwest, it inhabits sandy-bottomed creeks, but more often large rivers and lakes with sandy, silty, and/or gravelly bottoms. Nymphs live in depositional firm sand, often where rivers deposit into a lake, and also in the rivers themselves (Iowa Odonata Survey 2010; Wisconsin Odonata Survey 2009). Along the Ottawa River in Quebec, large numbers of larvae emerged from heavily impacted areas with stone walls along the shoreline and some aquatic plants, debris, and sand/mud substrates (Hutchinson & Ménard 1999). It is not known where the adults reside, but like other hanging clubtails in the genus *Stylurus*, they probably take refuge high up in large trees along the shoreline where they feed and become sexually mature. However, Walker (1958) suggested that this species' seeming rarity may be attributed to its habit of remaining far out over open water, seldom coming to shore.



Tom Murray



(Donnelly 2004c)

**Distribution and Inventory Needs:** *S. notatus* has its distributional center in western lower Michigan in the southern Great Lakes forest ecoregion, extending northwest to Manitoba, east to Quebec and south to northern Georgia. New York is near the northeastern range extent (Donnelly 2004c), where the species is widely distributed, and extremely rare. It has not been seen in New York in recent years. There is an older record from Rochester, Monroe county (presumably the Genesee River) and Needham (1943) reported a copulating pair collected from the vicinity of Crown Point along Lake Champlain (this is the type

specimen). The species appears to be declining range-wide, and it has nearly disappeared from Kentucky where it was common in the 1940s and 1950s (Laudermilk 2002). Besides the Lake Ontario shoreline near the mouth of the Genesee River, the species might also be looked for along northern Lake Champlain and/or the St. Lawrence River since there are several records from the Ontario/Quebec border very close to New York. Schneider (1992) also mentions the Poultney River as a possible locale because of its sandy substrate.

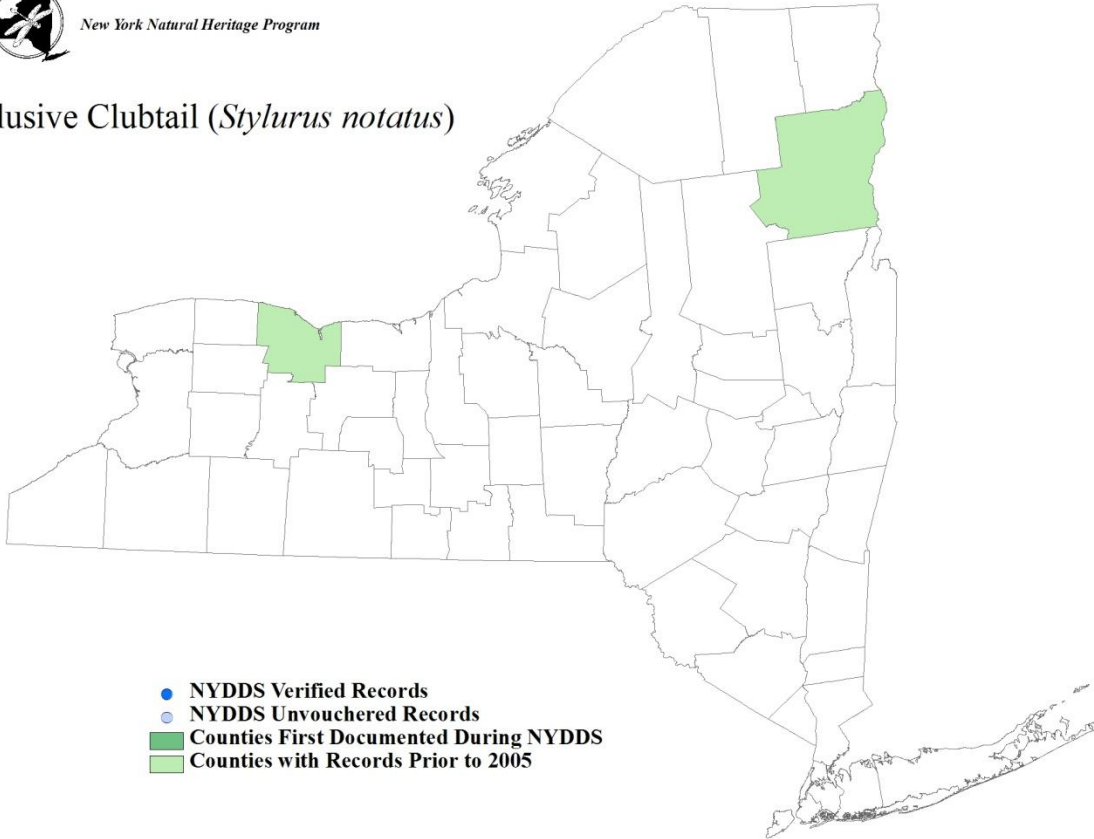
**Phenology:** The Crown Point breeding record was from July 30. In the upper midwest adults are most frequently encountered from mid July to mid August, with the entire flight season extending from mid June to mid September (Iowa Odonata Survey 2010, Wisconsin Odonata Survey 2009).





New York Natural Heritage Program

### Elusive Clubtail (*Stylurus notatus*)



## GOMPHIDAE

### Russet-tipped Clubtail (*Stylurus plagiatus*)

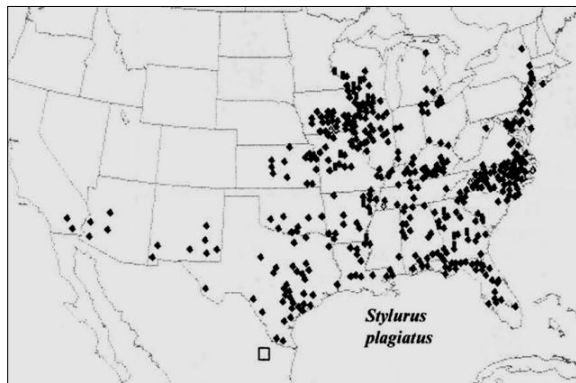
Pre-NYDDS Status: G5, S1

Draft Revised Status: S1

**Habitat Characteristics:** In the main part of its range, this species inhabits primarily larger rivers, but also smaller creek tributaries and even lakes and reservoirs with sandy and/or silty bottoms, into which the larvae burrow (Dunkle 2000). In New York, this species is an extreme habitat specialist, nearly exclusively inhabiting forested tidal mudflat communities along the Hudson River and short stretches of tidal tributaries (Corser 2010). Walker (1958) mentions that adults inhabit the tops of the tallest trees along waterbodies.



Jesse Javcox 2005



(Donnelly 2004c)

**Distribution and Inventory Needs:** *S. plagiatus*' center of distribution is in the southern forest/grassland ecoregion along the Kansas/Oklahoma border, and the species reaches its northern extent in eastern New York. The northeastern-most occurrence in its entire range lies on the Mohawk River very near its confluence with the Hudson (Hemeon 2007). Pre-NYDDS records (Donnelly 2004a) are known from here southward along the Hudson to its mouth, but the NYDDS records were concentrated in Greene, Columbia and southern Albany counties pointing to the existence of an important (meta)population in this vicinity. There is an older record from Lake George, but no recent records from that location, despite some searching. Further inventory is needed along southern Lake Champlain and westward along the Mohawk River where the habitat seems suitable for population expansion along the northern edge of this presumably temperature-limited species (Corser 2010).

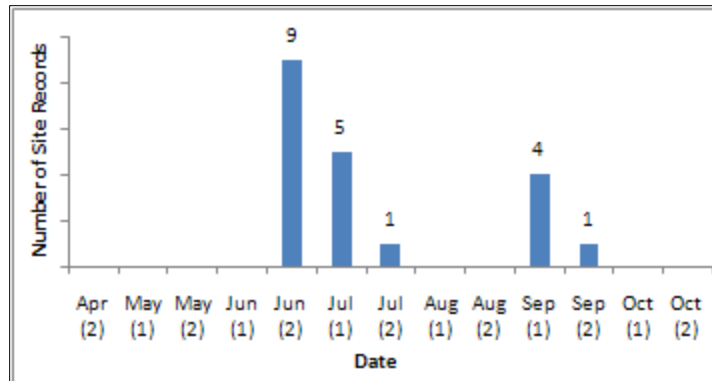
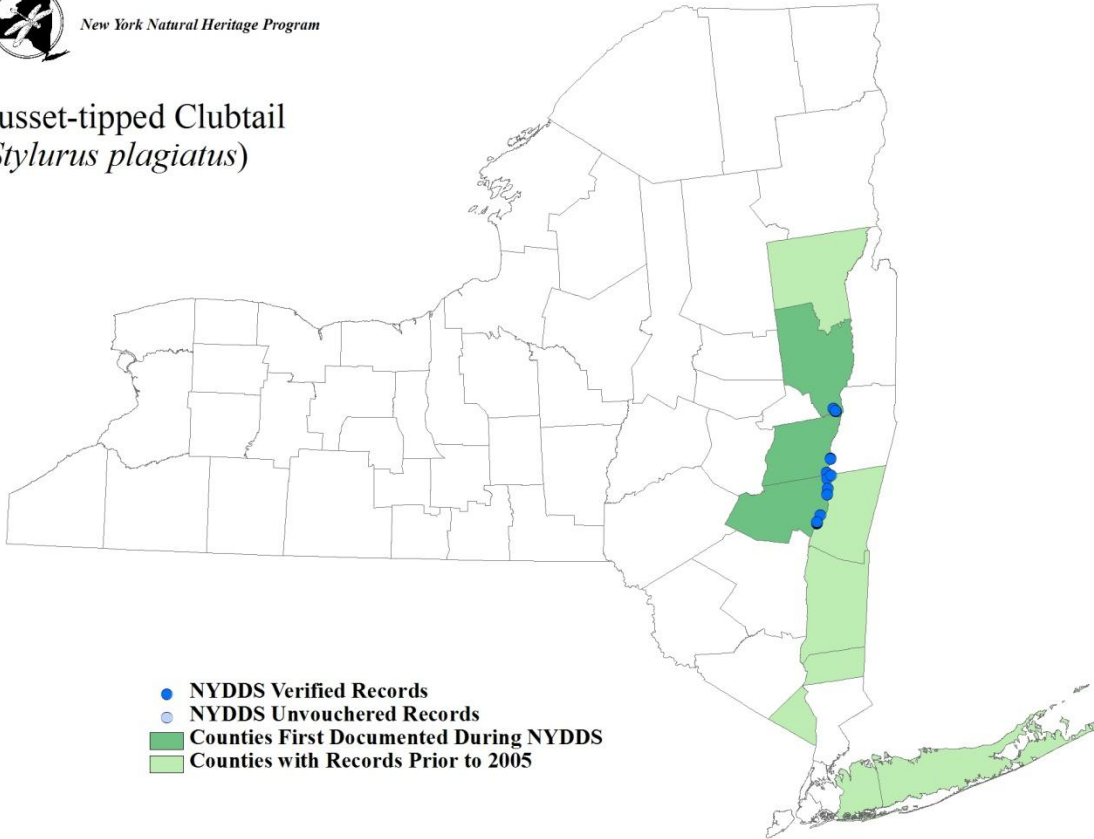
**Phenology:** In New York, the larvae usually emerge during mid-day in the last week of June and first week of July (Hemeon 2007). Adults, however, are not observed again until the breeding season during the month of September. The phenology chart reflects this, as exuviae were collected in June and July and adults were found in September. It is not known where they reside in the interim, but like other hanging clubtails in the genus *Stylurus*, they are believed to take refuge high up in large trees along the shoreline (Corser 2010) where they feed and become sexually mature.





New York Natural Heritage Program

### Russet-tipped Clubtail (*Stylurus plagiatus*)



## GOMPHIDAE

### Zebra Clubtail (*Stylurus scudderi*)

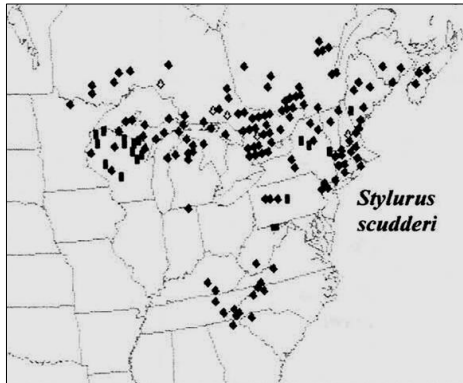
Pre-NYDDS Status: G4, S3

Draft Revised Status: S3S4

**Habitat Characteristics:** This species is found primarily on smaller rivers and medium-sized forested trout streams with intermittent riffles and rapids (Walker 1958) and sandy/mucky bottoms with slow to moderate flow. Larvae burrow deeply into sand/silt substrates in pools. Newly emerged adult males disperse to surrounding woodlands, and during breeding they patrol streams frequently landing on the banks, logs, rocks sand/cobble bars, and shoreline vegetation (Massachusetts NHESP 2003). Females are rarely observed (Walker 1958).



Denis A. Doucet



(Donnelly 2004c)

**Distribution and Inventory Needs:** *S. scudderi* has the center of its distribution in southwestern Ontario in the southern Great Lakes forest ecoregion. It ranges east to Nova Scotia, west to northern Minnesota and south to northern Georgia. New York is near the center of its range where it is widely distributed primarily in the upper Hudson watershed, but also occurring in the Lake Champlain and northeast Lake Ontario/St. Lawrence watersheds (Donnelly 2004c). It ranges from the Bog River in St. Lawrence County east to the Ausable and Schroon rivers in Essex County, south to the Roeliff Jansen Kill in Columbia County and northwestward to

the Jessup River and East Canada Creek in Hamilton County.

Cascadilla and Fall Creeks in Cayuga and Tompkins County in central New York should be surveyed because in the mid 1950s many larvae were collected and reared from the vicinity of McClean and Ellis (Donnelly 1999) and the species has been known from the upper Cascadilla since at least the 1920s (Needham 1928). It is important to know whether this species has disappeared from the southeast Lake Ontario watershed and if it still occurs west of the Adirondacks. Likewise, a pre-NYDDS record from Ward Pound Ridge in Westchester County (Donnelly 1999) indicates that the species may be more widely distributed in southern New York since it also occurs in the adjacent states of New Jersey, Connecticut and Massachusetts (Donnelly 2004c).

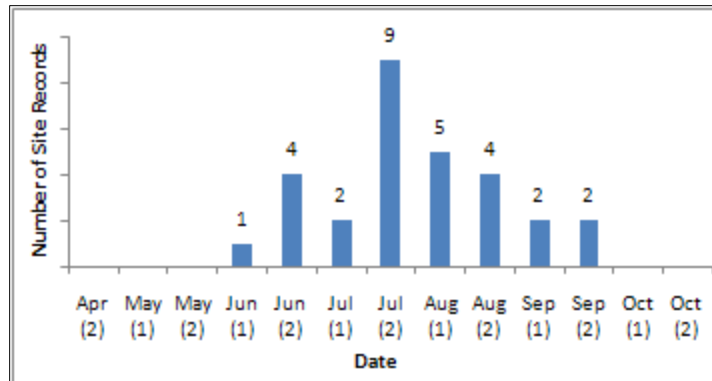
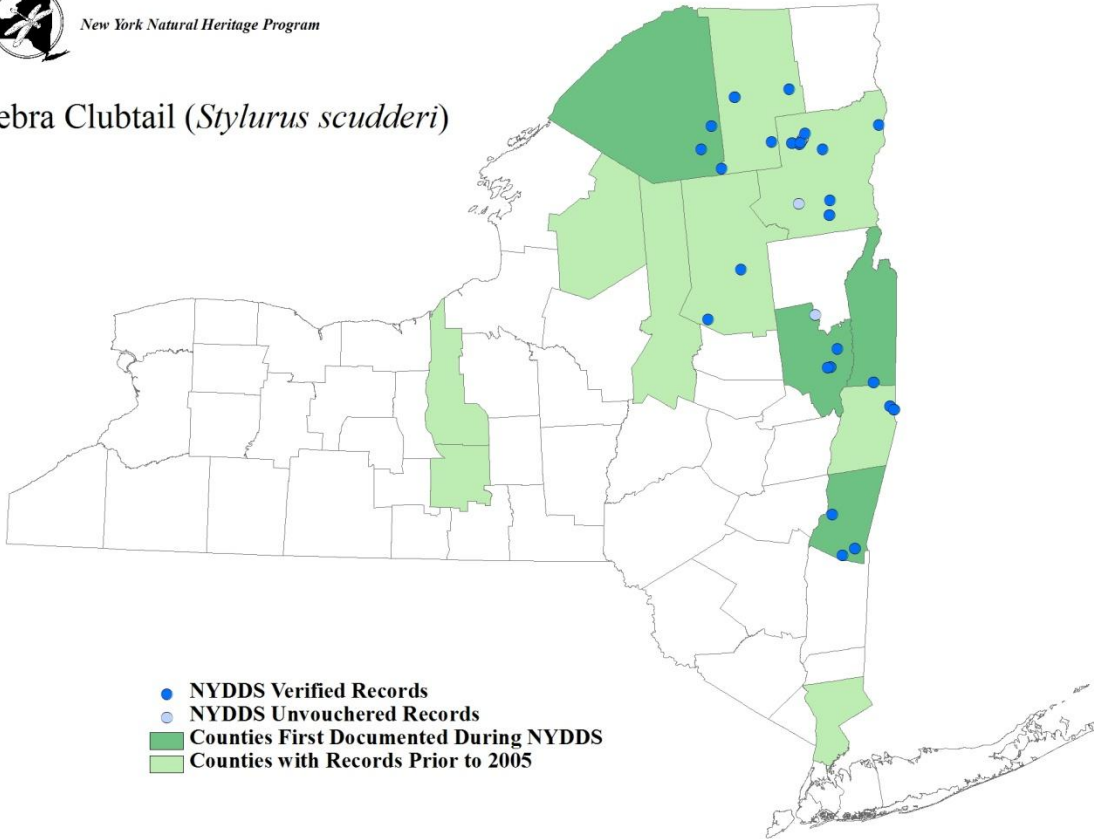
**Phenology:** The NYDDS records for this species were about evenly split between adults and exuviae, but adults apparently were not readily observed and most were found from mid-July to early September, often in late afternoon or early evening. The full flight season in New York is about 10 weeks; exuviae were found from June 30 through mid-September, which is similar to the flight season in Maine (Brunelle & deMaynadier 2005), Massachusetts (Massachusetts NHESP 2003), Wisconsin (Wisconsin Odonata Survey 2009) and Pennsylvania (Evans 2002).





New York Natural Heritage Program

### Zebra Clubtail (*Stylurus scudderi*)



## GOMPHIDAE

### Arrow Clubtail (*Stylurus spiniceps*)

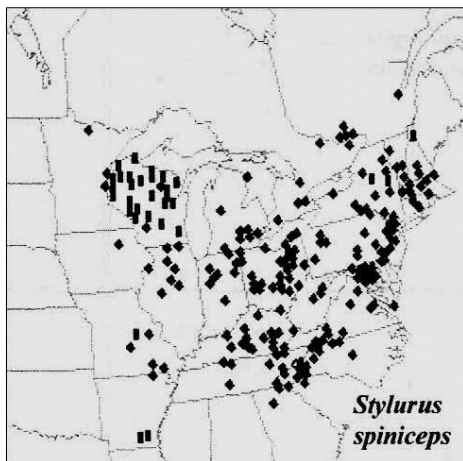
Pre-NYDDS Status: G5, S3

Draft Revised Status: S3

**Habitat Characteristics:** The nymphs of this species inhabit medium to large, swift, sandy-bottomed rivers and occasionally larger creeks where they burrow deeply into the sandy substrate, often emerging on sandy beaches. Adults are elusive and rarely encountered, likely spending most of their time high in the tree-tops in riparian areas and surrounding uplands, rarely perching on shoreline vegetation or protruding logs or rocks (Wagner *et al.* 1995, Massachusetts NHESP 2003).



Tom Murray



(Donnelly 2004c)

**Distribution and Inventory Needs:** The distributional center of *S. spiniceps* lies in northwestern Ohio in the southern Great Lakes ecoregion, extending northwest to northern Minnesota, south to southern Arkansas, and northeastward to southern Quebec and Maine (Donnelly 2004c). New York lies near the northeastern range extent and here the species is rather widely distributed, especially in the Hudson River watershed northward to tributaries of Lake Champlain (Boquet River), as well as the Delaware, Susquehanna, Allegheny, St. Lawrence and Genesee River systems. Pre-NYDDS county records for the Wallkill River in Ulster County and the Raquette River in St. Lawrence County did not show up in Donnelly (2004d), but were

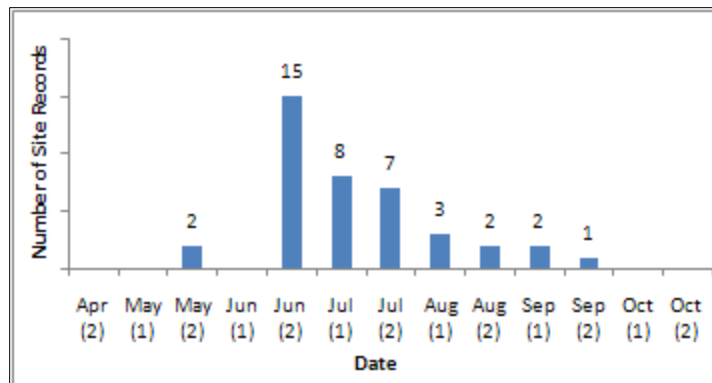
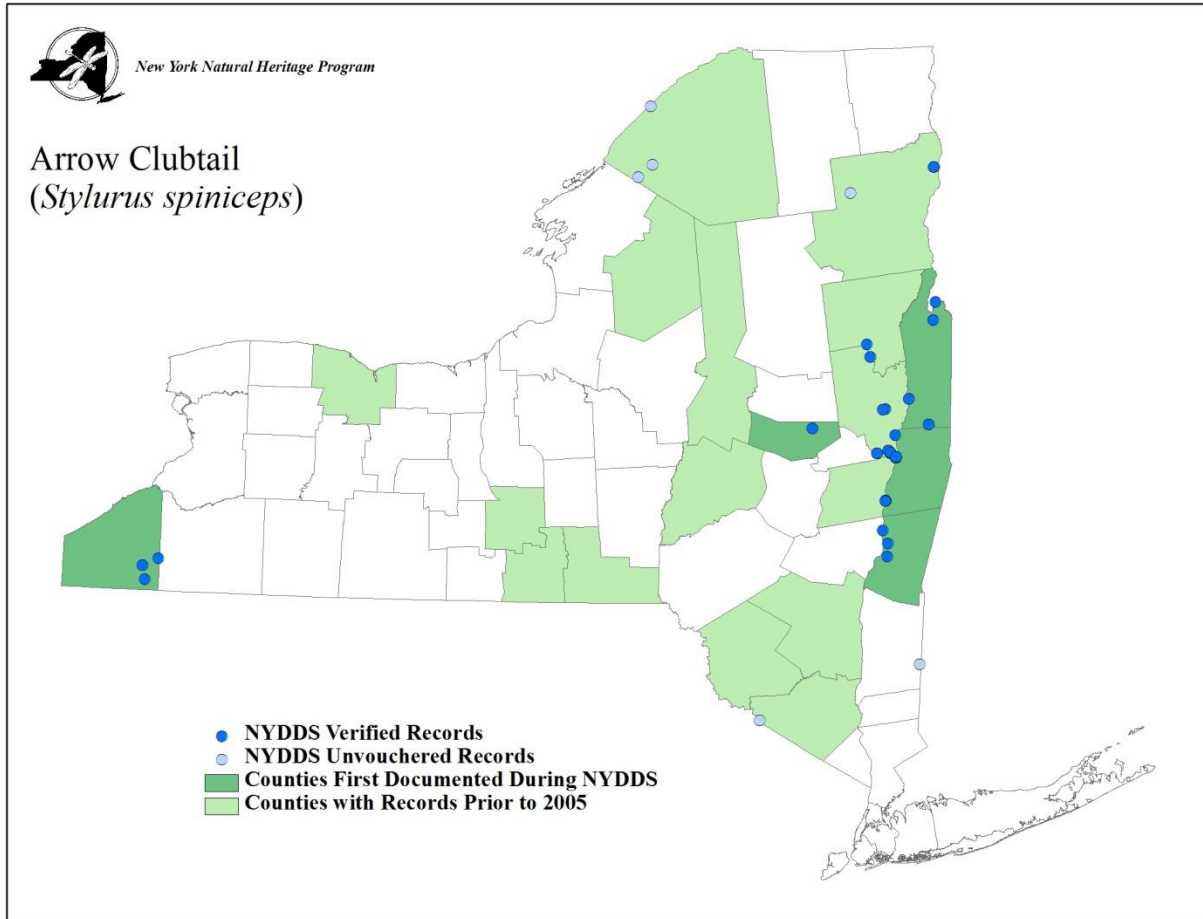
gleaned from NY Natural Heritage files. As in other northeastern (Wagner *et al.* 1995; Brunelle & deMaynadier 2005) and midwestern states (The Ohio Odonata Society 2000; O'Brien 2010), this species seems to have undergone a notable range expansion during the 1990s and early 2000s in New York. By 2003, it was removed from the NY Natural Heritage Active Inventory List. Curiously, NYDDS surveyors did not uncover such a wide distribution of this species, with the vast majority of records coming from the Hudson River and nearby tributaries in the Capital District. This pattern may be due to the active collection of exuviae in this part of the state by skilled surveyors. Notable finds, however, did extend the known range to the Conewango Creek area in extreme southwestern New York. Additional inventory in southwestern New York and along the Canadian border could prove fruitful as there are numerous records from the adjacent states of Pennsylvania and Ohio and the provinces of Ontario and Quebec (Donnelly 2004c).

**Phenology:** Nearly all detections of this species in New York have been of exuviae, and the emergence and flight period indicated by these records extends over nearly three months from June 24 to September 15 (the May dates on the graph represent larval observations on the Upper Hudson River), with most of the records coming during the second half of June into the first half of July. This is similar to the flight season in Massachusetts (Massachusetts NHESP 2003), but is





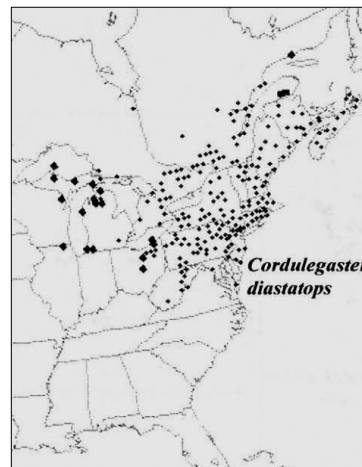
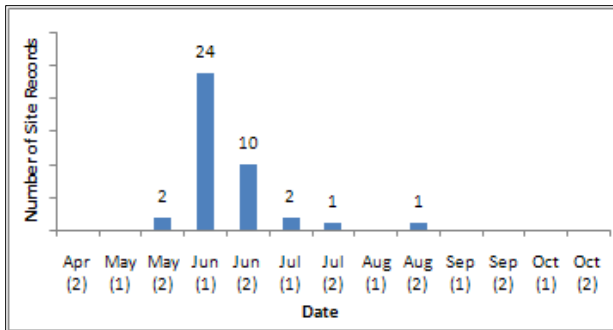
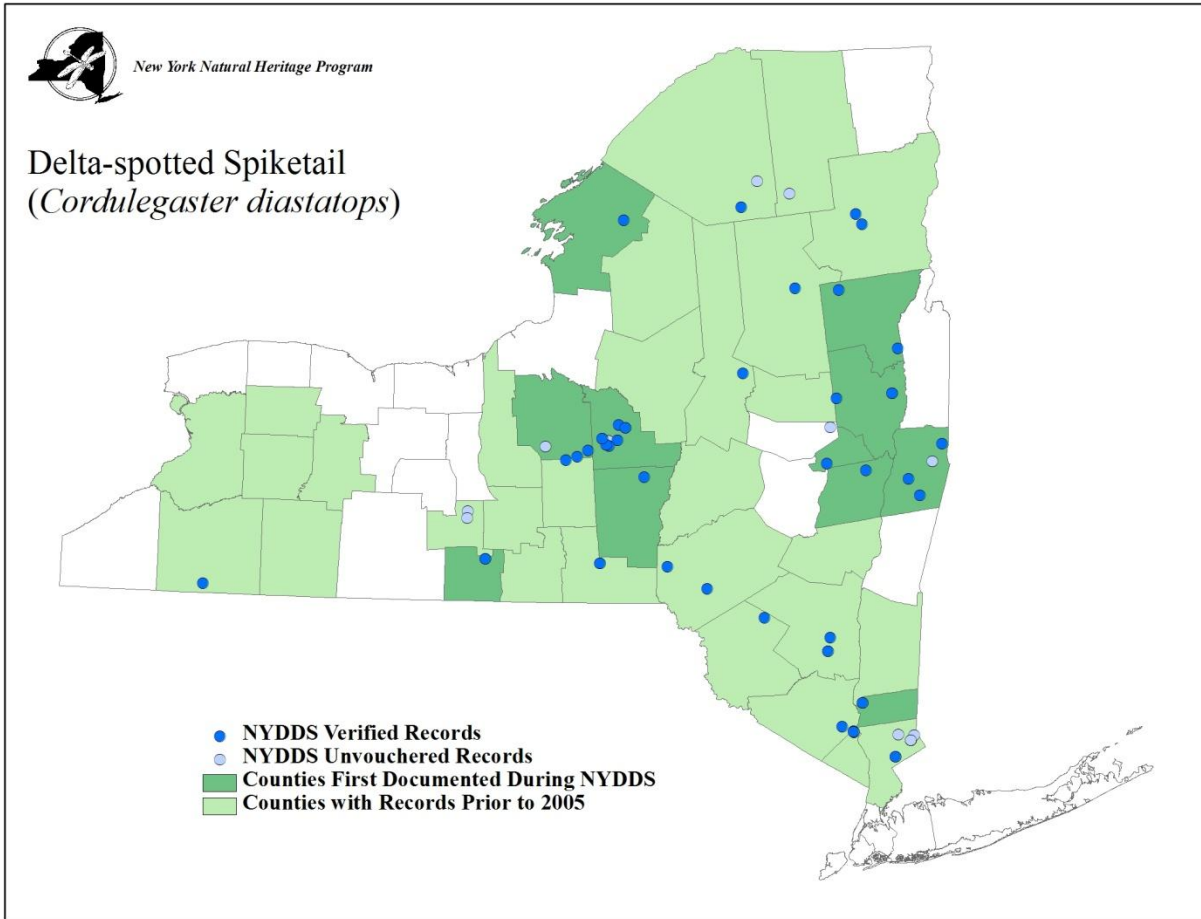
significantly earlier than in Ohio (The Ohio Odonata Society 2000), New Jersey (Bangma & Barlow 2010) and Connecticut (Wagner *et al.* 1995) where the species is most often detected in August.



**CORDULEGASTRIDAE**

**Delta-spotted Spiketail (*Cordulegaster diastatops*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004c)



## CORDULEGASTRIDAE

### Tiger Spiketail (*Cordulegaster erronea*)

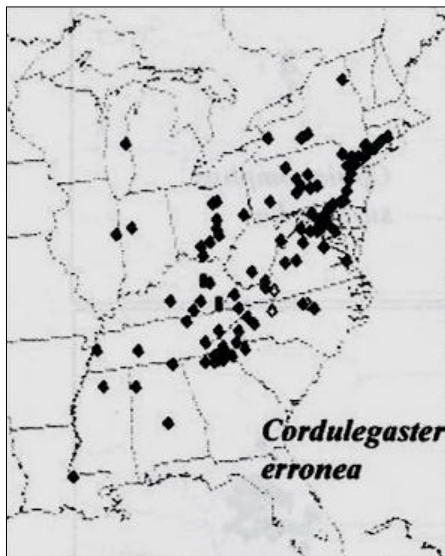
Status: G4, S1

Draft Revised Status: S1

**Habitat Characteristics:** Throughout their range, Tiger Spiketails are habitat specialists inhabiting tiny, forested, spring-fed coldwater streams, small spring trickles, or seeps in partial shade that are too small for fish where there is a constant, slight water flow and a sandy/gravelly substrate (Barlow 1995, Donnelly 1999; Dunkle 2000). In northern New Jersey, the species is limited to perennial low-to-medium-gradient forested cold water springs and trickles with a fine sand substrate that is relatively free of organic matter with a mix of skunk cabbage, jewelweed, sedges, and ferns (Barlow 1995). In Ohio, *C. erronea* use small headwater streamlets with persistent flow and good forest cover in steep ravines and adults spend significant time in the forest canopy and cruising the stream during the heat of the day (Glotzhober 2006). An informative distribution model found that environmental variables associated with topographic position (slope, topographic index) and surficial geology were the most informative parameters in defining suitable habitats for this species (New York Natural Heritage Program 2009b). Barlow (1995) also mentioned that geological areas conducive to the formation and maintenance of numerous permanent spring-fed seeps draining into deep, wooded glacial valleys were ideal locations. In Ohio, larvae inhabit sandy (less often silt or muck) stretches of very shallow streamlets upstream of obstructions that exclude fish (Glotzhober 2006).



Jesse Jaycox



(Donnelly 2004c)

**Distribution and Inventory Needs:** The distributional center of *C. erronea* lies in northeastern Kentucky in the Mixed Mesophytic Forest ecoregion and extends south to Louisiana and north to western Michigan and northern New York. New York forms the northeastern range extent and an older record (pre-1926) from Keene Valley in Essex County is the northernmost known occurrence of this species. Southeastern New York is the stronghold for this species in the lower Hudson River watershed in Orange, Rockland, Putnam and Westchester Counties and is contiguous with New Jersey populations (Barlow 1995, Bangma & Barlow 2010). These populations were not discovered until the early 1990s and some have remained extant since then, while additional sites were added during NYDDS. A second occupied area in the Finger Lakes region of central New York has been known since the 1920s (Needham 1928), and was re-discovered at

Excelsior Glen in Schuyler County in the late 1990s. During NYDDS, a second Schuyler County record was reported in 2005 as well as one along a small tributary stream of Otisco Lake in southwestern Onondaga County in 2008. The habitat in the Finger Lakes appears to be somewhat different from that in southeastern New York, as surveyors reported more exposed, silty streams



flowing from deep wooded ravines into large lakes, which is similar to habitats in Michigan (O'Brien 1998) and Ohio (Glotzhober & Riggs 1996, Glotzhober 2006). The rarity of this species in this portion of the state is highlighted by the low rate of detections from over 16 surveys in 2004 and 2005 in suitable habitats by experienced observers during the flight season who failed to find any additional sites. Nevertheless, Glotzhober (2006) reported that the acquisition of a positive search image and increased survey effort greatly expanded the number of known sites and overall range in Ohio. A single enigmatic record from Erie County was reported by Donnelly (2004d). A distributional model predicted that many of the tributaries feeding into the central Finger Lakes (especially Seneca, Cayuga, Keuka, and Canandaigua lakes) as well as along Eighteen Mile creek near North Evans in Erie County should have suitable habitat for this rare and elusive species (New York Natural Heritage Program 2009b).

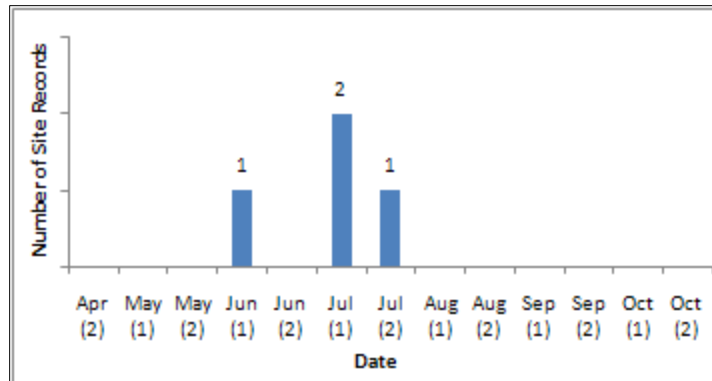
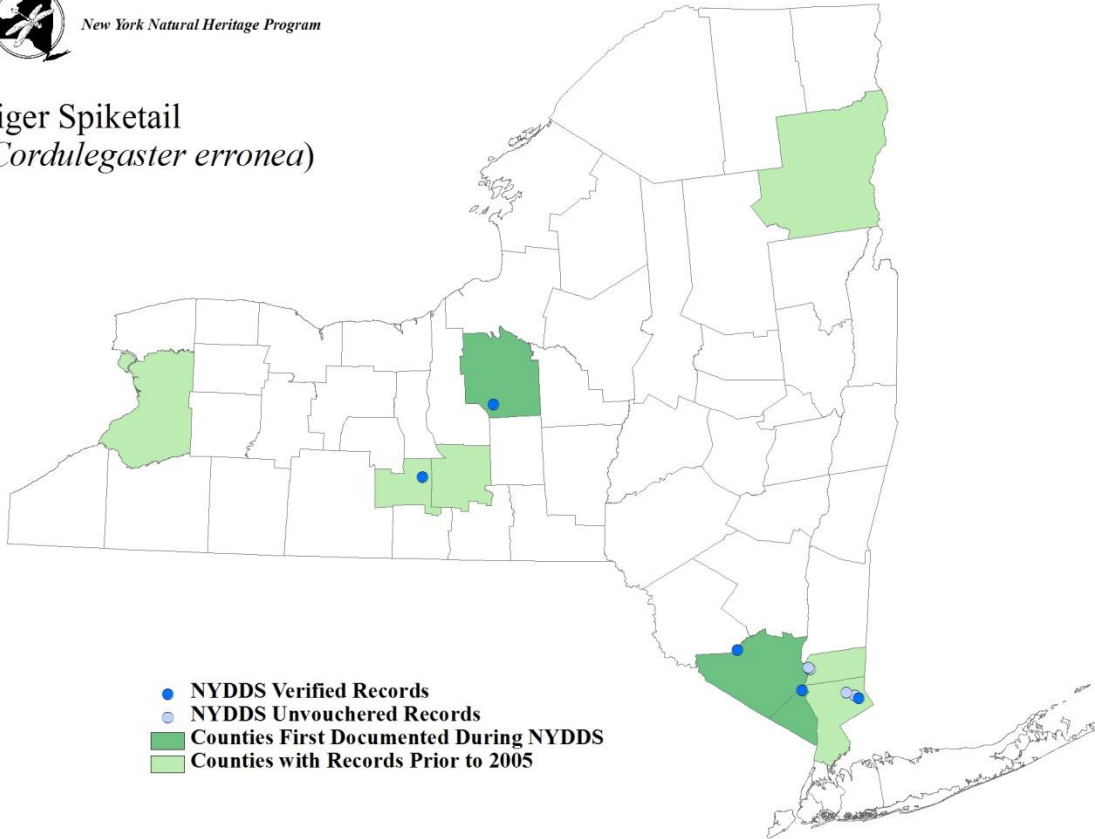
**Phenology:** Early June to mid- September (New York Natural Heritage Program 2009e) is the reported flight season in New York which is similar to Ohio (June 1-September 3, with 83% of the observations on or after July 16) (The Ohio Odonata Society 2000) and New Jersey (June 23-September 5, with a peak in August) (Bangma & Barlow 2010). Our phenology data, both from NY Natural Heritage database records, as well as the newer NYDDS sightings, supports a somewhat shorter two-month flight season in New York, from June 12 to August 12, with most records coming from the last week of June through July. In good habitat in optimum weather conditions (between 10:00 AM to 4:00 PM) during the flight season, an observer should be able to observe one or more patrolling males within 30-60 minutes (Glotzhober 2006).





New York Natural Heritage Program

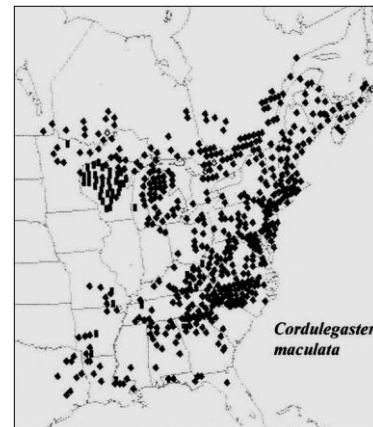
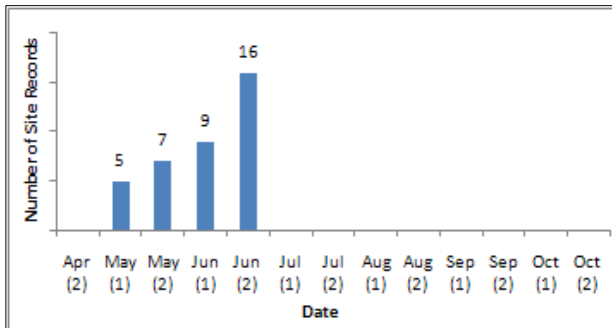
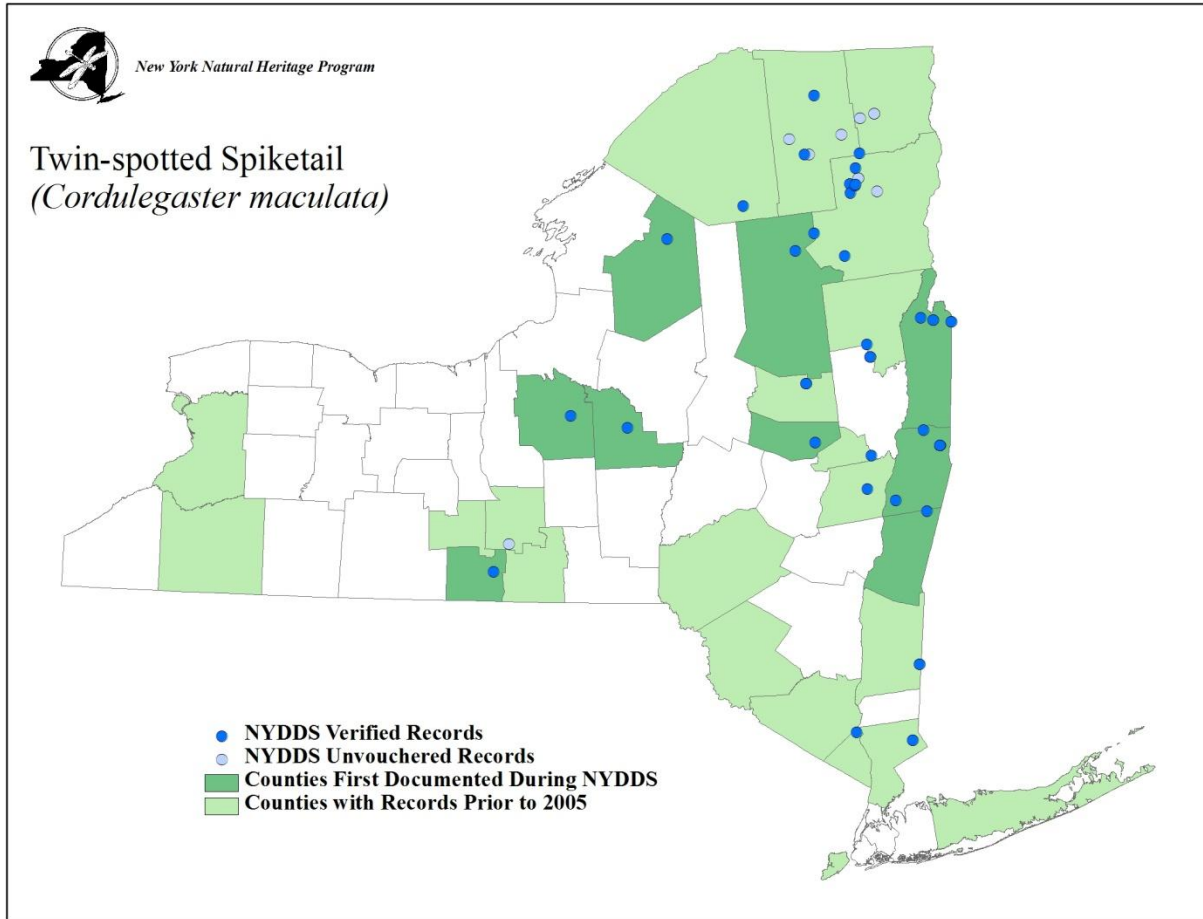
### Tiger Spiketail (*Cordulegaster erronea*)



**CORDULEGASTRIDAE**

**Twin-spotted Spiketail (*Cordulegaster maculata*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004c)



## CORDULEGASTRIDAE

### Arrowhead Spiketail (*Cordulegaster obliqua*)

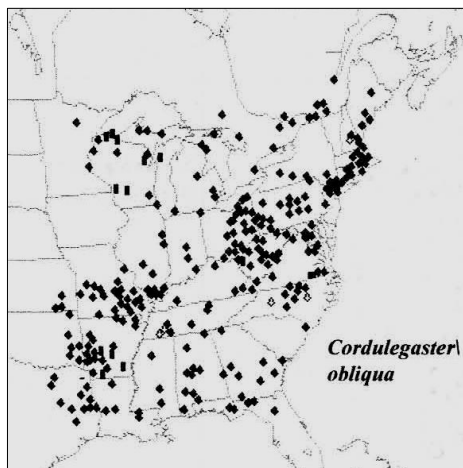
Pre-NYDDS Status: G4, S2S3

Draft Revised Status: S3

**Habitat Characteristics:** As elsewhere in the northeast and midwest (Nikula *et al.* 2003; Wisconsin Odonata Survey 2009, Bangma & Barlow 2010) Arrowhead Spiketails in New York oviposit and spend most of their time at small spring-fed streams and seeps with soft organic muck bottoms and sometimes rocky substrates. These streams are in forested areas although the seepages themselves may be in small areas of more open habitat types such as wet meadows or small cattail marshes and fields dominated by ferns and other moisture dependent herbaceous plants. Adults may feed in forest clearings in the vicinity of the principal breeding habitat (New York Natural Heritage Program 2009f). A somewhat informative distribution model (New York Natural Heritage Program 2009b) found that environmental variables associated with moderate degrees of canopy cover, topographic index and mild temperatures (average annual minimum temperature, and frost free days) were the most informative parameters in defining suitable habitats for this species. Lloyd (2005) noted that such seeps provide a unique habitat for macroinvertebrates such as *C. obliqua* by having smaller seasonal temperature changes and generally predictable year-round flows.



Alan W. Wells 2006



(Donnelly 2004c)

**Distribution and inventory needs:** The distributional center of *C. obliqua* lies in southwest Ohio in the Southern Great Lakes Forest Ecoregion, extending northwest to northern Minnesota, south to Texas and Florida and north to southern Ontario and Quebec (Donnelly 2004c). However it is likely that as with other *Cordulegaster*, this large range could comprise a species complex involving varying levels of hybridization (Pilgrim *et al.* 2002). New York lies near the northeastern range extent, and the species is rather widely distributed from the Finger Lakes region eastward. At the time of Needham (1928) *C. obliqua* was only known from extreme southern New York, but by the time of Donnelly (1999, 2004d) locales farther northward in the Hudson River Valley and in

Letchworth State Park in Livingston County had been reported. Likewise, NYDDS efforts since 2005 continued to expand the known range of this species, most notably with several additional sites in the central part of the state and northward to northern Washington and St. Lawrence Counties. This pattern probably represents a recent range expansion of this species, but could also arise simply from increased surveys efforts. Similarly, the range in Ohio has apparently expanded since 1990 (The Ohio Odonata Society 2000), but during recent atlas efforts in Maine (Brunelle & deMaynadier 2005), only one new locale was added. Several of the known sites in New York have been extant for nearly 20 years and often multiple individuals are observed



during surveys, suggesting good population viability of this species in the state and the discovery of additional populations is expected. More locales, particularly along the Canadian border counties, should turn up since there are many known sites nearby in Ontario and Quebec (Donnelly 2004c).

**Phenology:** Mid-May through July (New York Natural Heritage Program 2009e) is the reported flight season in New York which is similar to Ohio (The Ohio Odonata Society 2000), but longer than Massachusetts (Nikula *et al.* 2003) and New Jersey (Bangma & Barlow 2010). Our phenology data, both from NY Natural Heritage database records, as well as the newer NYDDS sightings, support a somewhat shorter two month flight season in New York, from June 2 to July 30, with 70% of the records coming during the month of June.

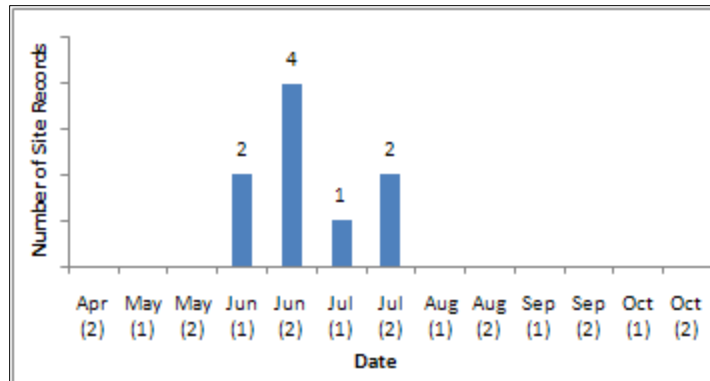
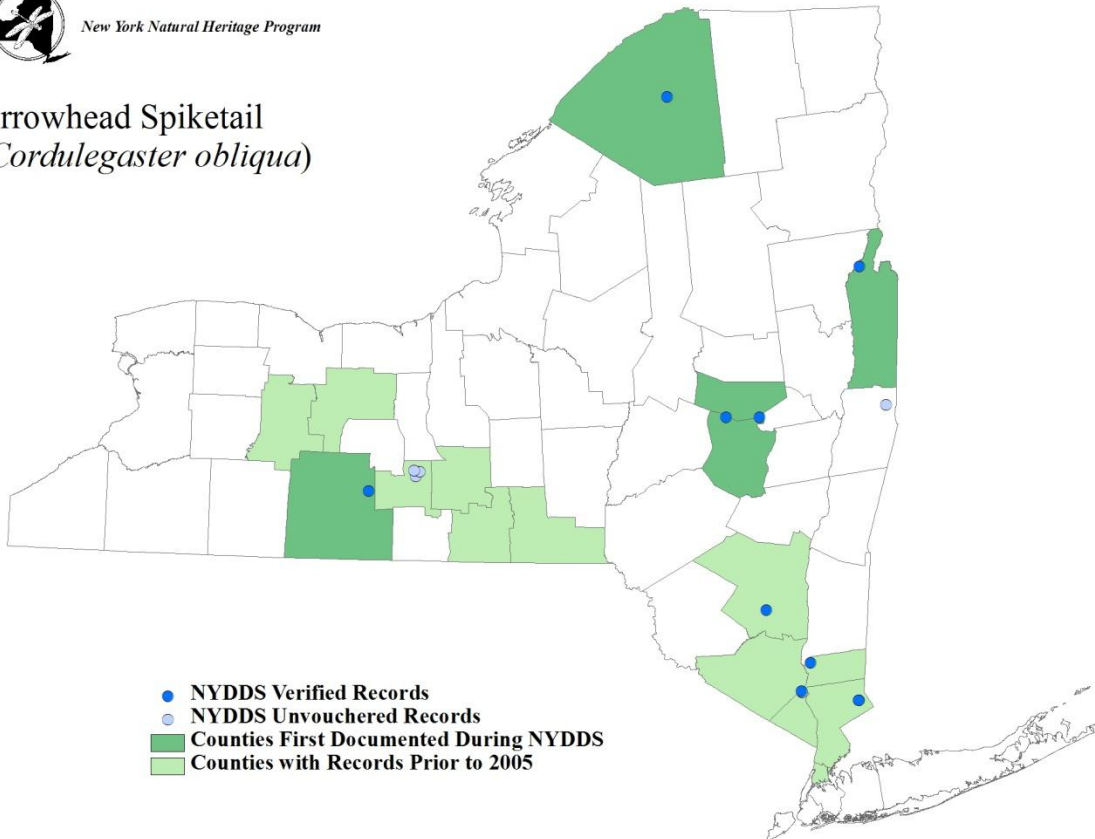






New York Natural Heritage Program

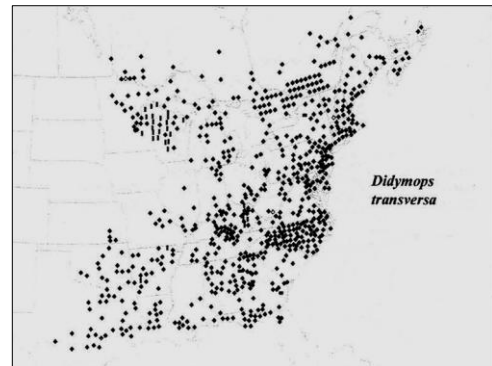
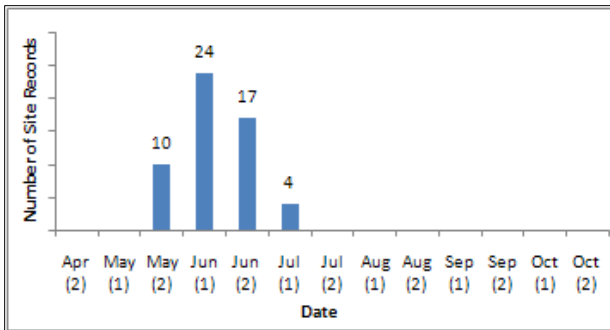
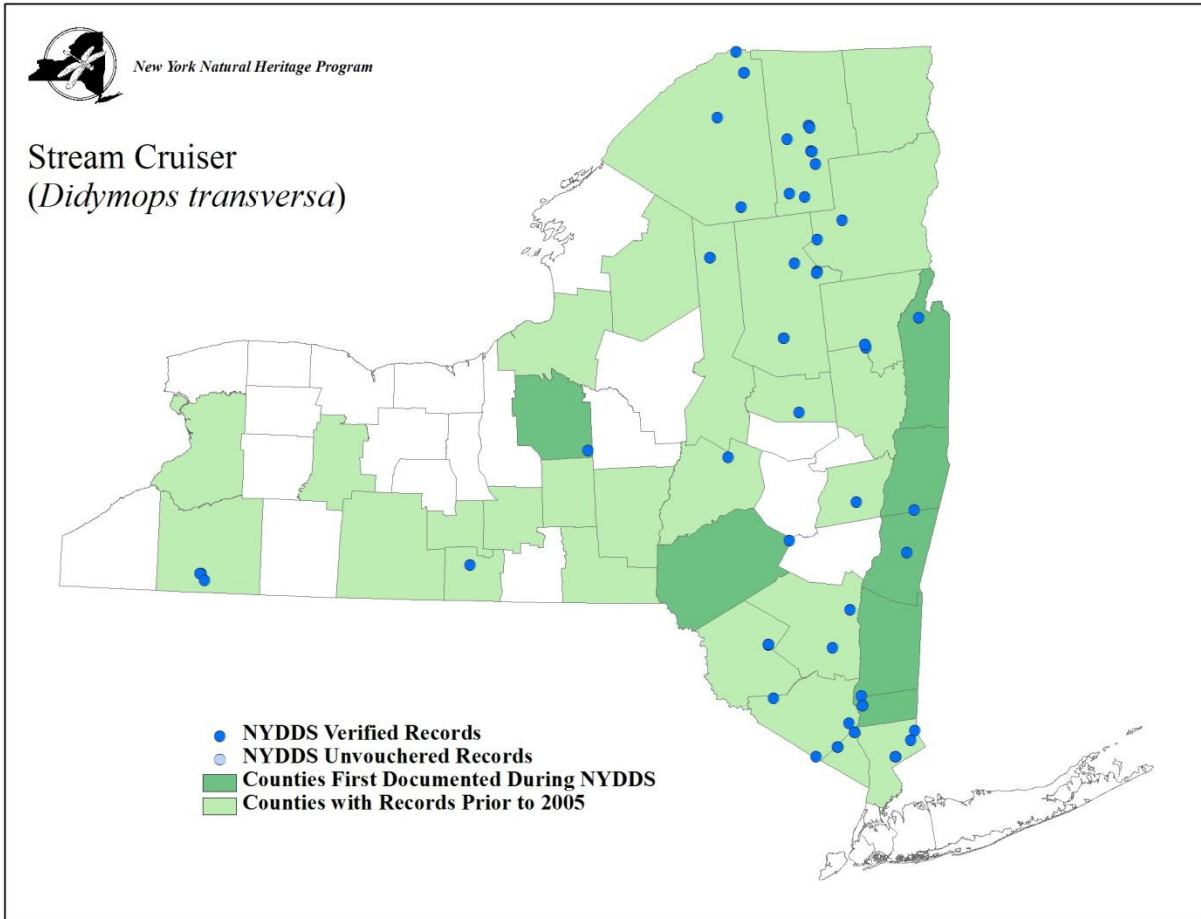
### Arrowhead Spiketail (*Cordulegaster obliqua*)



**MACROMIIDAE**

**Stream Cruiser (*Didymops transversa*)**

**Pre-NYDDS Status: G5, S5**



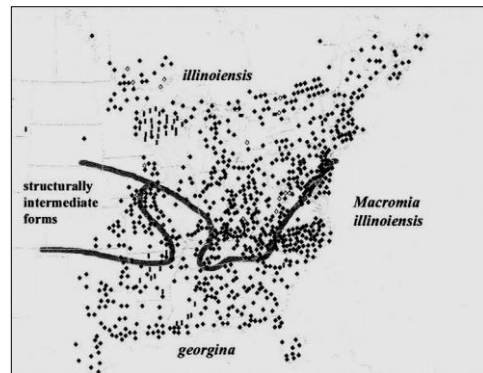
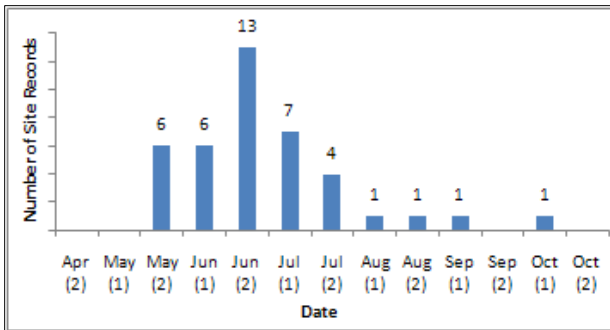
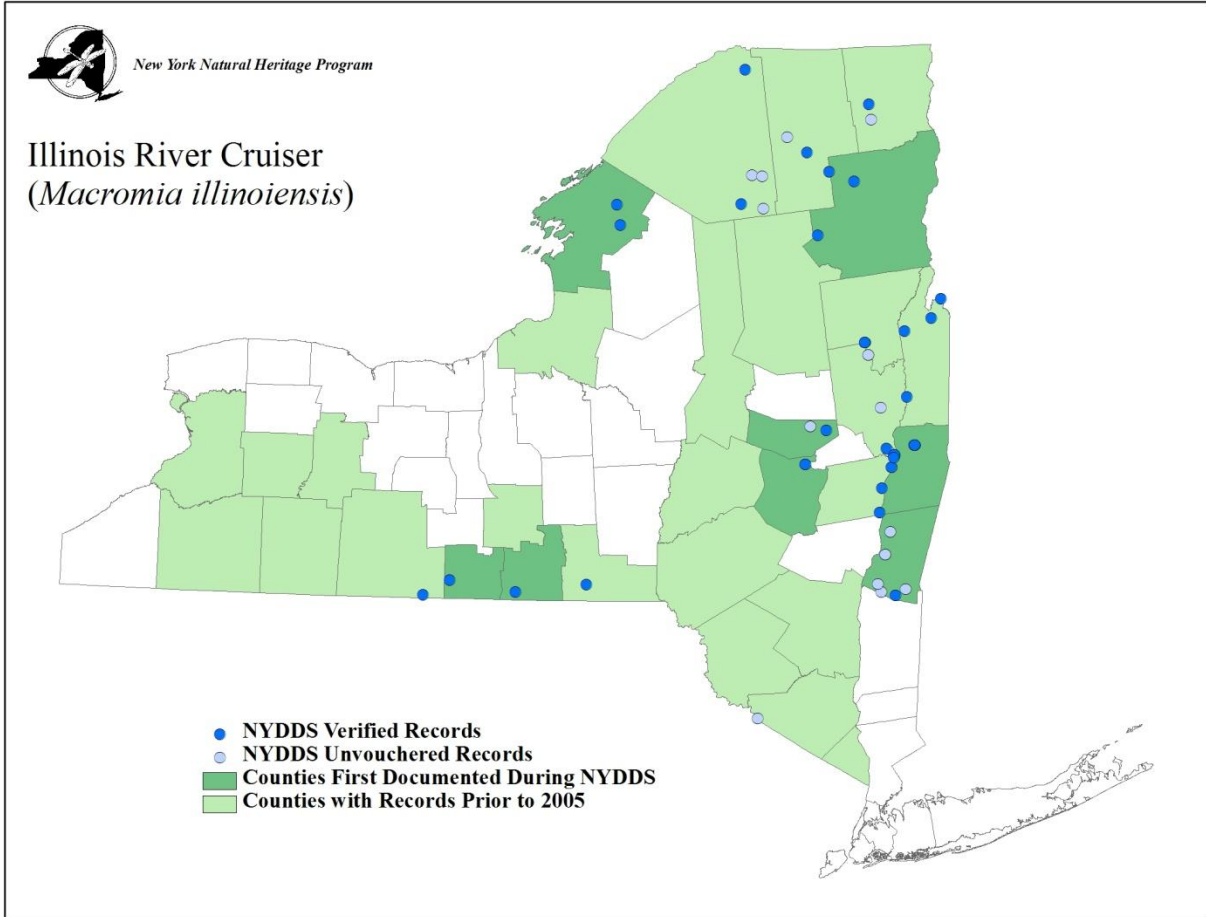
(Donnelly 2004c)



**MACROMIIDAE**

**Illinois River Cruiser (*Macromia illinoensis*)**

Pre-NYDDS Status: G5, S5



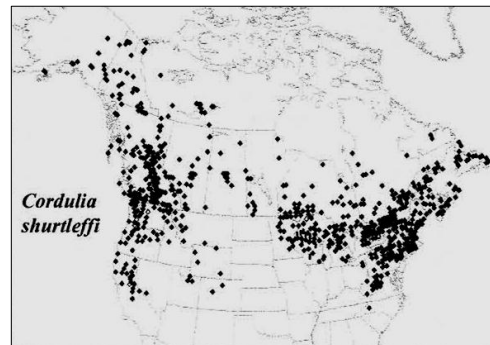
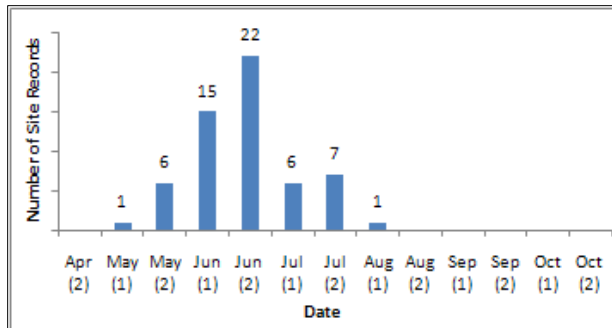
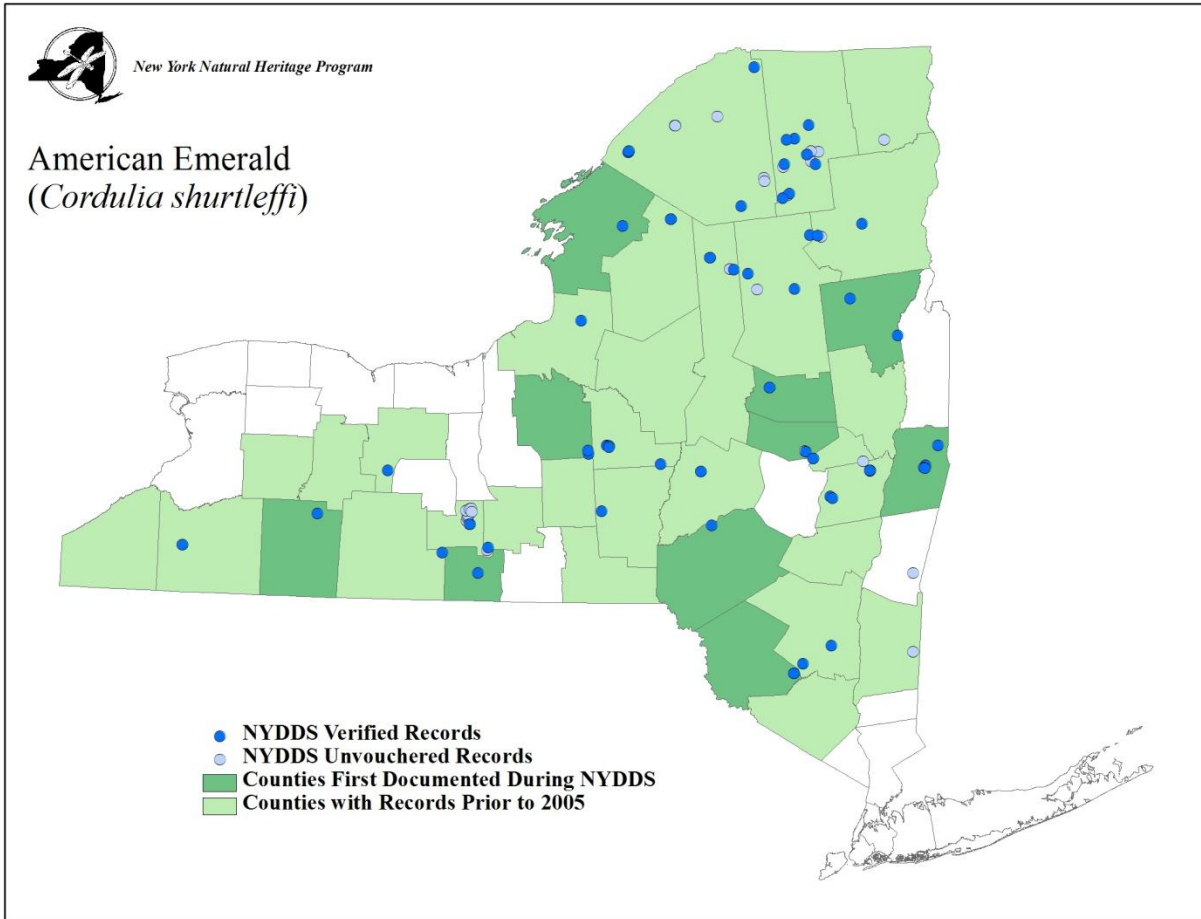
(Donnelly 2004c)



# CORDULIIDAE

## American Emerald (*Cordulia shurtleffi*)

Pre-NYDDS Status: G5, S5



(Donnelly 2004d)

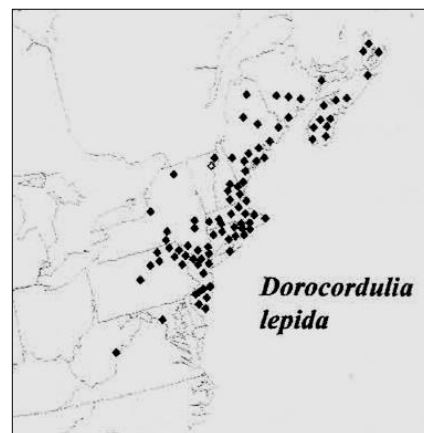
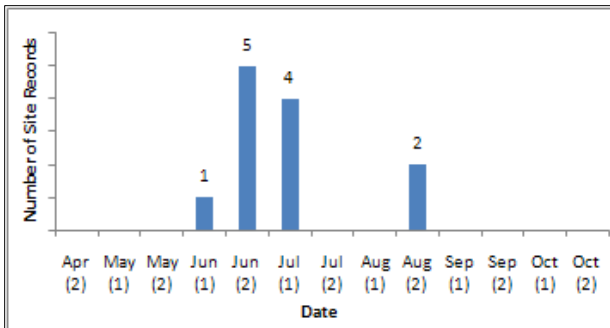
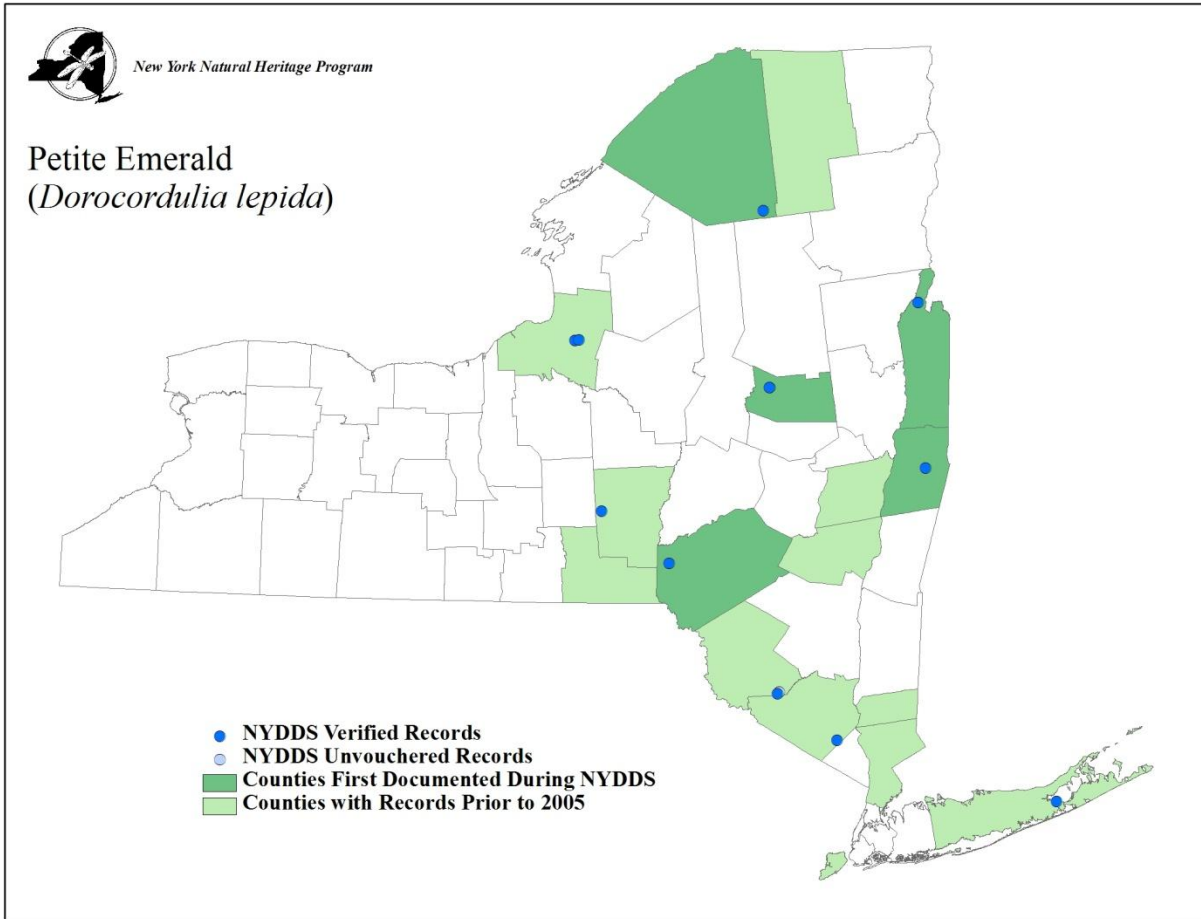


**CORDULIIDAE**

**Petite Emerald (*Dorocordulia lepida*)**

**Pre-NYDDS Status: G5, S4S5**

**Draft Revised Status: S3**



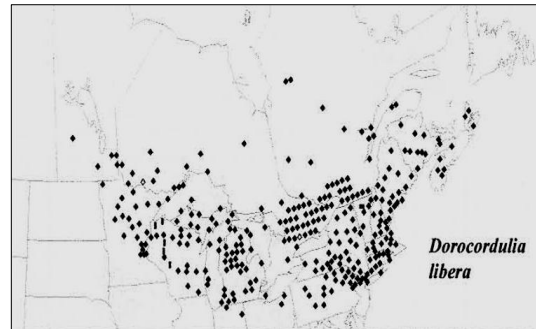
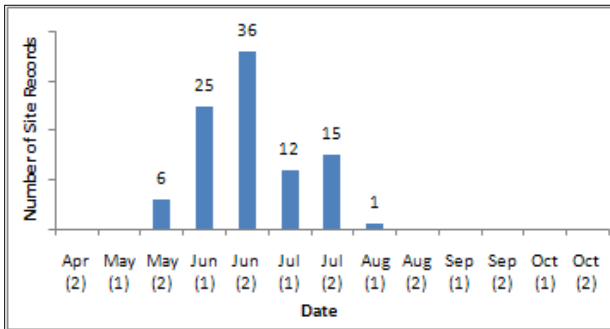
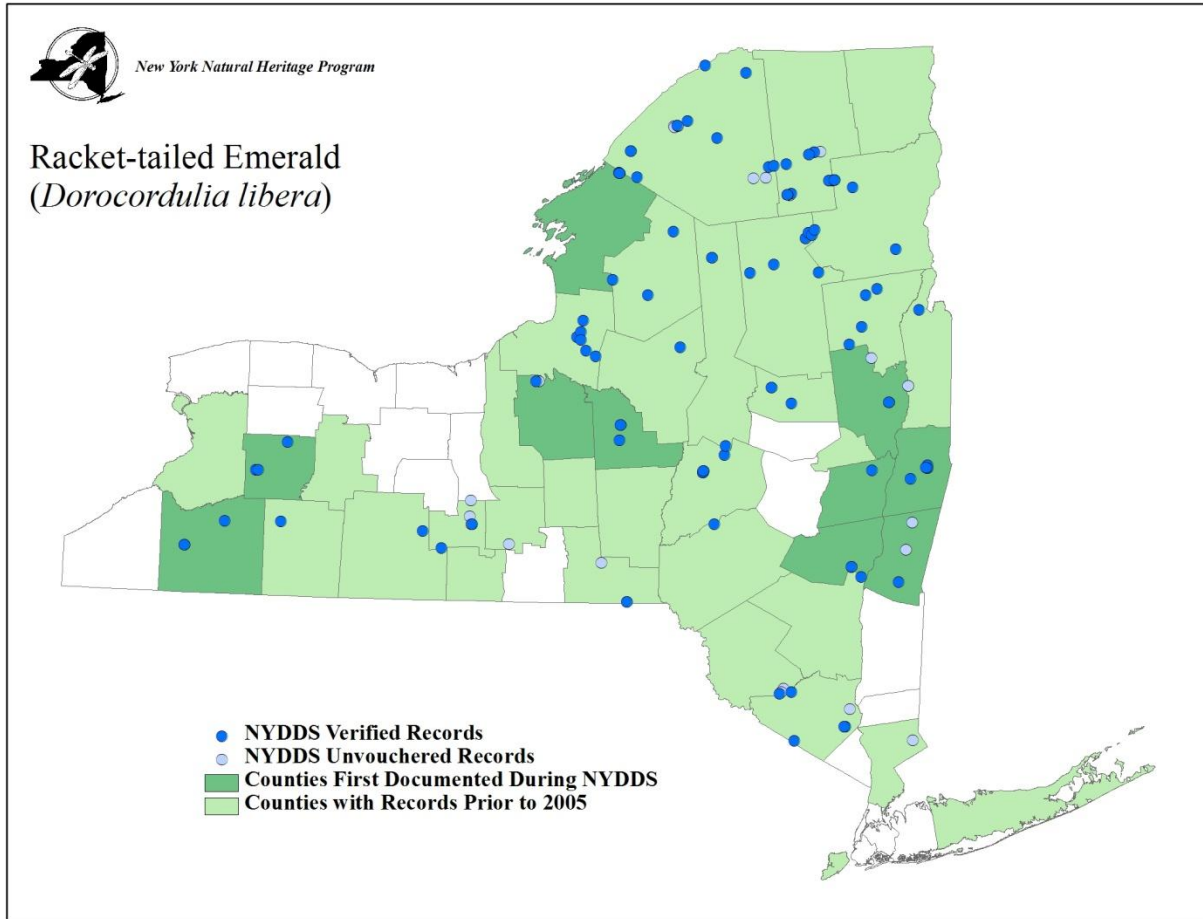
(Donnelly 2004d)



**CORDULIIDAE**

**Racket-tailed Emerald (*Dorocordulia libera*)**

Pre-NYDDS Status: G5, S5



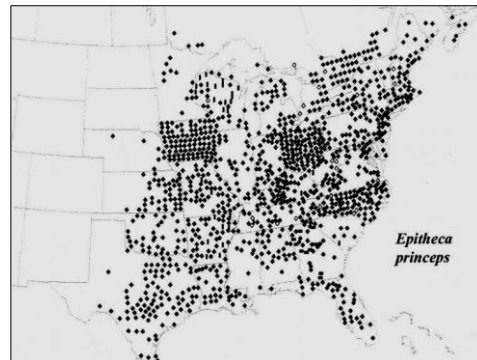
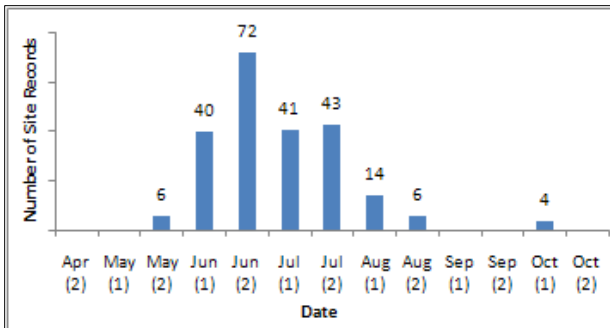
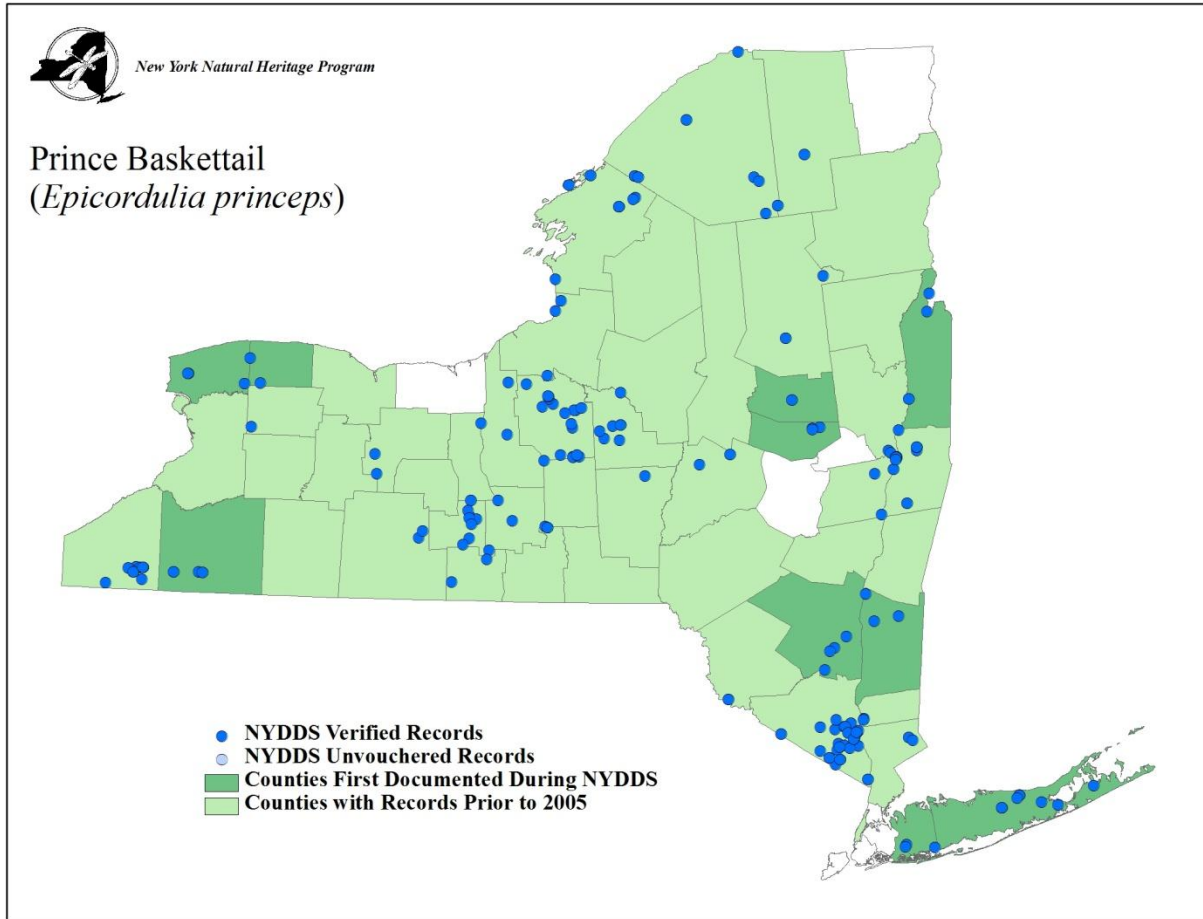
(Donnelly 2004d)



**CORDULIIDAE**

**Prince Baskettail (*Epicordulia princeps*, syn. *Epitheca princeps*)**

Pre-NYDDS Status: G5, S5



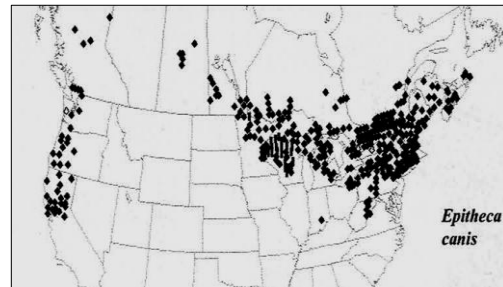
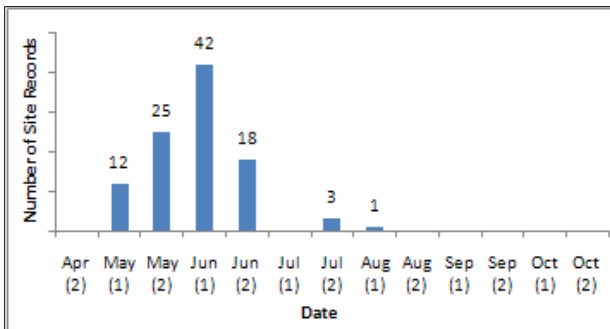
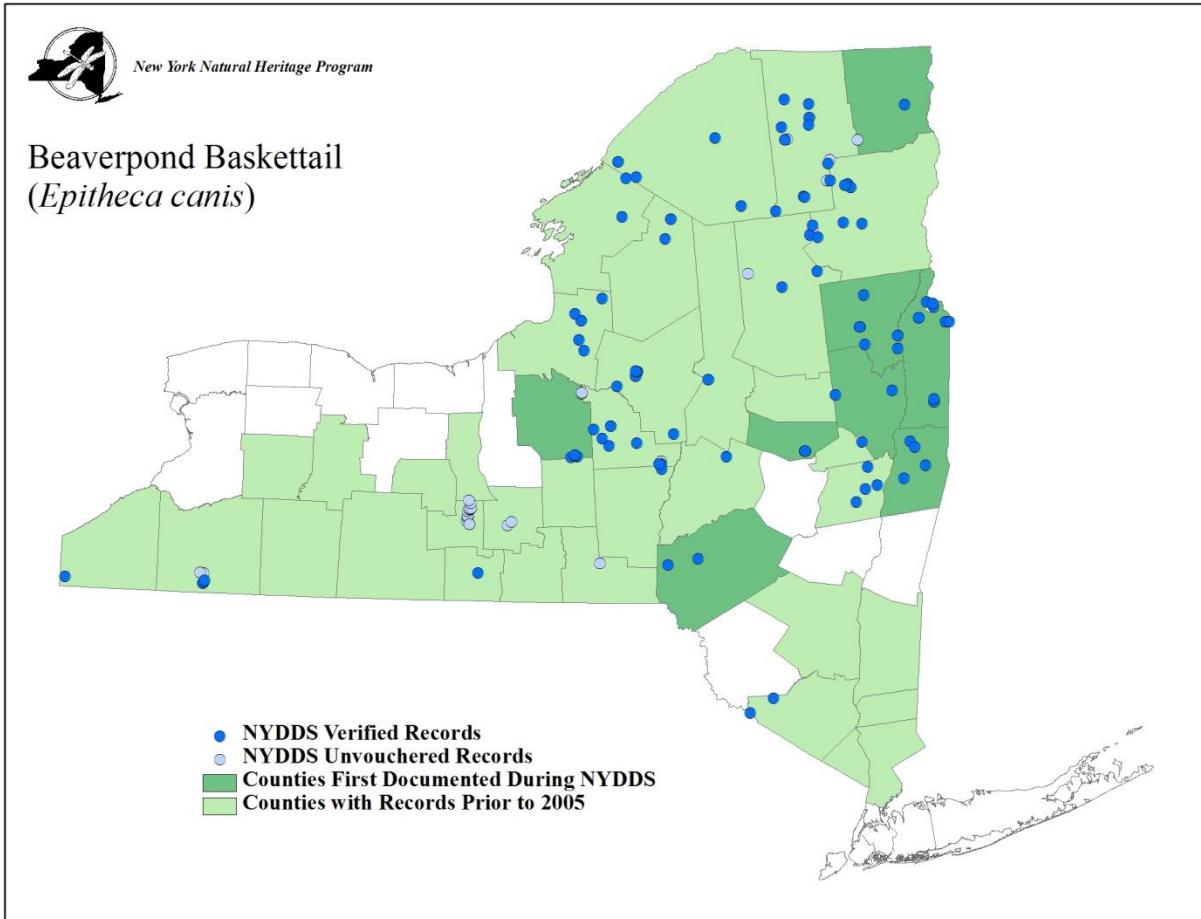
(Donnelly 2004d)



**CORDULIIDAE**

**Beaverpond Baskettail (*Epitheca canis*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004d)

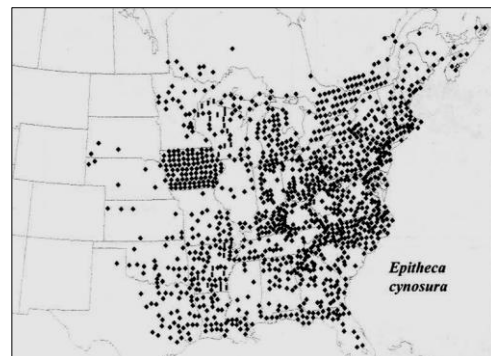
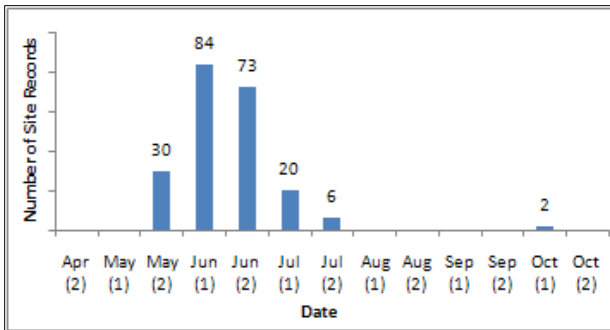
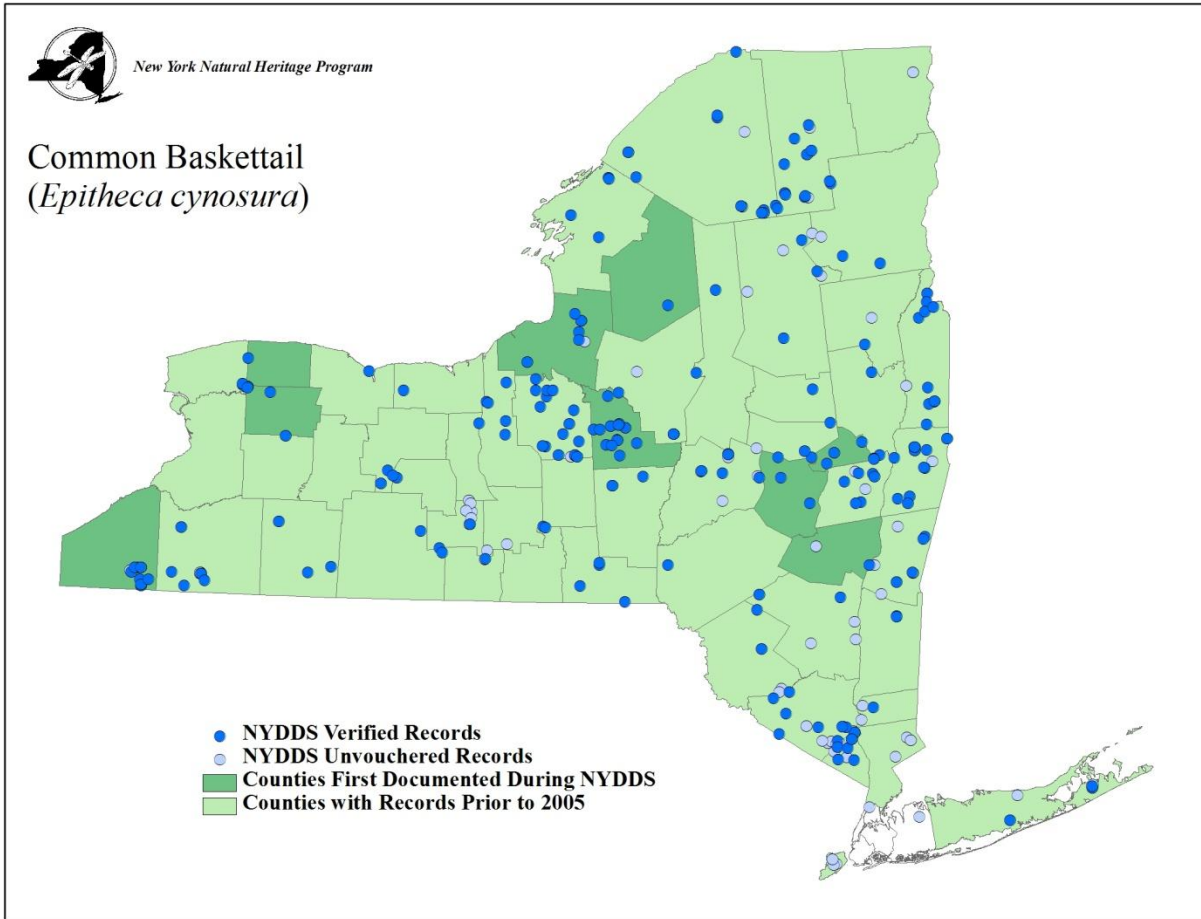




**CORDULIIDAE**

**Common Baskettail (*Epitheca cynosura*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004d)



## CORDULIIDAE

### Mantled Baskettail (*Epitheca semiaquea*)

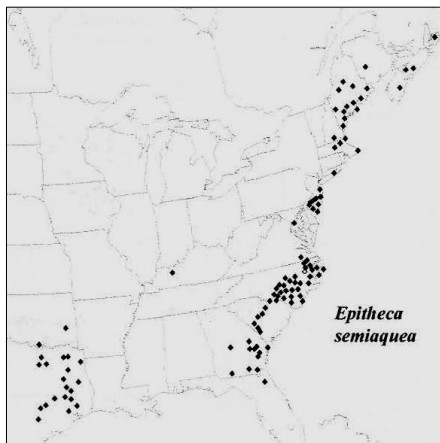
Pre-NYDDS Status: G5, SH

Draft Revised Status: S2

**Habitat Characteristics:** Mantled Baskettails are known to inhabit lakes, ponds, marshy wetlands, swampy beaver ponds, slow streams, and ditches with clear water (Nikula *et al.* 2003). In New York, they have been found recently at a large bog upstate as well as coastal plain ponds on Long Island.



Jeffrey Pippen



(Donnelly 2004d)

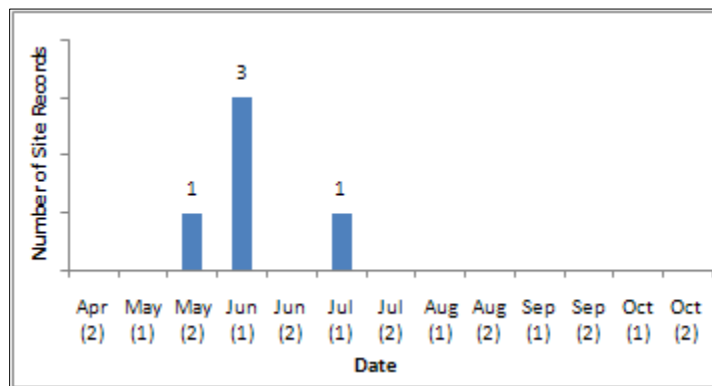
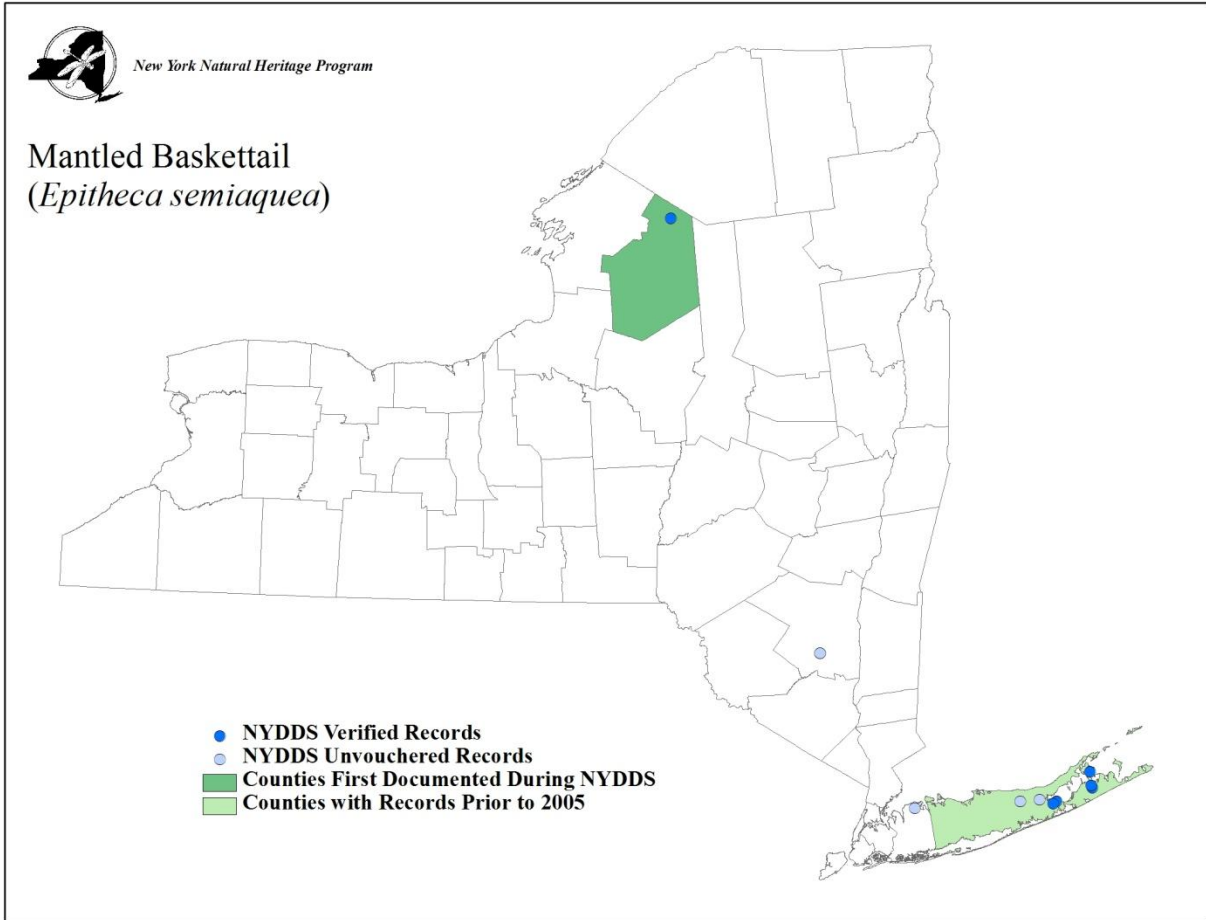
**Distribution and Inventory Needs:** *Epitheca semiaquea* are distributed from Texas and Oklahoma to the eastern coast of the U.S. from Florida northward to Maine and into New Brunswick and Nova Scotia (Donnelly 2004d, Abbott 2010). Older New York records were from Yaphank, North Sea, and Greenport in Suffolk county (Donnelly 1999). There was an apparent long absence of confirmed records in the state after the early 1950s (New York Natural Heritage Program 2010) until it was photographed on Long Island before Donnelly's 1999 publication (Donnelly 1999). It is possible it was confused with *Epitheca cynosura* in New York for many years, as *E. semiaquea* does not have the large basal wing markings that individuals have from southern New Jersey southward

(Donnelly pers. Comm.). Donnelly notes that from northern New Jersey to Massachusetts and Nova Scotia, the wing markings are generally much smaller or even absent (Donnelly pers. Comm.) and are identified instead by shorter and thicker abdomens than *Epitheca cynosura*, with a gentle tapering from front to rear (Donnelly pers. Comm.). Confirmed specimen records were taken from Sunday Swamp in Lewis county in 2006, and from the Mashomack Preserve on Shelter Island, and Crooked, Lily, Penny, and Sears Ponds in 2008 from Suffolk county. Slightly uncertain, but highly probable records include Lake Minnewaska in Ulster county, and Suffolk county locations of Cranberry Bog, a field off Line Road, and Shu Swamp. Future surveyors, especially within the known range for this species, should try to capture individuals of what appear to be either *E. semiaquea* or *E. cynosura*. A single specimen from a given site is recommended by for confirmation of ID to document further locations (Donnelly pers. Comm.) and known sites should be monitored for the persistence of the species with attention to numbers, breeding behavior, habitat quality, and any threats to the habitat. An informative distribution model developed by NY Natural Heritage highlighted several ponds on Long Island that would be worthy of survey effort near known locations, including Birch Creek Owl Pond County Park, Division Pond, Bellows Pond, and Grass Pond (New York Natural Heritage Program 2009a).

**Phenology:** New Jersey reports adults from April 24 through June 24 (Bangma & Barlow 2010), while Maine has documented Mantled Baskettails from mid-May to the third week in July (Brunelle & deMaynadier 2005). In New York, there are observations from the end of May



through the June 9, both pre-NYDDS and during (the chart shows only verified specimens), then one observation on June 22 and another on July 13 (Donnelly 1999).

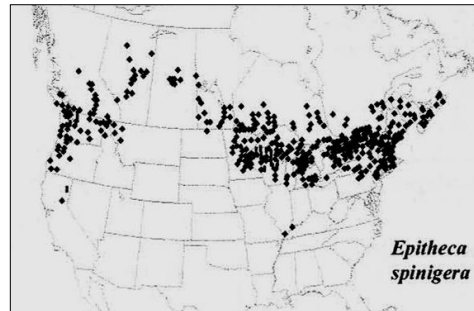
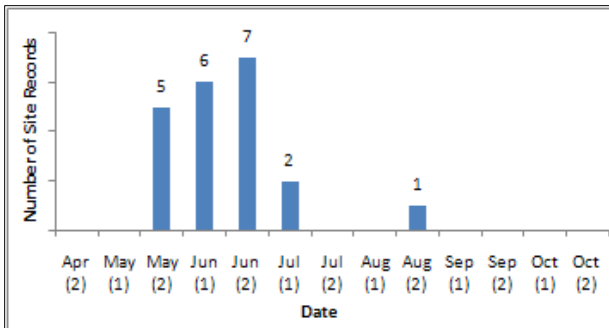
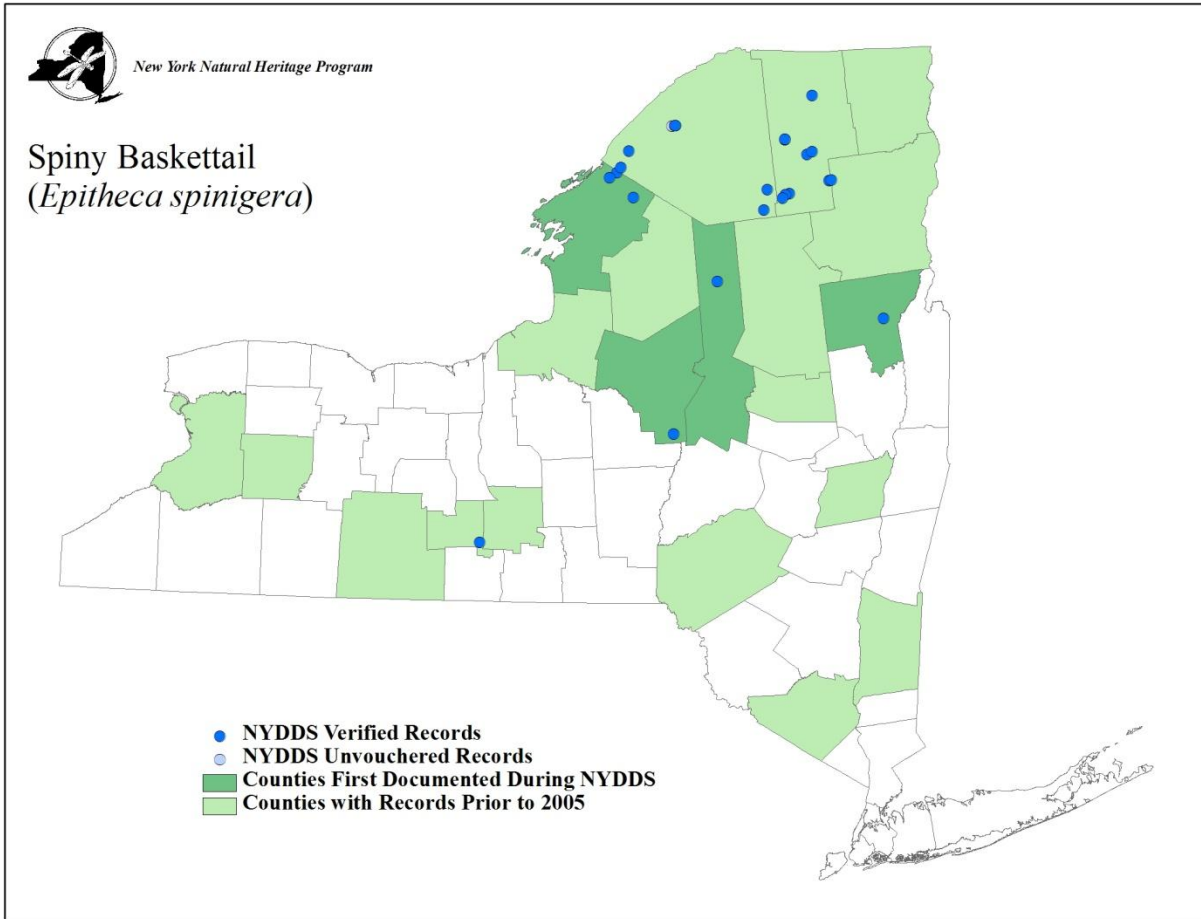


**CORDULIIDAE**

**Spiny Baskettail (*Epitheca spinigera*)**

**Pre-NYDDS Status: G5, S4S5**

**Draft Revised Status: S3**



(Donnelly 2004d)

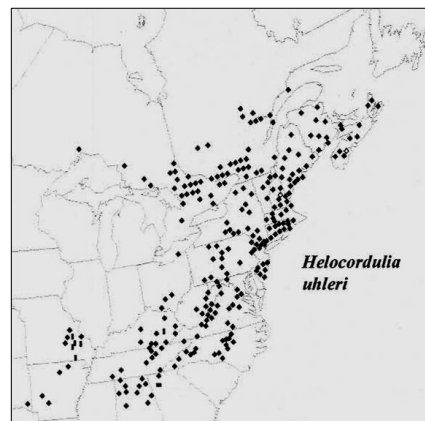
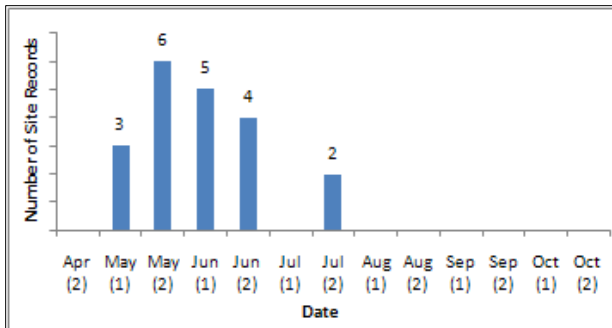
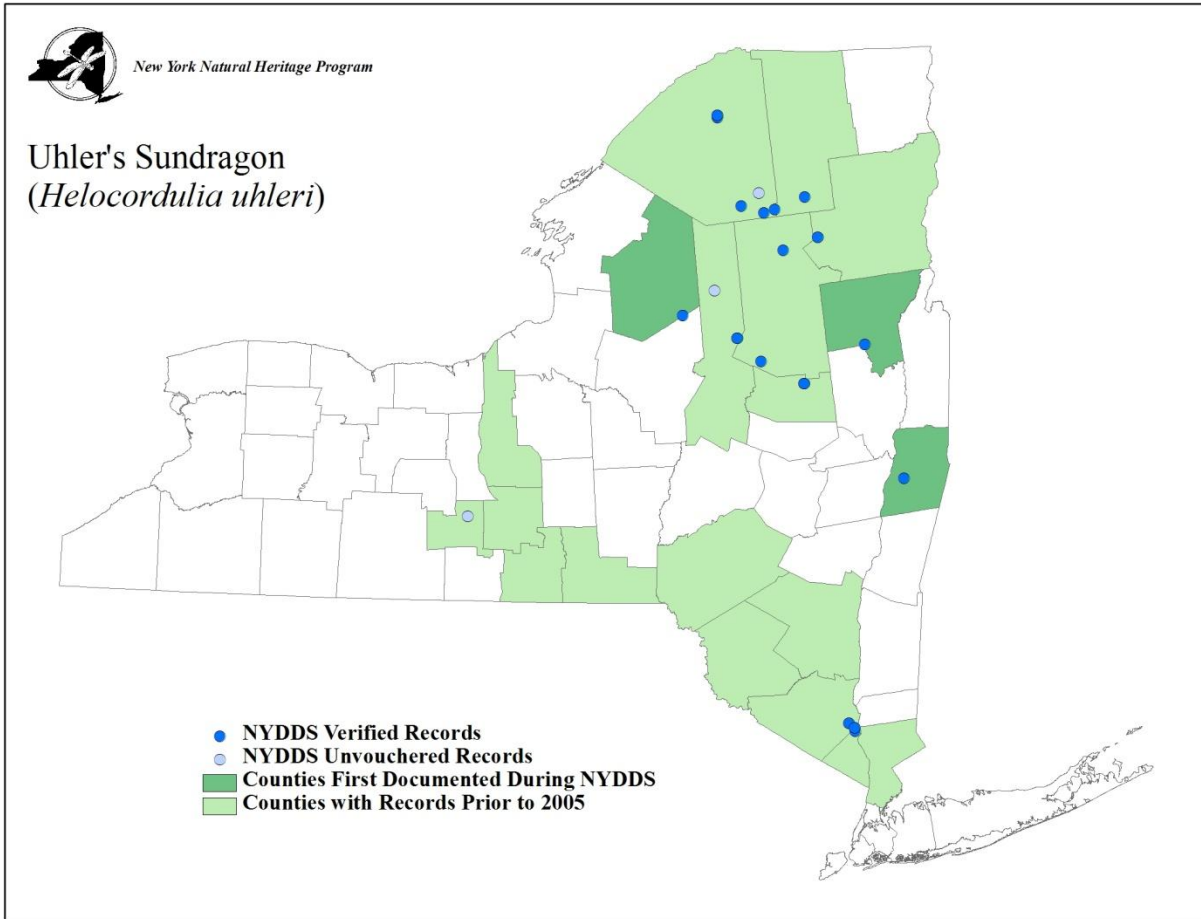


**CORDULIIDAE**

**Uhler's Sundragon (*Helocordulia uhleri*)**

**Pre-NYDDS Status: G5, S4S5**

**Draft Revised Status: S3**



(Donnelly 2004d)

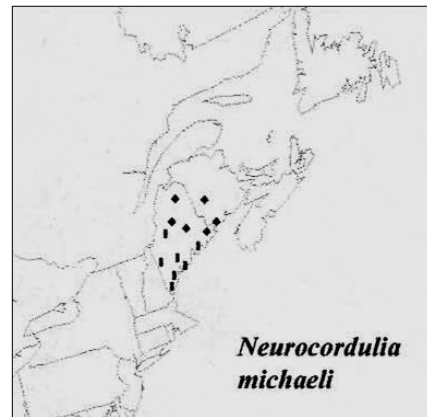
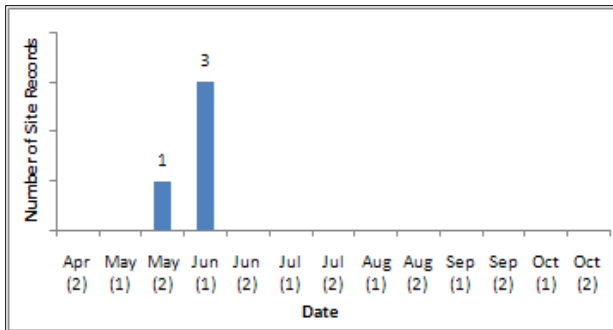
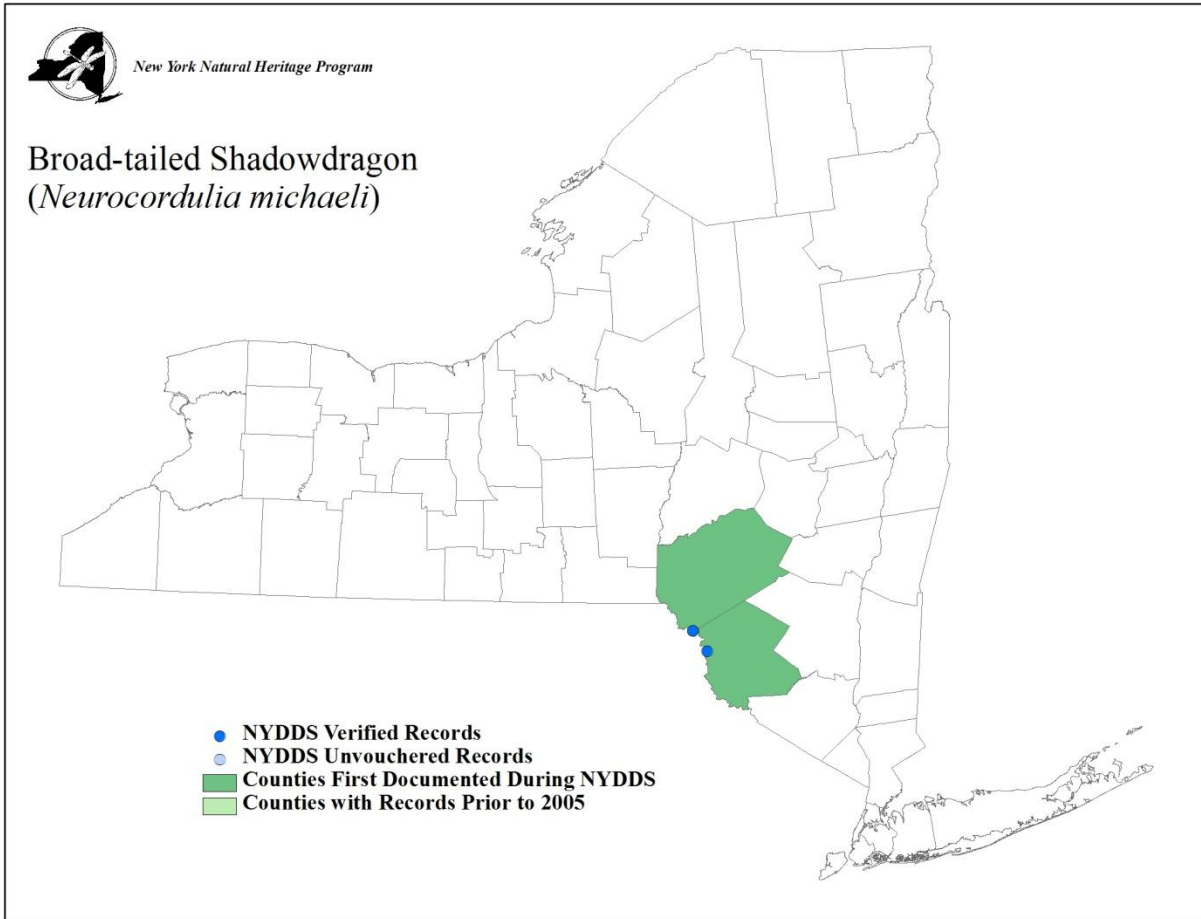


**CORDULIIDAE**

**Broadtailed Shadowdragon (*Neurocordulia michaeli*)**

**Pre-NYDDS Status: G3G4, SNR**

**Draft Revised Status: S1**



(Donnelly 2004d)

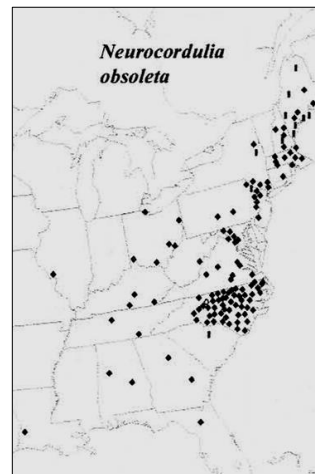
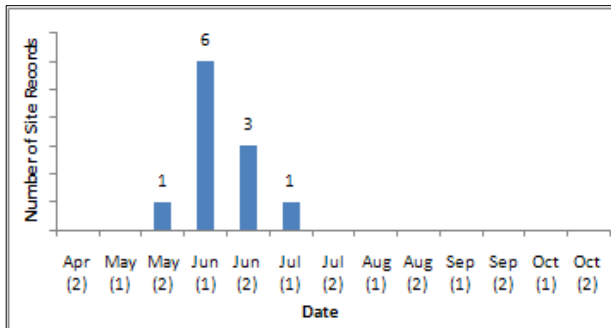
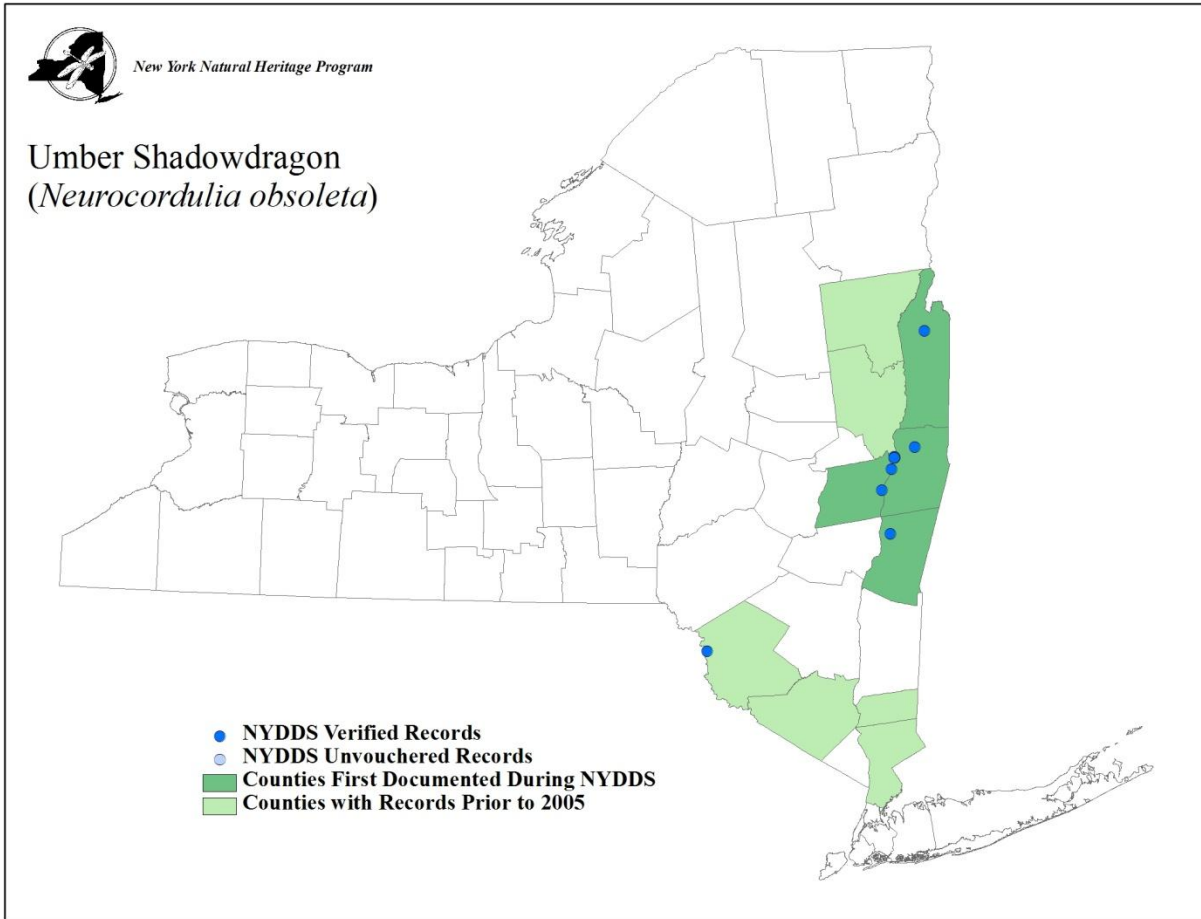


**CORDULIIDAE**

**Umber Shadowdragon (*Neurocordulia obsoleta*)**

**Pre-NYDDS Status: G5, SU**

**Draft Revised Status: S1**



(Donnelly 2004b)

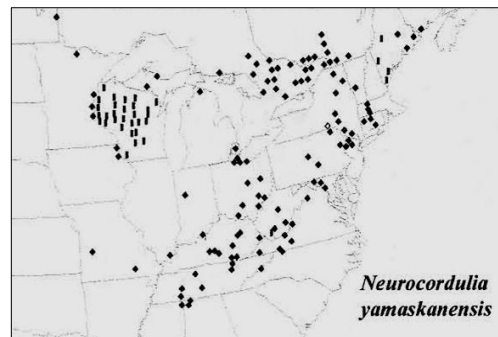
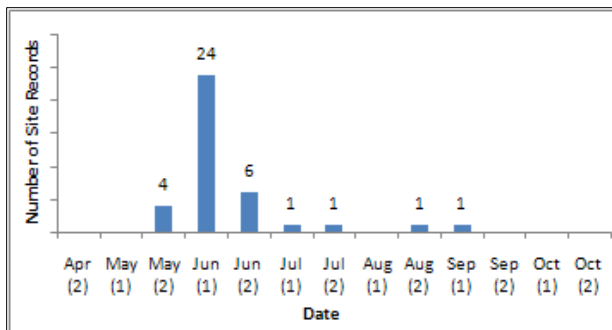
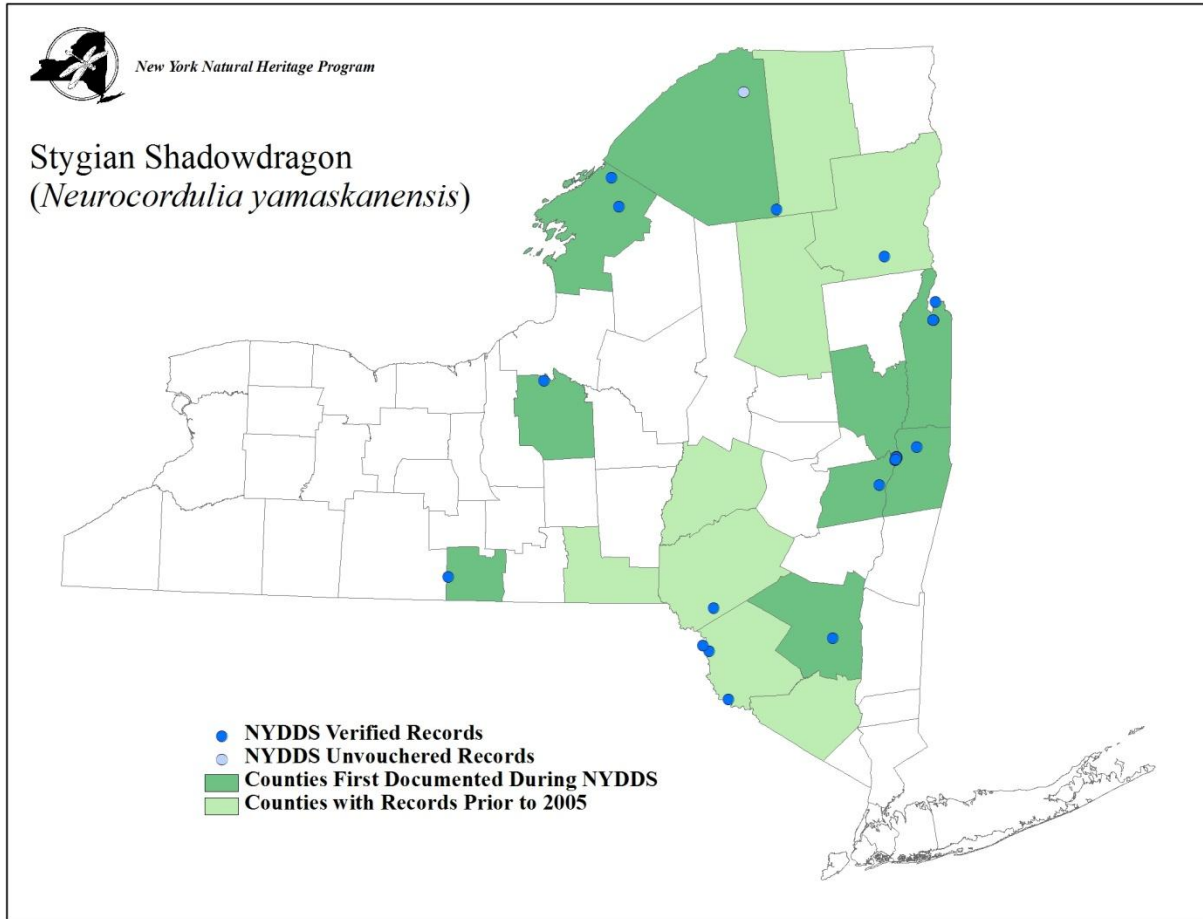


**CORDULIIDAE**

**Stygian Shadowdragon (*Neurocordulia yamaskanensis*)**

**Pre-NYDDS Status: G5, SU**

**Draft Revised Status: S3**



(Donnelly 2004d)





## CORDULIIDAE

### Ringed Emerald (*Somatochlora albicincta*)

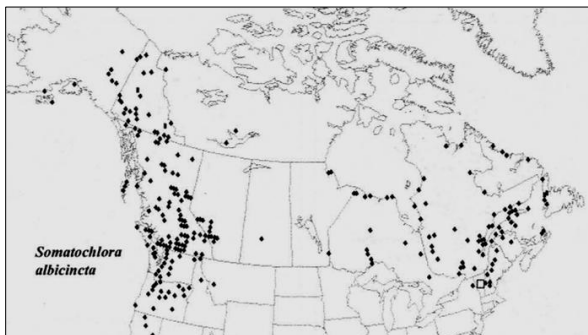
Pre-NYDDS Status: G5, SH

Draft Revised Status: SH

**Habitat Characteristics:** In the northeast, this species occupies cold smaller ponds and lakes at forested higher elevations (> 2200 ft.) with some water movement and often with shallow boggy shores and scattered, sparse sedge vegetation (Dunkle 2000; Pfeiffer 2007). In the northwestern Rocky Mountains, all occupied habitats are relatively open, unvegetated, shallow, rocky-bottomed ponds in valleys and mud-bottomed mossy fen ponds in the mountains (Cannings & Cannings 1994). Walker & Corbet (1975) observed that males favor low flight over the water near the mouths of small tributary streams. Boreal *Somatochlora* nymphs take at least 4 years to develop and they occupy shallow water meadows, sedge-filled pools, and sedge-filled shallows of small ponds. During this time, they are drought resistant and can survive dry conditions for up to 4-9 months through certain physiological adaptations and by actively burrowing in mud and seeking out sheltered locations in moss, cracks in mud, crevices in rotting logs, and sedge root clumps (Wiley & Eiler 1972).



Denis A. Doucet



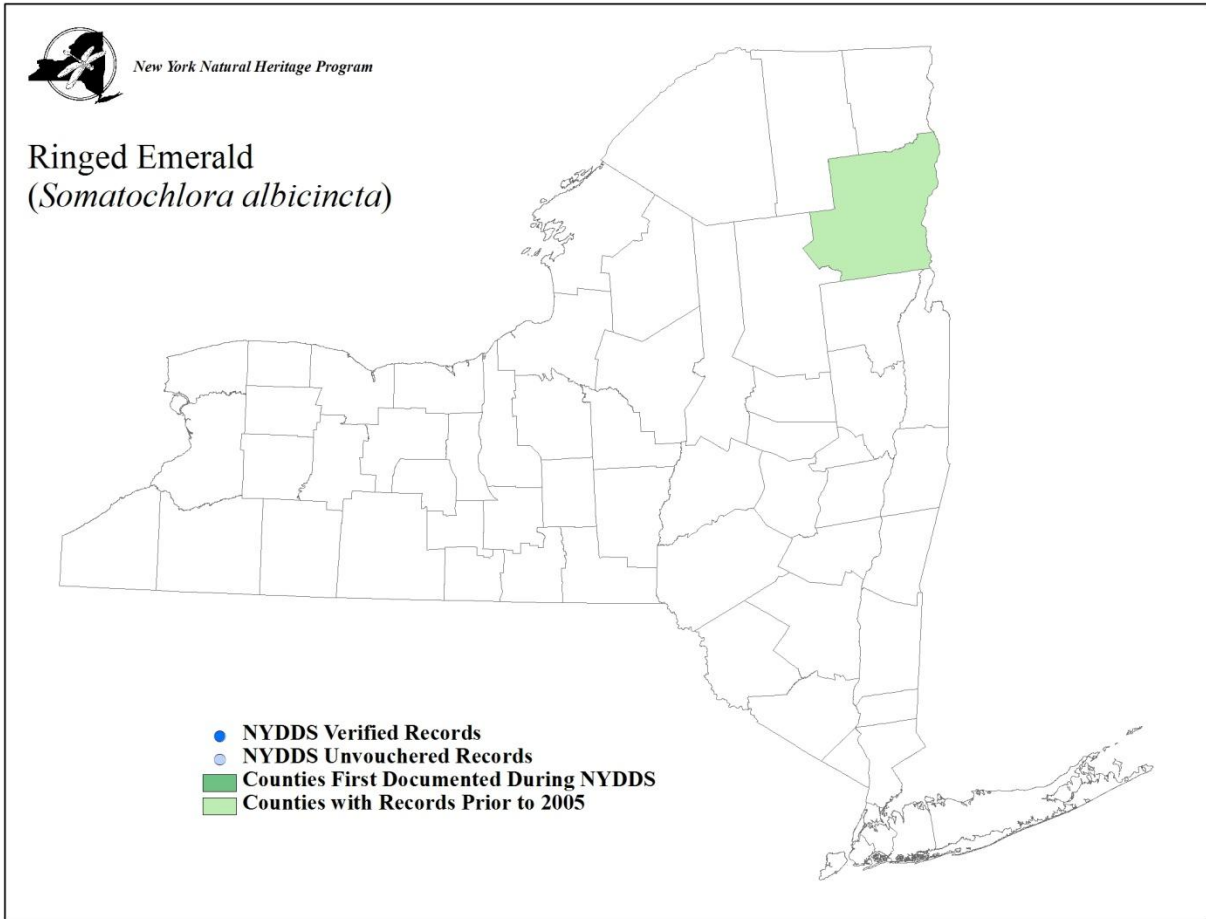
(Donnelly 2004d)

**Distribution and Inventory Needs:** The center of distribution for *S. albicincta* lies in northwestern Manitoba in the mid-Continental Canadian Forest ecoregion. It ranges west to Alaska, south to northern California, and northeast to Newfoundland and Labrador. New York lies at the southern range extent (Donnelly 2004d) and an older record from Lake Tear of the Clouds below Mt. Marcy and an older record from Mt. Marcy (Donnelly

1999) are the southernmost known occurrences in the northeast. It has not been seen in New York for at least 80 years, when Needham (1928) reported it from the Adirondack High Peaks. An excursion to Lake Tear of the Clouds by experienced surveyors on August 20, 2009 failed to turn it up (although survey duration and weather were not ideal) and it was not observed elsewhere during the NYDDS. An adult of this species was recently collected at Lake of the Clouds on Mt. Mansfield in Vermont (Pfeiffer 2007) at about 4000' elevation, and during the recent Maine Odonata survey several new locales were discovered in the White Mountains (Brunelle & deMaynadier 2005). It has not been found in southern Ontario since the early 1980s and extant records in this province are currently confined to regions along the shore of Hudson Bay (Ontario Natural Heritage Information Centre 2010b). Given the recent Vermont record, it seems plausible that this species still occurs on small, high elevation ponds or lakes in the Adirondack High Peaks, especially since *Somatochlora* almost always occur at low densities, they often fly high (30-50'), and adults are extremely elusive and difficult to capture (Packauskas 2005).



**Phenology:** Both historical records of *S. albicincta* in New York were in July (Needham 1928; Donnelly 1999), and Brunnelle & deMaynadier (2005) reported that the flight season in Maine runs from July 1 through the first week of August.



## CORDULIIDAE

### Lake Emerald (*Somatochlora cingulata*)

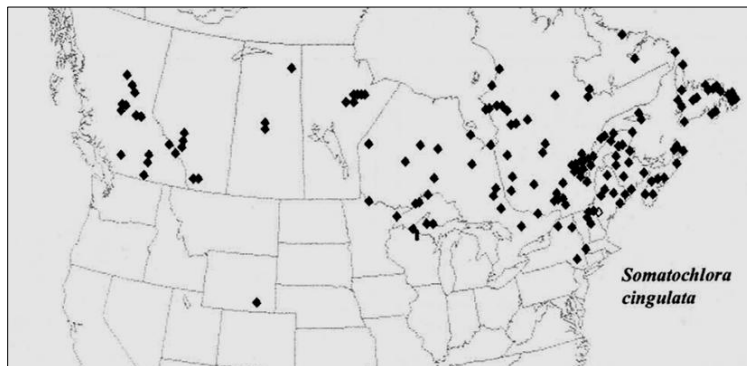
Pre-NYDDS Status: G5, S1

Draft Revised Status: S1

**Habitat Characteristics:** This boreal species does not seem to have clear habitat preferences, being found in both lentic and lotic habitats (Walker & Corbet 1975). Lentic habitats include shallower, boggy lakes as well as deeper rocky ponds with sandy beaches. Lotic habitats include sluggish well-vegetated reaches of medium-sized and large rivers (Cannings & Cannings 1994; Nikula *et al.* 2003). Despite being seen in New York only about six times, it has been found in all of these habitat types. Adults usually fly out of reach far out over the water (Walker & Corbet 1975). Boreal *Somatochlora* nymphs take at least 4 years to develop and they occupy shallow water meadows, sedge-filled pools, and sedge-filled shallows of small ponds. During this time, they are drought resistant and can survive dry conditions for up to 4-9 months through certain physiological adaptations and by actively burrowing in mud and seeking out sheltered locations in moss, cracks in mud, crevices in rotting logs, and sedge root clumps (Wiley & Eiler 1972).



Blair Nikula



(Donnelly 2004d)

### Distribution and Inventory

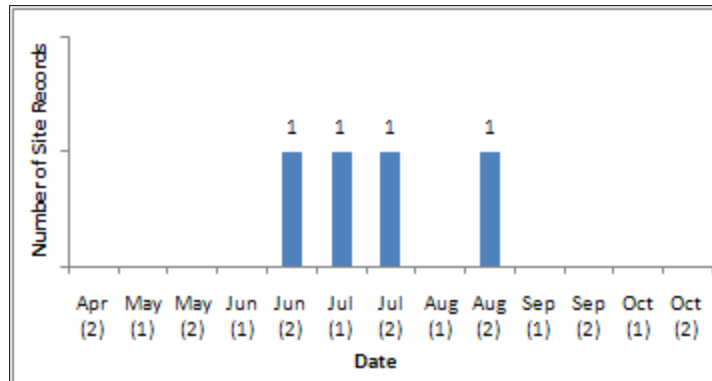
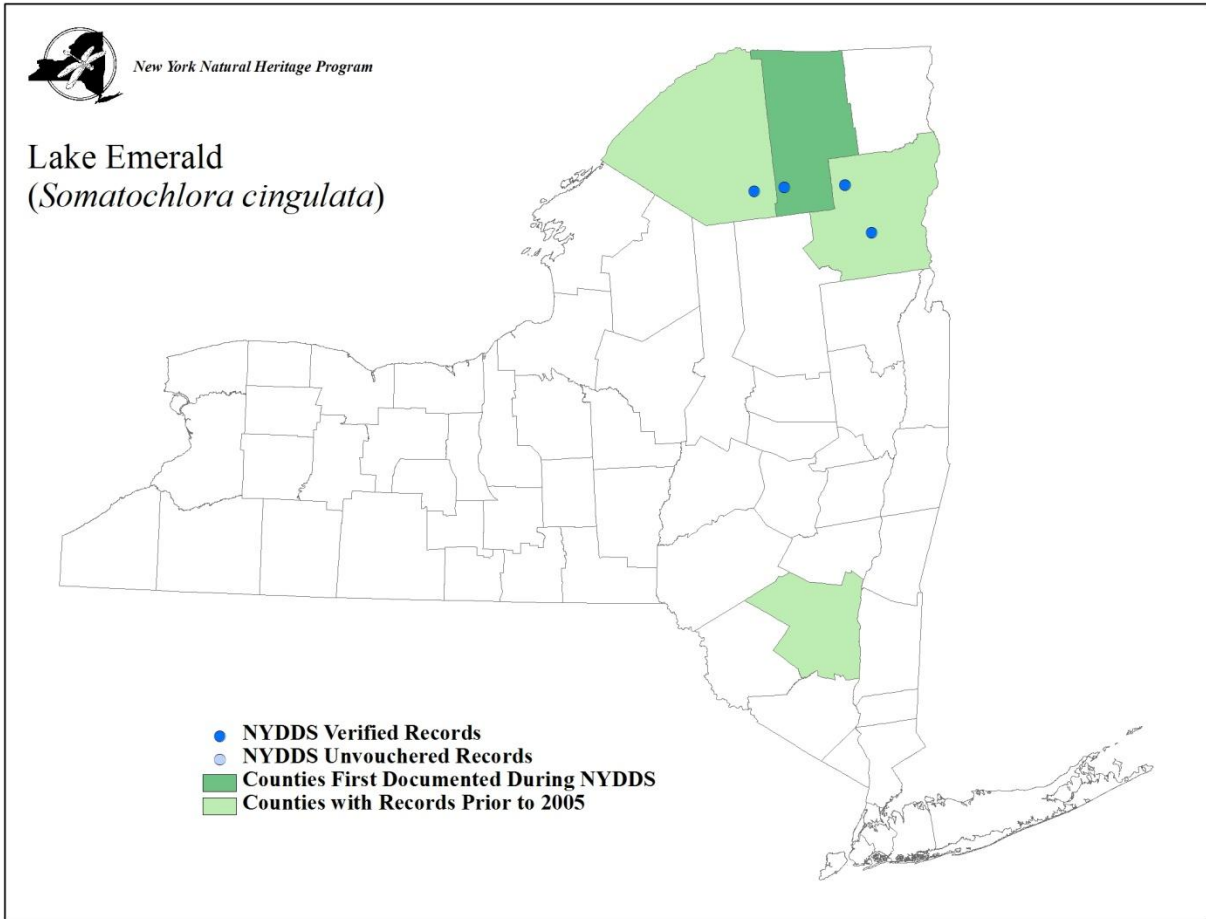
**Needs:** The center of distribution lies in northwestern Ontario in the central Canadian Shield forest, and ranges west to British Columbia, south to Wyoming, and northeast to Newfoundland and Labrador. New York lies at the southern range extent and a 1966 record from Slide Mountain in the Catskills is the southernmost known occurrence

in the northeast (Donnelly 1999, Donnelly 2004d). Sometime in the late 1960s-early 1970s, it also made a brief appearance at a high elevation nonbreeding habitat at Mt. Greylock in Massachusetts (Nikula *et al.* 2003). Pre-NYDDS presumed breeding records came from the Boreas River in Essex County, and at Massawepie Mire in St. Lawrence County. During NYDDS, they were observed and photographed at Massawepie Mire in 2007, and new records were located at beaches on ponds in Essex County (Clear Pond), and Franklin County (Little Wolf Pond) and on one river (Chubb in Essex County). It seems likely that this species occurs on other ponds, and perhaps rivers in the Adirondacks, and since the adults are very difficult to observe, exuviae can be sought on small sand beaches at ponds.

**Phenology:** *S. cingulata* has an extended flight season and all pre-and NYDDS records of adults and exuviae in New York have been found between June 25-August 15. This is shorter than in



Maine (Brunelle & deMaynadier 2005) where the flight season extends through September. Walker & Corbet (1975) reported that the majority of dates were in July and August.

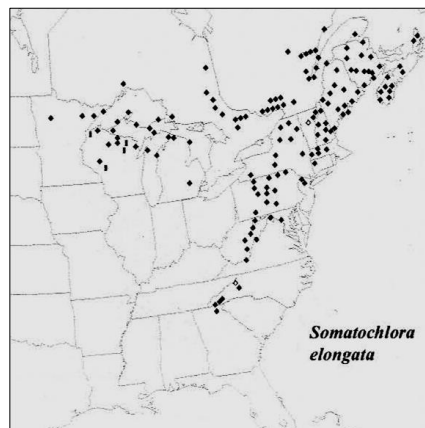
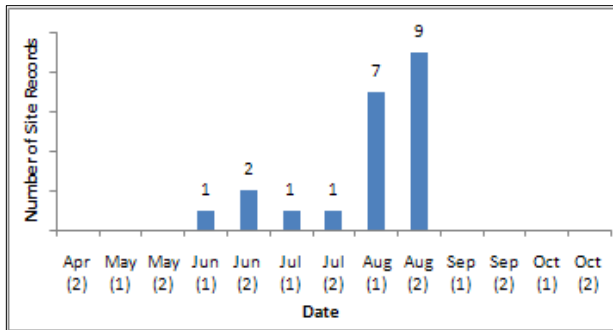
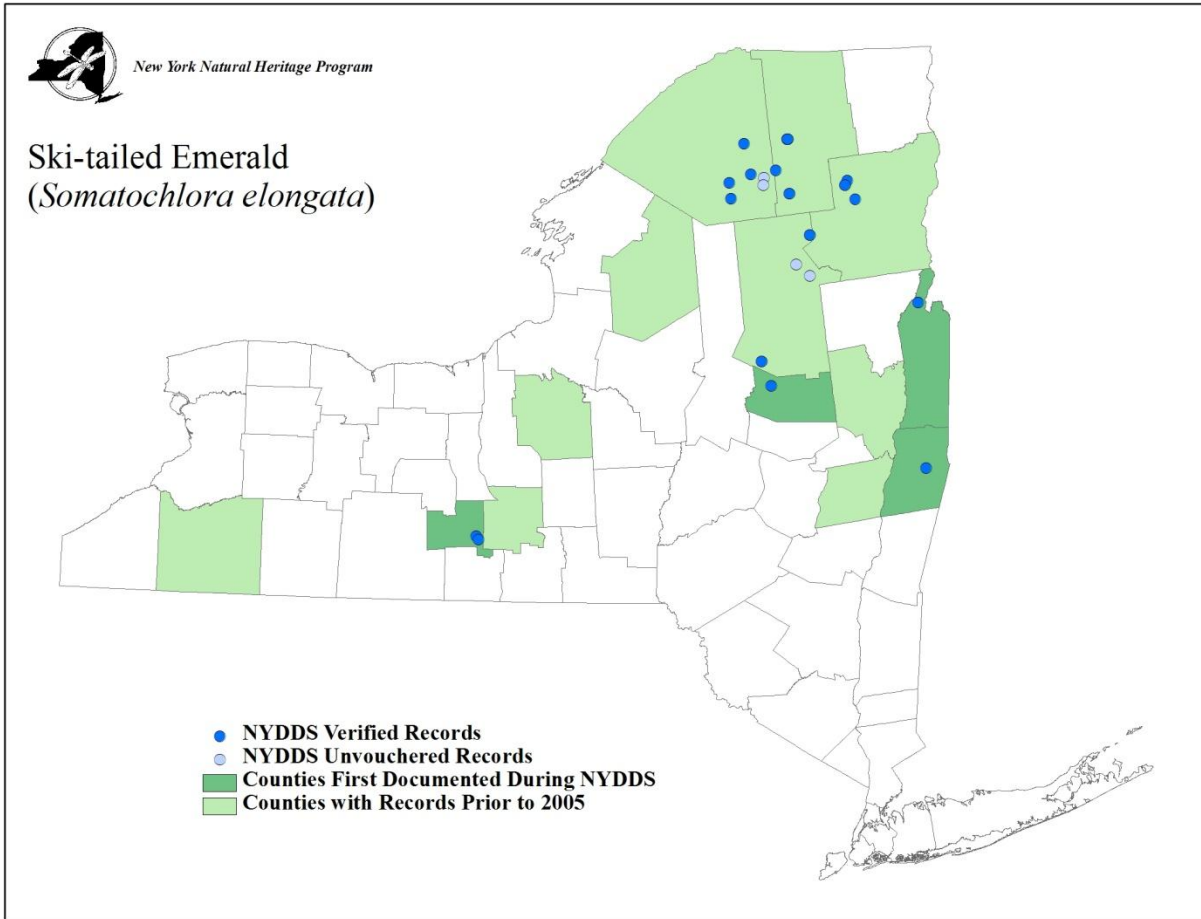


**CORDULIIDAE**

**Ski-tailed Emerald (*Somatochlora elongata*)**

**Pre-NYDDS Status: G5, S4**

**Draft Revised Status: S3S4**



(Donnelly 2004d)



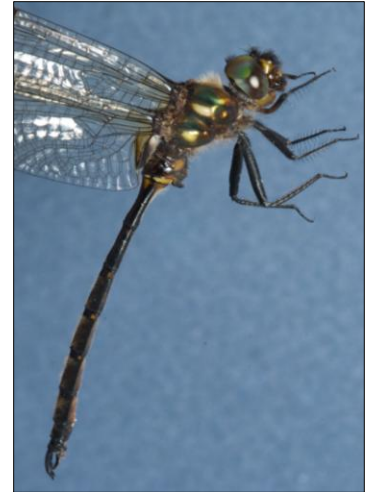
## CORDULIIDAE

### Forcipate Emerald (*Somatochlora forcipata*)

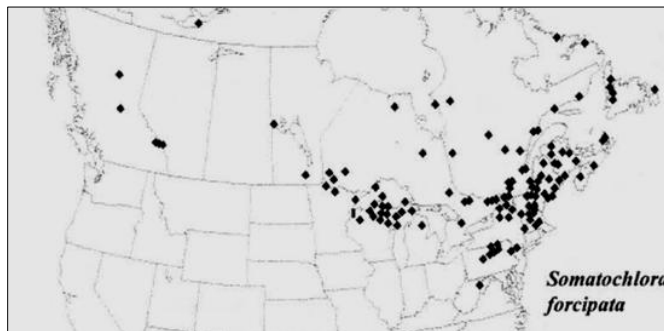
Pre-NYDDS Status: G5, S1

Draft Revised Status: S1S3

**Habitat Characteristics:** Throughout its range, this species inhabits small spring-fed boggy streams and it feeds in sunny glades and along roads, perching in trees 15-20' high (Walker & Corbet 1975). In New York, specific habitat characteristics include large bogs and boggy swales. The boggy swale has a lush growth of *Carex*, blue flag, and sphagnum. Water flows slowly through the swale and pools are present in some areas; the water was several inches deep in July. The swale is connected to a large poor fen/spruce tamarack bog complex. Boreal *Somatochlora* nymphs take at least 4 years to develop and they occupy shallow water meadows, sedge-filled pools, and sedge-filled shallows of small ponds. During this time, they are drought resistant and can survive dry conditions for up to 4-9 months through certain physiological adaptations and by actively burrowing in mud and seeking out sheltered locations in moss, cracks in mud, crevices in rotting logs, and sedge root clumps (Wiley & Eiler 1972).



Stephen Diehl and Vici Zaremba 2008



(Donnelly 2004d)

### Distribution and Inventory Needs:

The center of distribution lies in north-central Ontario in the central Canadian Shield forest ecoregion and ranges northwestward to the Northwest Territories, south to northern Wisconsin and West Virginia, northeastward to Newfoundland and Labrador (Donnelly 2004d). New York lies near the center of the range, but this species was not discovered in the state until 1980 in

Hamilton County (Donnelly 1999) at McGinn Meadows. It was already known from several northeastern states, including farther south in Pennsylvania, before this time (Walker & Corbet 1975), but most northeastern U.S. records came after the 1920s (Walker 1925). During the 1990s, it was discovered in large bog complexes in Franklin County (Bloomindale Bog, Spring Pond Bog, Kildare peatlands), and St. Lawrence County (Hitchins Pond Bog) as well as sites in Essex and Lewis County (Donnelly 1999, 2004a). Additional new bog sites in the Adirondacks were added during the NYDDS in Hamilton and Franklin Counties and at least two of the known sites have been extant for 10-15 years. In 2007, the range was extended significantly southward in New York to the Rensselaer Plateau when an adult was captured at the Dyken Pond Educational Center and records are known from nearby in western Vermont and Massachusetts (Donnelly 2004d).

This pattern could suggest a recent range expansion for this species or simply increased survey efforts; similarly, the number of known townships inhabited by this species in Maine doubled to over 25 during recent atlas efforts in that state (Brunelle & deMaynadier 2005). It is



likely that this species occurs on small streams primarily within larger bogs (more infrequently at smaller ones) throughout the Adirondacks and perhaps the Tug Hill and Rensselaer Plateaus, especially since *Somatochlora* almost always occur at low densities, they often fly high (30-50'), and adults are extremely elusive and difficult to capture (Packauskas 2005). In addition, appropriate bog/fen habitats should be searched in Sullivan and Orange Counties and along the central Southern Tier in Steuben, Tioga, Chemung and Broome Counties because there are known records in adjacent New Jersey and Pennsylvania (Donnelly 2004d).

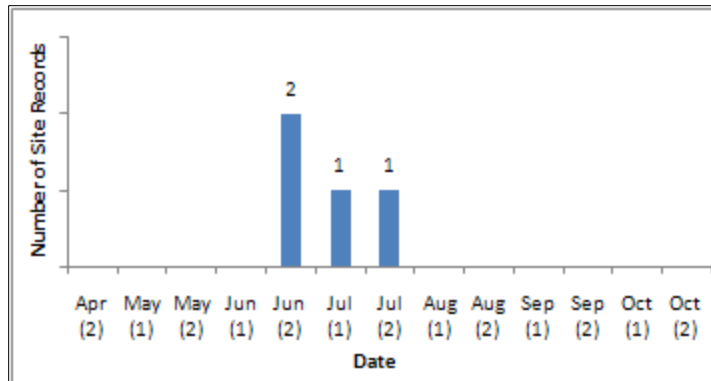
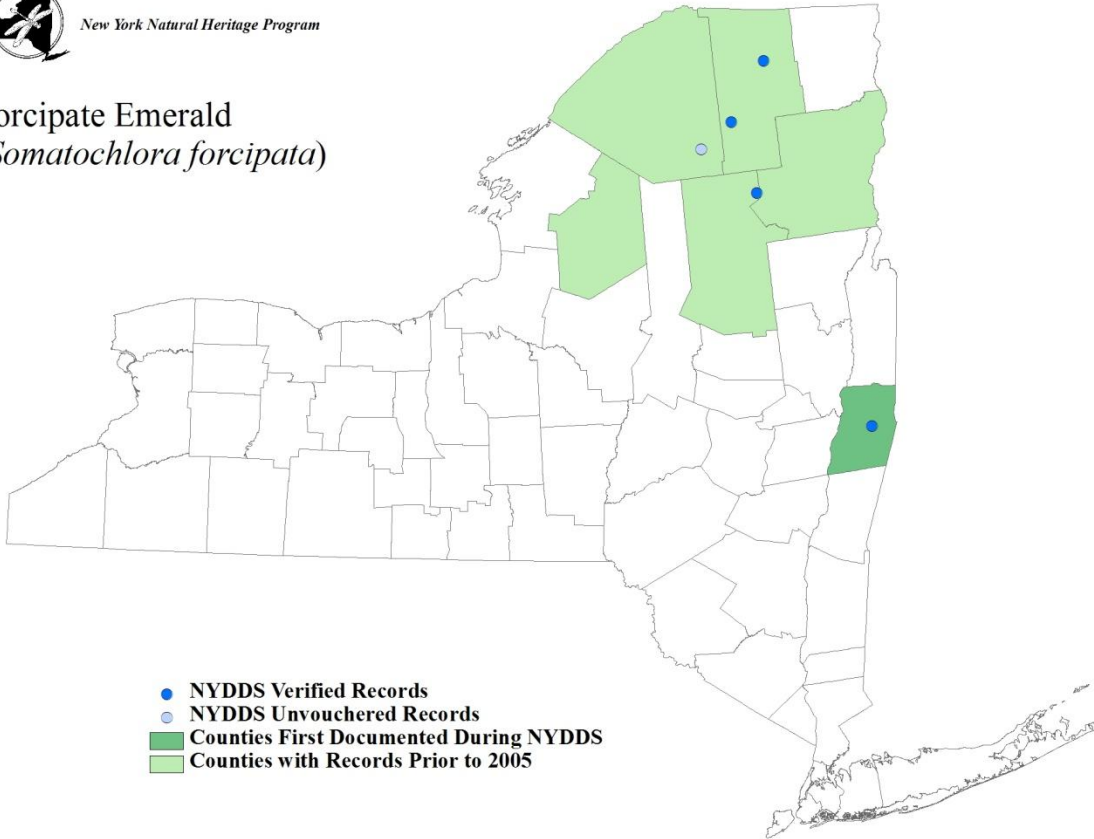
**Phenology:** Donnelly (1999) reported the flight season in New York as June 23 to July 11. This is significantly shorter than reported in Maine (Brunelle & deMaynadier 2005) and Massachusetts (Nikula *et al.* 2003) which runs from the end of May to early-September, which is also similar to the flight season reported by Walker & Corbet (1975), who stated that July was the peak flight season. Our phenology data both from NY Natural Heritage database records, as well as the newer NYDDS sightings, supports Donnelly's (1999) description of a more protracted three week flight season in New York, from June 23 to July 15.





New York Natural Heritage Program

### Forcipate Emerald (*Somatochlora forcipata*)



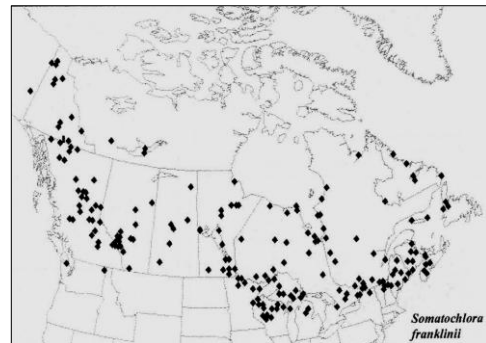
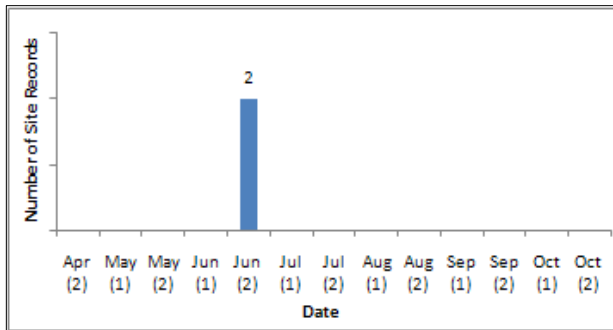
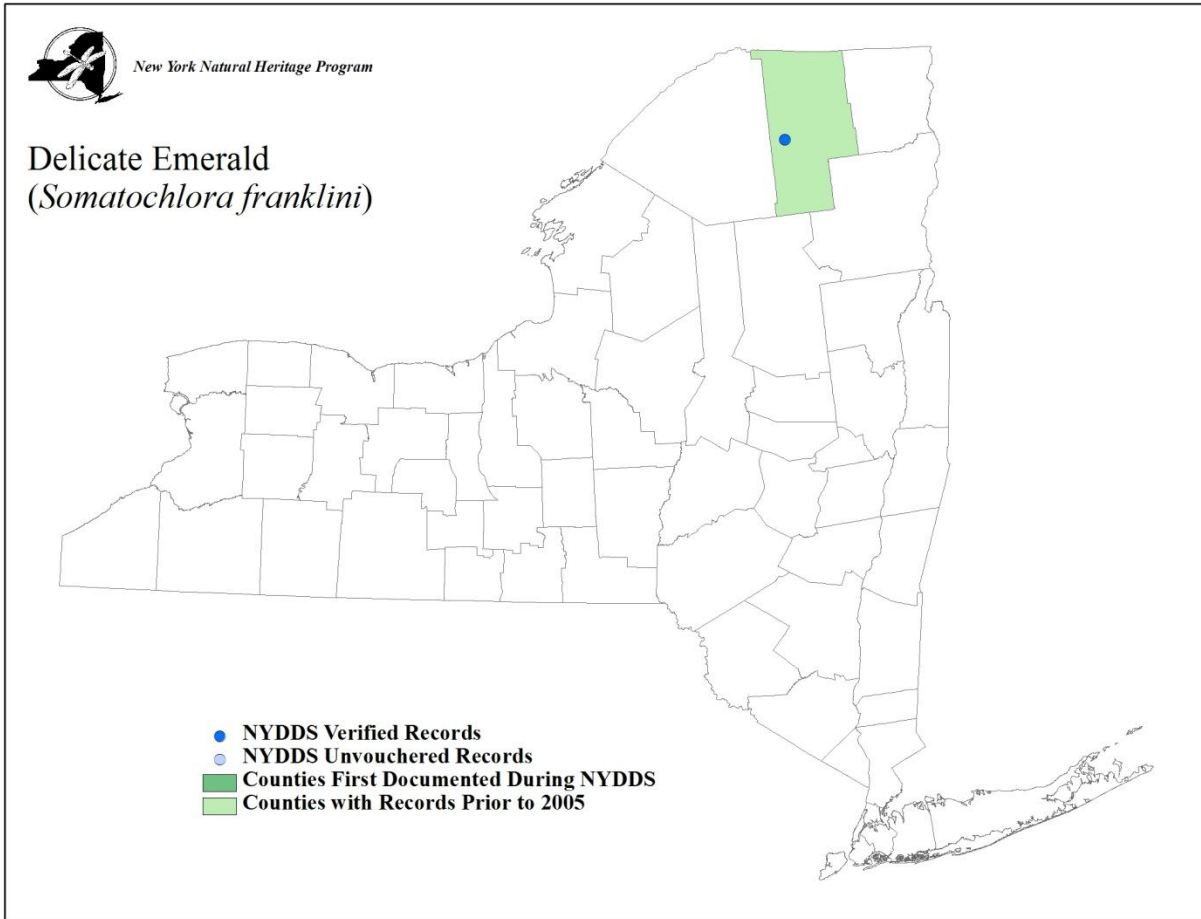


**CORDULIIDAE**

**Delicate Emerald (*Somatochlora franklini*)**

**Pre-NYDDS Status: G5, SNR**

**Draft Revised Status: S1**



(Donnelly 2004d)



## CORDULIIDAE

### Incurvate Emerald (*Somatochlora incurvata*)

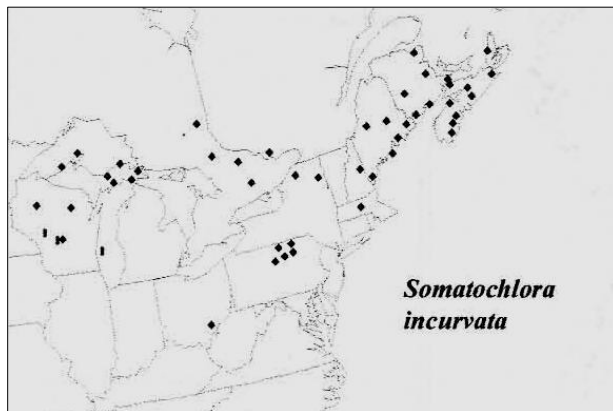
Pre-NYDDS Status: G5, S1

Draft Revised Status: S1S3

**Habitat Characteristics:** In New York this species inhabits large, open, forest-bordered bogs, poor fens, and peatlands with widely scattered tamarack and black spruce, and ericaceous bog shrubs interspersed with sedges and Sphagnum, with abundant shallow, pooled water and rivulets. The water in these pools is clear and cold and moves almost imperceptibly through the sphagnum mat (Shiffer 1993). In Michigan, *S. incurvata* can be found in patterned peatlands and northern fens associated with marl- or peat-containing flowing alkaline groundwater (Lee 1999). Wisconsin habitats are large wetland complexes on old glacial lake beds, often adjacent to sandy pine uplands. Larvae have only recently been described and were found clinging to the underside of sphagnum mounds at pool edges in partially decomposed dark brown sphagnum and sedges (Wisconsin Natural Heritage Inventory Program 2010). Boreal *Somatochlora* nymphs take at least 4 years to develop and they occupy shallow water meadows, sedge-filled pools, and sedge-filled shallows of small ponds. During this time, they are drought resistant and can survive dry conditions for up to 4-9 months through certain physiological adaptations and by actively burrowing in mud and seeking out sheltered locations in moss, cracks in mud, crevices in rotting logs, and sedge root clumps (Wiley & Eiler 1972). Males fly low and erratically over vegetation and occasionally perch on tree branches or hover over open pools.



Denis A. Doucet



(Donnelly 2004d)

**Distribution and Inventory Needs:** The center of distribution lies in southeastern Ontario in the eastern Great lakes lowland forest ecoregion and ranges westward to Wisconsin, east to Nova Scotia and south to Ohio (Donnelly 2004d). New York lies near this center, but the species is exceedingly rare and only known from a handful of northern bogs. This species (all adults; exuviae have not been reported in New York) was not discovered in the state until the early-mid 1990s at Massawepie Mire and Bloomingdale Bog in the northern

Adirondacks (Donnelly 1999). It was not seen again until about 10 years later in the northern Adirondacks when a male was found at Sevey Bog in 2004 and at Jordan River Bog in 2005 (New York Natural Heritage Program 2010). The species seems to be highly ephemeral in New York because it has rarely been observed at a site subsequent to the initial sighting (with the exception of Massawepie Mire), despite numerous visits by experienced surveyors. This pattern is similar to Michigan where the species was first described in 1916, but not seen again until the early 1990s (Lee 1999). In Maine, (Brunelle & deMaynadier 2005), and Nova Scotia (Sjogren



2002) the species was found at several new locations after 1999. An informative distribution model developed by NY Natural Heritage highlighted several large bogs in southern Franklin County that would be worthy of intensive survey efforts including north of the St. Regis River near Whitney Pond and Black Pond Swamp and Bull Rush Bay on Middle Saranac Lake in the Saranac Lakes Wild Forest (New York Natural Heritage Program 2006).

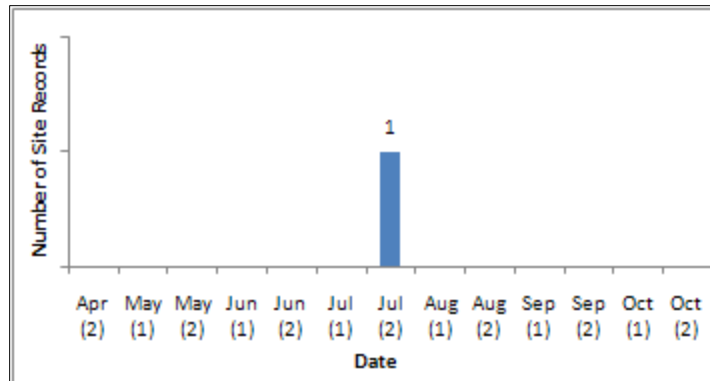
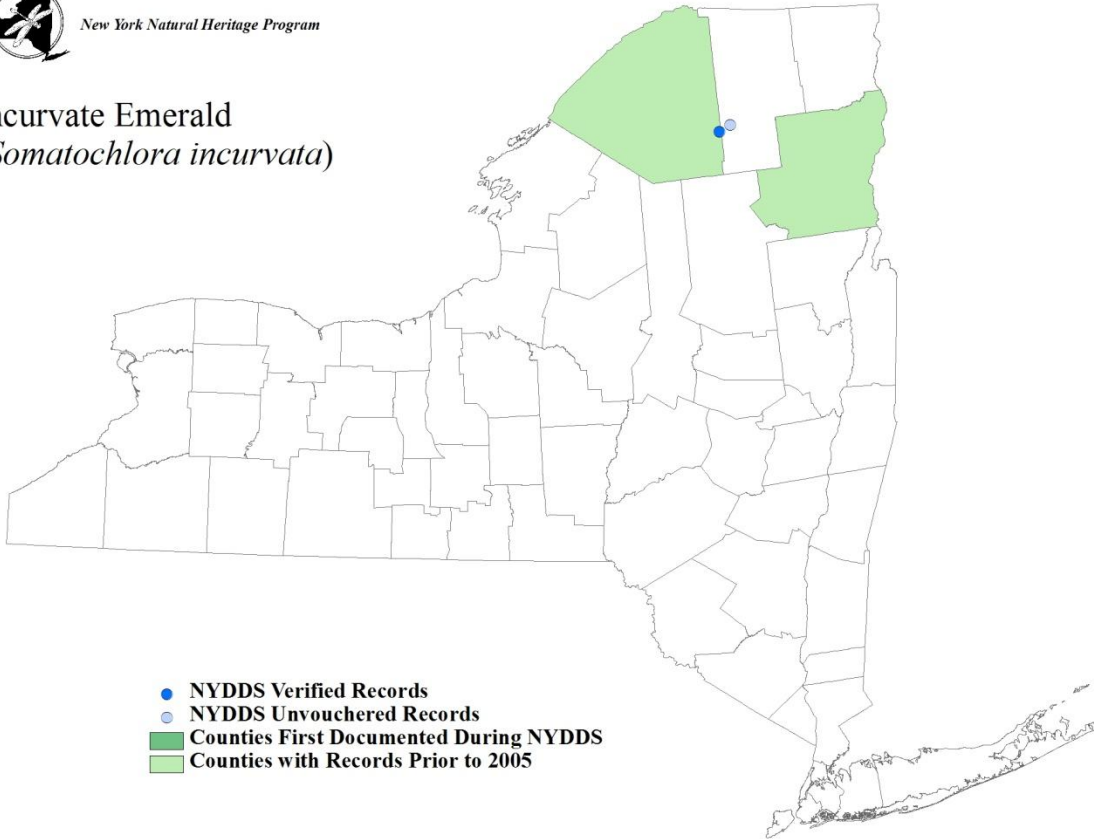
**Phenology:** All of the New York records were from July 20 through August 14. This is similar to the flight season in Michigan (Lee 1999), but significantly shorter than in the other parts of the range and in the northeast where it has been observed from late June to early October (Walker & Corbet 1975; Shiffer 1993; Nikula *et al.* 2003; Brunelle & deMaynadier 2005). Sjogren (2002) suggests that surveys for adults should be conducted from mid-July through August.





New York Natural Heritage Program

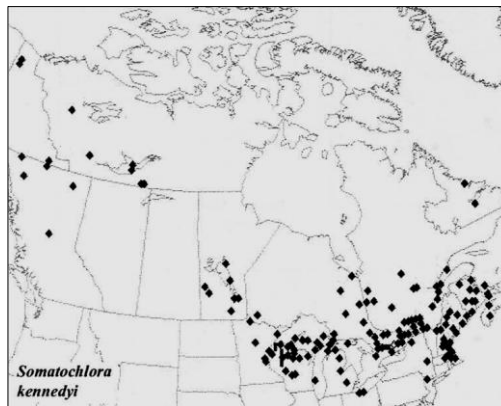
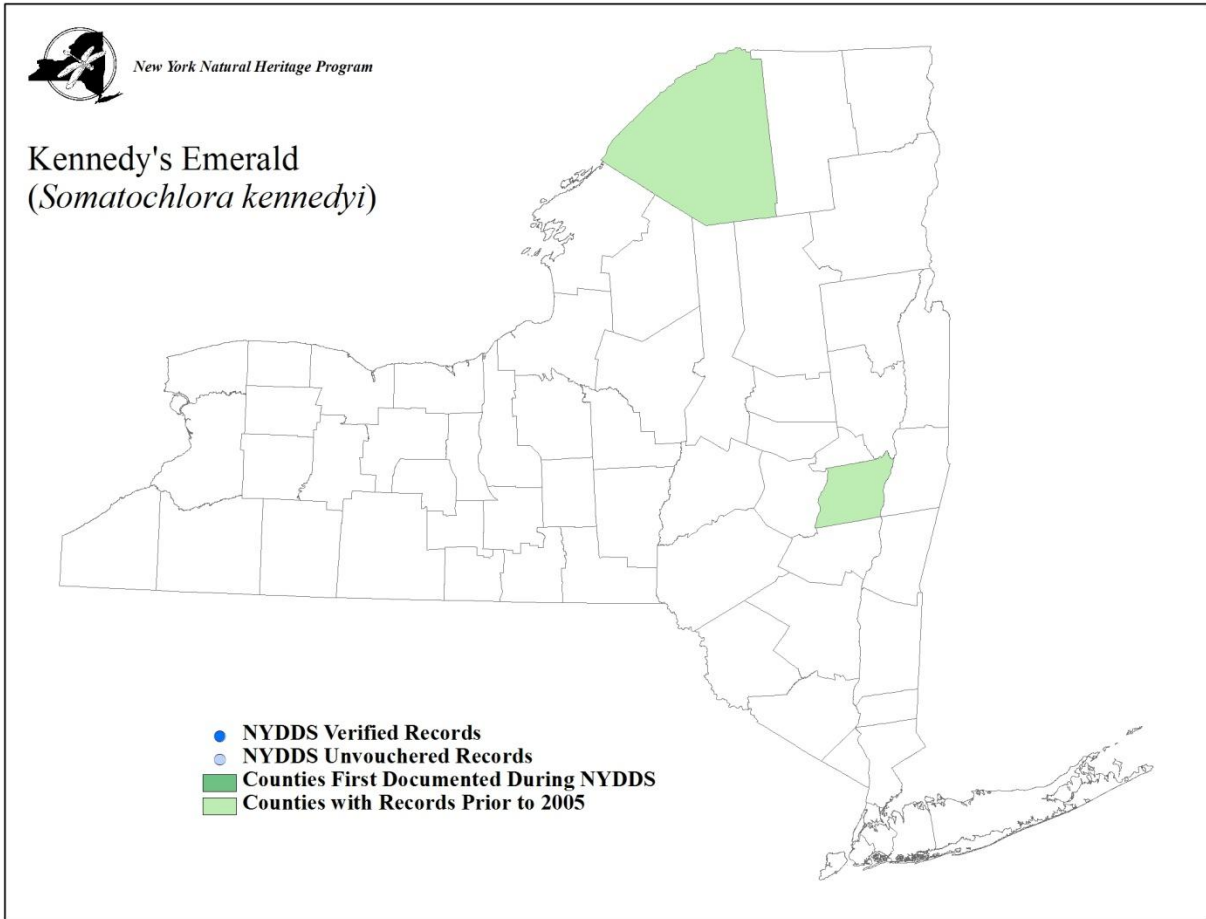
### Incurvate Emerald (*Somatochlora incurvata*)



**CORDULIIDAE**

**Kennedy's Emerald (*Somatochlora kennedyi*)**

**Pre-NYDDS Status: G5, SNA**



(Donnelly 2004d)



## CORDULIIDAE

### Mocha Emerald (*Somatochlora linearis*)

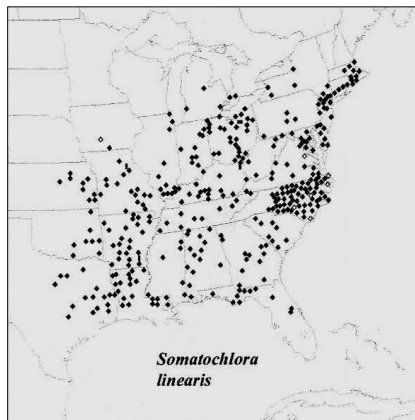
Pre-NYDDS Status: G5, S2S3

Draft Revised Status: S1



Steve Walter 2007

**Habitat Characteristics:** Rangelwide, *S. linearis* inhabits small (3-9' wide) intermittent, shaded streams with fine gravel and/or sandy substrates in deciduous forests (Dunkle 2000). The most complete habitat description comes from eastern Massachusetts where SaintOurs (2004) found large numbers in habitats where small intermittent forest streams crossed open areas, particularly utility easements and the substrate was muck-bottomed or boggy, often choked with sphagnum and smartweed. Individuals could also be found away from watercourses at forest ecotones. This habitat is similar to a site in Rockland County which is a low-gradient intermittent section of a forested stream flowing from a sedge meadow with vegetated banks containing sedge and sphagnum tussocks.



(Donnelly 2004d)

**Distribution and Inventory Needs:** The distributional center of *S. linearis* is in central Kentucky in the central U.S. Hardwood forest ecoregion and ranges south to Florida and Texas, north to Michigan and Massachusetts. Unlike most New York *Somatochlora*, this is a southern species that inhabits hardwood forests, and an older record from Oswego County (pre-1926) is the northernmost occurrence known (Needham 1928, Donnelly 2004d). Currently, it appears to be confined to extreme southeastern New York in the Lower Hudson River watershed as NYDDS records came from Orange, Rockland and Westchester Counties. One was observed as part of a multi-species feeding swarm on the edge of the Catskills in 2007 in Greene County.

Donnelly (1999) however, reported it as far north as West Point and Swamp River (Dutchess County) in the Hudson Valley. A more severe range contraction has apparently occurred in western and central New York because it was historically known from scattered locales including at Red House Brook in Allegany State Park where it has not been found since it was first discovered in 1981, despite follow-up searches. Other upstate locales have not been reported since 1928 (Needham 1928) and the species is known from as early as the late 1800s from Grand Island in Erie County (Walker 1925).

This apparent contraction is peculiar as SaintOurs (2004) recently reported good numbers in eastern Massachusetts and the species is apparently expanding its range in the Midwest (The Ohio Odonata Society 2000, Johnson 2003). Purdue *et. al* (1999) found high genetic variation in *S. linearis* from Illinois and Arkansas, suggesting effective ongoing dispersal among these populations and their data supported the conclusion that occupied areas to the north (i.e., New York) that were covered in ice during the last glacial maximum were likely colonized by these more southerly populations in the lower Midwest. A distribution model developed by NY Natural Heritage indicated that the species may be temperature limited as it is not predicted to



occur north of the lower Hudson Valley or southwestern New York. A few locations in Putnam County, especially around Philipse Brook, Sprout Brook, and Canopus Creek may hold populations waiting to be discovered. Likewise, small watercourses in and around Allegany State Park (Sawmill Run, Quaker Run, Chipmunk Creek, Limestone Brook) could also prove fruitful (New York Natural Heritage Program 2005).

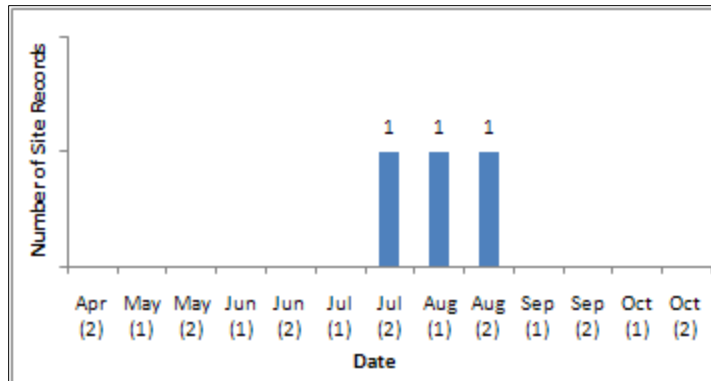
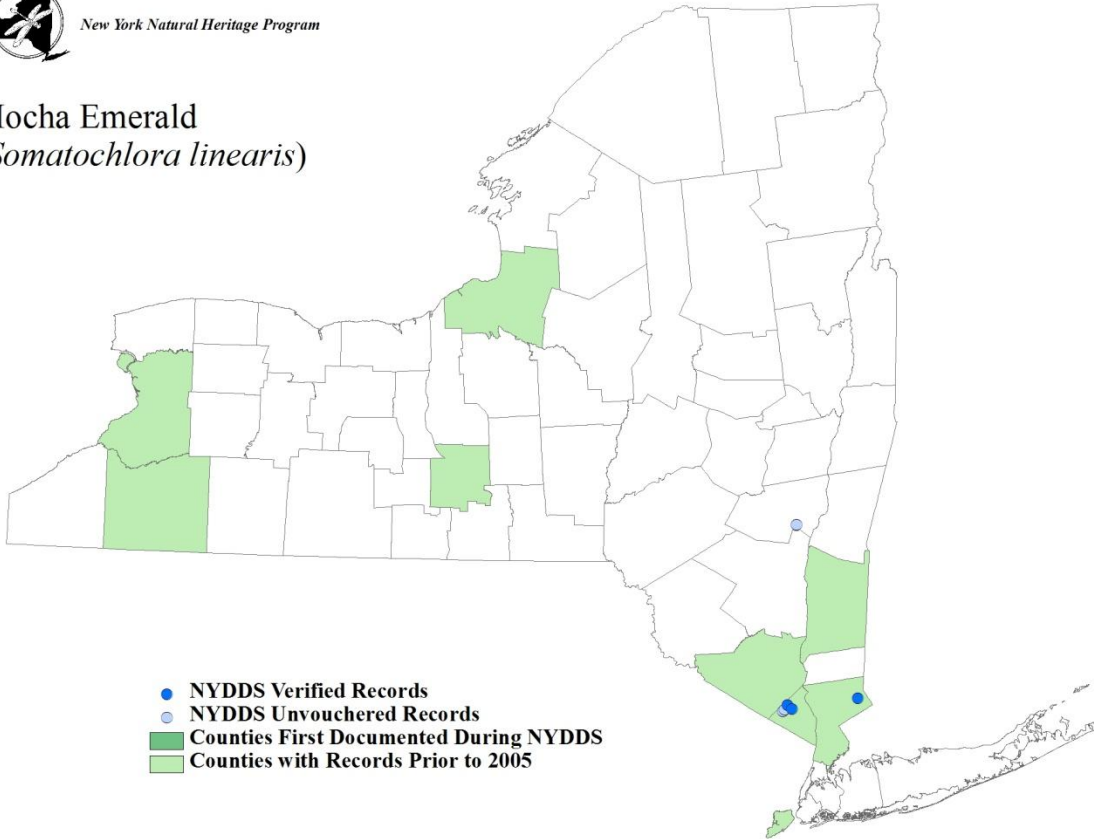
**Phenology:** Mid-June to mid-September (New York Natural Heritage Program 2007d) is the reported flight season in New York, which is similar to other states in the northeast (Massachusetts NHESP 2003f, Bangma & Barlow 2010b). Our phenology data, both from NY Natural Heritage database records, as well as the newer NYDDS sightings, support a more protracted seven-week flight season in New York, from July 22 to September 12, with most records coming in August.





New York Natural Heritage Program

### Mocha Emerald (*Somatochlora linearis*)





## CORDULIIDAE

### Ocellated Emerald (*Somatochlora minor*)

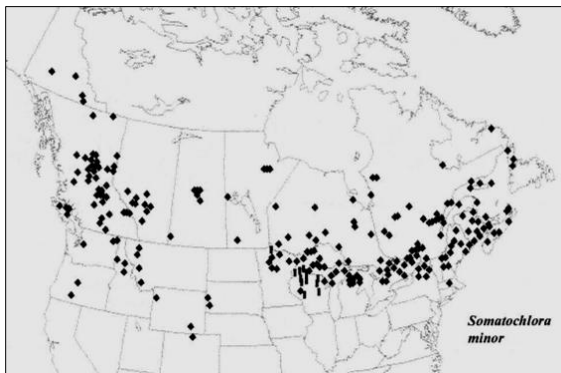
Pre-NYDDS Status: G5, S2S3

Draft Revised Status: S1S3



Stephen Diehl and Vici Zaremba 2008

**Habitat Characteristics:** In New York, the most thorough habitat description comes from a site in St. Lawrence County. The dragonfly was found in a wetland with a small stream (5-8' wide) running through the center with a mud and muck bottom. There is at least one small beaver dam and one end of the bog that appears to have been impounded in previous years and scattered dead spruce and a marshy portion at the far end. One end of the wetland is a more typical bog with stunted black spruce, tamarack, ericaceous shrubs, sedges, cranberries, and areas of standing water and rivulets. At the ends of the bog the spruce grades into dense 10-30 ft-tall black spruce and tamarack. Likewise, the remaining four extant locales in New York came from streams in, or near similar bog habitats. Habitats in Michigan (Ross 2001) were along thin outlet channels from beaver ponds and lakes within open sedge meadows where grasses overhang the waterways. Both of these habitat types are much narrower than the typical small clear, rocky gently flowing forest streams without emergent vegetation (Walker & Corbet 1975, Dunkle 2000), and this species is not considered an inhabitant of Cordilleran peatlands (Cannings & Cannings 1994). These differences may lie in alternative habitat preferences in eastern vs. western North American populations. Boreal *Somatochlora* nymphs take at least 4 years to develop and they occupy shallow water meadows, sedge-filled pools, and sedge-filled shallows of small ponds. During this time, they are drought resistant and can survive dry conditions for up to 4-9 months through certain physiological adaptations and by actively burrowing in mud and seeking out sheltered locations in moss, cracks in mud, crevices in rotting logs, and sedge root clumps (Wiley & Eiler 1972).



(Donnelly 2004d)

**Distribution and Inventory Needs:** The center of distribution lies in northwestern Ontario in the Midwest Canadian Shield forest ecoregion and ranges westward to the Yukon, south to Colorado and northeastward to Newfoundland and Labrador. New York lies along the southeastern range extent and the Adirondack records are some of the southernmost known occurrences in the northeast (Donnelly 2004d). Over the years, this species was known from a single vague museum record near Harrietstown in 1922 (Bloomingdale Bog?) in Franklin County (Walker 1925, Needham 1928). Donnelly (1999)

reported records from the early to mid-1990s at Bloomingdale Bog in Essex County, Spring Pond Bog near Derrick in Franklin County, and at Oswegatchie in St. Lawrence County. The range was extended further south in the early 2000s during field trips for Odonatology meetings when records were reported for Lewis and Hamilton Counties (Donnelly 2004a), and another at Leonard Pond Bog near Sevey Corners in St. Lawrence County. Then, in 2008, NYDDS



surveyors found *S. minor* along bog streams along Blue Mountain Road in southern Franklin County during a Northeast Dragonfly Society of the Americas (DSA) meeting.

This pattern could suggest a recent range expansion for this species, or simply increased survey efforts; similarly, the number of known townships inhabited by this species in Maine more than tripled to over 40 during atlas efforts in that state (Brunelle & deMaynadier 2005). It is likely that this species occurs on small streams within larger bogs throughout the Adirondacks and perhaps the Tug Hill Plateau, especially since *Somatochlora* almost always occur at low densities, they often fly high (30-50'), and adults are extremely elusive and difficult to capture (Packauskas 2005).

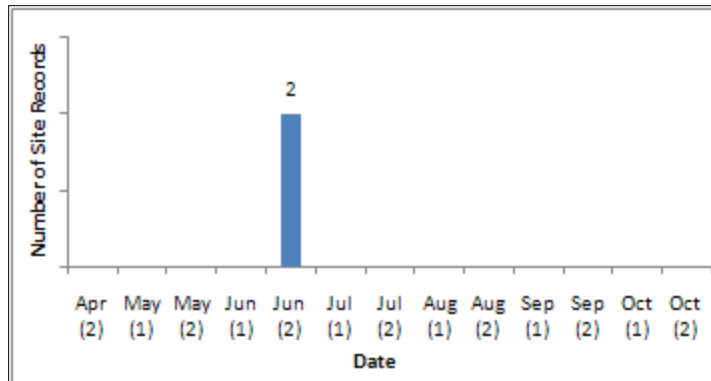
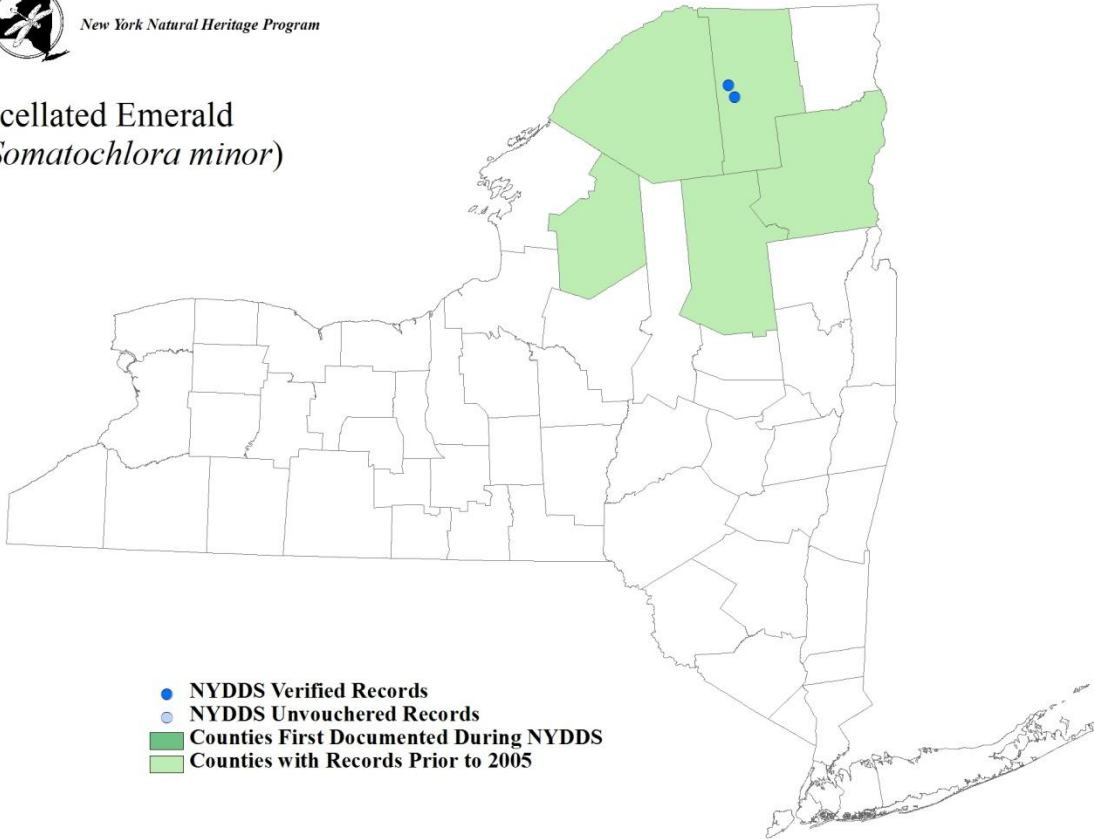
**Phenology:** Donnelly (1999) reported the flight season as June 12 to August 5, similar to the flight season (mid-June to mid-August) in Maine (Brunelle & deMaynadier 2005), but the above records (NYDDS) and those from the NY Natural Heritage database were all found over the span of about a month between June 27 to July 21.





New York Natural Heritage Program

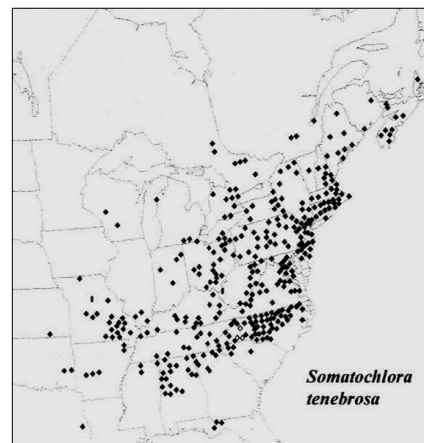
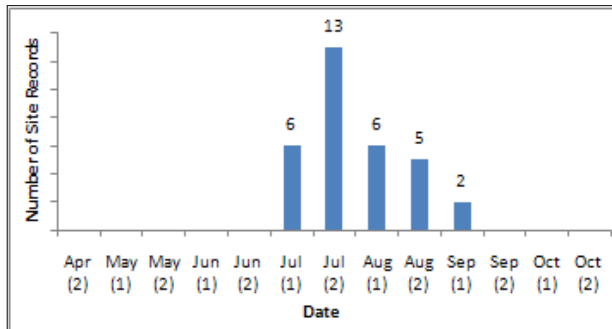
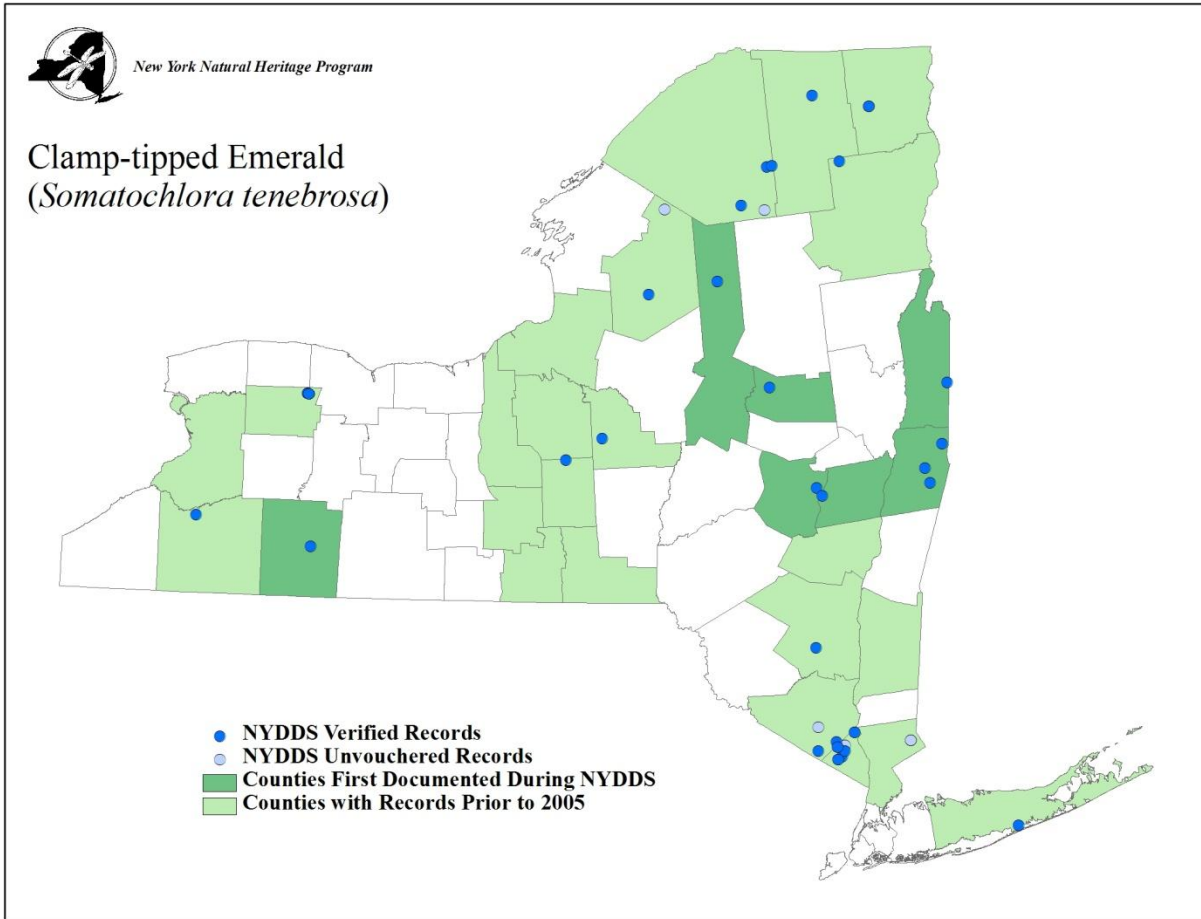
### Ocellated Emerald (*Somatochlora minor*)



**CORDULIIDAE**

**Clamp-tipped Emerald (*Somatochlora tenebrosa*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004b)

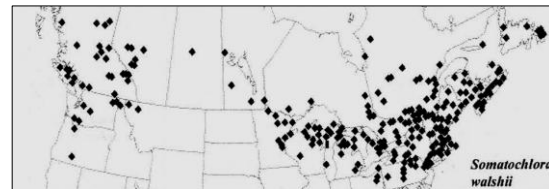
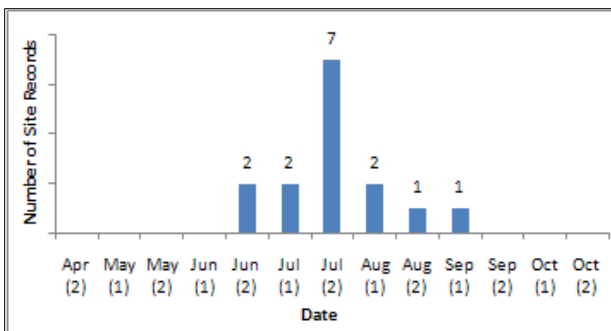
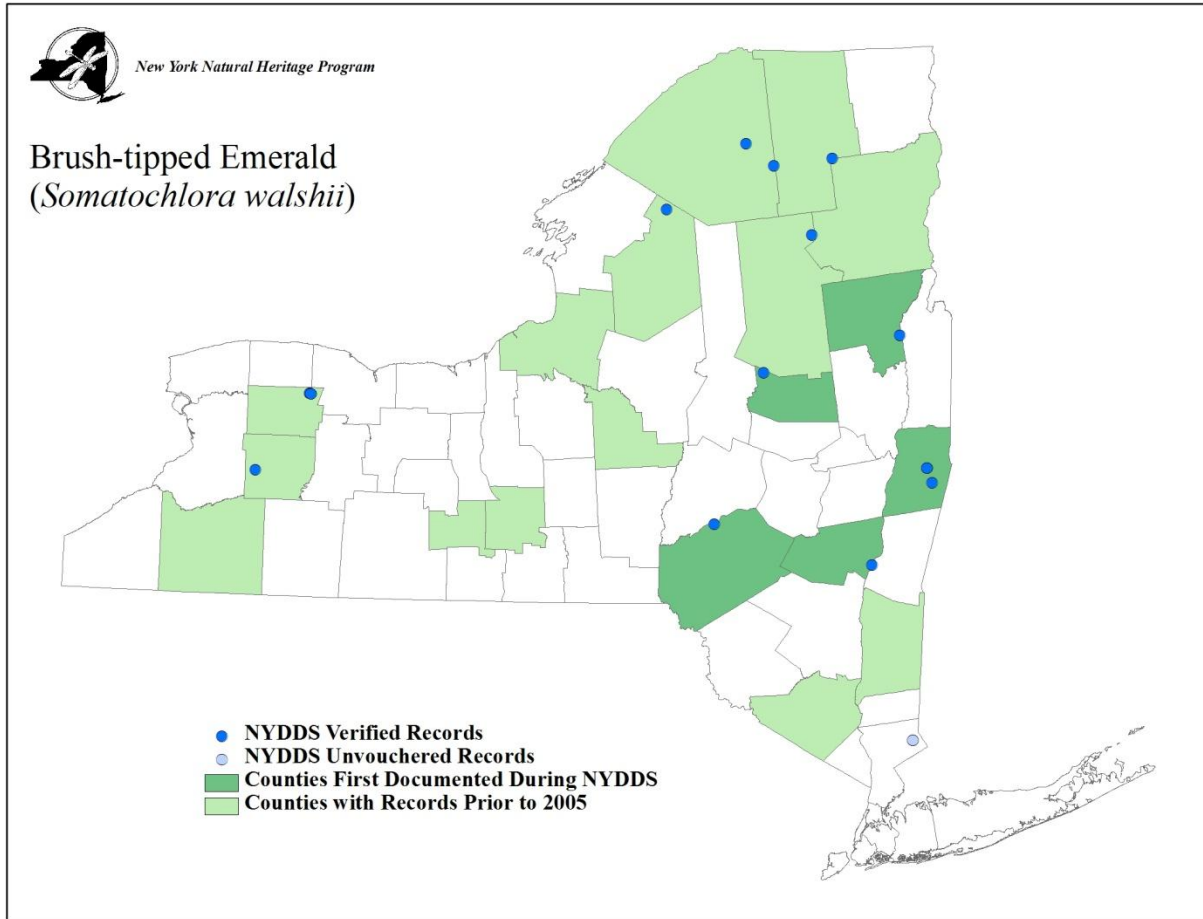


**CORDULIIDAE**

**Brush-tipped Emerald (*Somatochlora walshii*)**

**Pre-NYDDS Status: G5, S3**

**Draft Revised Status: S3**



(Donnelly 2004b)

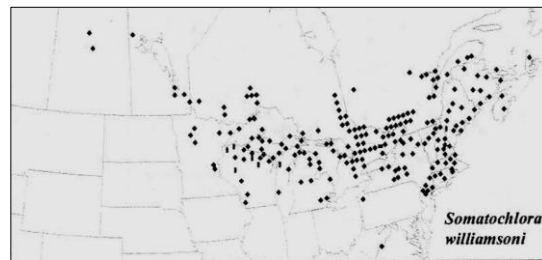
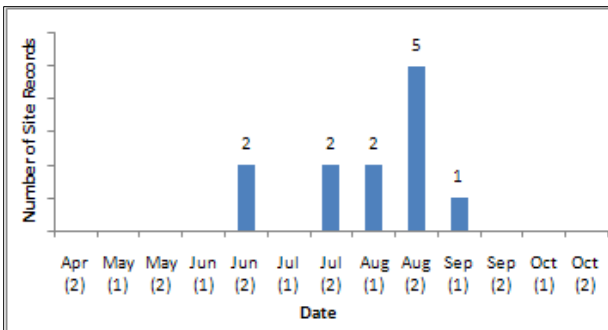
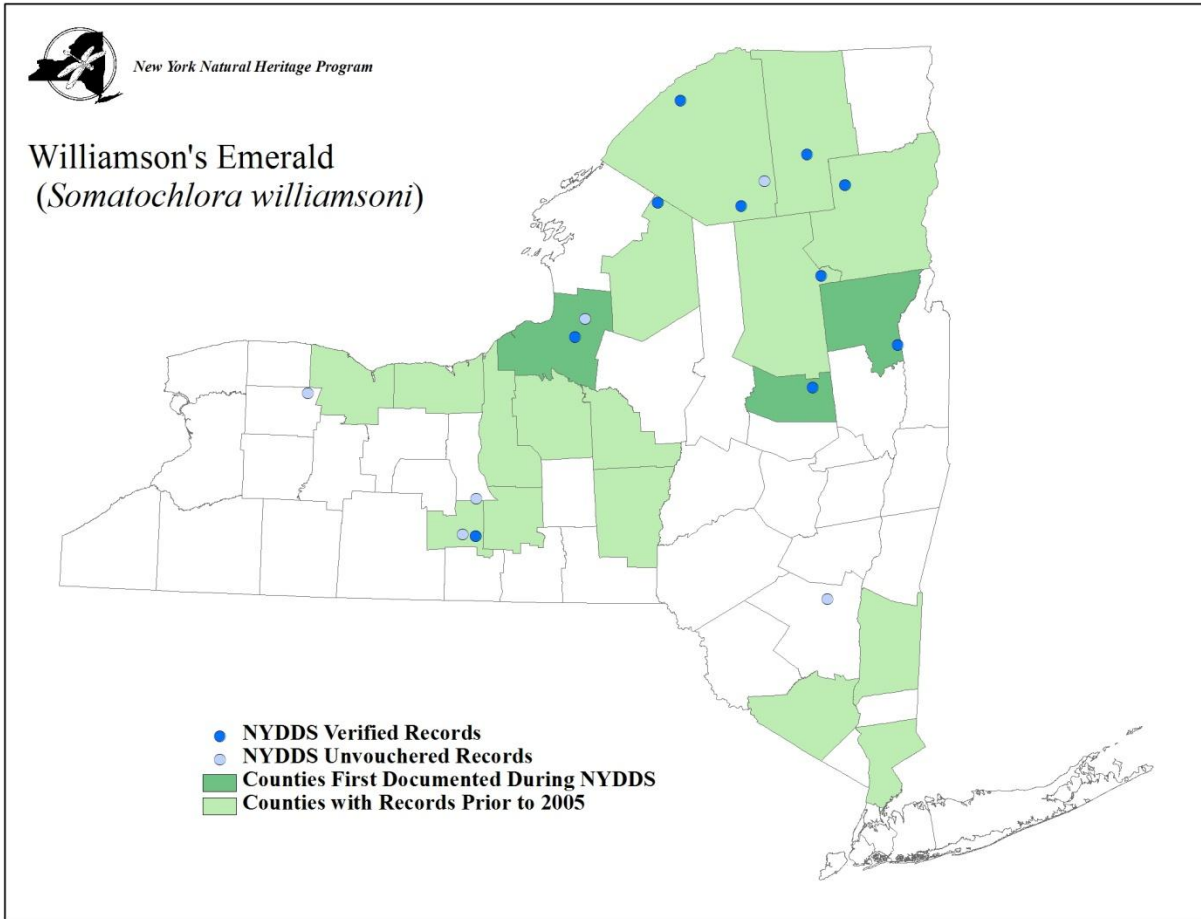


**CORDULIIDAE**

**Williamson's Emerald (*Somatochlora williamsoni*)**

**Pre-NYDDS Status: G5, S3S4**

**Draft Revised Status: S3S4**



(Donnelly 2004b)



## CORDULIIDAE

### Ebony Boghaunter (*Williamsonia fletcheri*)

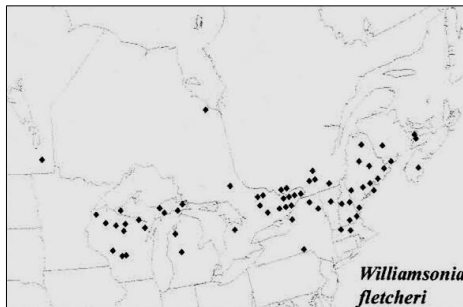
Pre-NYDDS Status: G4, S1

Draft Revised Status: S1

**Habitat Characteristics:** Habitats where Ebony Boghaunters are found include sphagnum bogs, fens, and swamps with open pools near woodlands (Nikula *et al.* 2003), often with soupy sphagnum pools (Massachusetts NHESP 2003). While the larvae live in these wet areas, the nearby woodland component appears essential for adult behaviors such as hunting, roosting, and mating (Charlton 1985, Massachusetts NHESP 2003). It is often found in the same locations as *W. lintneri* in other states and provinces, but there are no known extant populations of *W. lintneri* in New York (Wisconsin Odonata Survey 2009, New York Natural Heritage Program 2010). Larvae of *W. fletcheri* develop in small, open pools of water within bogs/fens or sphagnum mats (U.S. Forest Service 2010) that are often connected by ditches of standing, or slightly flowing, water (Hutchinson & Ménard 1999).



Denis A. Doucet 2009



(Donnelly 2004d)

**Distribution and Inventory Needs:** A North American species, *Williamsonia fletcheri* is found in the Canadian provinces of Manitoba, Ontario, Quebec, New Brunswick, and Nova Scotia (Charlton 1985, Abbott 2010). In the United States, it is known from Wisconsin, Michigan, New York, Vermont, New Hampshire, Massachusetts, and Maine (Donnelly 2004d, Abbott 2010). In New York, a 1947 records exists from Chenango Valley State Park in Broome county; this record has not been relocated despite efforts by many

odonatologists (Donnelly 1999). There are currently four extant locations in the state. Heron Marsh in Franklin county and Perch River Swamp in Jefferson county were documented in the 1990s (New York Natural Heritage Program 2010). New locations during the NYDDS include a marsh on the Raquette River in Franklin County and a bog near Oseetah Lake also in Franklin County. Other appropriate habitats in northern New York should be searched in May and June to try to document new locations for this species. Mead (2003) notes that populations tend to be very small and susceptible to local extinction, so known populations should be monitored in the future and threats to the habitat should be assessed.

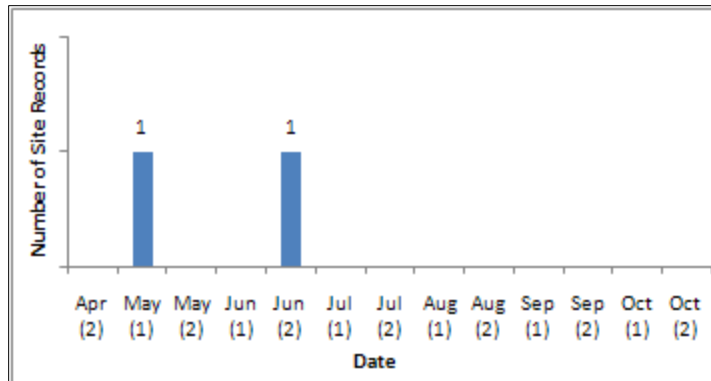
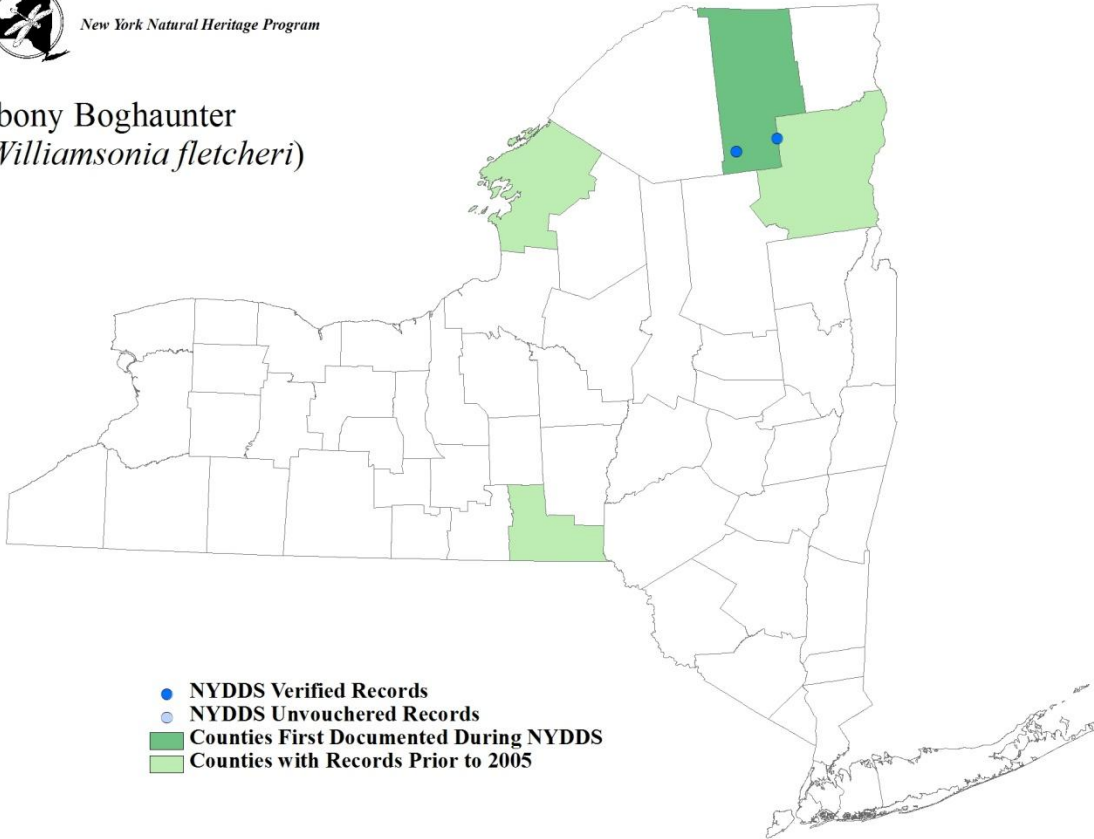
**Phenology:** There were two new location records during the NYDDS for *W. fletcheri*, one adult from May 11 and another from June 23. The flight season is from early May through early July in Wisconsin and Maine (Brunelle & deMaynadier 2005, Wisconsin Odonata Survey 2009), and May and June in Massachusetts (Massachusetts NHESP 2003). The flight season appears to be very early and brief compared to most dragonflies. This is one reason why they are infrequently encountered by surveyors in addition to their rarity and elusive behavior (Charlton & Cannings 1993).





New York Natural Heritage Program

### Ebony Boghaunter (*Williamsonia fletcheri*)





## CORDULIIDAE

### Ringed Boghaunter (*Williamsonia lintneri*)

Pre-NYDDS Status: G3, SH

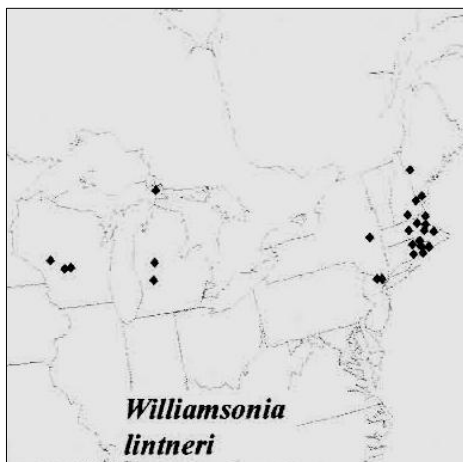
Draft Revised Status: SH

**Habitat Characteristics:** Throughout their range, Ringed Boghaunters are known to occur in acidic sedge fens and sphagnum bogs that contain “soupy” sphagnum pools and are surrounded by wooded uplands (Massachusetts NHESP 2003e). Habitat analysis for New England revealed that *W. lintneri* sites fall into two main types of peatlands, each containing an aquatic form of sphagnum: acidic shrub fens (dominated by Leatherleaf (*Chamaedaphne calyculata*) and Water Willow (*Decodon verticillatus*)) and acidic sedge or graminoid fens (dominated by Three-way Sedge (*Dulichium arundinaceum*) and/or various other sedges (*Carex* sp.) (Lundgren 1999). Other plants that have been noted to co-occur with *W. lintneri* include Highbush Blueberry (*Vaccinium corymbosum*) and Sheep Laurel (*Kalmia angustifolia*) (Massachusetts NHESP 2003d). The sizes of wetlands where *W. lintneri* is known to breed vary from less than one acre to hundreds of acres (Lundgren 1999). Many breeding locations are surrounded by Atlantic White Cedar (*Chamaecyparis thyoides*) in the southern portion of the species’ range, and by Black Spruce (*Picea mariana*) in the northern part of their range (Carpenter 1993).

The fen pools containing sphagnum (which is suspended in the water column or anchored and inundated) are the larval habitat, where exuviae are often found clinging to *Dulichium* stems after emergence in the spring (Biber 2002, Brown 2007c). Biber (2002) found that *W. lintneri* sites had significantly less developed upland habitats and deeper water levels in the fens, allowing standing water at least two weeks longer than similar sites where the species is not known to occur. Biber (2002) suggested that having a two-month period between mating and fen dry-down may be critical to the development and survival of newly hatched larvae. Woodlands that surround appropriate fen habitat appear to be essential to the persistence of the species, as adults have been observed using these areas for resting and mating (Massachusetts NHESP 2003c). Odonate experts in Rhode Island have had success locating adults by walking slowly along wooded paths (near appropriate larval habitat) and observing them tree trunks in the sun and wooded paths and roads (Carpenter 1993).



Tom Murray



(Donnelly 2004d)

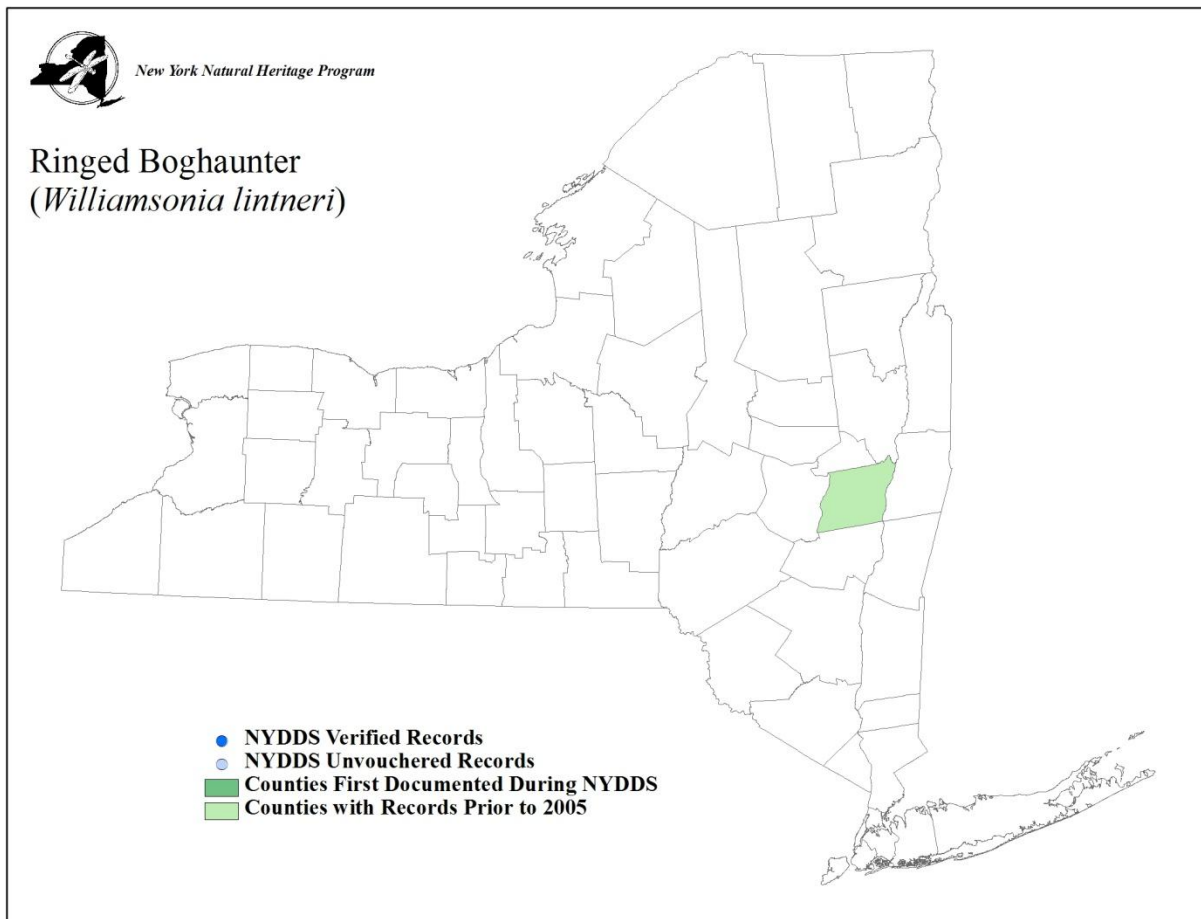
### **Distribution and Inventory Needs:** *Williamsonia*

*lintneri* is known from Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New Jersey, Wisconsin, Michigan, and historically, from New York (Donnelly 1999, Biber 2002). Specimens were collected on May 21 and May 27, 1874 in Karner, NY at “a sandy pine woods region”, which is now Colonie in the Albany area (Howe Jr 1923, Donnelly 1999). There have not been confirmed sightings of this species in New York since then (Donnelly 1999, New York Natural Heritage Program 2010). Experts searched for the species in appropriate habitats in southern New York in 1997 due



to the proximity to the northern New Jersey site, and at the historical location around the Albany Pine Bush Preserve in 1998, but none were found (Soltesz 1997, Novak & Gifford 1998). Surveyors note that these potential *W. lintneri* habitats are fragile and susceptible to trampling, suggesting caution if repeated visits to sites are made (Novak & Gifford 1998, Brown 2007c). During the NYDDS, we devoted a significant effort, especially in the spring 2006 to 2008, toward searching for this species and potential habitats in New York. NYDDS participants visited locations in Albany, Columbia, Rensselaer, Oneida, Oswego and Franklin counties to assess habitats for their suitability for harboring *W. lintneri* populations. Excellent potential habitat was assessed in Rome and Grafton, NY, but no Ringed Boghaunters were documented, despite repeat visits to these areas. Many have not given up the quest in New York and dedicated odonate enthusiasts will continue to look for potential habitats in the future for this rare dragonfly that has been recommended for listing as federally endangered (Carpenter 1993). To read more about the special effort for this species, see page 294.

**Phenology:** Originally collected on May 21 and 27 in 1874 in New York and it has not been seen in the state since (Donnelly 1999). It was collected from New Jersey on May 9, 1993 (Soltesz 1997). They have a brief and early flight season. Maine adult sightings are from early May through mid-June and in Rhode Island the third week of April (Carpenter 1993, Brunelle & deMaynadier 2005).

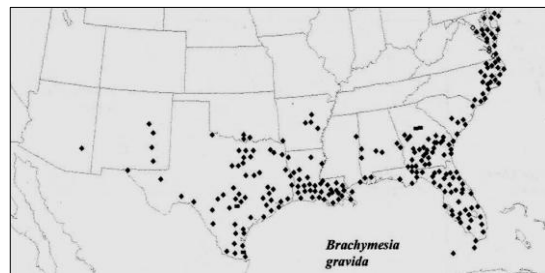
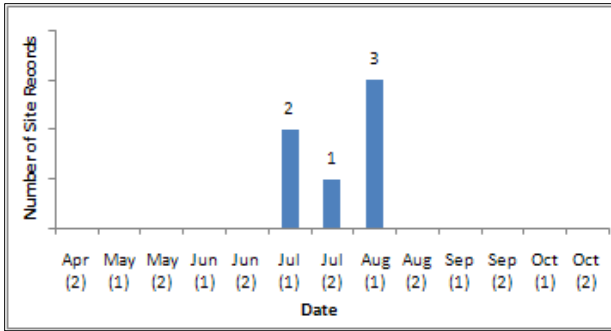
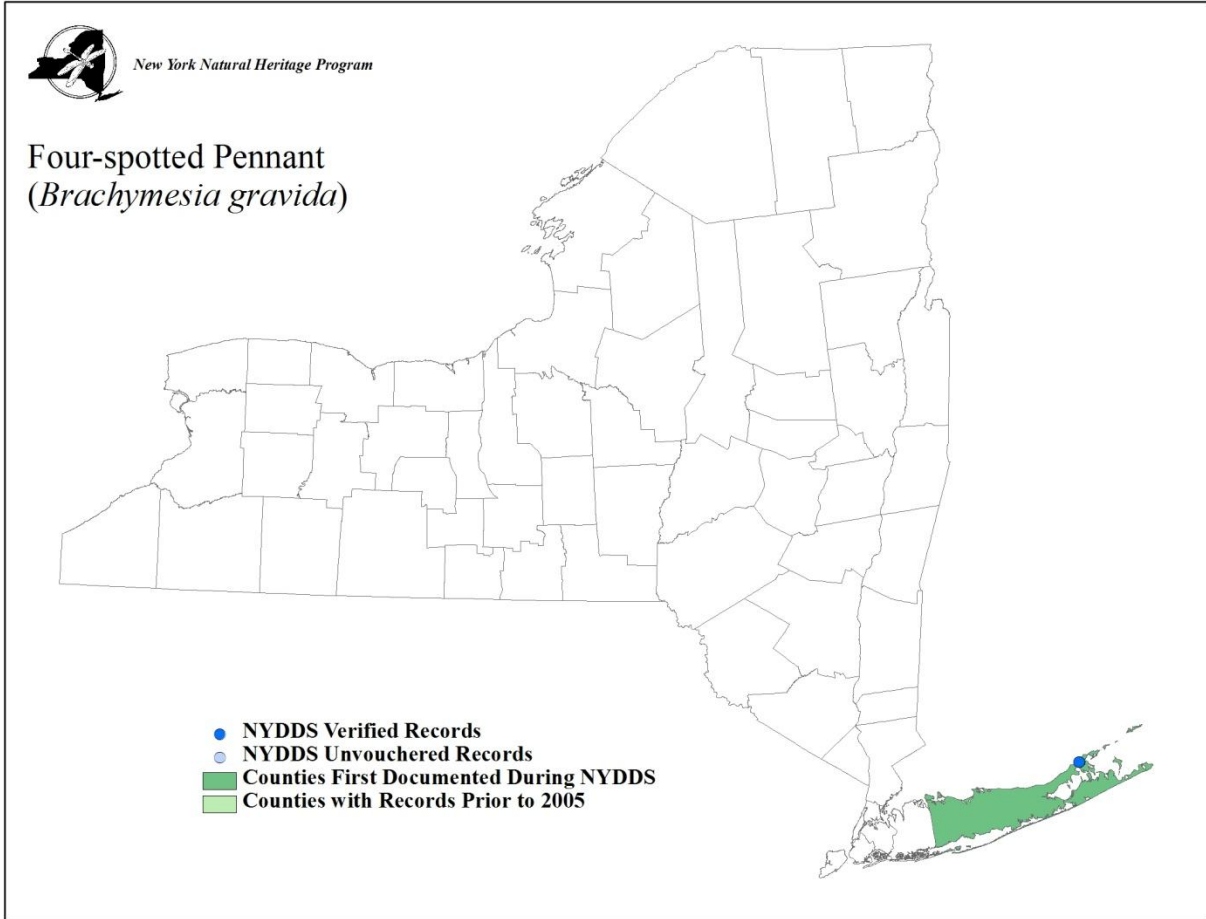


**LIBELLULIDAE**

**Four-spotted Pennant (*Brachymesia gravida*)**

**Pre-NYDDS Status: G5, SNR**

**Draft Revised Status: S1**



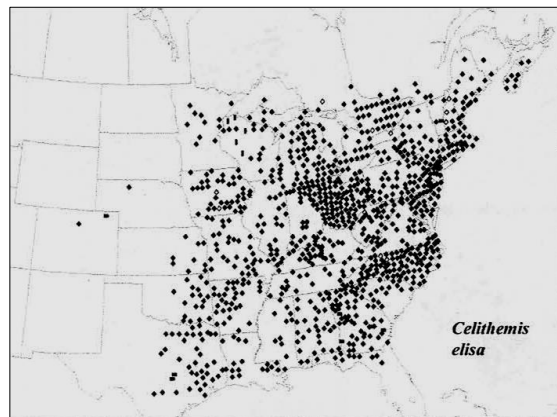
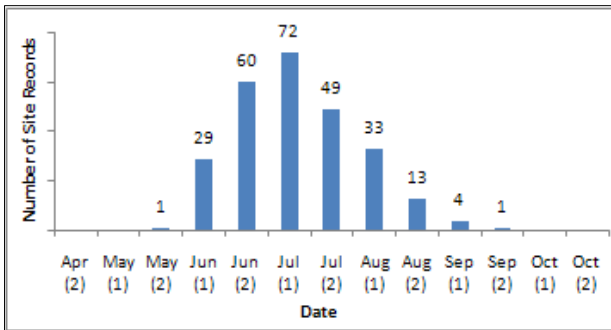
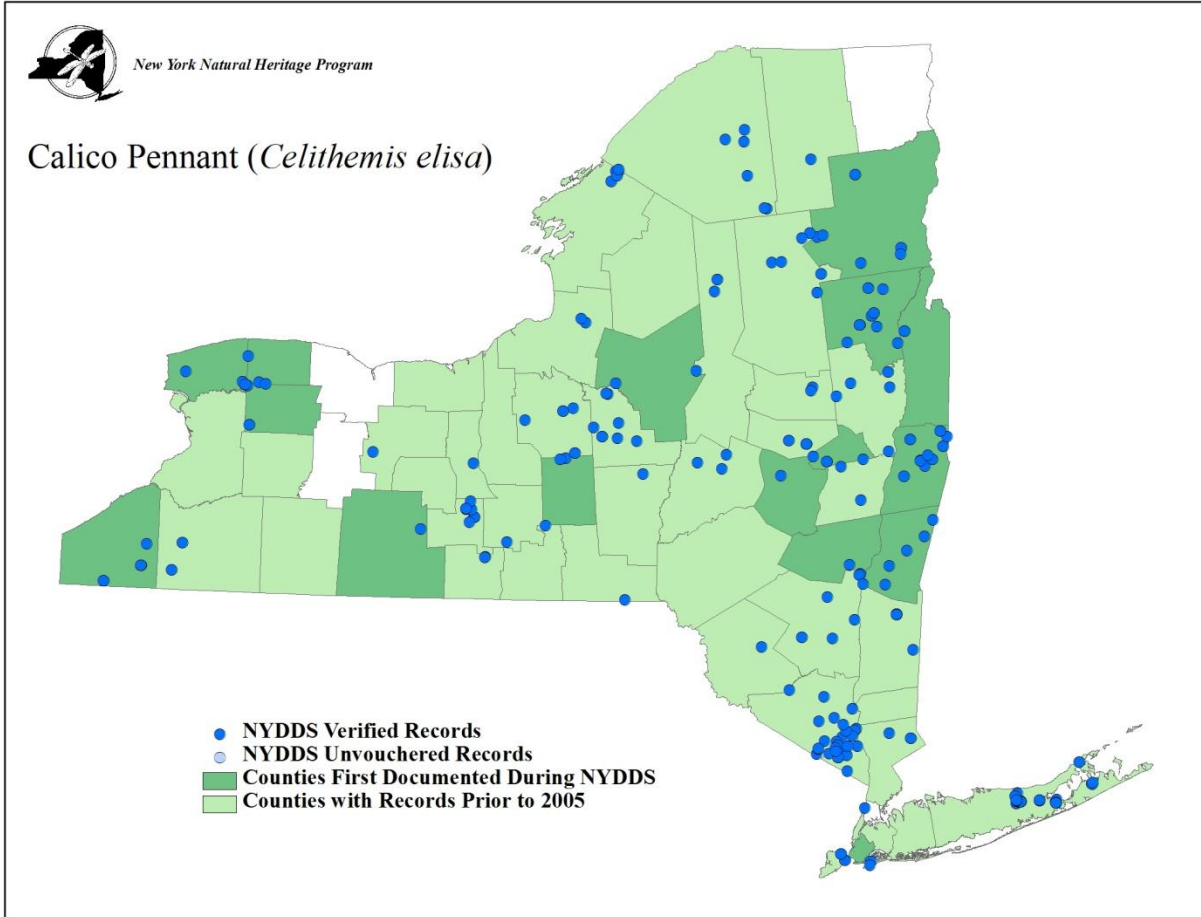
(Donnelly 2004b)



**LIBELLULIDAE**

**Calico Pennant (*Celithemis elisa*)**

Pre-NYDDS Status: G5, S5



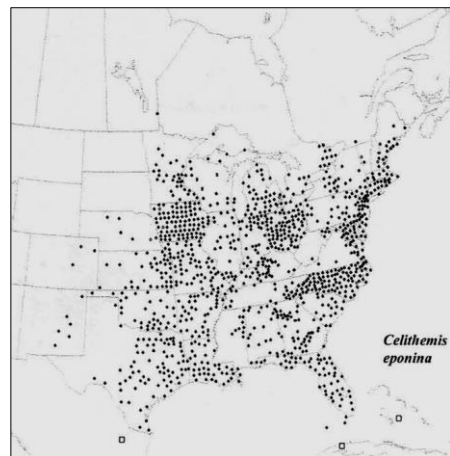
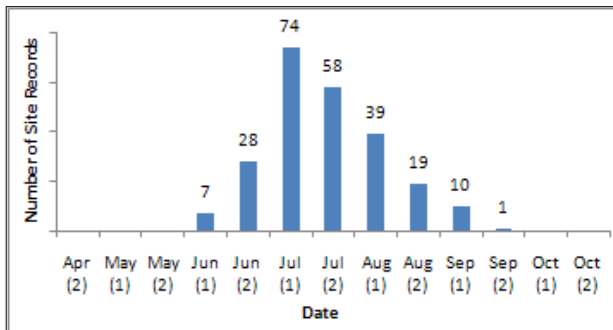
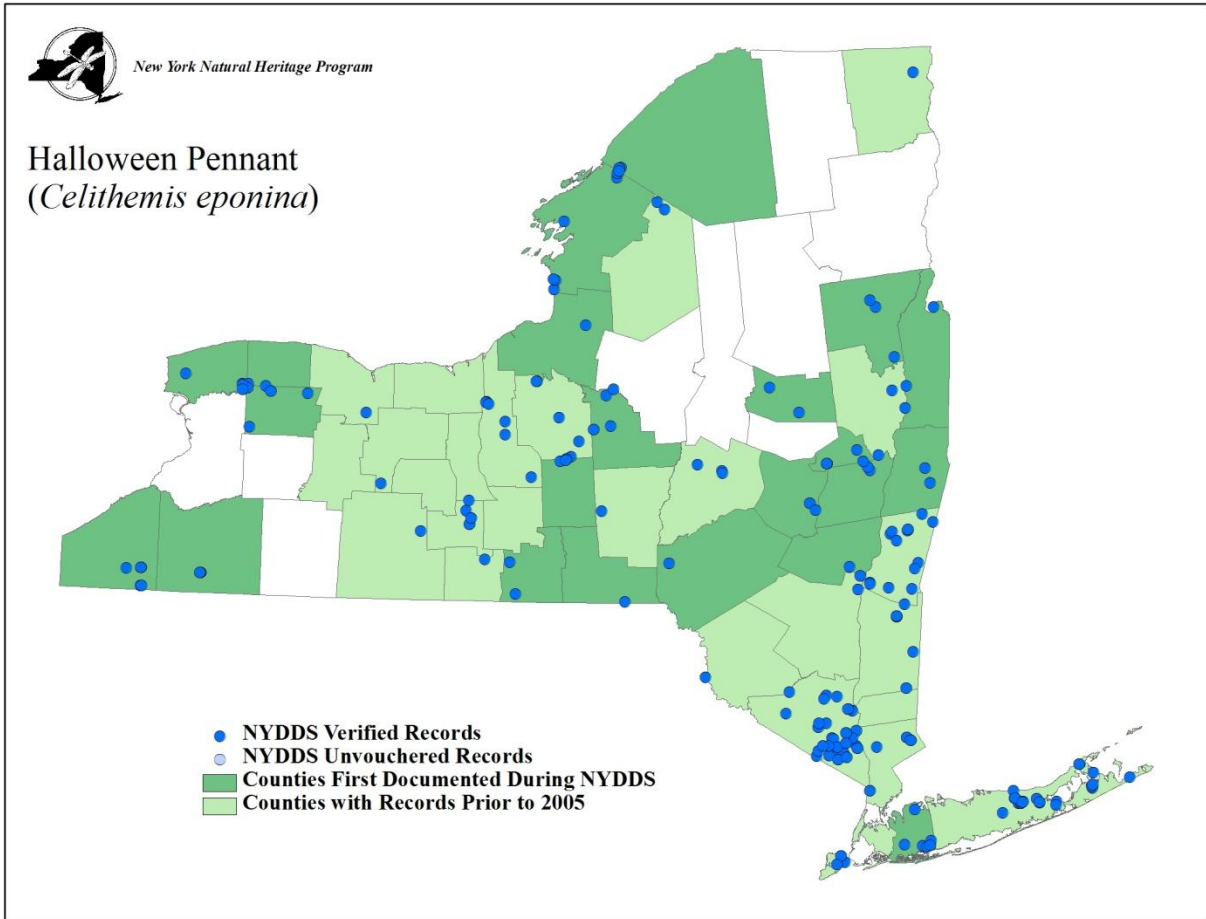
(Donnelly 2004b)



**LIBELLULIDAE**

**Halloween Pennant (*Celithemis eponina*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004b)

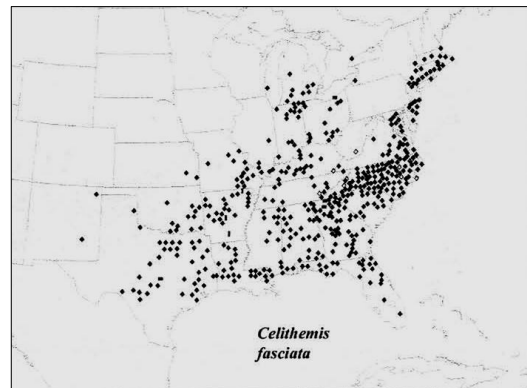
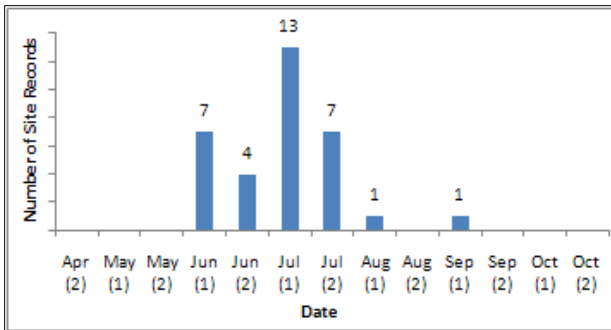
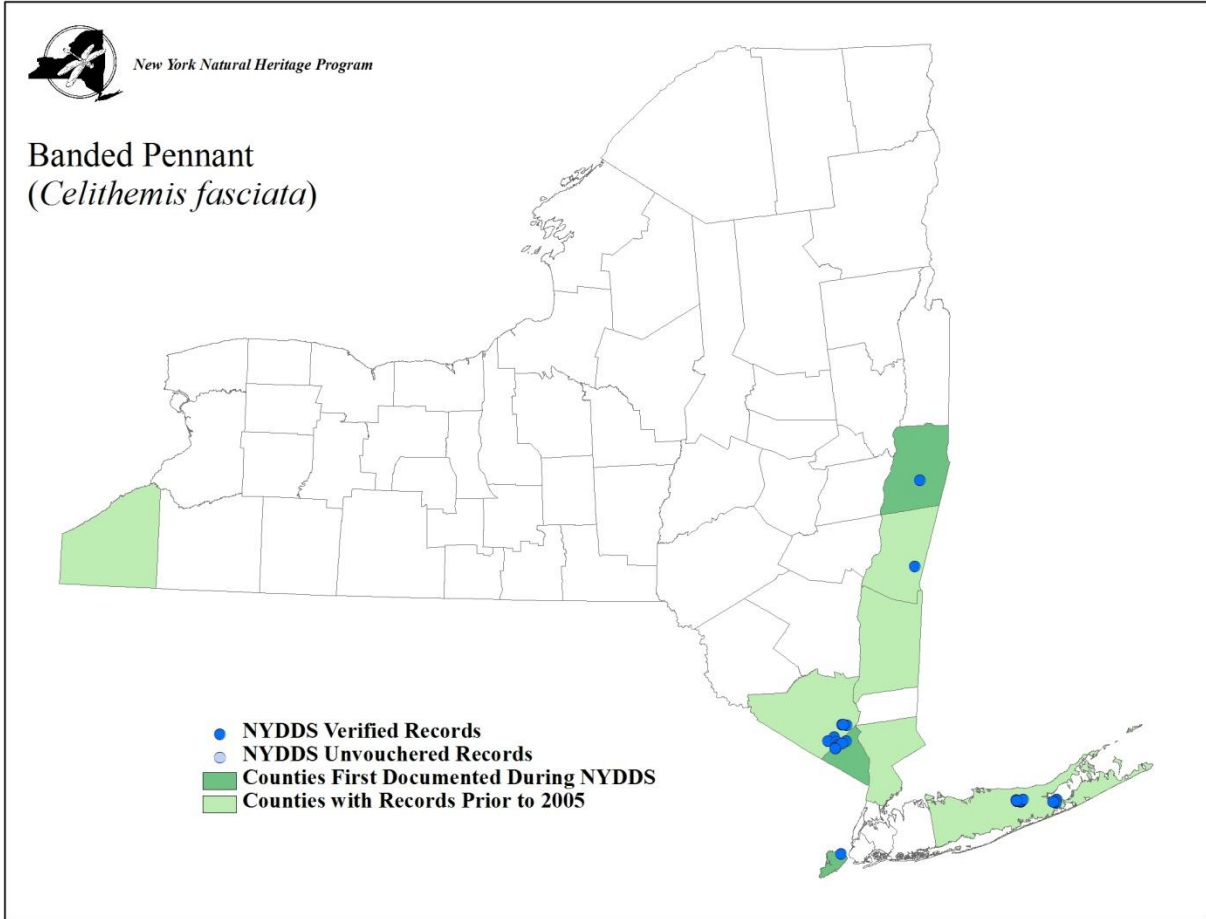


**LIBELLULIDAE**

**Banded Pennant (*Celithemis fasciata*)**

**Pre-NYDDS Status: G5, SNR**

**Draft Revised Status: S3**



(Donnelly 2004b)

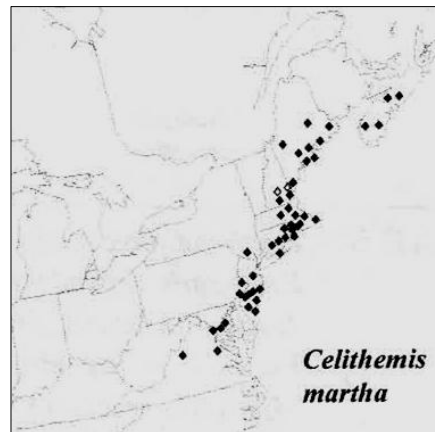
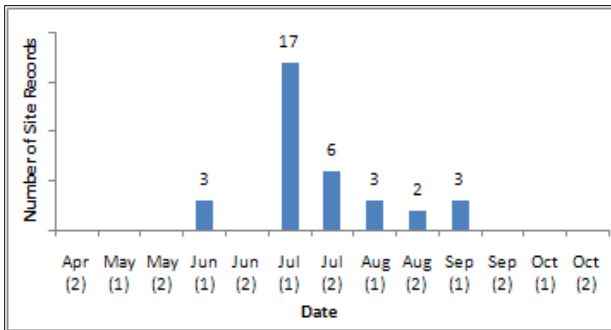
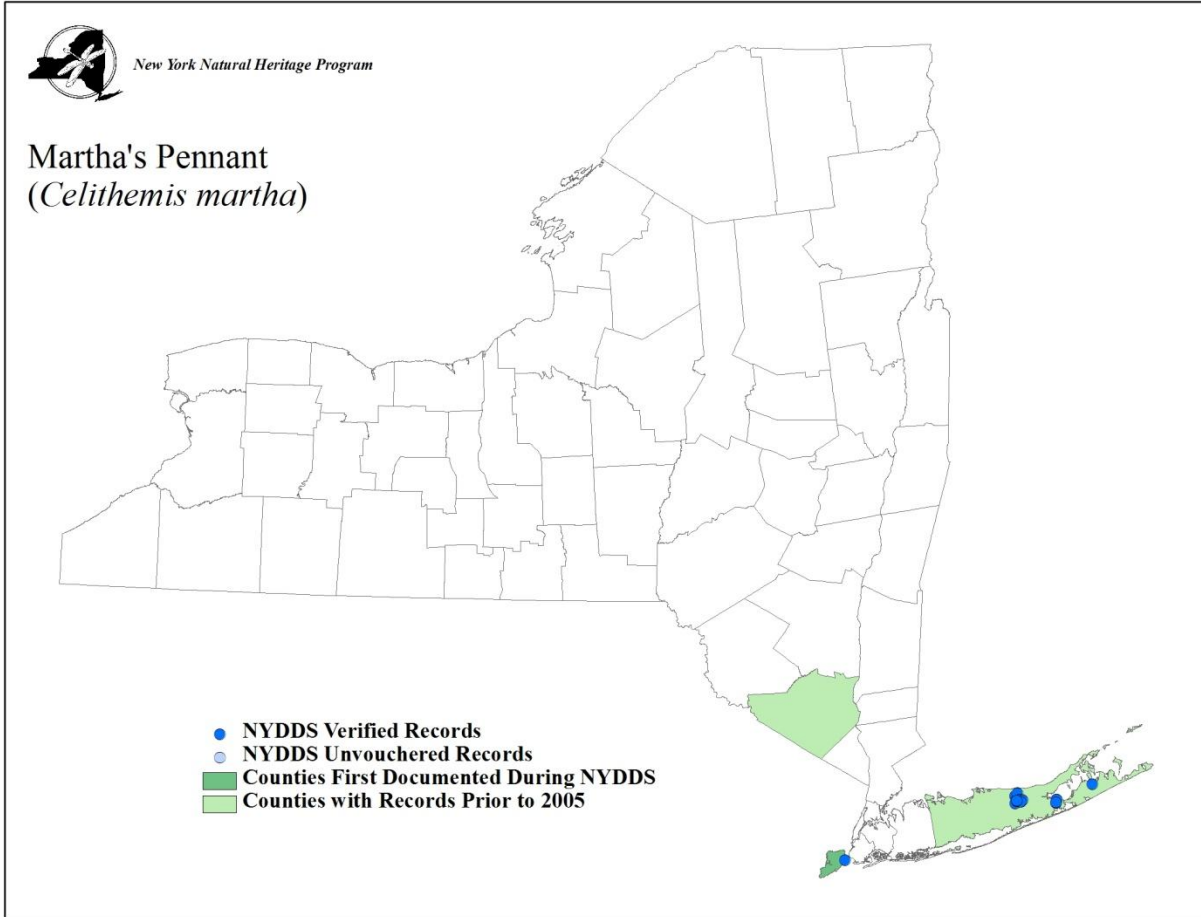


**LIBELLULIDAE**

**Martha's Pennant (*Celithemis martha*)**

**Pre-NYDDS Status: G4, S3**

**Draft Revised Status: S2**



(Donnelly 2004b)

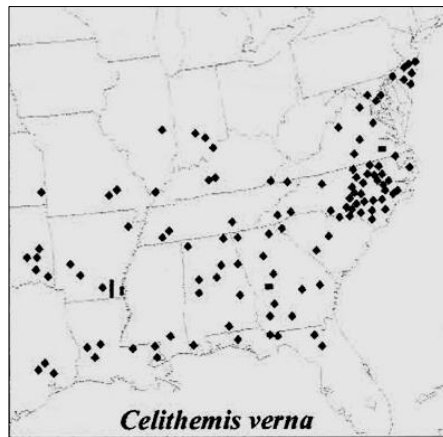
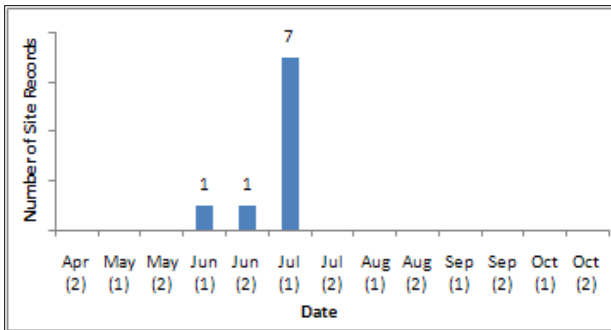
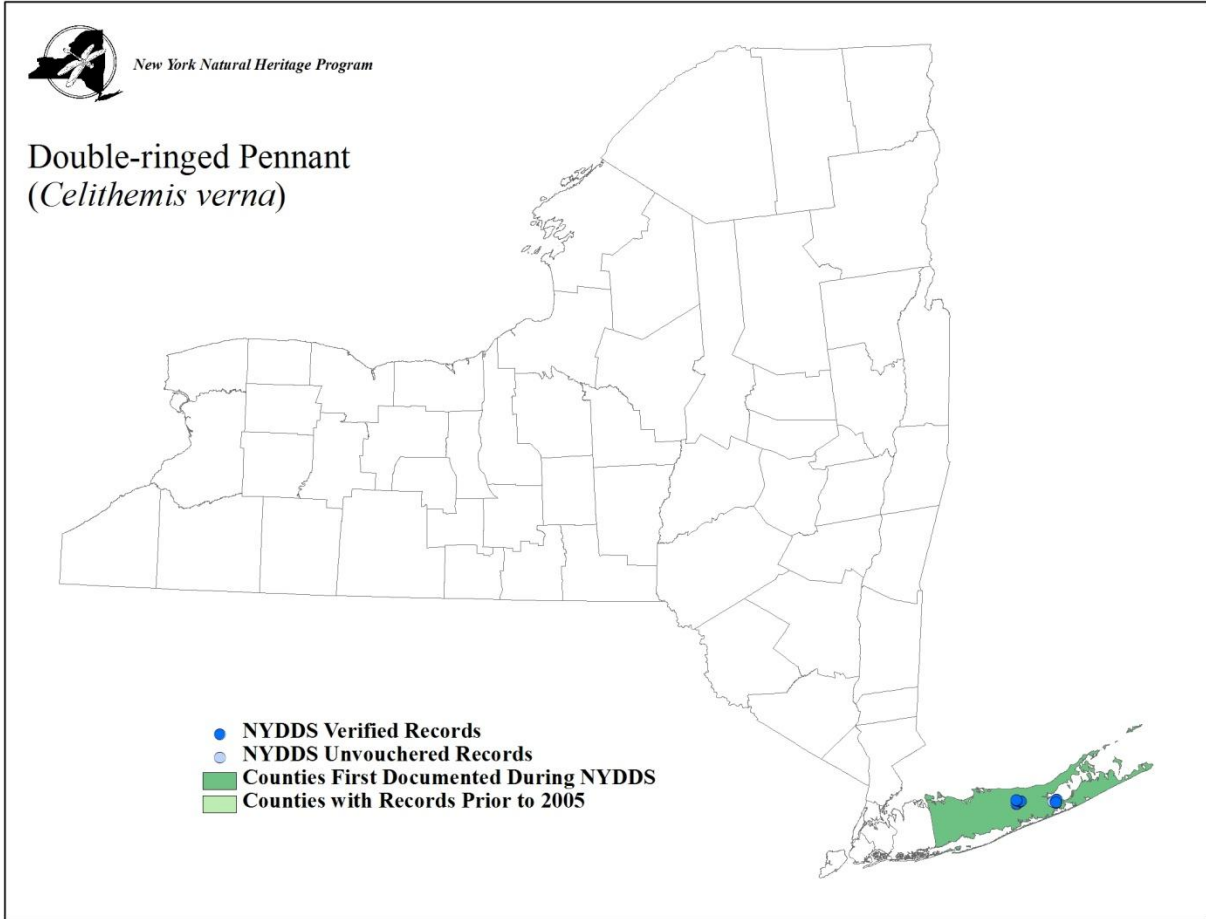


**LIBELLULIDAE**

**Double-ringed Pennant (*Celithemis verna*)**

**Pre-NYDDS Status: G5, SNR**

**Draft Revised Status: S1**



(Donnelly 2004b)

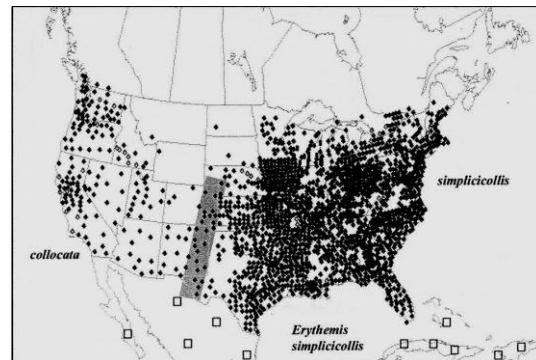
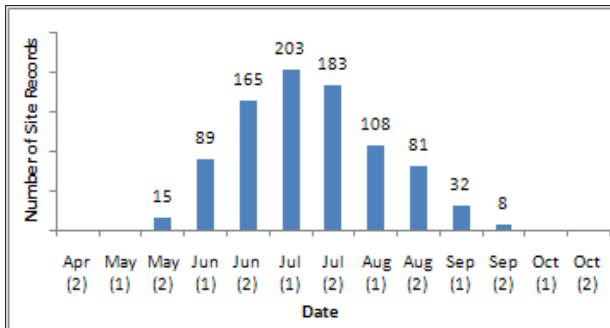
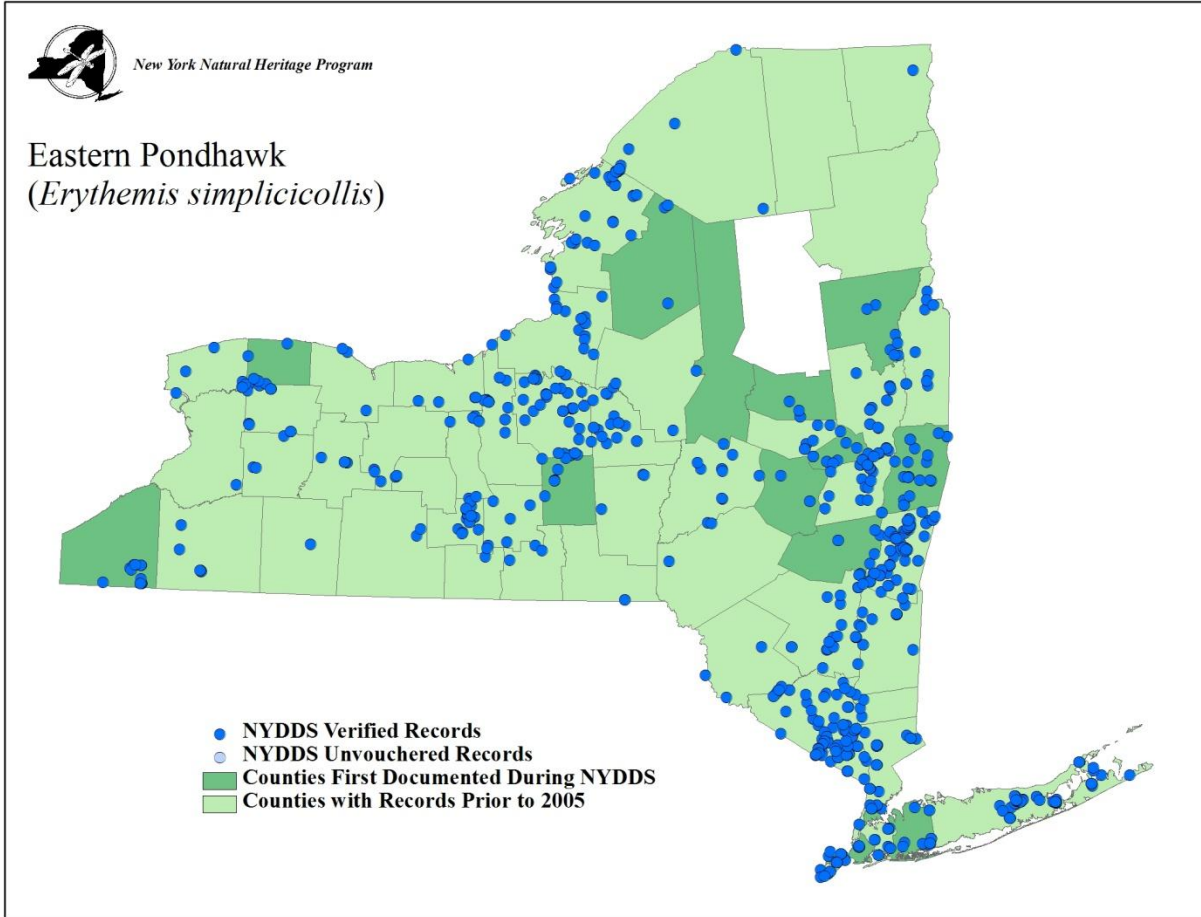




**LIBELLULIDAE**

**Eastern Pondhawk (*Erythemis simplicicollis*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004d)

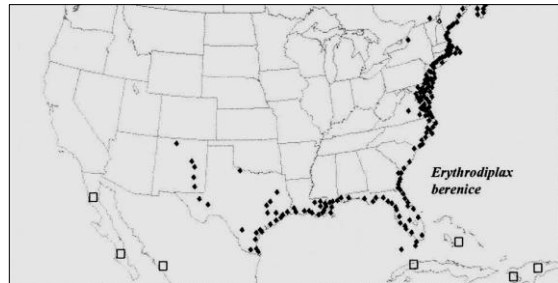
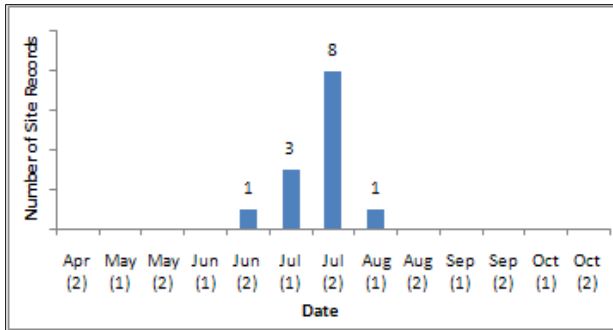
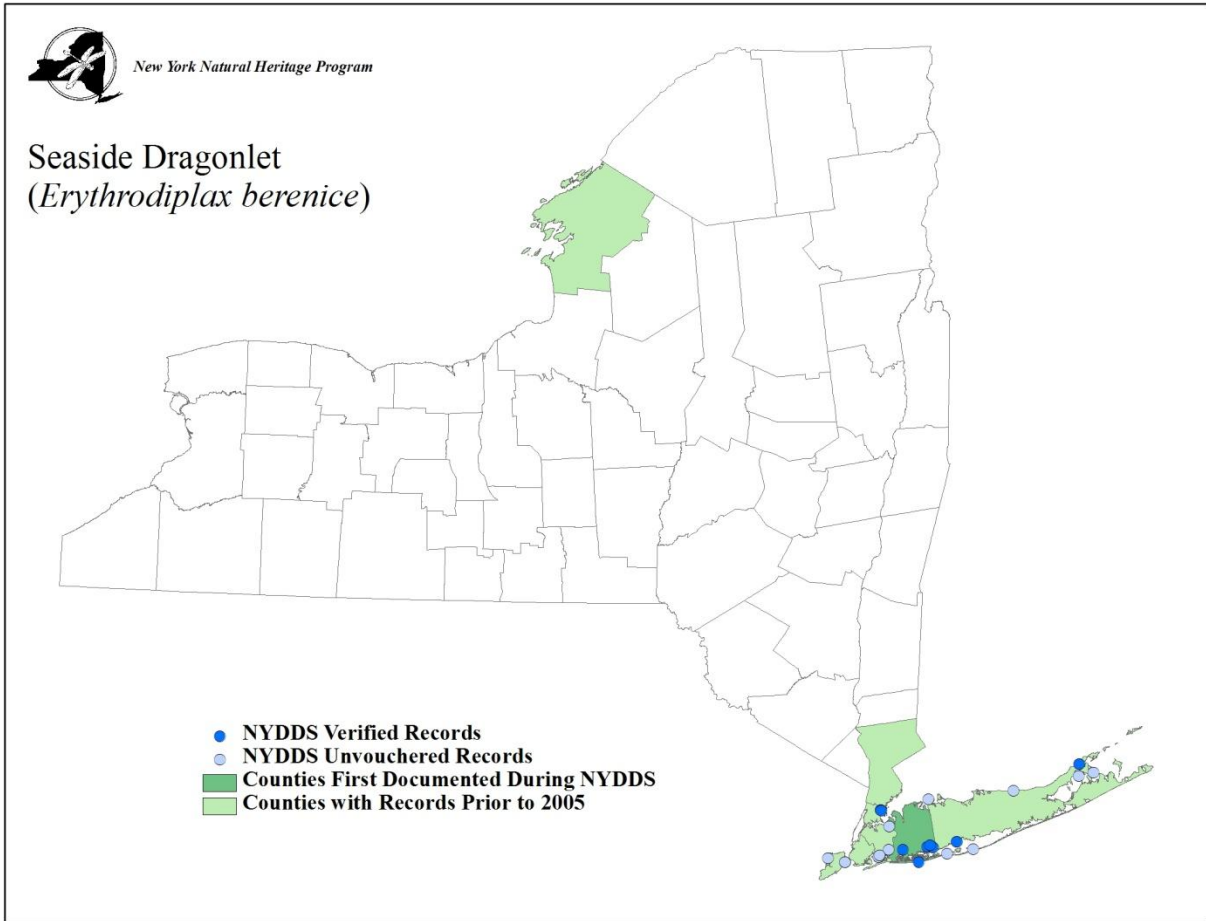


**LIBELLULIDAE**

**Seaside Dragonlet (*Erythrodiplax berenice*)**

**Pre-NYDDS Status: G5, S3S4**

**Draft Revised Status: S2**



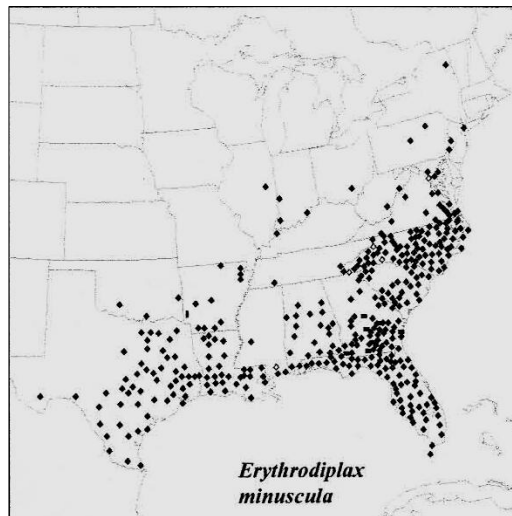
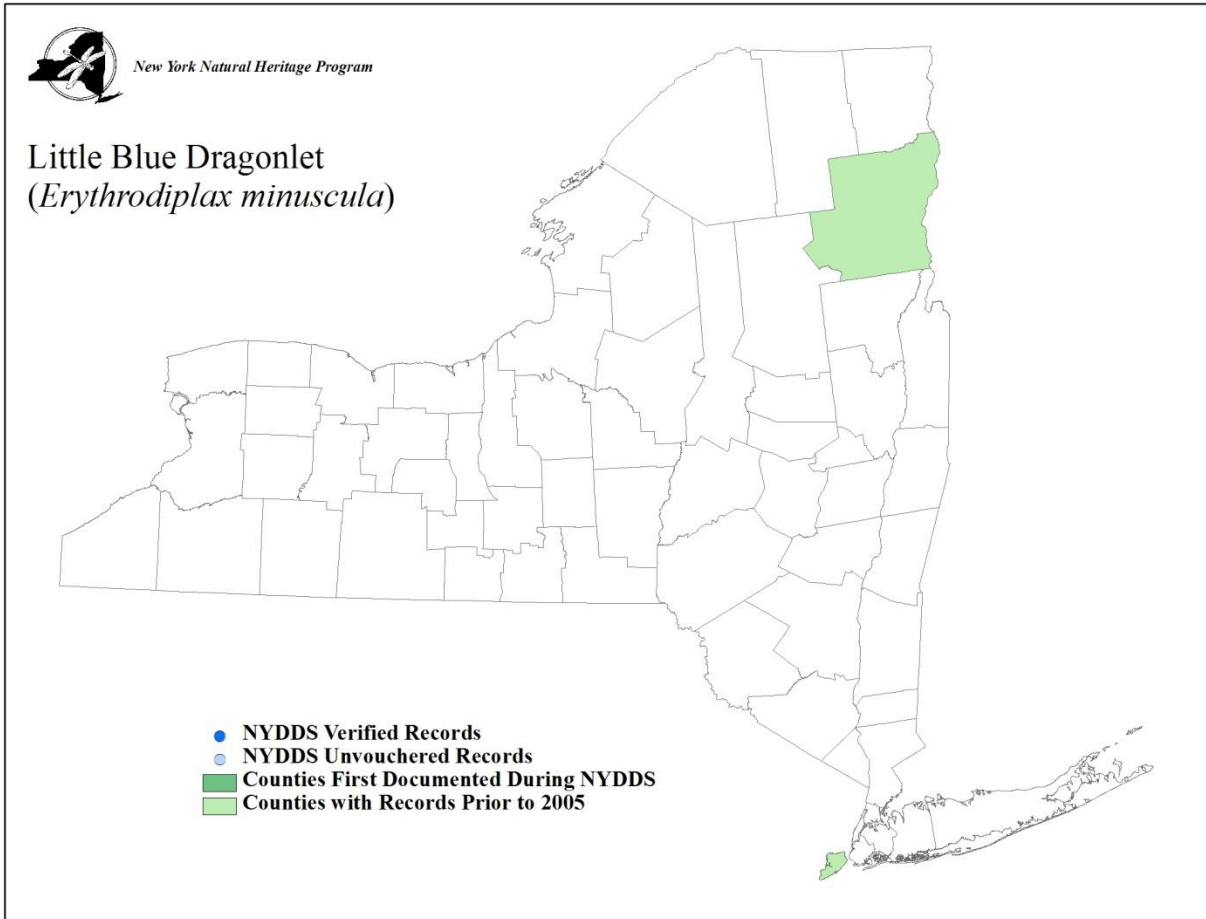
(Donnelly 2004d)



**LIBELLULIDAE**

**Little Blue Dragonlet (*Erythrodiplax minuscula*)**

**Pre-NYDDS Status: G5, SNA**



(Donnelly 2004d)

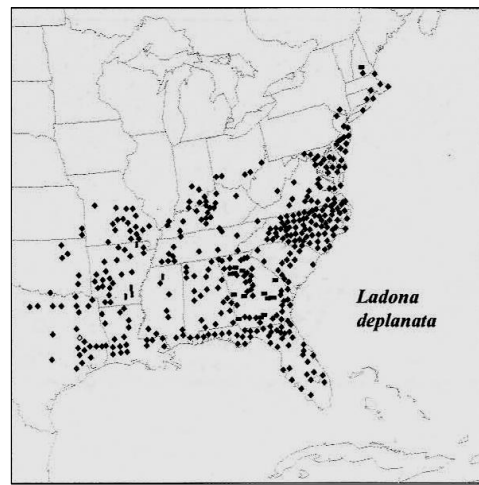
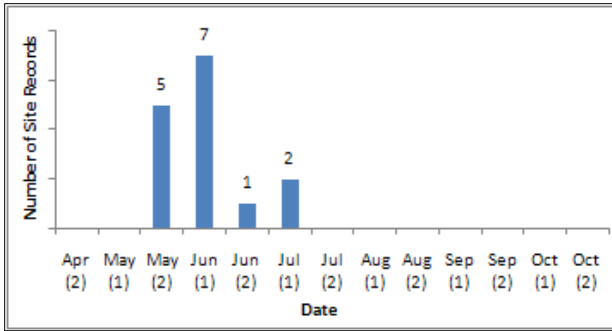
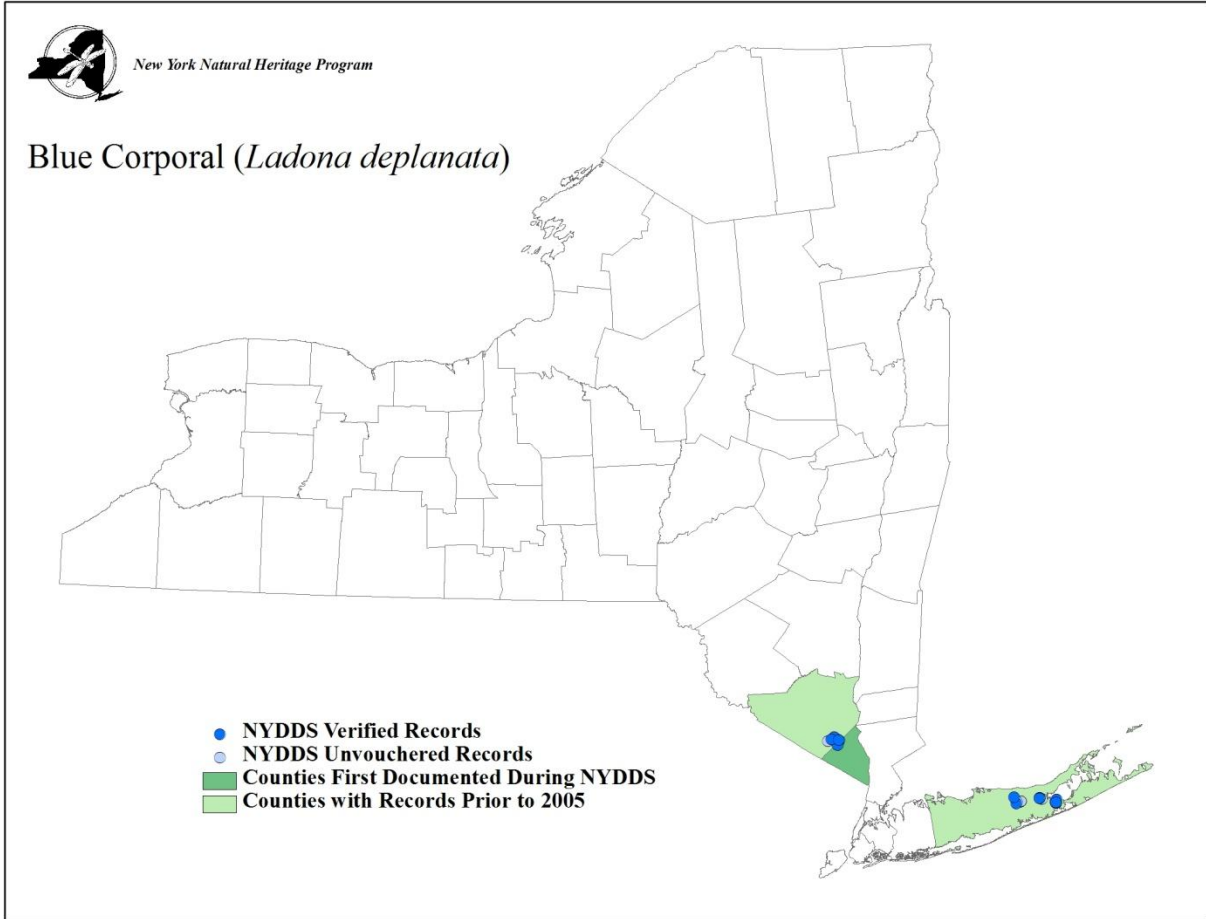


**LIBELLULIDAE**

**Blue Corporal (*Ladona deplanata*)**

**Pre-NYDDS Status: G5, S4**

**Draft Revised Status: S2S3**



(Donnelly 2004d)

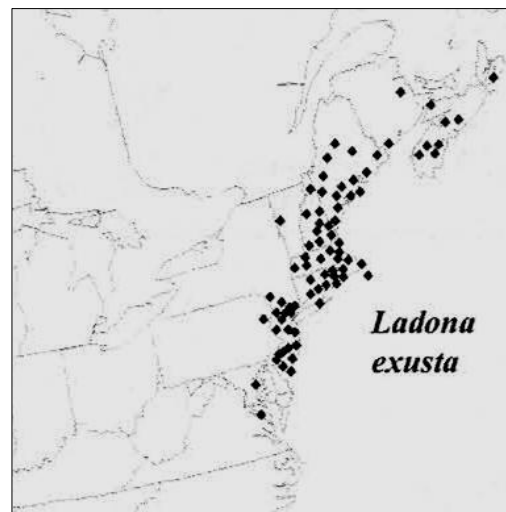
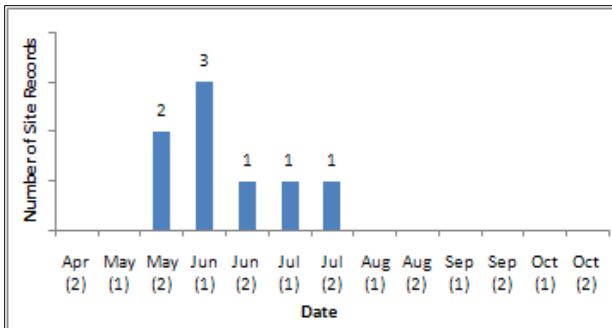
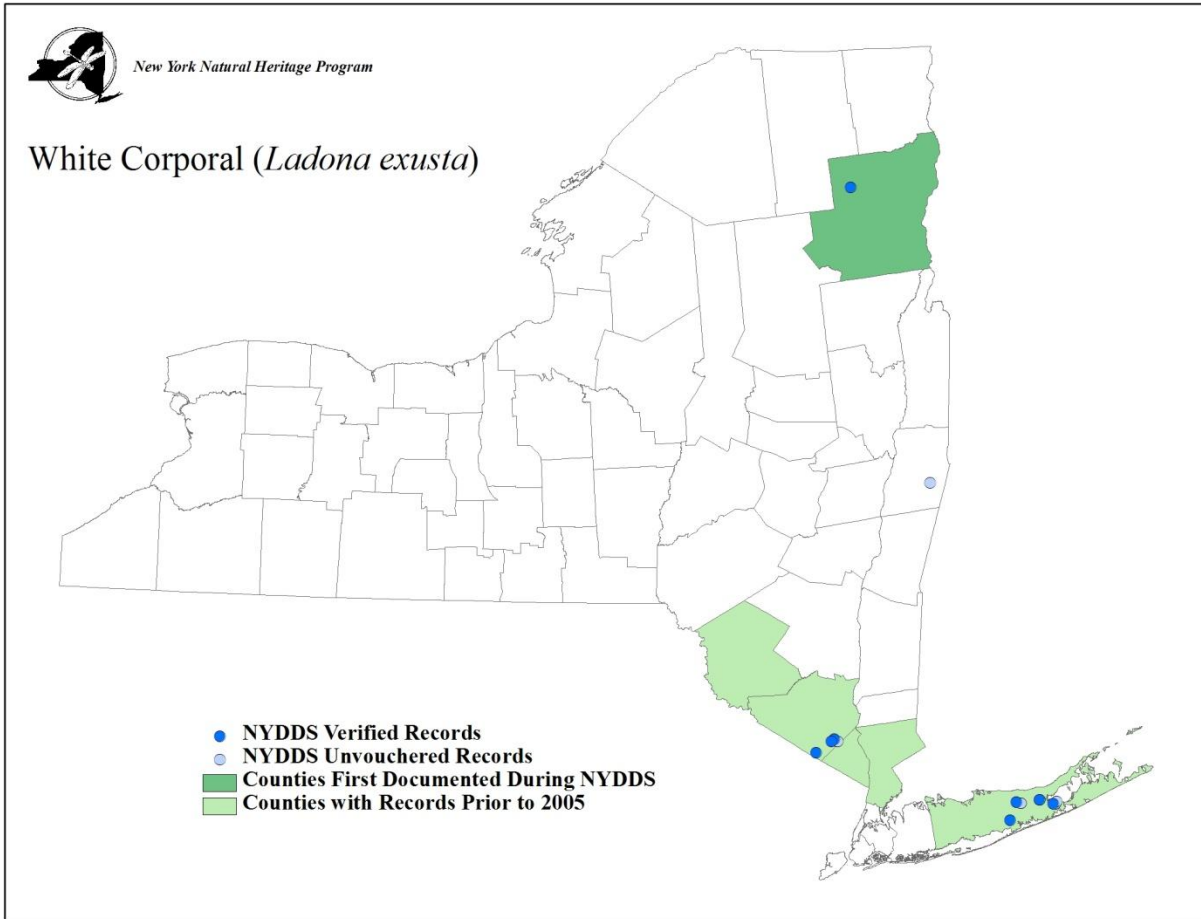


**LIBELLULIDAE**

**White Corporal (*Ladona exusta*)**

**Pre-NYDDS Status: G4, S4**

**Draft Revised Status: S3**



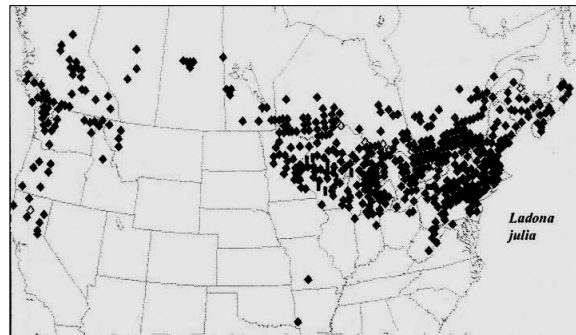
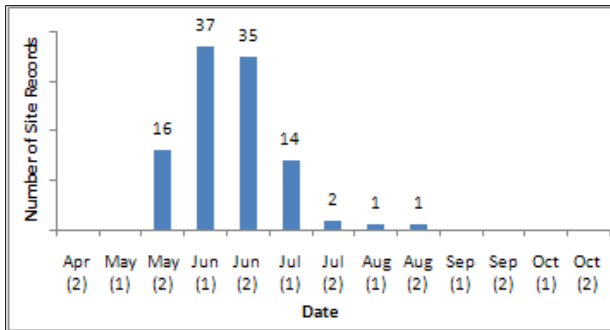
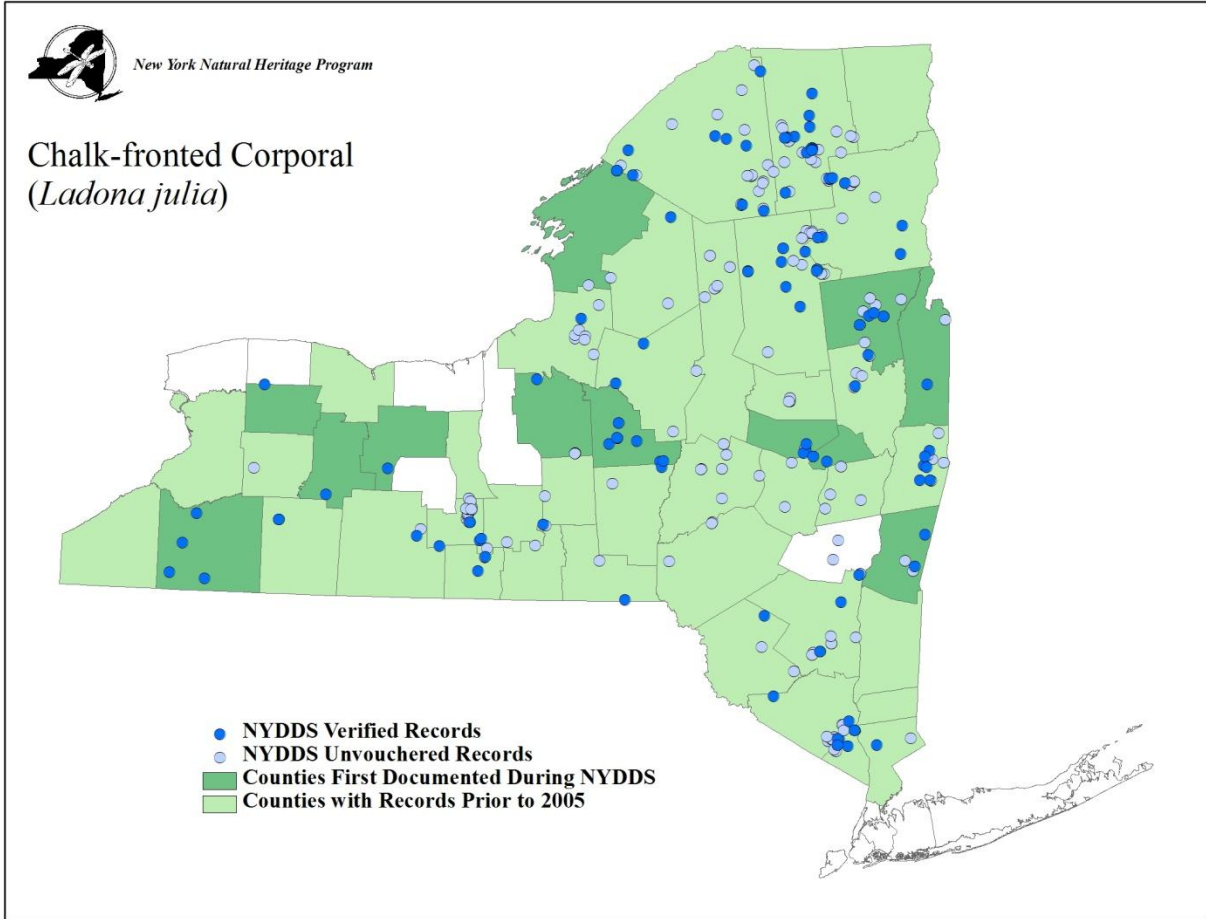
(Donnelly 2004d)



**LIBELLULIDAE**

**Chalk-fronted Corporal (*Ladona julia*)**

Pre-NYDDS Status: G5, S5



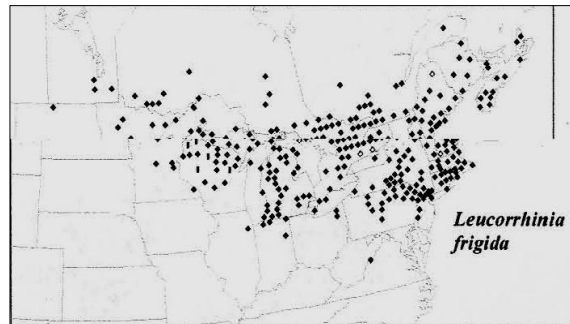
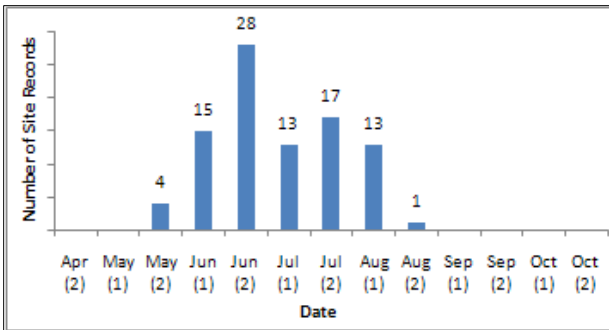
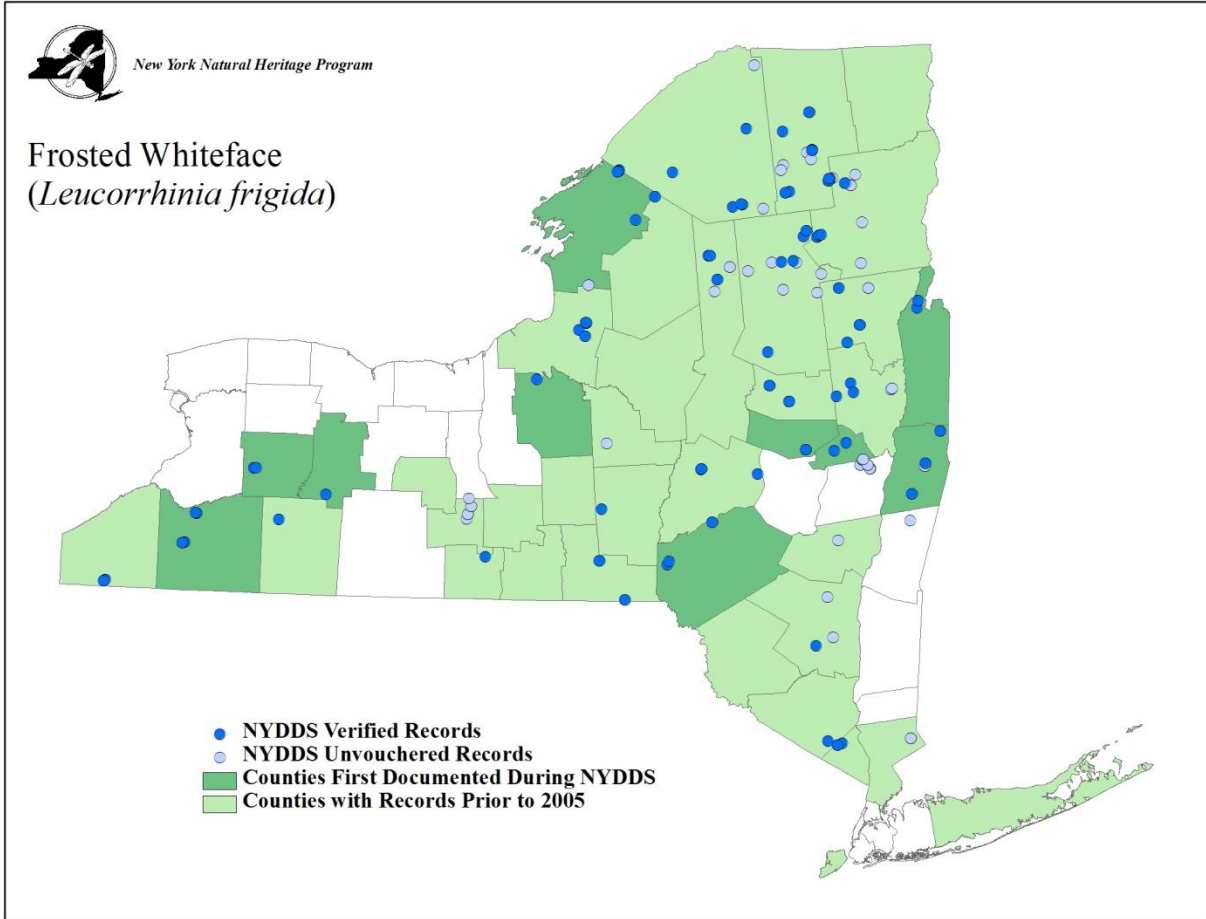
(Donnelly 2004d)



**LIBELLULIDAE**

**Frosted Whiteface (*Leucorrhinia frigida*)**

Pre-NYDDS Status: G5, S5



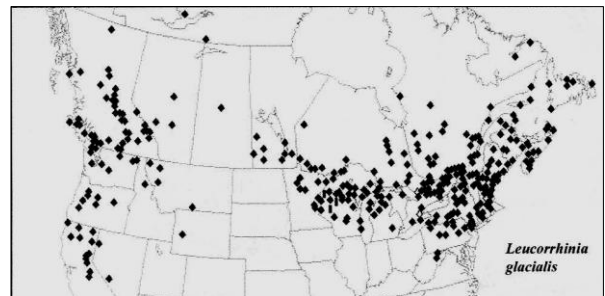
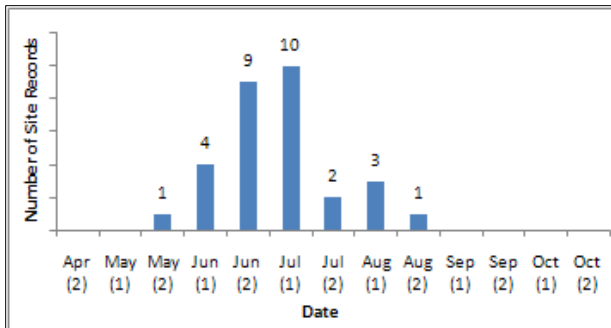
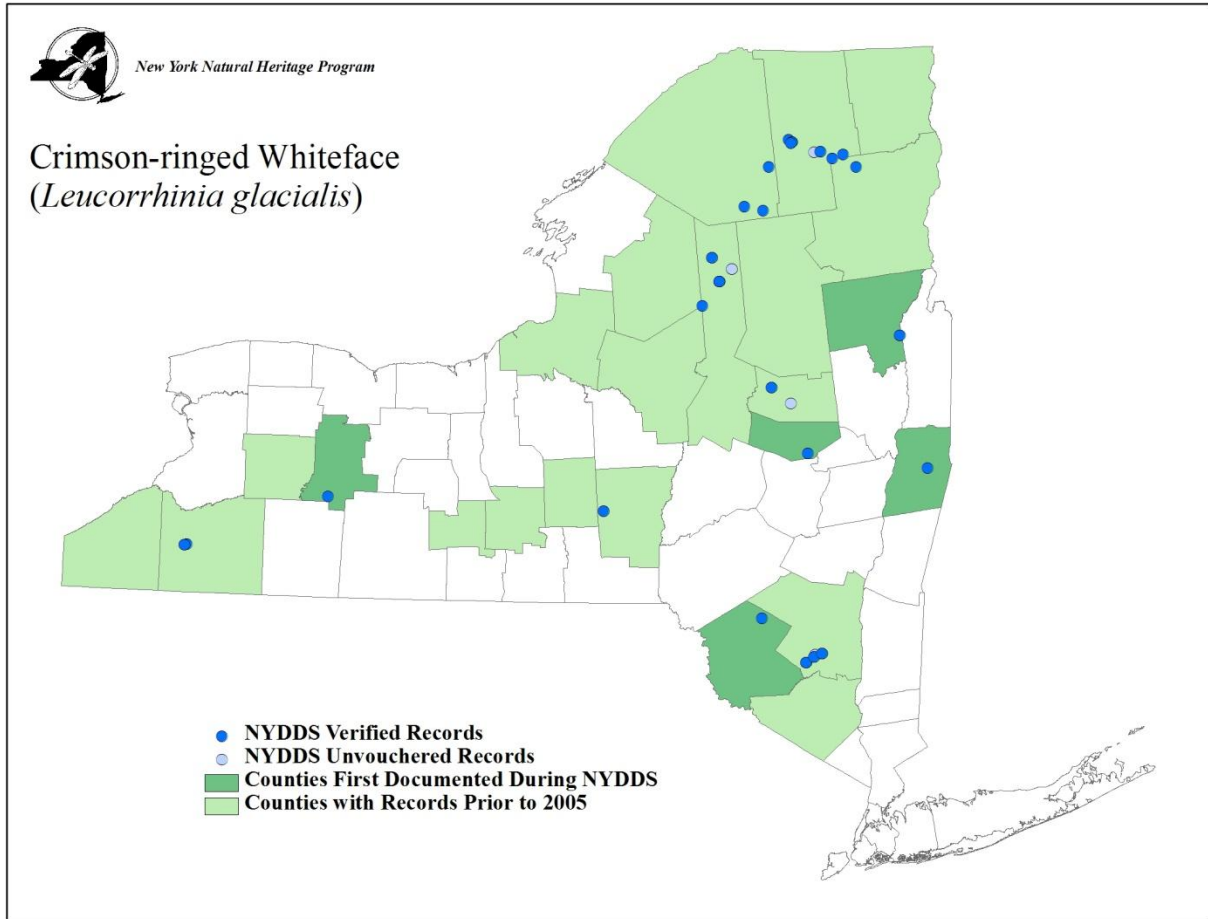
(Donnelly 2004d)



**LIBELLULIDAE**

**Crimson-ringed Whiteface (*Leucorrhinia glacialis*)**

**Pre-NYDDS Status: G5, S4**



(Donnelly 2004d)

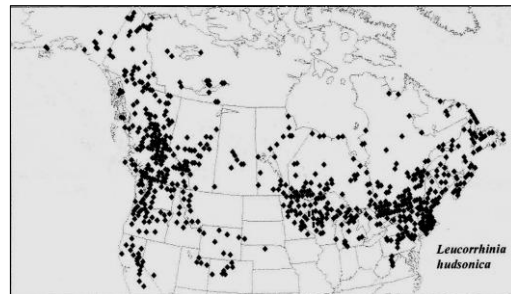
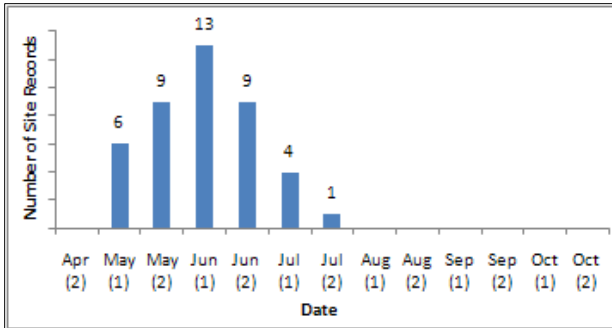
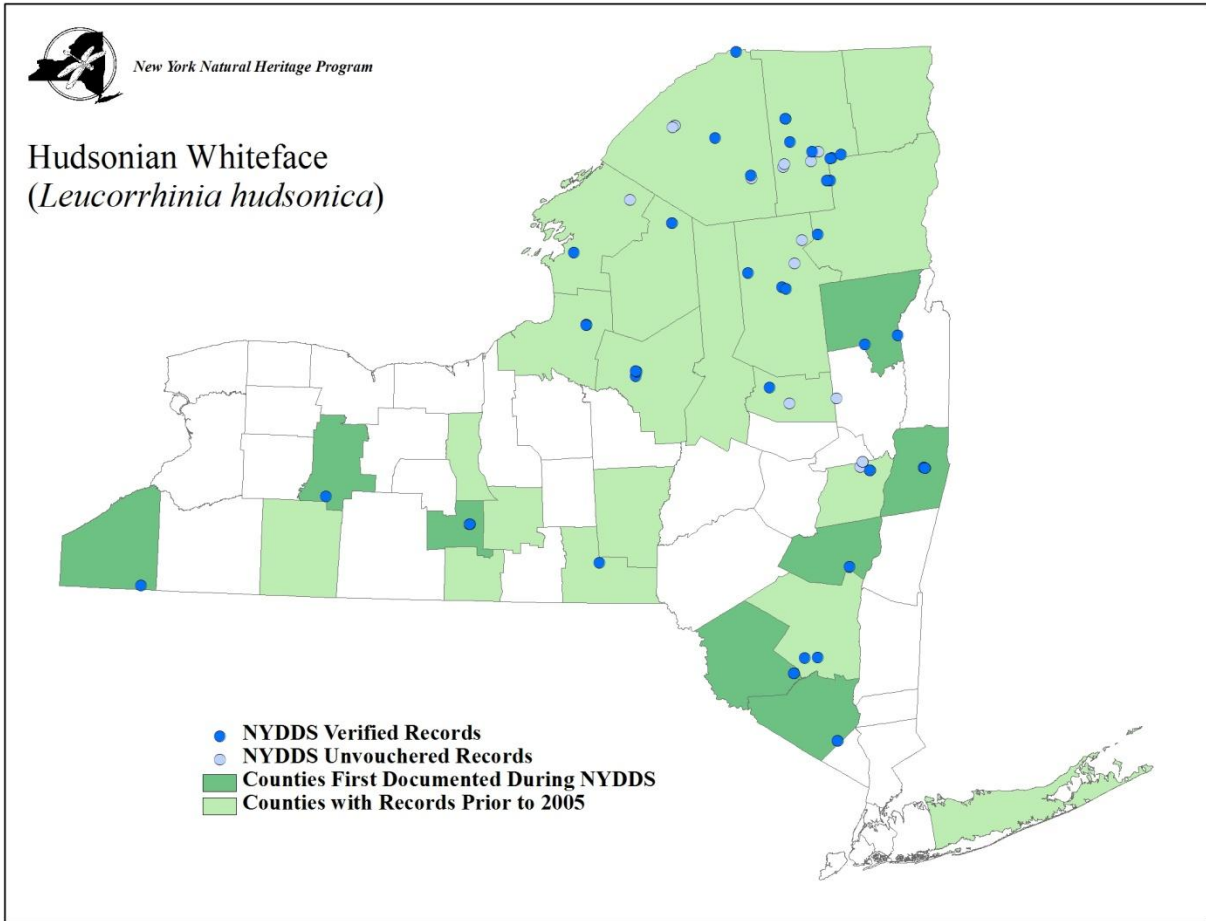




**LIBELLULIDAE**

**Hudsonian Whiteface (*Leucorrhinia hudsonica*)**

**Pre-NYDDS Status: G5, S4**



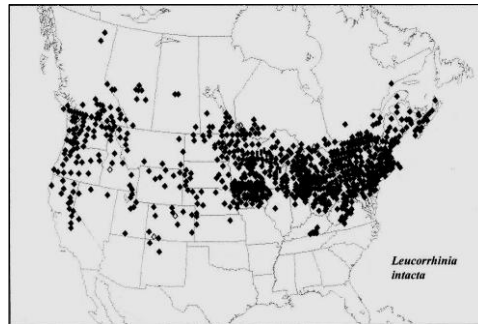
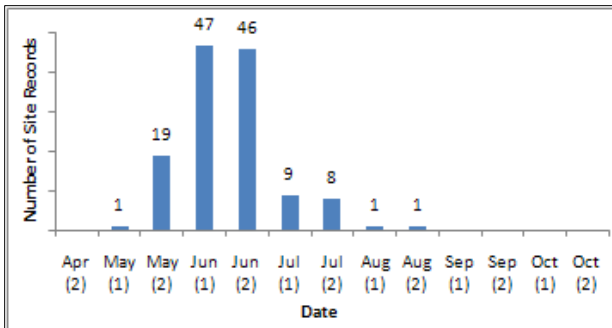
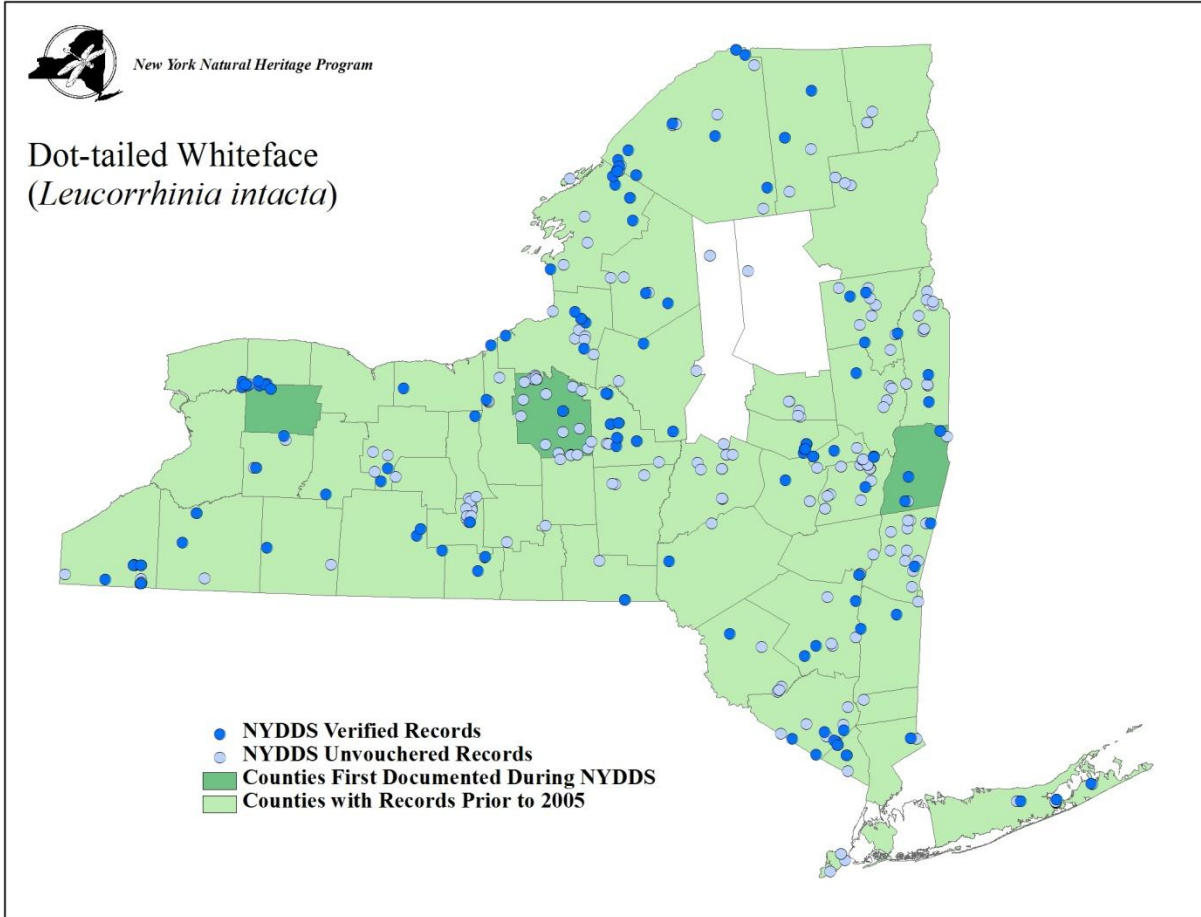
(Donnelly 2004d)



**LIBELLULIDAE**

**Dot-tailed Whiteface (*Leucorrhinia intacta*)**

Pre-NYDDS Status: G5, S5



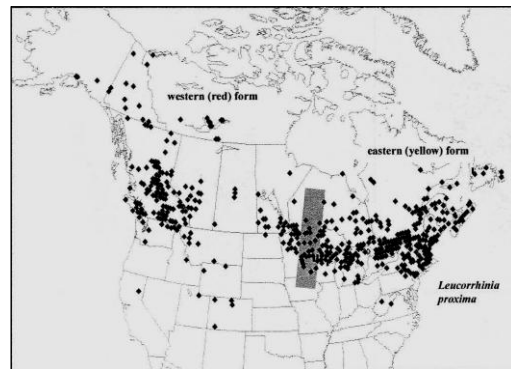
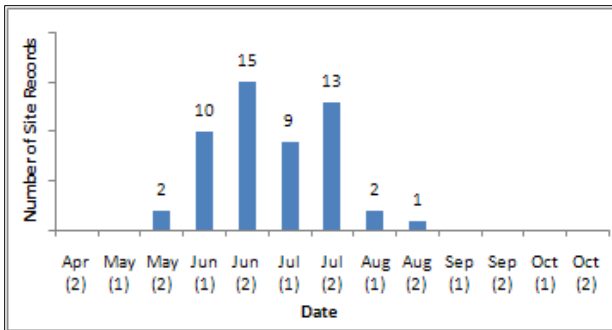
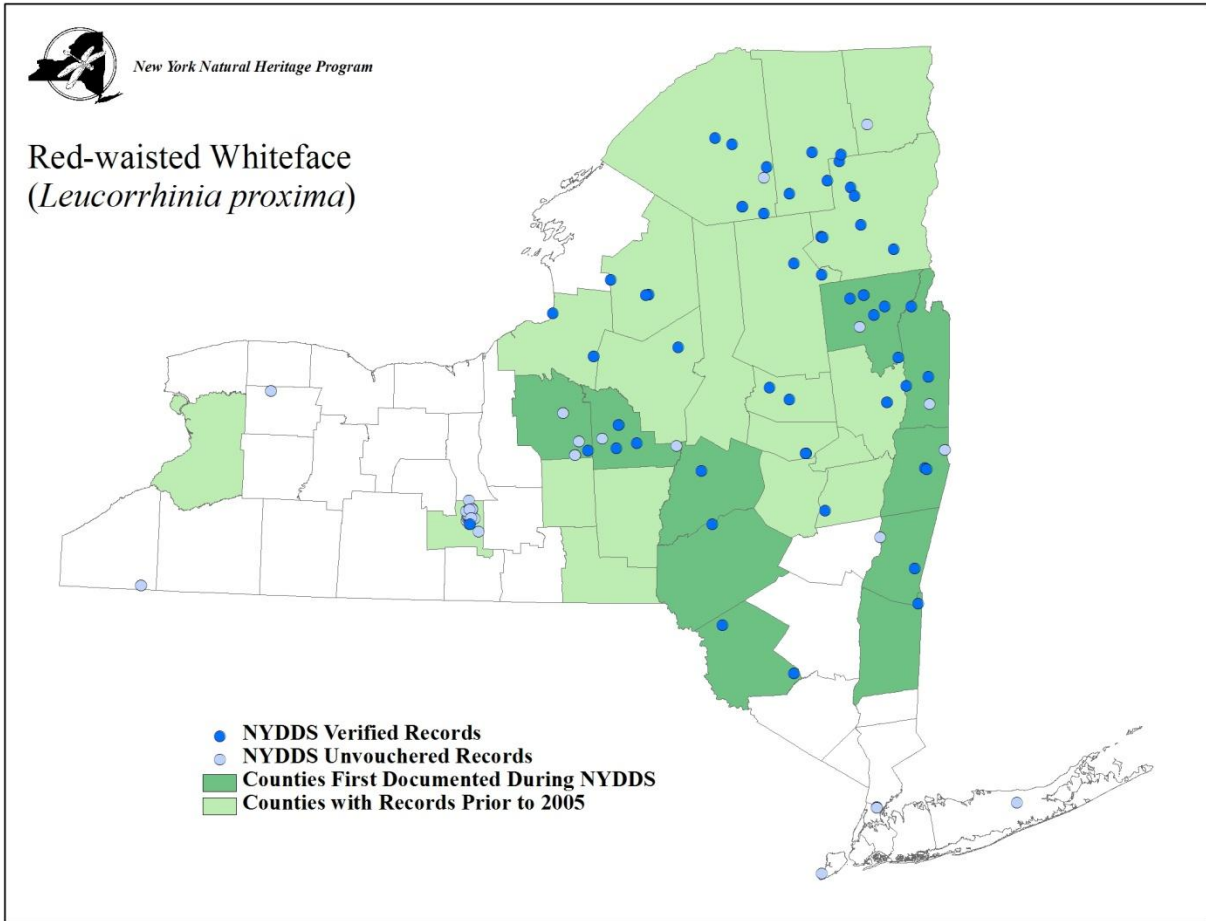
(Donnelly 2004d)



**LIBELLULIDAE**

**Red-waisted Whiteface (*Leucorrhinia proxima*)**

**Pre-NYDDS Status: G5, S3S4**



(Donnelly 2004d)

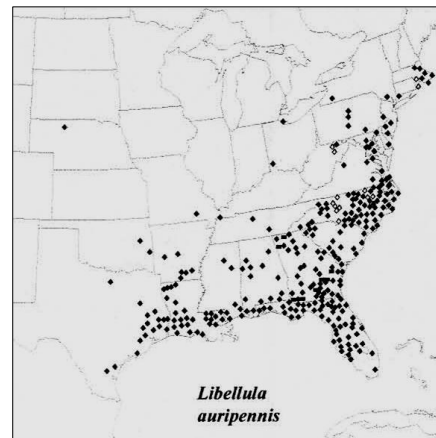
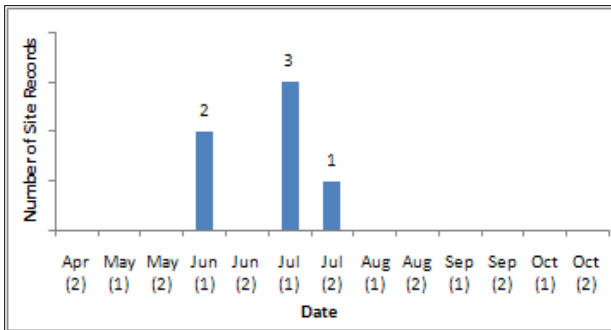
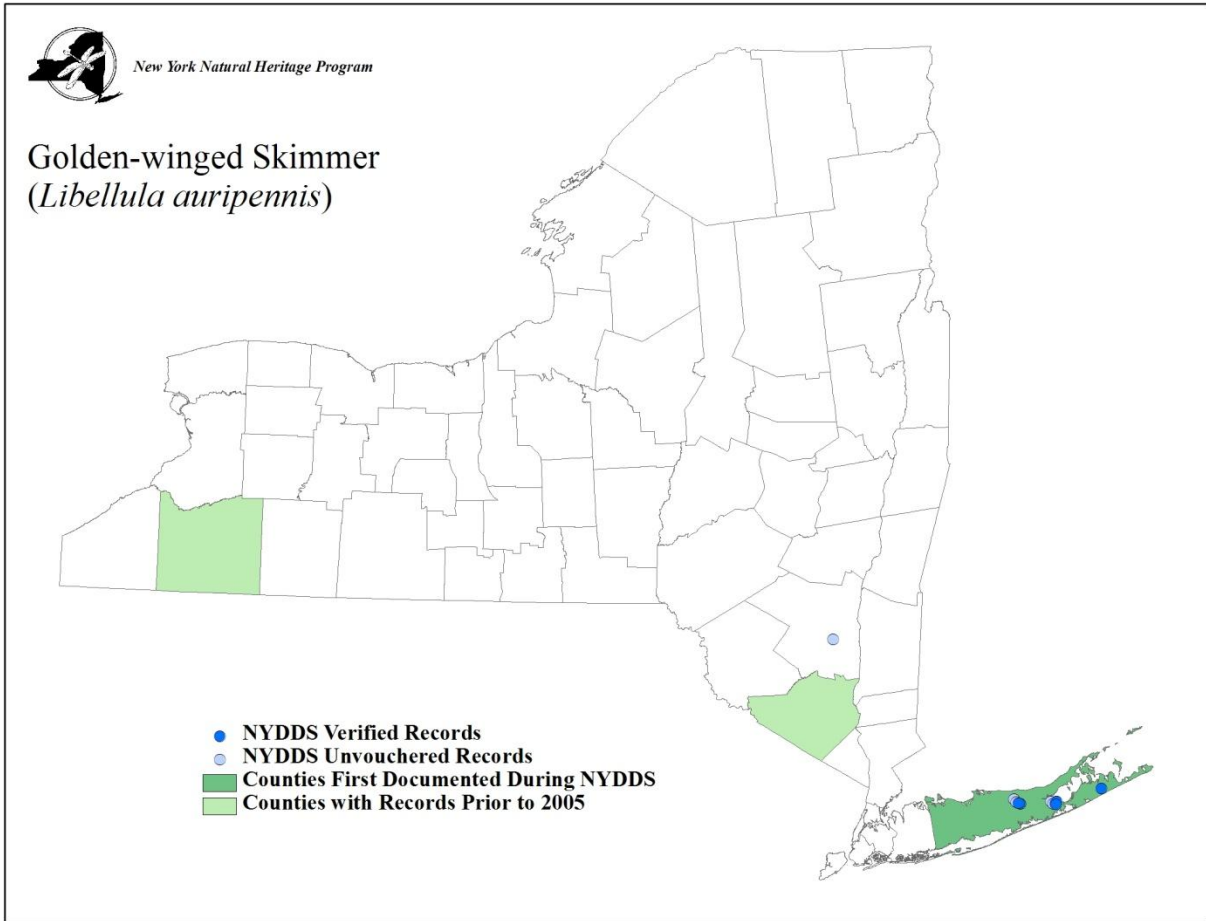


**LIBELLULIDAE**

**Golden-winged Skimmer (*Libellula auripennis*)**

**Pre-NYDDS Status: G5, S1**

**Draft Revised Status: S1S2**



(Donnelly 2004d)

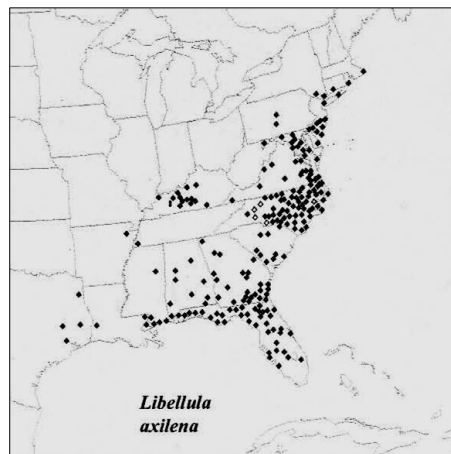
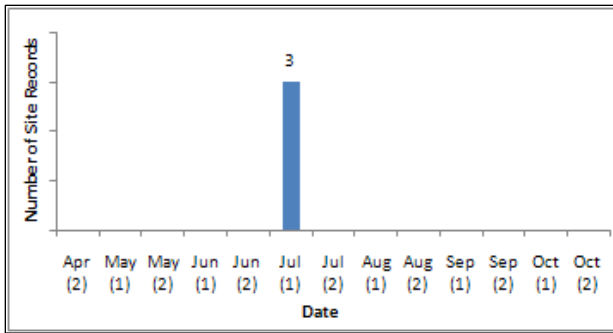
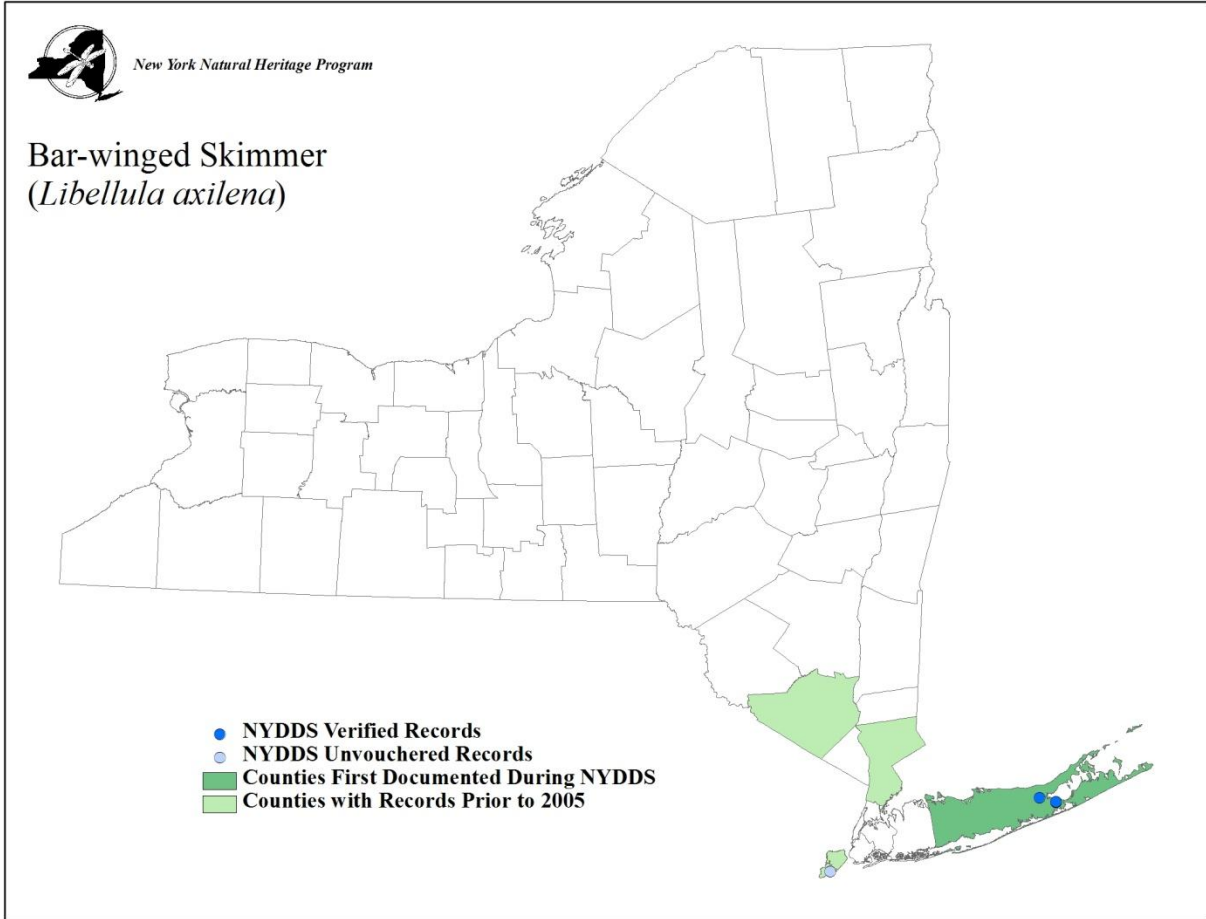


**LIBELLULIDAE**

**Bar-winged Skimmer (*Libellula axilena*)**

**Pre-NYDDS Status: G5, SNA**

**Draft Revised Status: S1, if breeding confirmed**



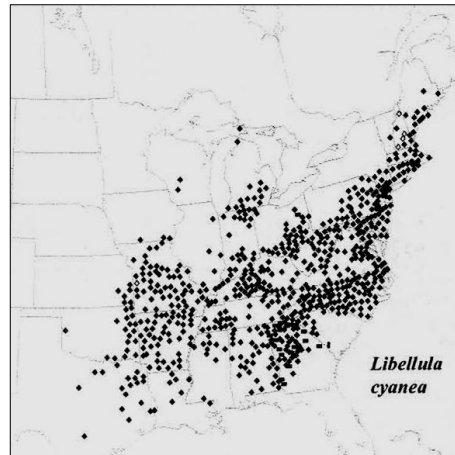
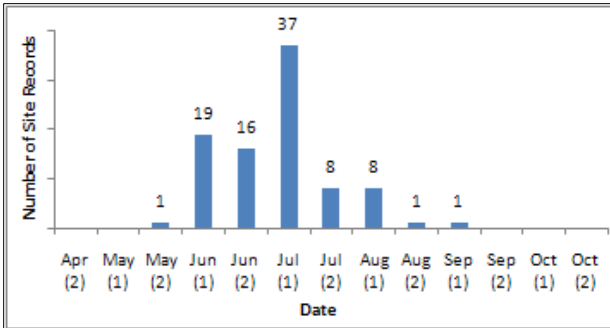
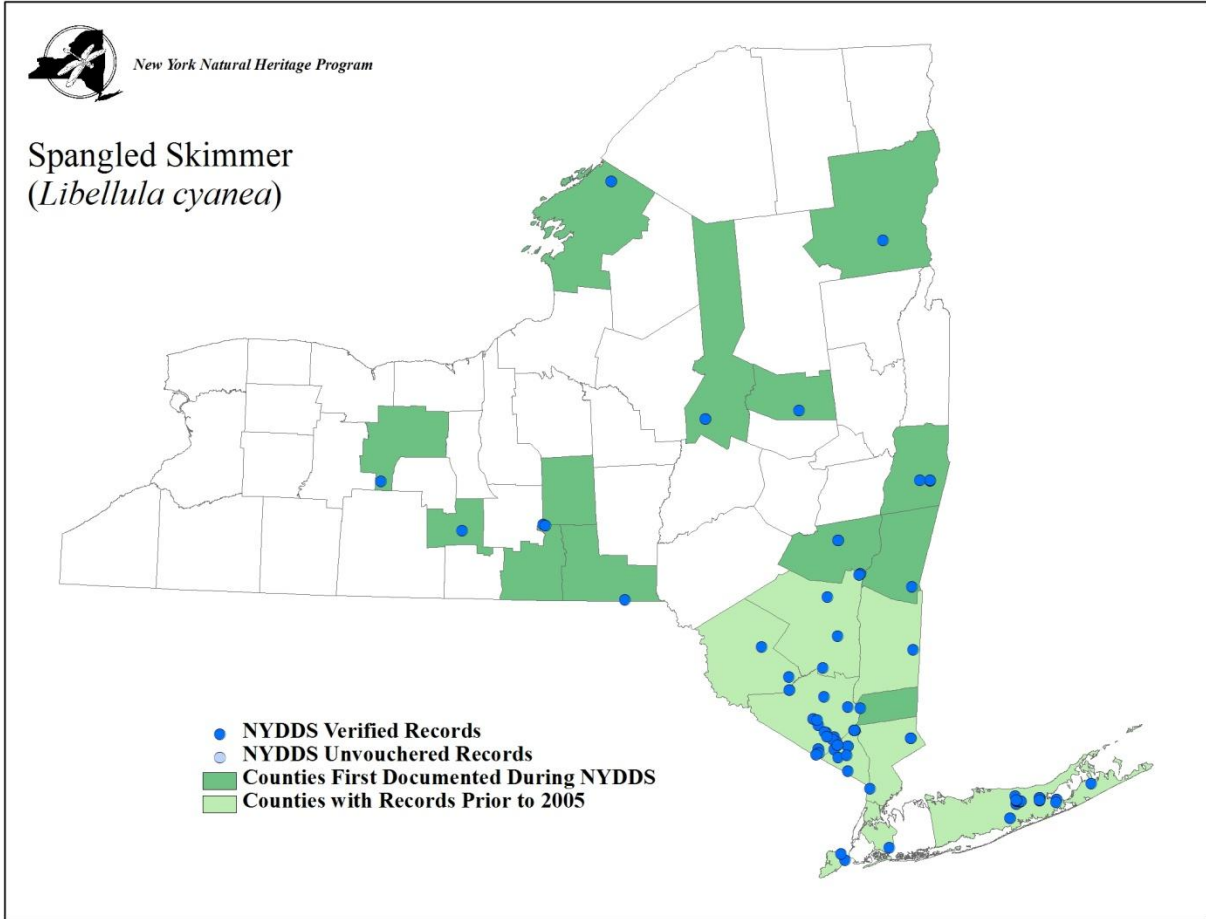
(Donnelly 2004d)



**LIBELLULIDAE**

**Spangled Skimmer (*Libellula cyanea*)**

**Pre-NYDDS Status: G5, S4S5**



(Donnelly 2004d)



## LIBELLULIDAE

### Yellow-sided Skimmer (*Libellula flavida*)

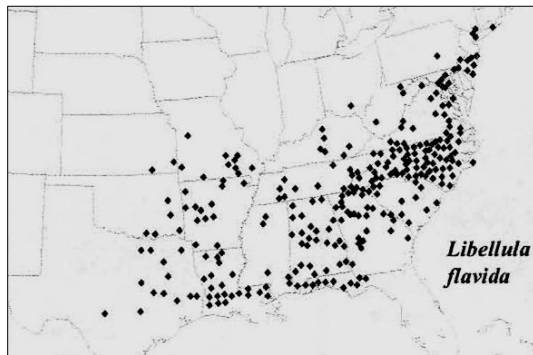
Pre-NYDDS Status: G5, S1

Draft Revised Status: S1

**Habitat Characteristics:** *Libellula flavida* is known to inhabit mucky or boggy seepages mainly along the coastal plain (Dunkle 2000). In New Jersey, they have been found in acidic bogs with Sphagnum moss, mainly in abandoned cranberry bogs and along the coastal plain (Barber 1999, Bangma & Barlow 2010). In New York, Donnelly (1999) noted that habitat where the species was previously known on Long Island has been degraded and there are no recent records. However, a stable population was first documented on Staten Island in 1997 in an area with habitat including sandy barrens and sphagnum bogs (Lederer 1997).



Patrick Coin



(Donnelly 2004d)

**Distribution and Inventory Needs:** Yellow-sided Skimmers have a known range in the U.S. from Texas north to Oklahoma and Missouri east to the Atlantic coast and north to southern New York (Abbott 2010). Thus, New York lies at the northern range extent for this species. Older records exist for Westchester and Suffolk counties and Staten Island (Donnelly 1999). One confirmed extant location is known for Clay Pit Ponds State Park Preserve on Staten Island near sphagnum bogs and sandy barrens (Lederer 1997). While this

site is located on state-owned protected land, efforts should be made to monitor this population with habitat and threat assessments. Two females have been observed by an experienced surveyor in Cranberry Bog County Park in Suffolk county since 2005 (Walter pers. Comm.). While the photo for this record is slightly uncertain since it could not be separated from an immature *L. incesta* by experts (Donnelly pers. Comm.), this site should be considered a probable site for this species and should be monitored. In addition, further searching in appropriate habitats and flight season at new locations in southern New York and Long Island may reveal other populations of this species.

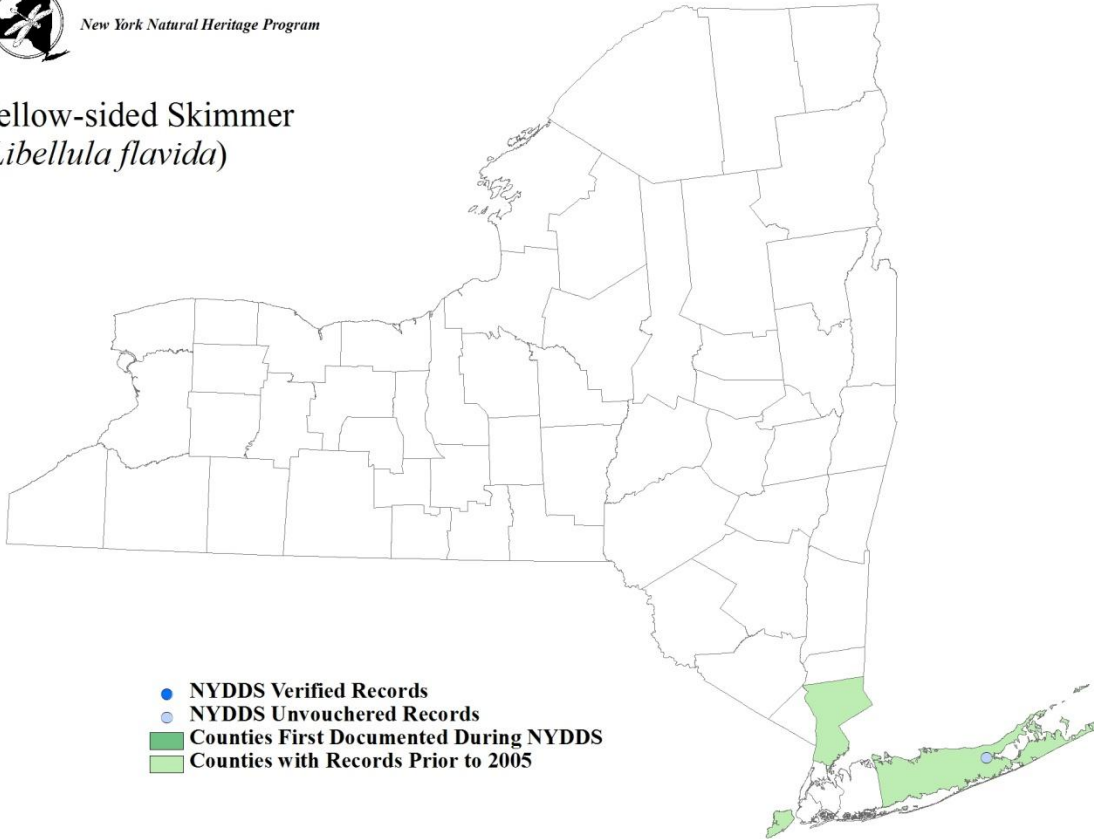
**Phenology:** In New York, Donnelly (1999) notes the flight season as June-July and Lederer's (1997) specimen was captured on July 19. The Suffolk county observation was July 3. Adults have been observed in New Jersey from May 11 to September 4 (Bangma & Barlow 2010) and they are known throughout their range to fly from mid-March to early October (Dunkle 2000).





New York Natural Heritage Program

## Yellow-sided Skimmer (*Libellula flavida*)

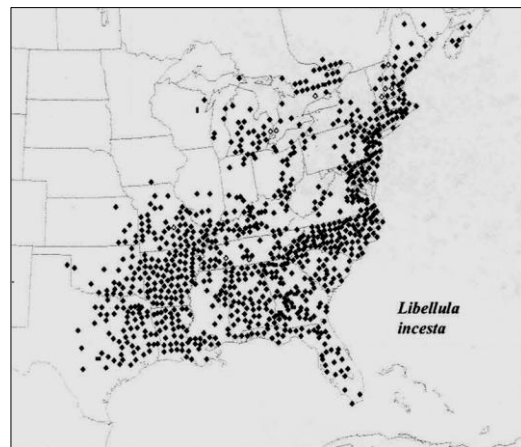
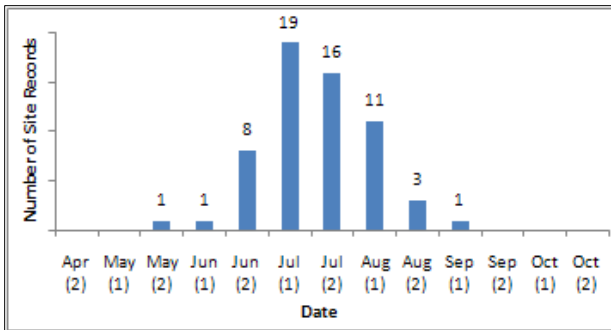
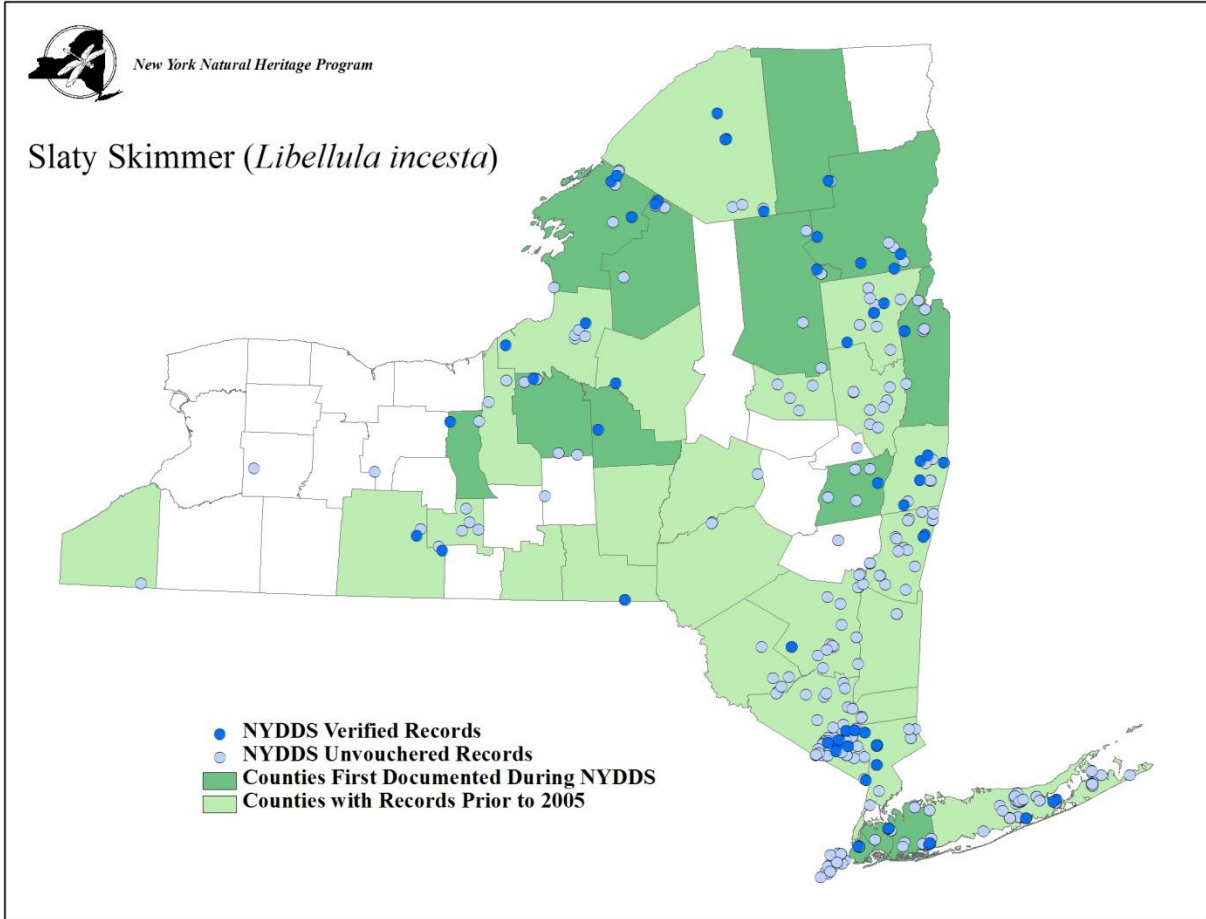




**LIBELLULIDAE**

**Slaty Skimmer (*Libellula incesta*)**

**Pre-NYDDS Status: G5, S5**



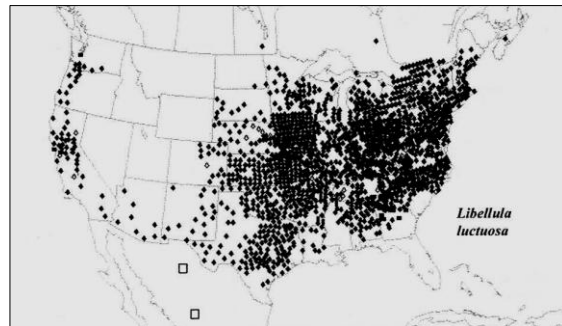
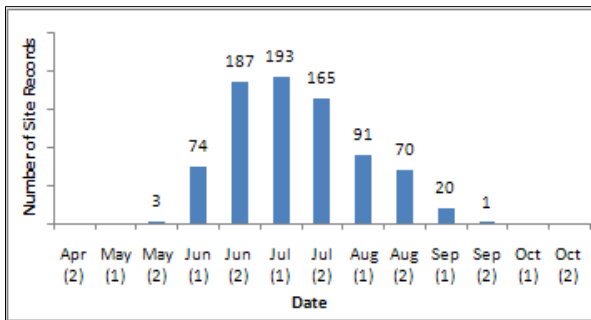
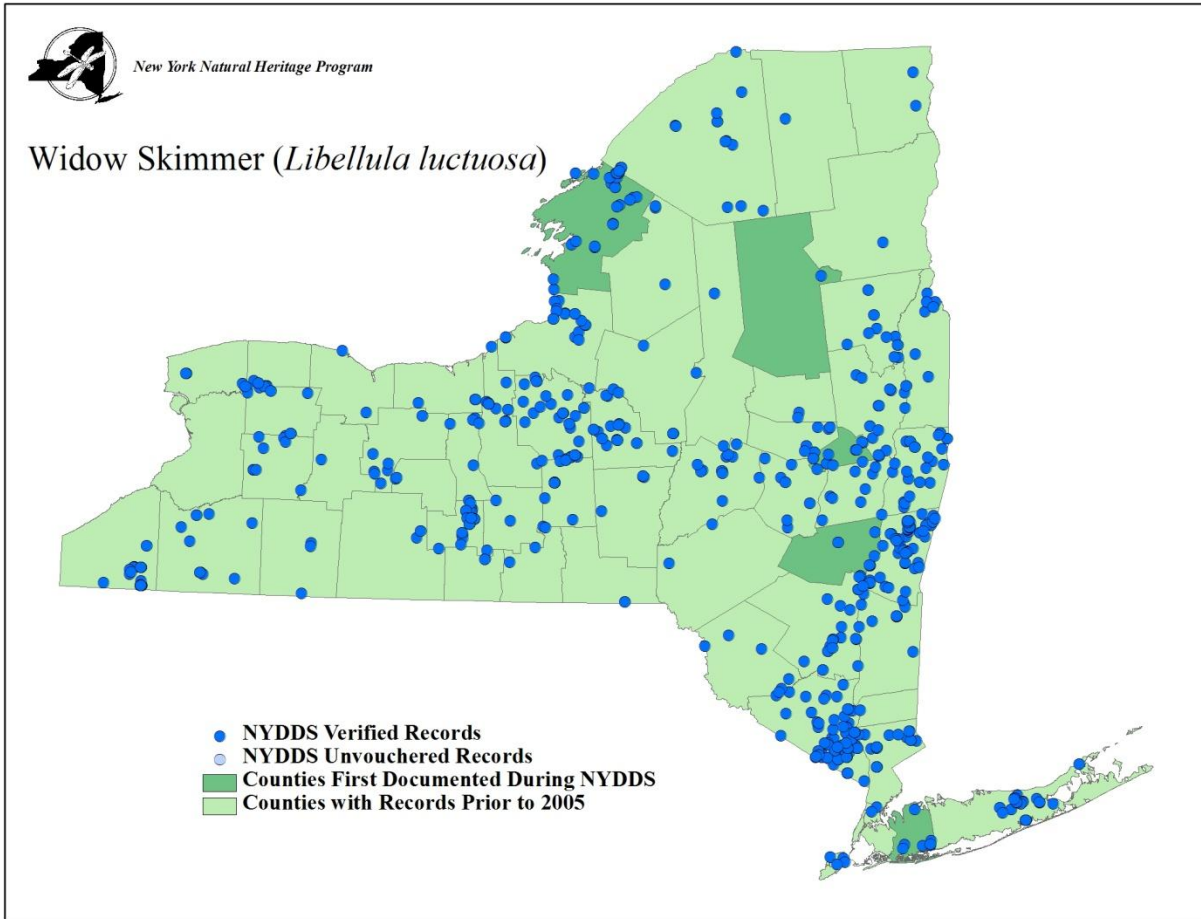
(Donnelly 2004d)



**LIBELLULIDAE**

**Widow Skimmer (*Libellula luctuosa*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004d)



## LIBELLULIDAE

### Needham's Skimmer (*Libellula needhami*)

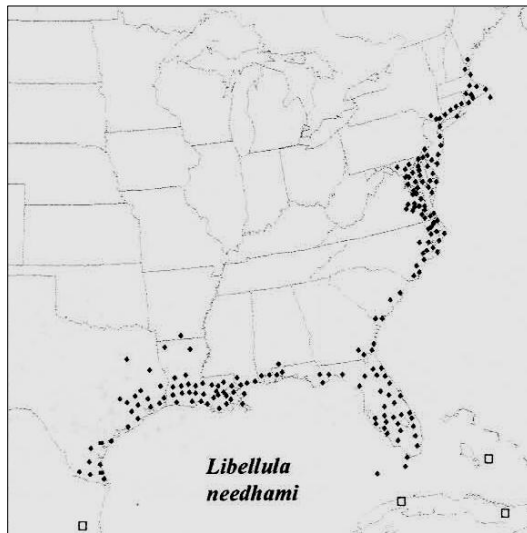
Pre-NYDDS Status: G5, S2S3

Draft Revised Status: S3

**Habitat Characteristics:** Needham's Skimmer is known to inhabit brackish backwaters, marshes, lakes, ponds, tidal rivers, and canals throughout its range (Dunkle 2000, Pennsylvania Natural Heritage Program 2010a). In New York, most NYDDS sightings occurred near marshes, ponds, and rivers and included sites with brackish water.



Alan W. Wells 2006



(Donnelly 2004d)

**Distribution and Inventory Needs:** *Libellula needhami* is found along the southern United States that border the Gulf of Mexico, then along the Atlantic coastline northward to southern Maine (Abbott 2010, Pennsylvania Natural Heritage Program 2010a). It is also found ranging from the southern United States to Quintana Roo, Mexico, in the Florida Keys, Cuba, and the Bahamas (Dunkle 2000). In New York, it is found in the southern counties of Westchester, Putnam, Orange, Rockland, Richmond, Kings, Queens, Nassau and Suffolk (Donnelly 1999) It has been confirmed in at least 16 locations across these counties and observed in at least nine other locations, many of which were documented since 1997 (New York Natural Heritage Program 2010). The effort from the NYDDS added a number of new records for

this species. The species is still estimated to be an S3 (vulnerable) based on this new information and sites should be monitored to document population numbers, trends, and threats at known sites where they have been observed.

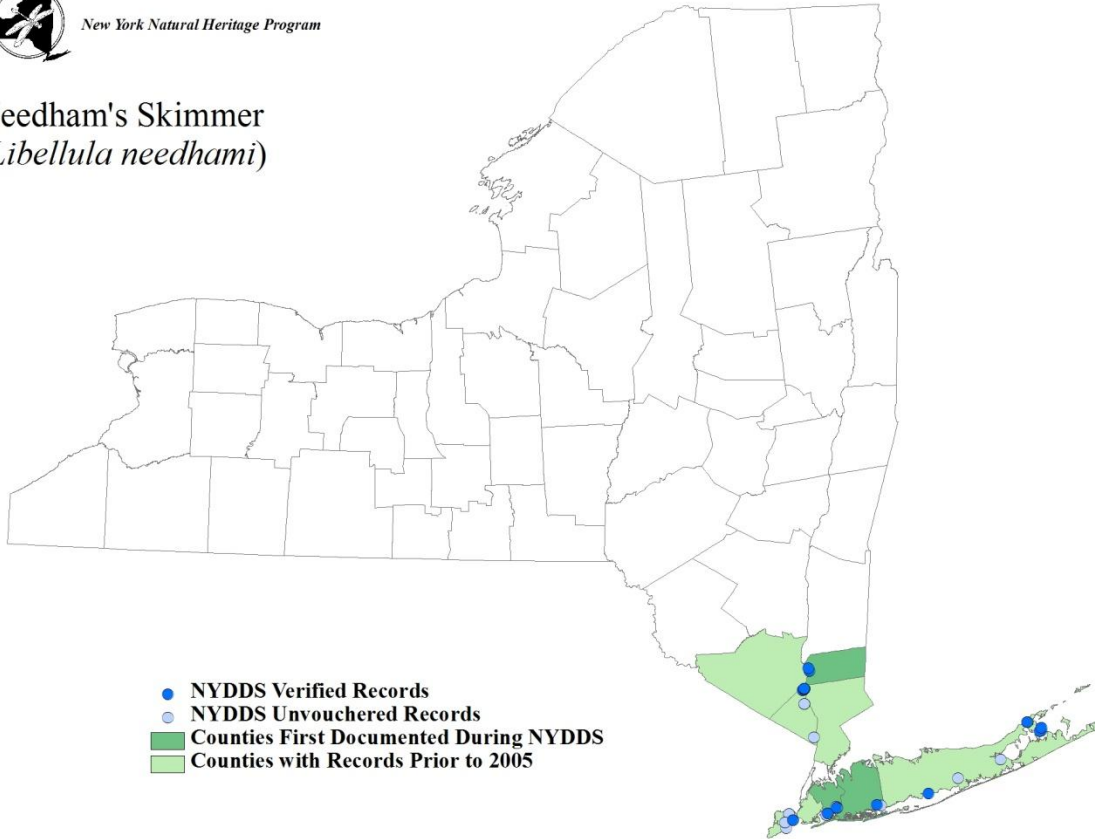
**Phenology:** In New Jersey, *L. needhami* is known to be on the wing from May 19 to September 20 (Bangma & Barlow 2010). During the NYDDS, New York adults were confirmed from June 21 through September 5 and pre-NYDDS records indicate that adults have been observed in New York as early as May (Donnelly 1999).



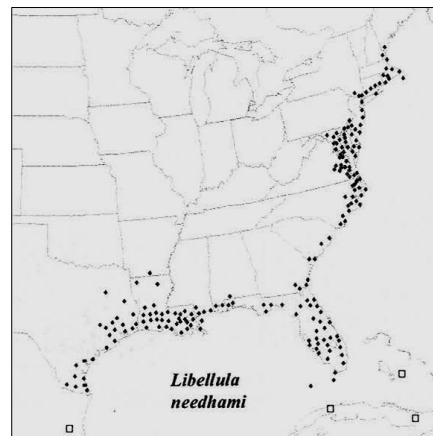
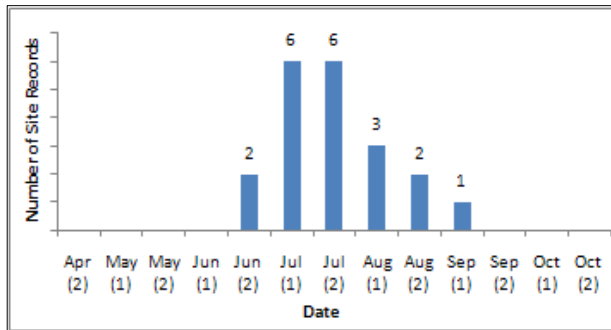


New York Natural Heritage Program

### Needham's Skimmer (*Libellula needhami*)



- NYDDS Verified Records
- NYDDS Unvouchered Records
- Counties First Documented During NYDDS
- Counties with Records Prior to 2005



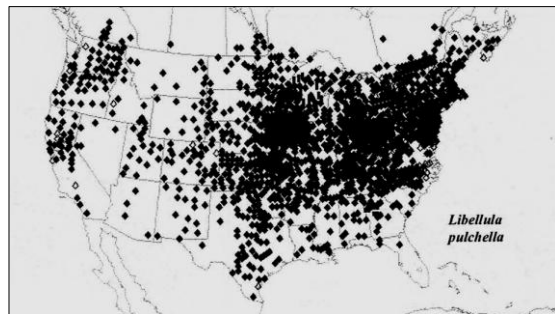
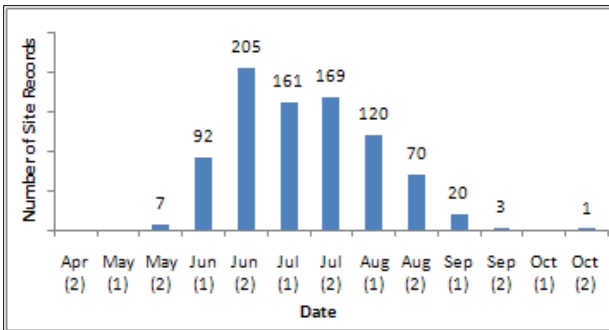
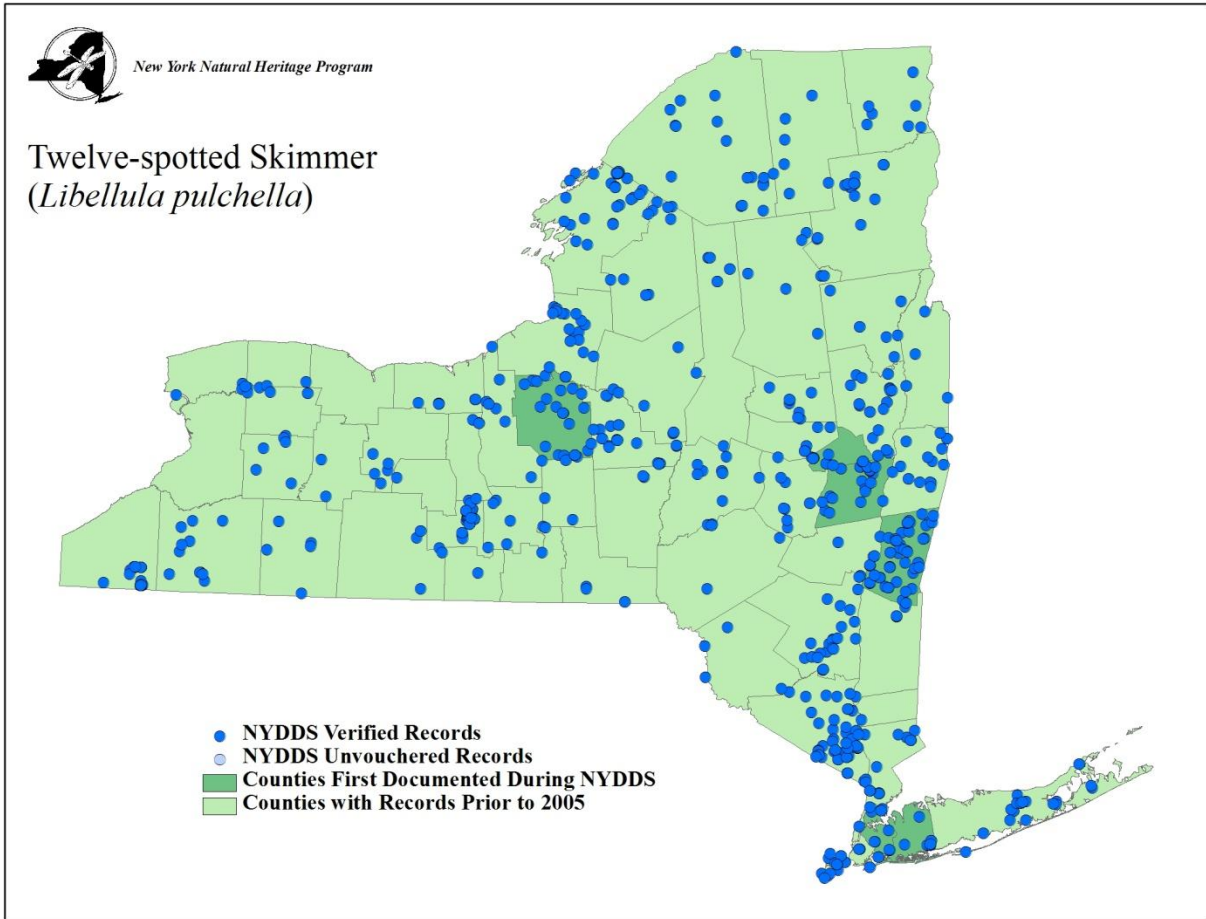
(Donnelly 2004d)



**LIBELLULIDAE**

**Twelve-spotted Skimmer (*Libellula pulchella*)**

Pre-NYDDS Status: G5, S5



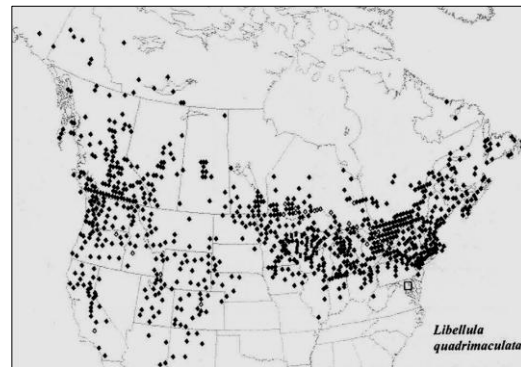
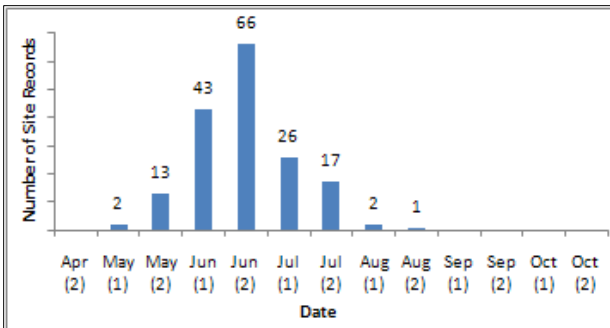
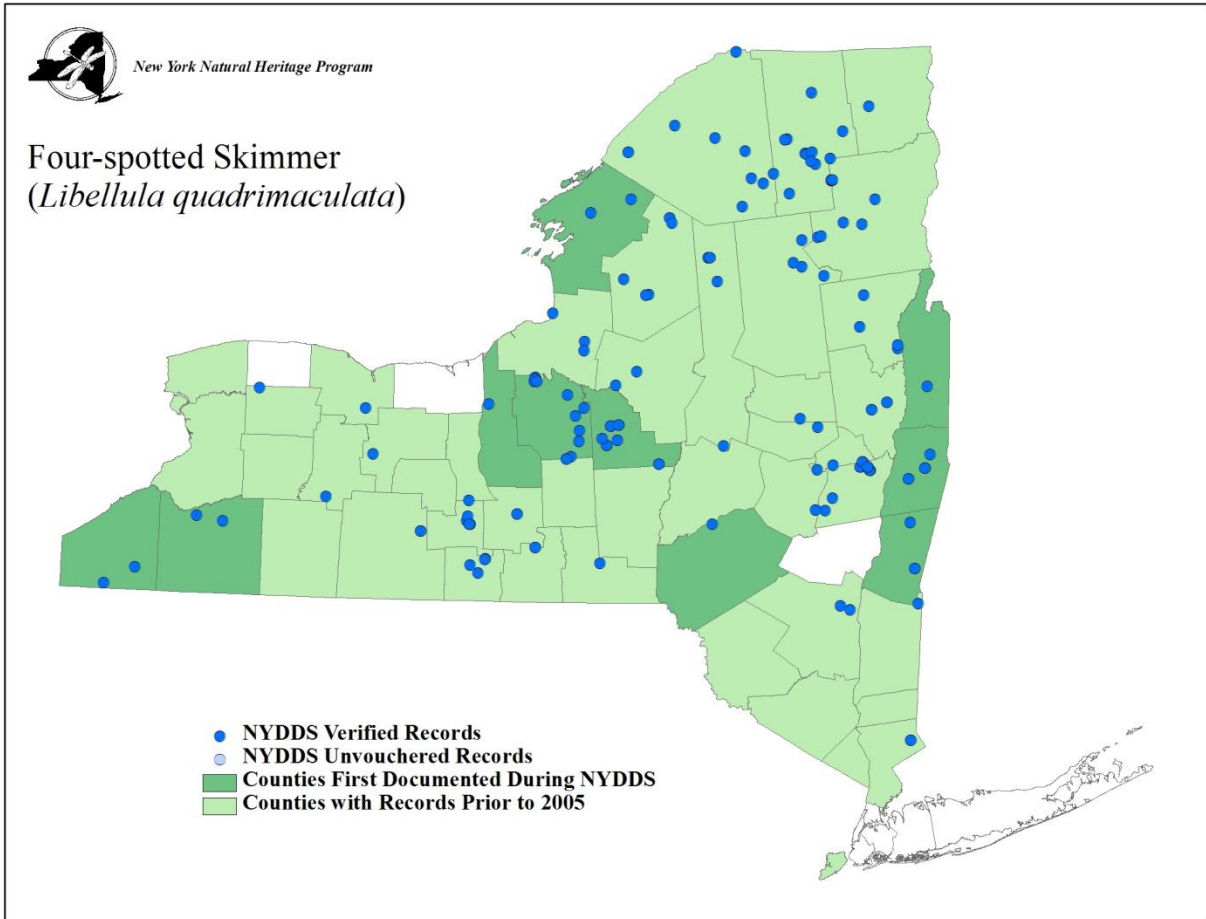
(Donnelly 2004d)



**LIBELLULIDAE**

**Four-spotted Skimmer (*Libellula quadrimaculata*)**

Pre-NYDDS Status: G5, S5



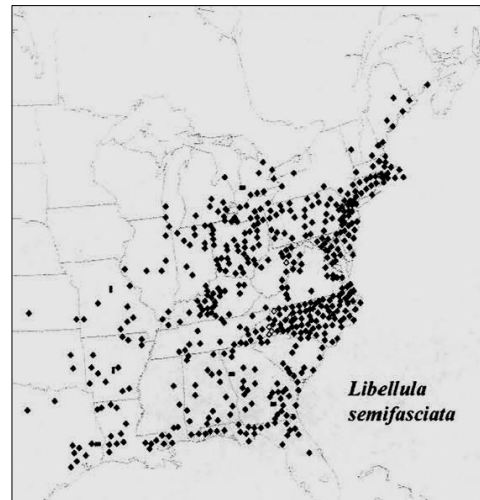
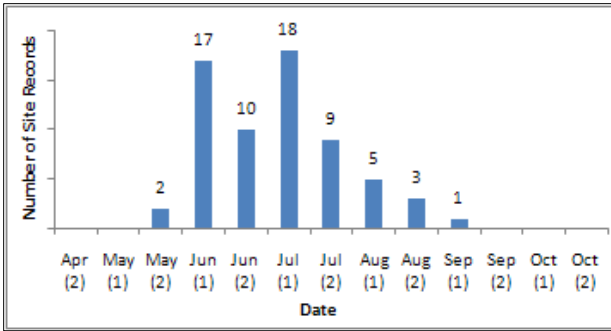
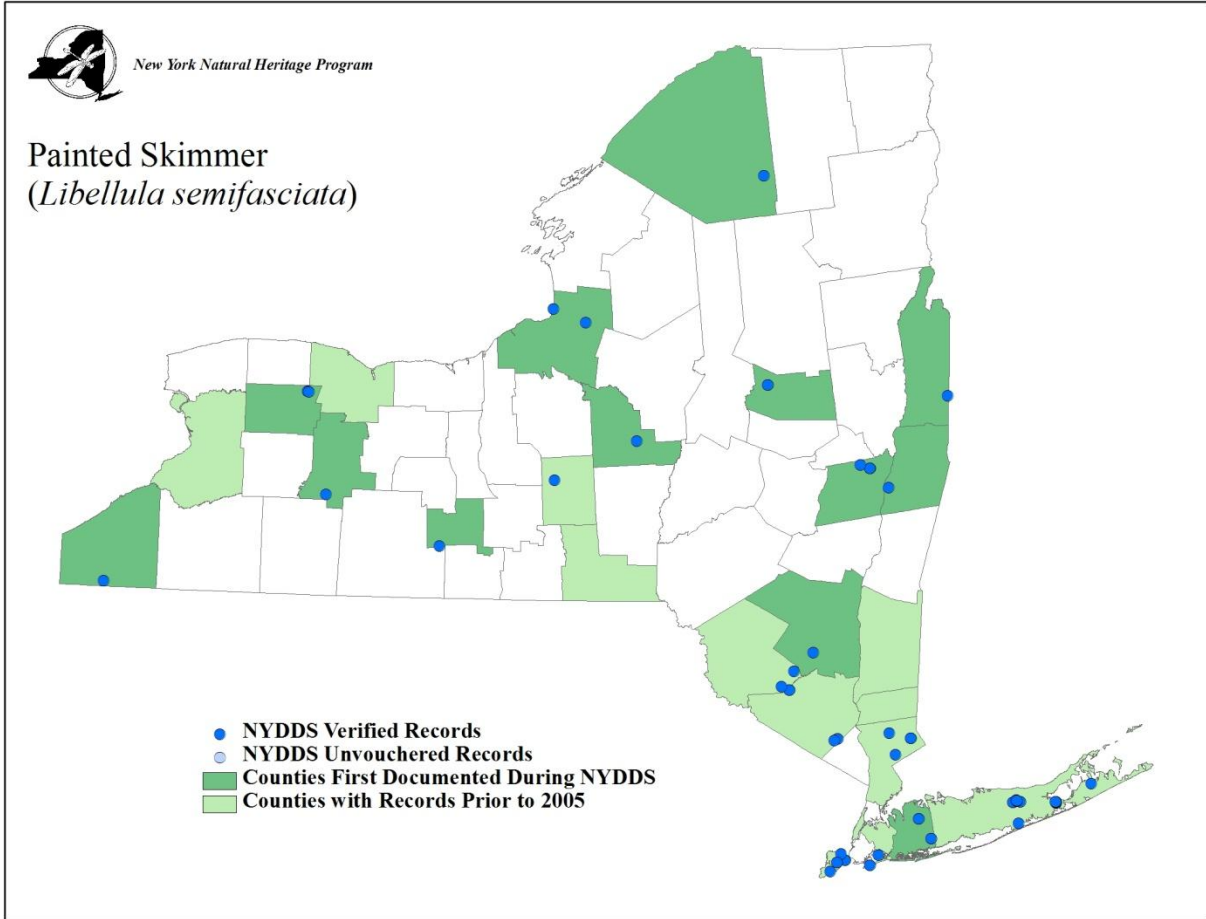
(Donnelly 2004d)



**LIBELLULIDAE**

**Painted Skimmer (*Libellula semifasciata*)**

**Pre-NYDDS Status: G5, S5**



(Donnelly 2004d)

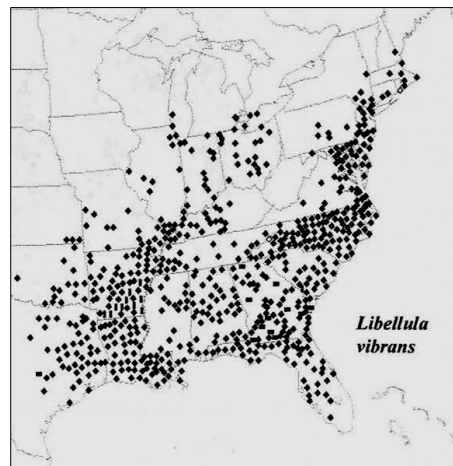
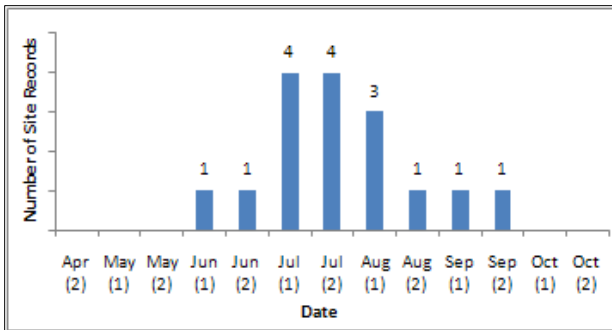
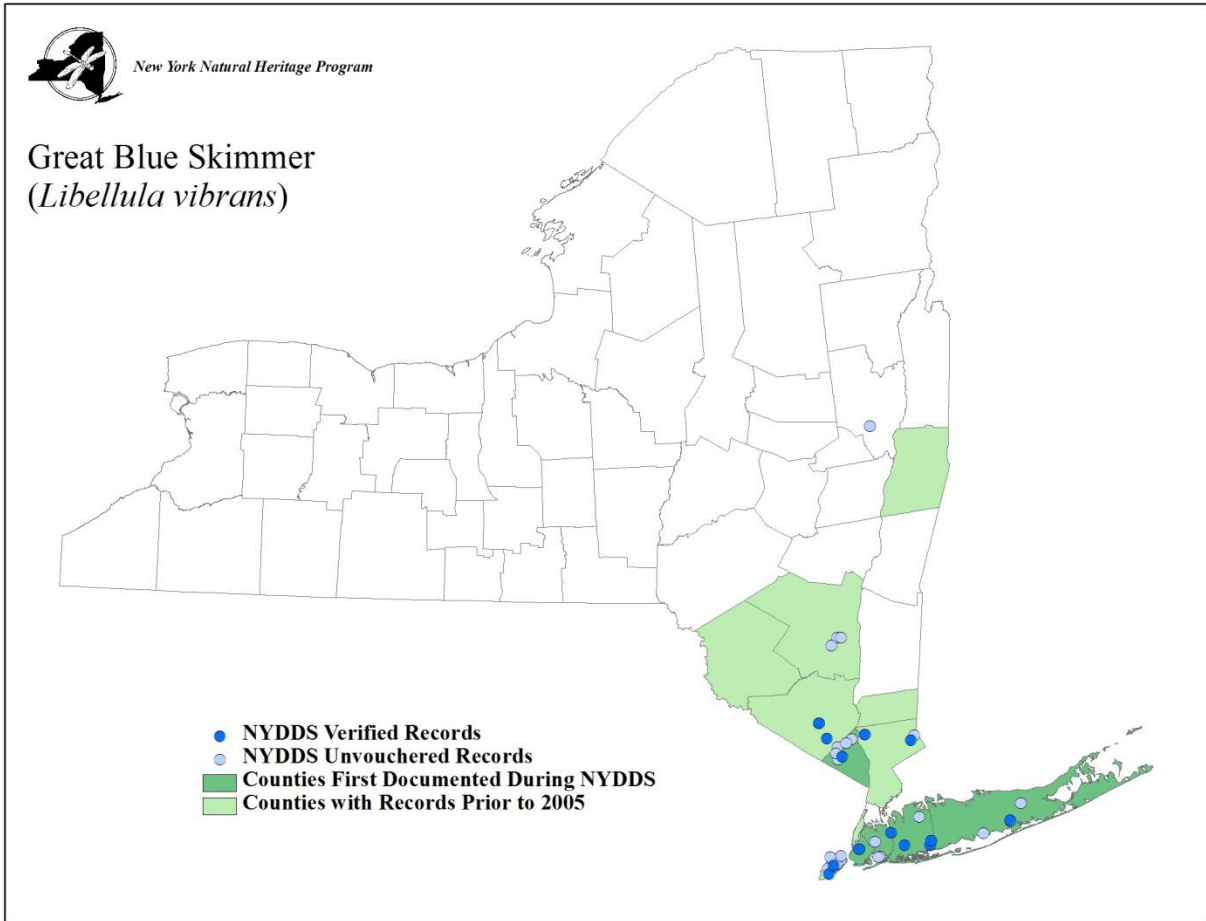


**LIBELLULIDAE**

**Great Blue Skimmer (*Libellula vibrans*)**

**Pre-NYDDS Status: G5, S3S4**

**Draft Revised Status: S3**



(Donnelly 2004d)



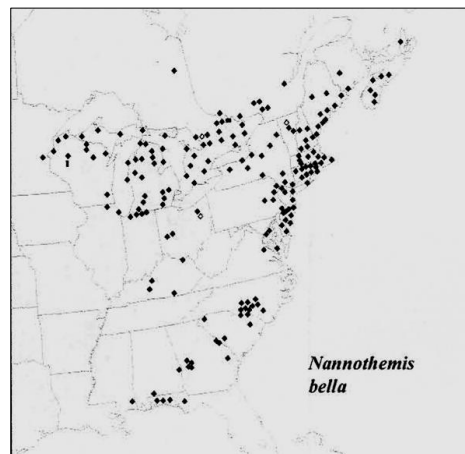
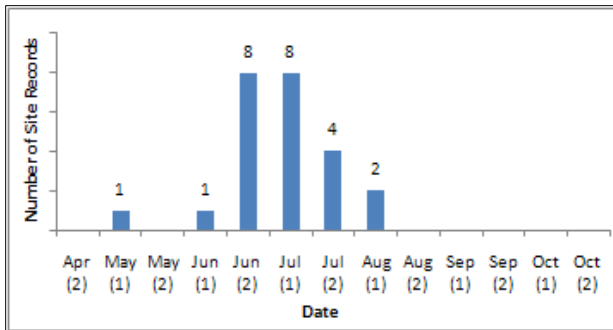
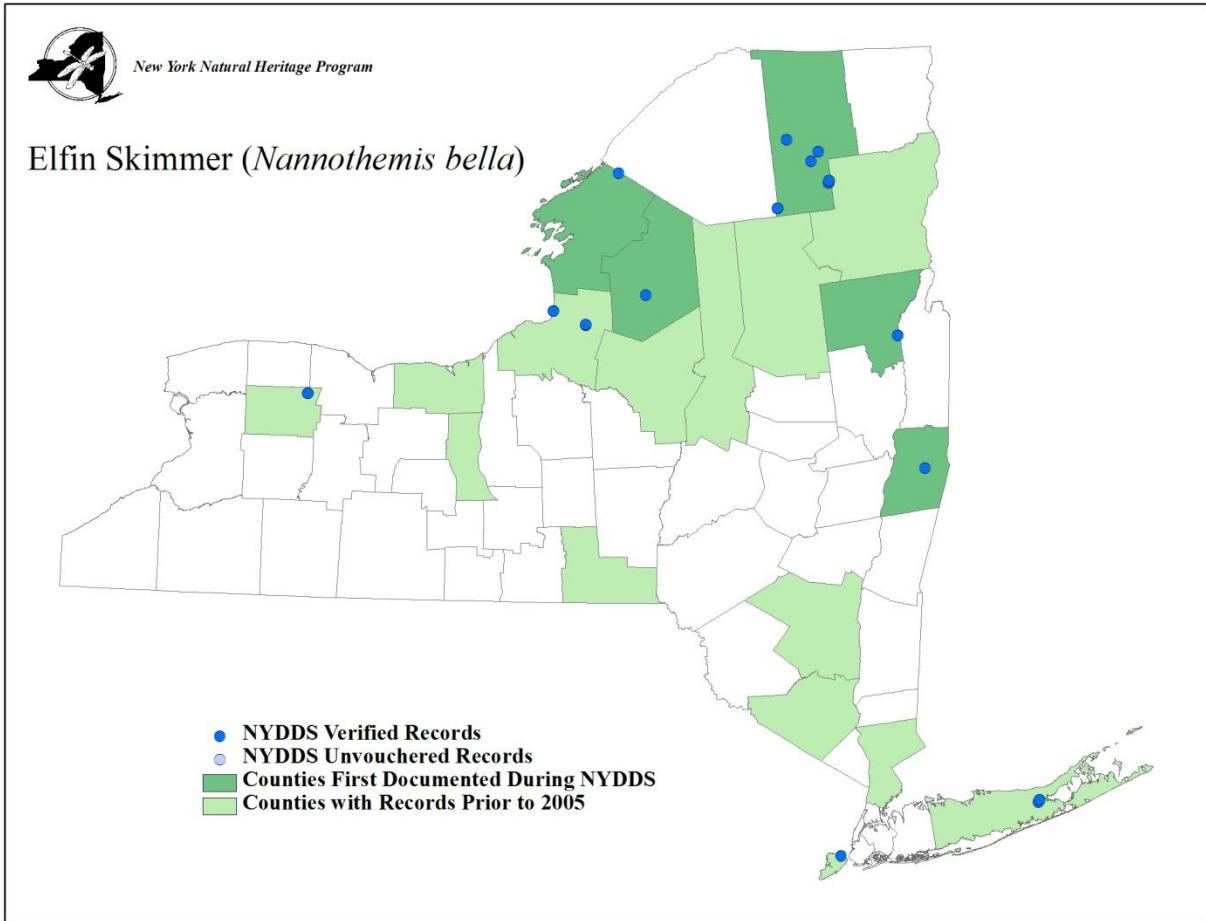


**LIBELLULIDAE**

**Elfin Skimmer (*Nannothemis bella*)**

**Pre-NYDDS Status: G4, S4**

**Draft Revised Status: S3**



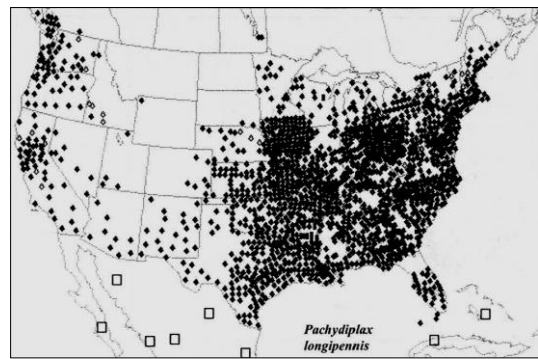
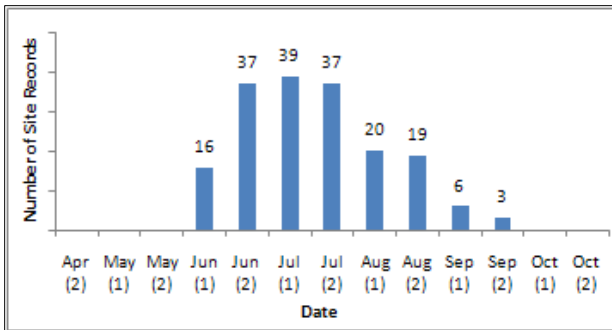
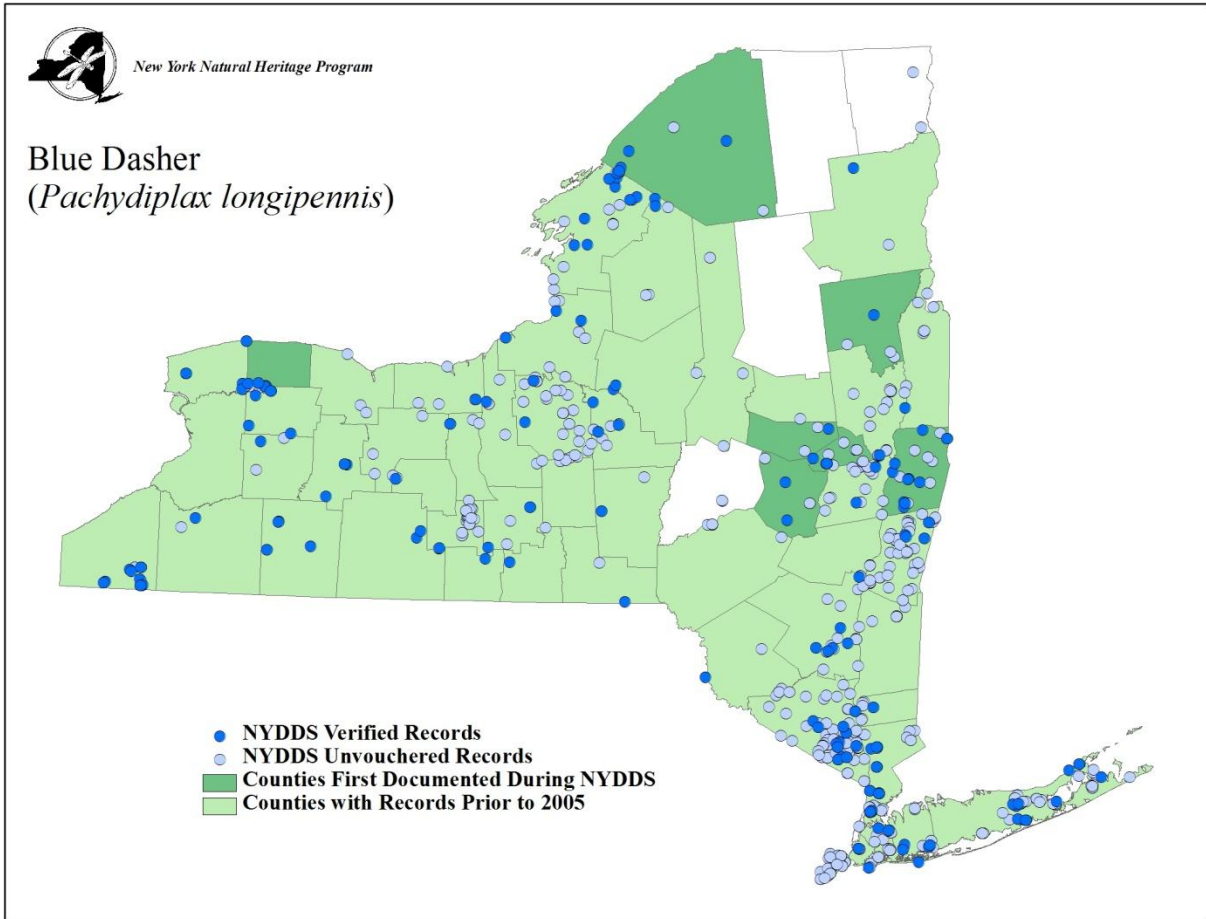
(Donnelly 2004d)



**LIBELLULIDAE**

**Blue Dasher (*Pachydiplax longipennis*)**

**Pre-NYDDS Status: G5, S5**



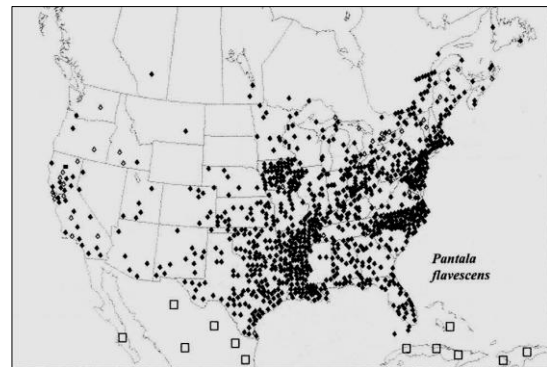
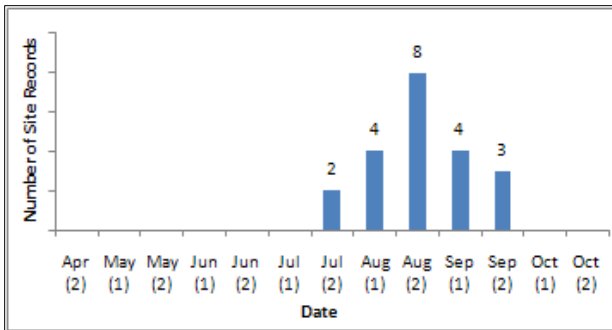
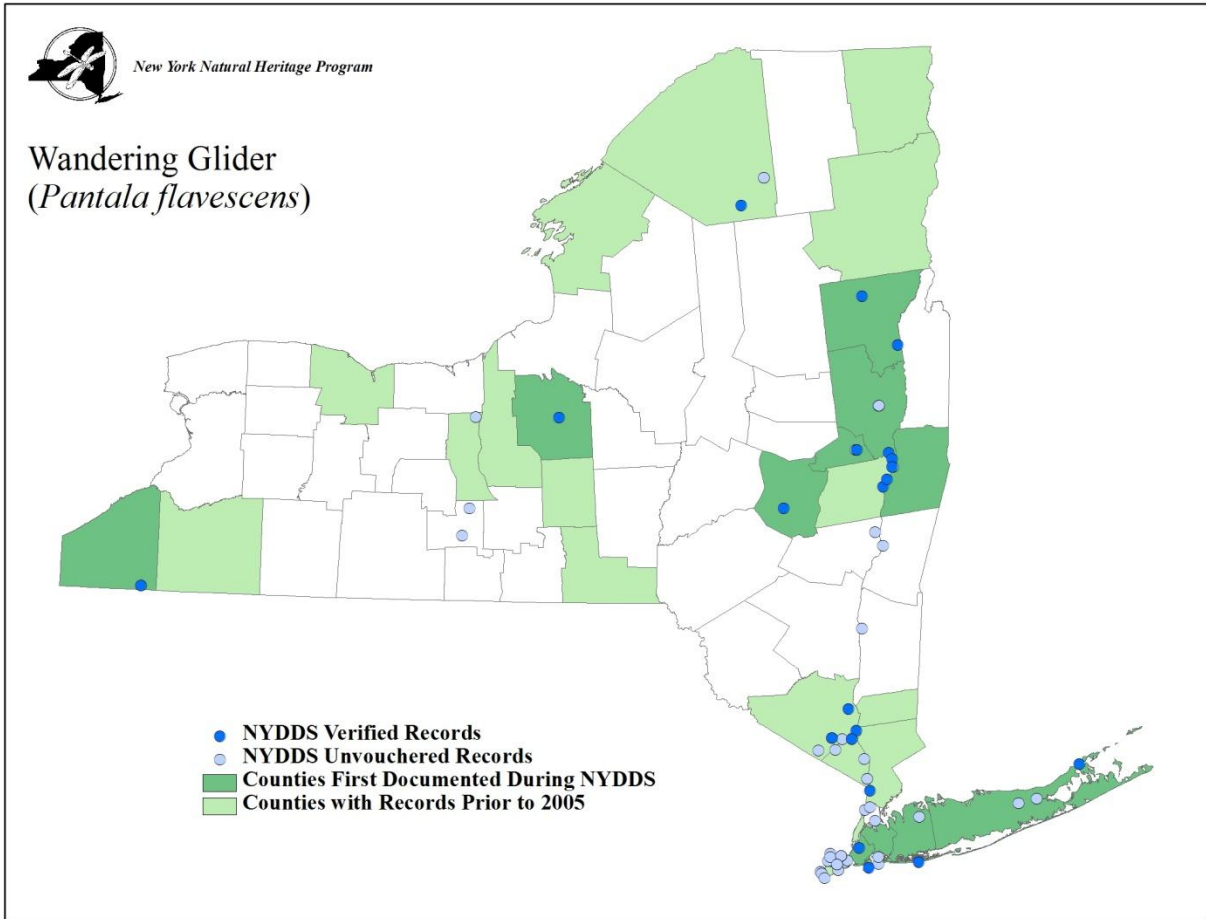
(Donnelly 2004d)



**LIBELLULIDAE**

**Wandering Glider (*Pantala flavescens*)**

**Pre-NYDDS Status: G5, S5**



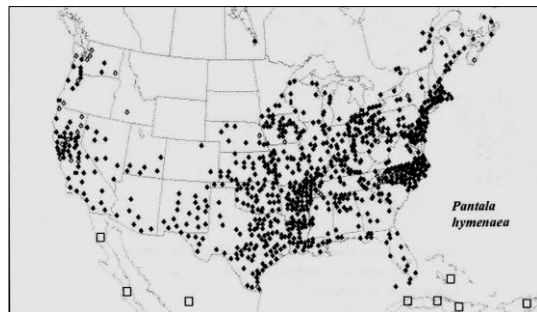
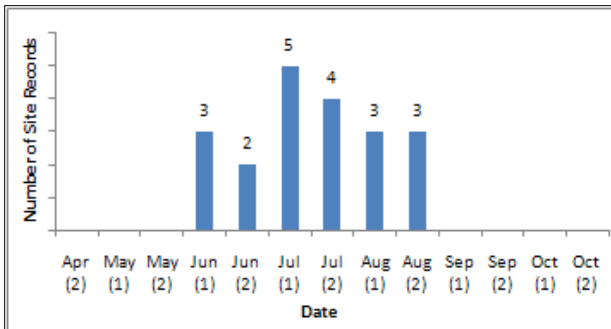
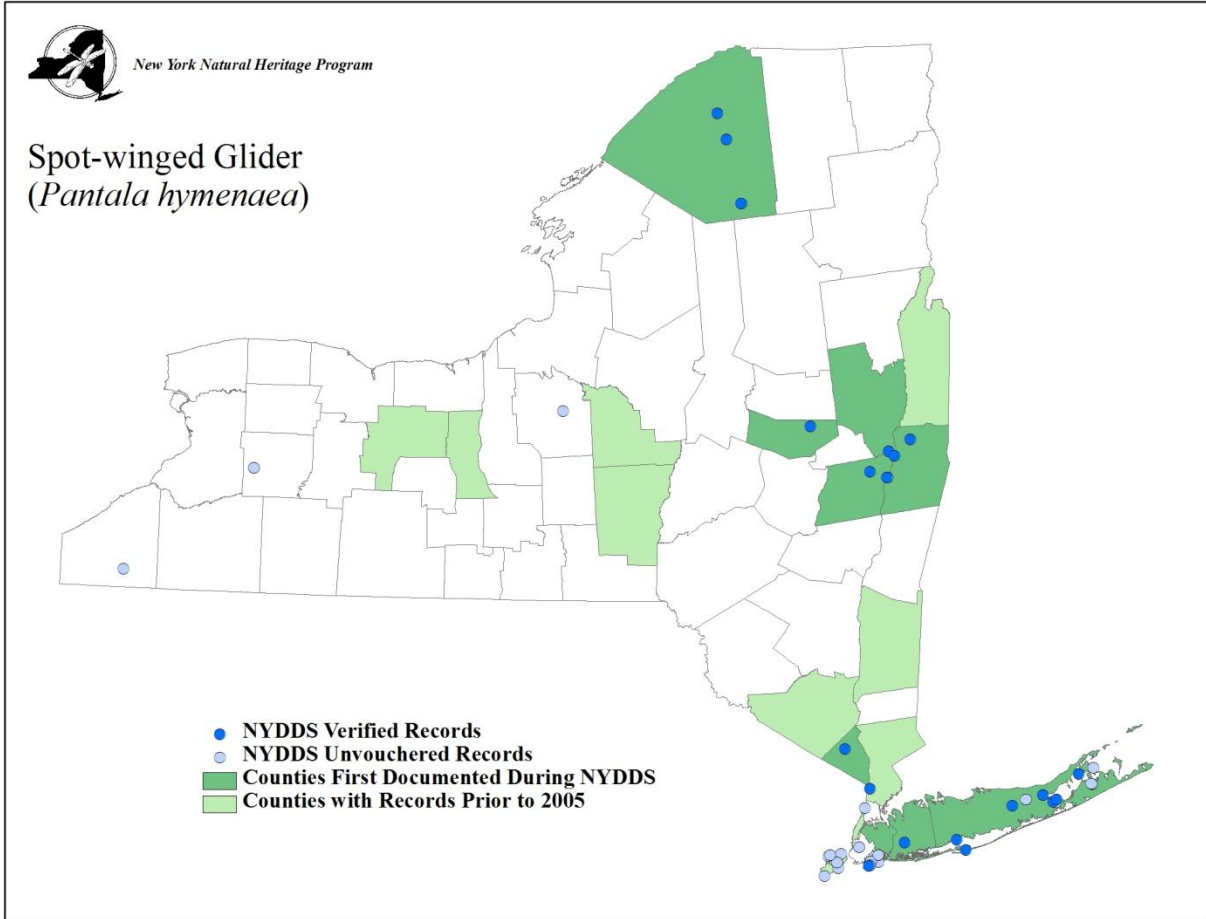
(Donnelly 2004d)



**LIBELLULIDAE**

**Spot-winged Glider (*Pantala hymenaea*)**

Pre-NYDDS Status: G5, S5



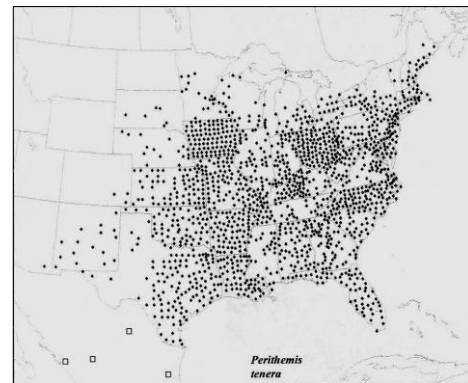
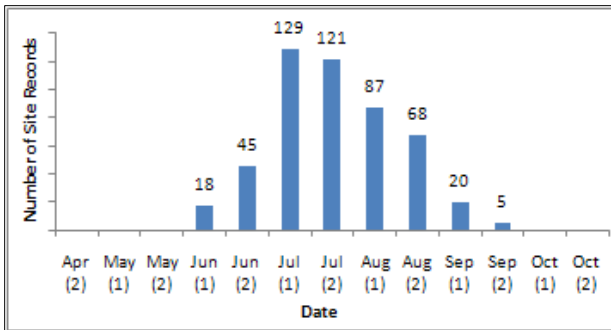
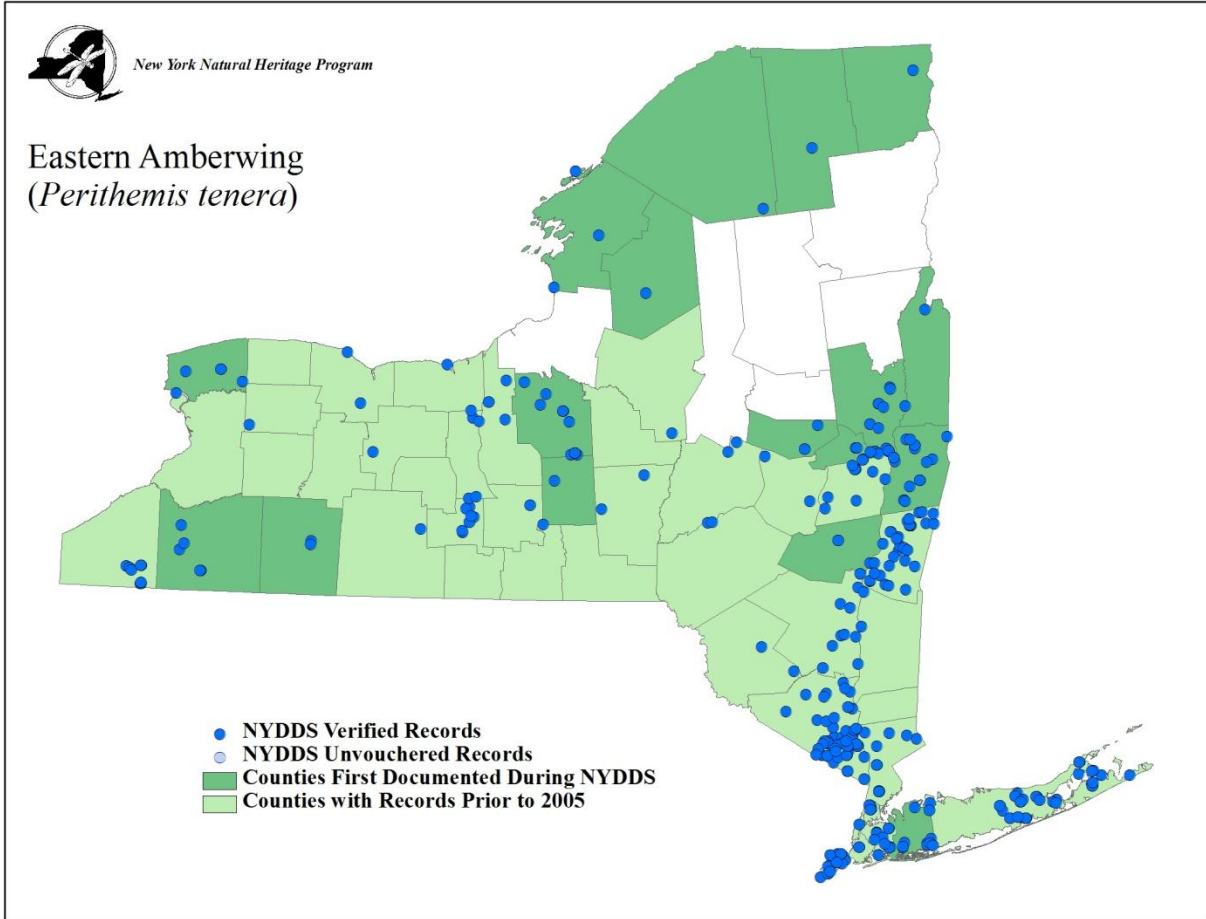
(Donnelly 2004d)



**LIBELLULIDAE**

**Eastern Amberwing (*Perithemis tenera*)**

**Pre-NYDDS Status: G5, S5**



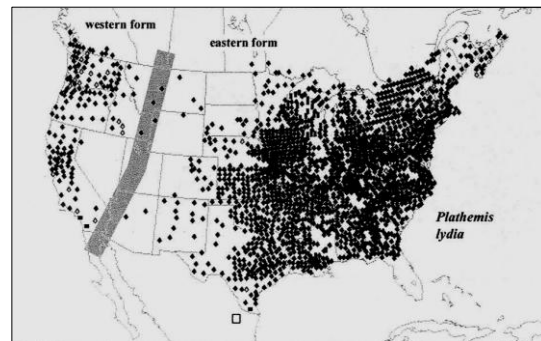
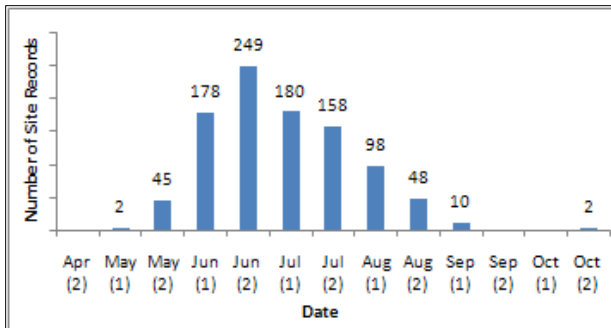
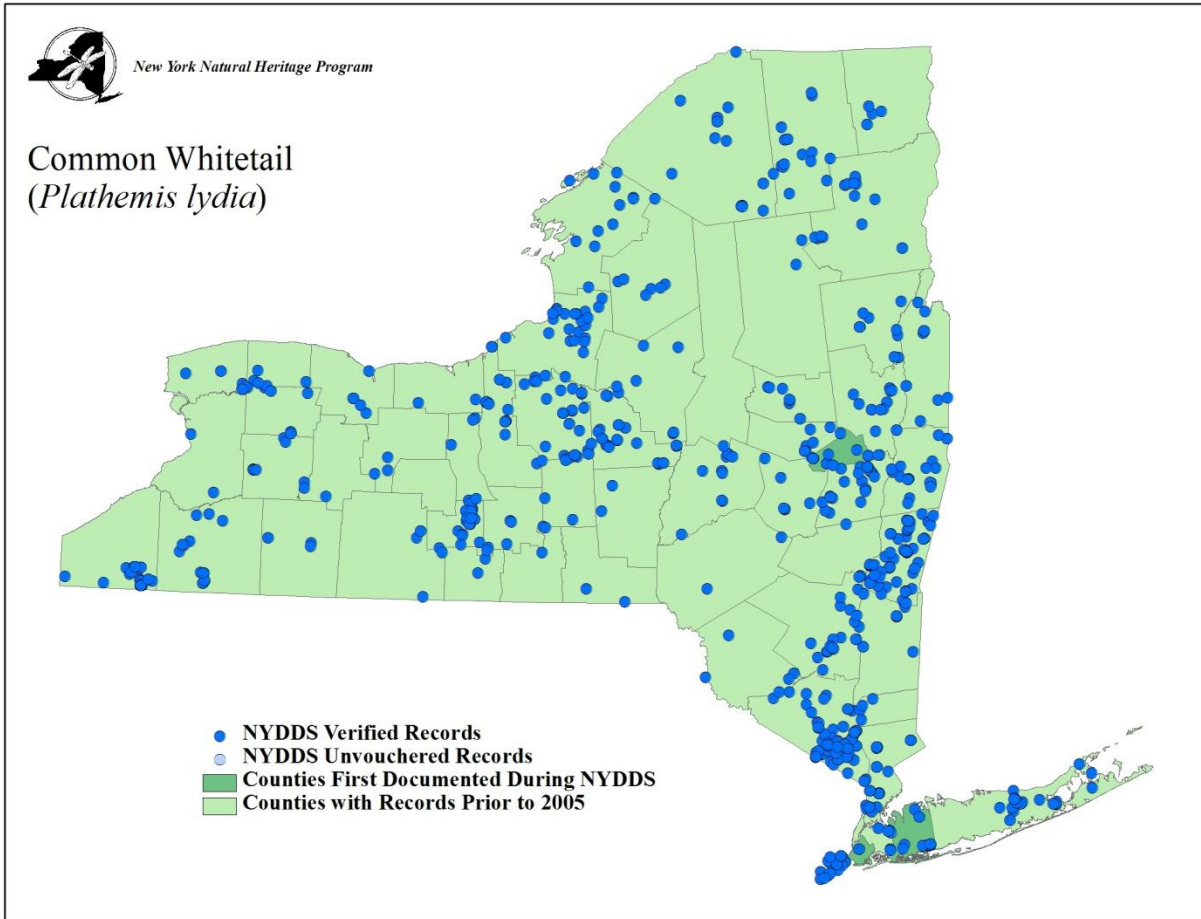
(Donnelly 2004d)



**LIBELLULIDAE**

**Common Whitetail (*Plathemis lydia*)**

Pre-NYDDS Status: G5, S5



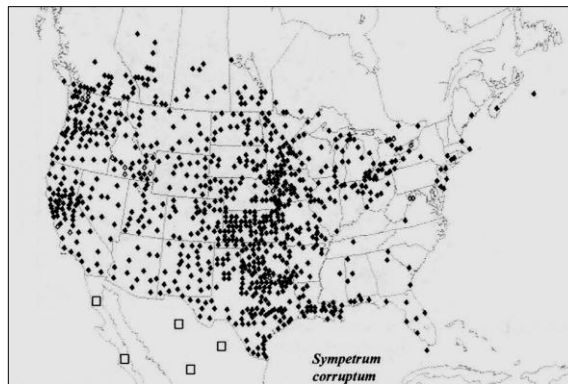
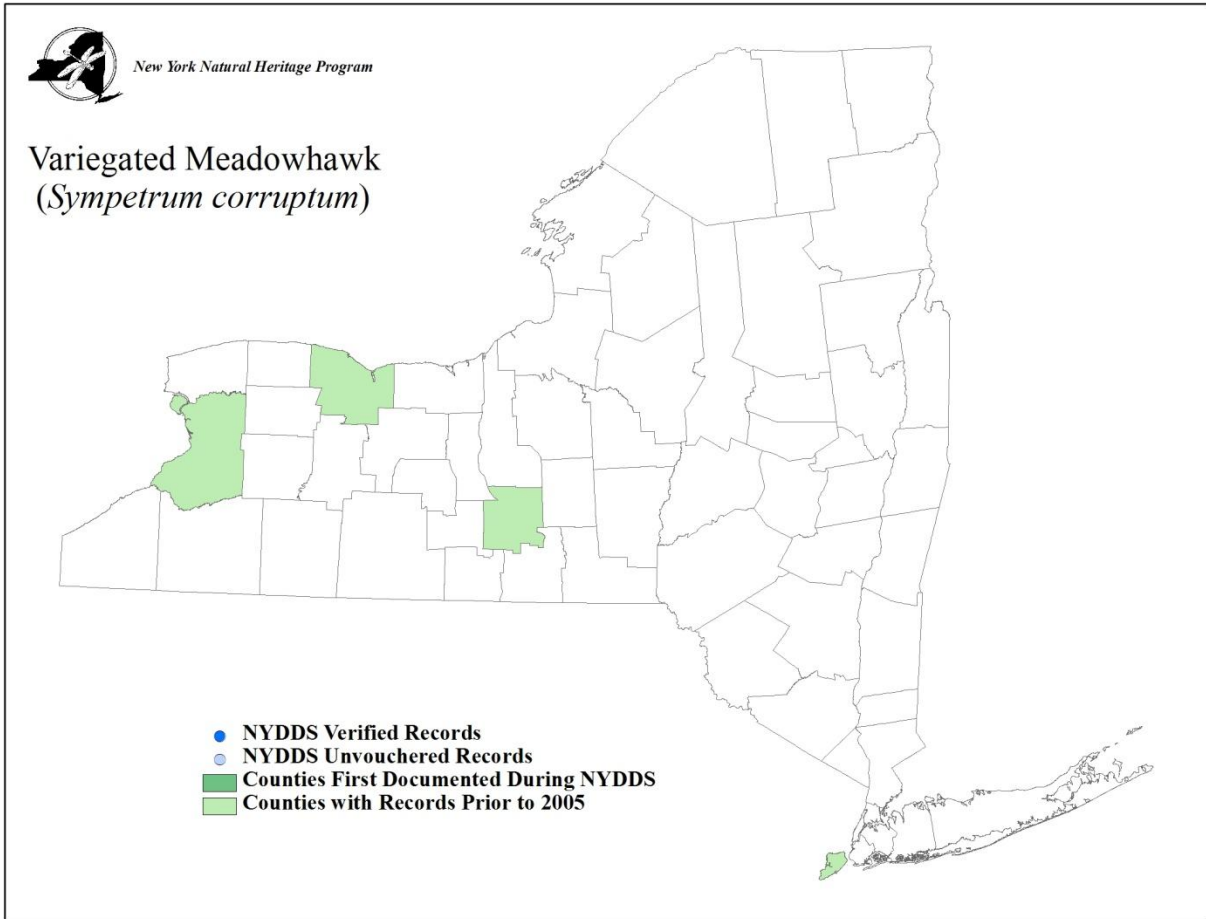
(Donnelly 2004d)



**LIBELLULIDAE**

**Variegated Meadowhawk (*Sympetrum corruptum*)**

**Pre-NYDDS Status: G5, SNR**



(Donnelly 2004d)

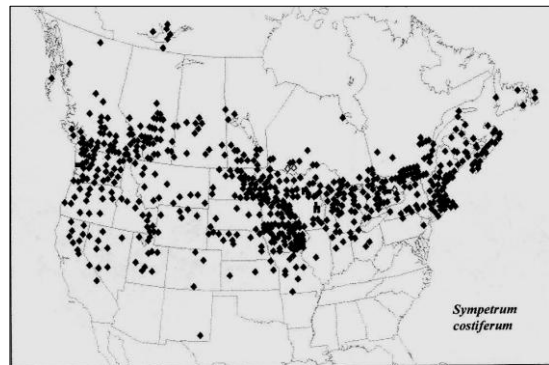
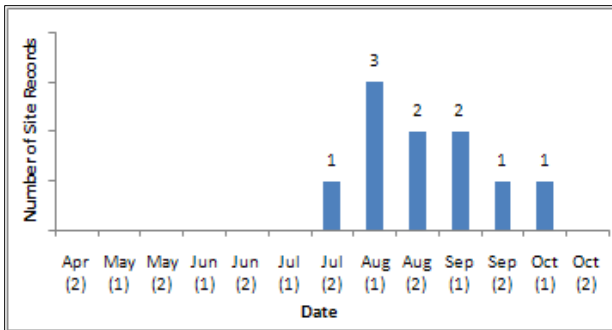
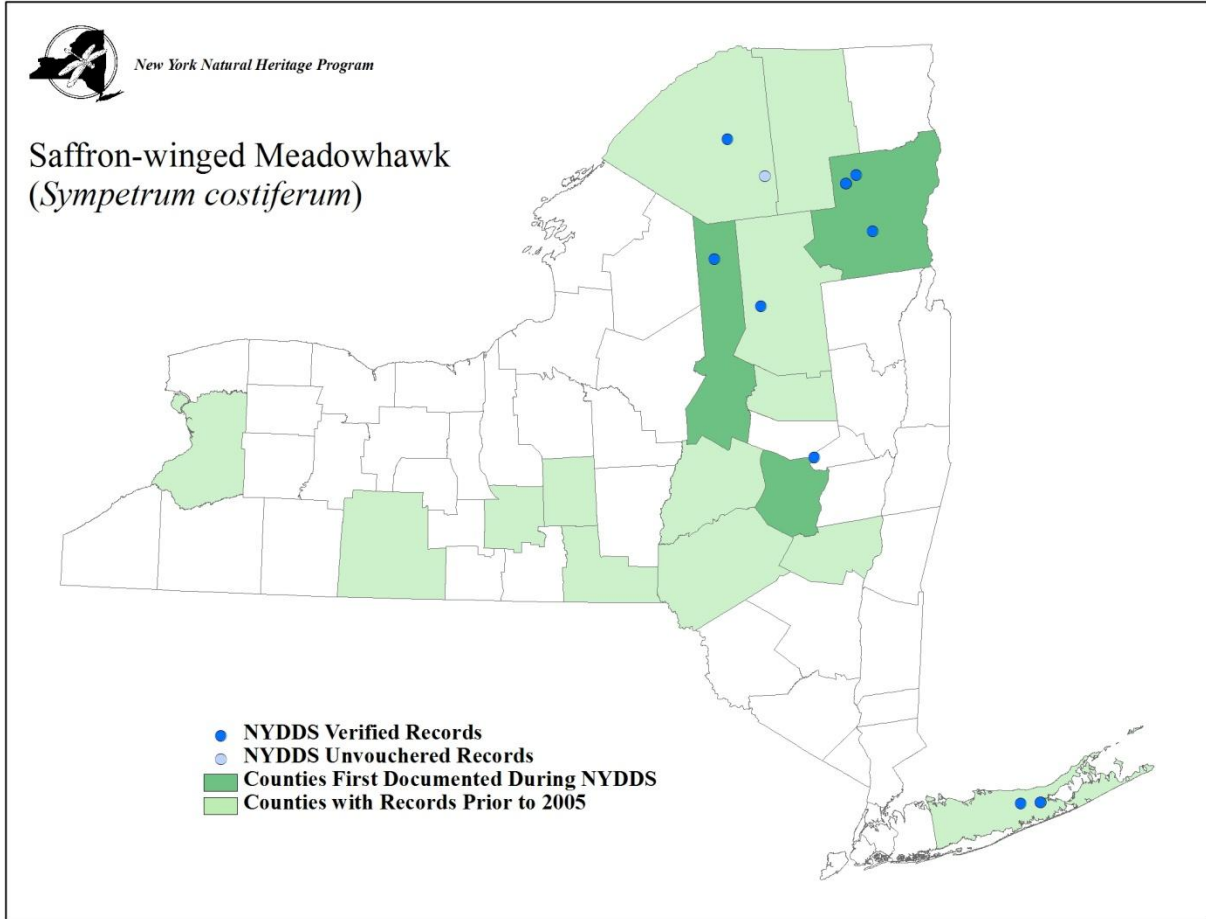


**LIBELLULIDAE**

**Saffron-winged Meadowhawk (*Sympetrum costiferum*)**

**Pre-NYDDS Status: G5, S4**

**Draft Revised Status: S3S4**



(Donnelly 2004d)





## LIBELLULIDAE

### Black Meadowhawk (*Sympetrum danae*)

Pre-NYDDS Status: G5, S2S3

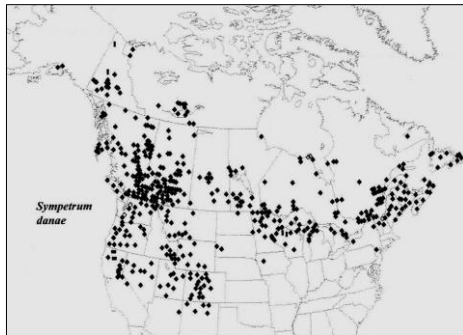
Draft Revised Status: S1

**Habitat Characteristics:** In the United Kingdom, Black Meadowhawk's are found in shallow, boggy ponds with vegetation, where they are known as Black Darters (Bradley 2006). They have also been shown to prefer oviposition sites with *Sphagnum* moss (Michiels & Dhondt 1990) where larvae will develop and live

(Nelson *et al.* 2000). In North America, they are known from wetland habitats including bogs, fens, and marshes, and less often, ponds and lakes and moving water (Dunkle 2000). In New York, habitats include a wet meadow dominated by grasses and shrubs with open water, two rivers (one near a field and the other near marshy habitat), and a pond located near a variety of habitat types (New York Natural Heritage Program 2010).



Linda Lapan



(Donnelly 2004d)

**Distribution and Inventory Needs:** *Sympetrum danae*'s range covers boreal habitats across North America and Eurasia (Pilgrim 2007). Recent genetic analysis has revealed that a subdivision exists for this species between the North American population and the Eurasian-Beringian population, where individuals from these two populations should be recognized as separate species (Pilgrim 2007). In North America, the species has been documented from Alaska east across Canada to Newfoundland, the western mountains of the U.S., where it is fairly common, and east across the northern

states, where it is less common (Dunkle 2000, Abbott 2010). In the Northeast, it is known from New Jersey, New York, Vermont, New Hampshire, and Maine (NatureServe 2009b, Abbott 2010). In New York, there are extant populations on the Chubb River where there is marshy habitat, a pond with marshy habitat and a stream nearby, a site on the West Branch of the Ausable River near a field, and a wetland near the Ausable (New York Natural Heritage Program 2010). There is an older record from a private fen in Genesee county (Donnelly 1999). Fen habitats should be searched for this species in western New York late in the season. In addition, it should be searched for not only in Adirondack bogs with *Sphagnum*, but also a variety of other habitat types including rivers and ponds. More effort by odonate enthusiasts is needed for late season species such as these. The efforts of a single volunteer revealed at least three new locations for *S. danae* in New York.

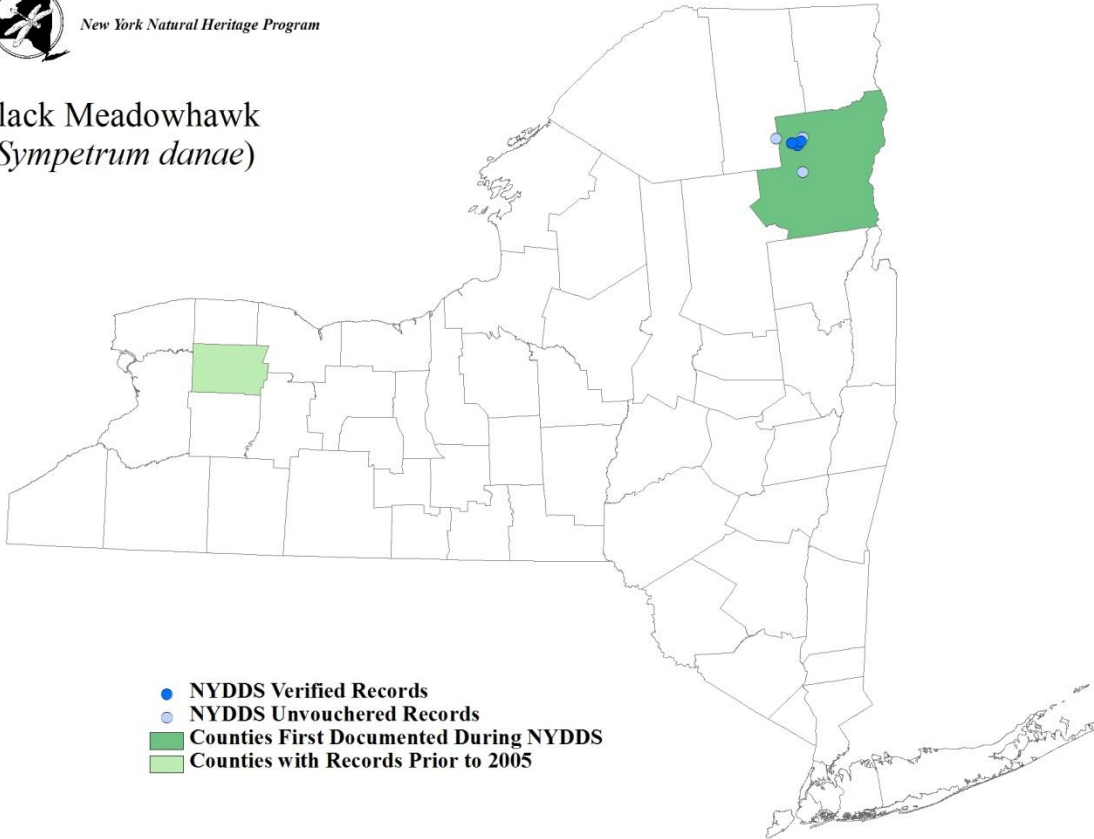
**Phenology:** Black Meadowhawk adults have been observed from mid-July into October in Wisconsin (Wisconsin Odonata Survey 2009). NYDDS and pre-NYDDS records have been documented from July 19 through September 11 (New York Natural Heritage Program 2010) and Dunkle (2000) notes the flight season as mid-June through mid-November for North America.



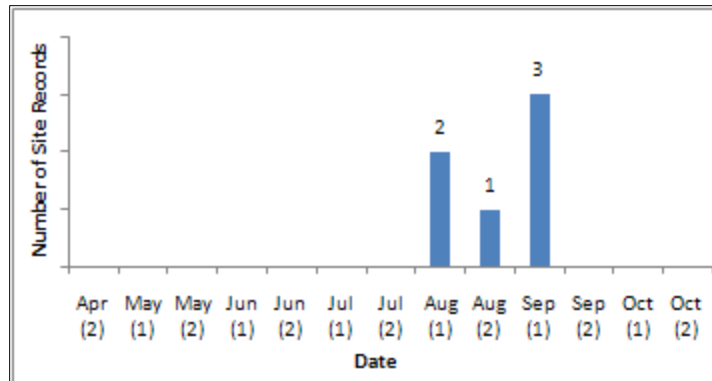


New York Natural Heritage Program

### Black Meadowhawk (*Sympetrum danae*)



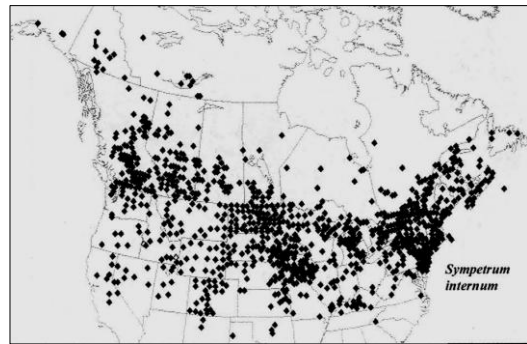
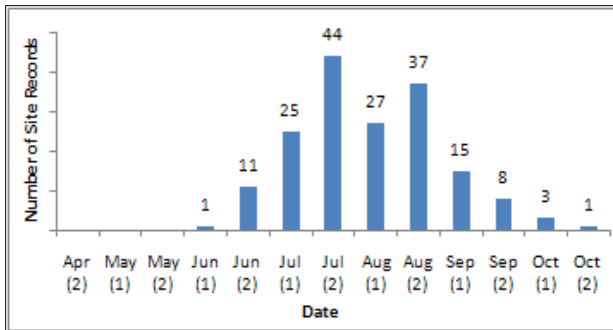
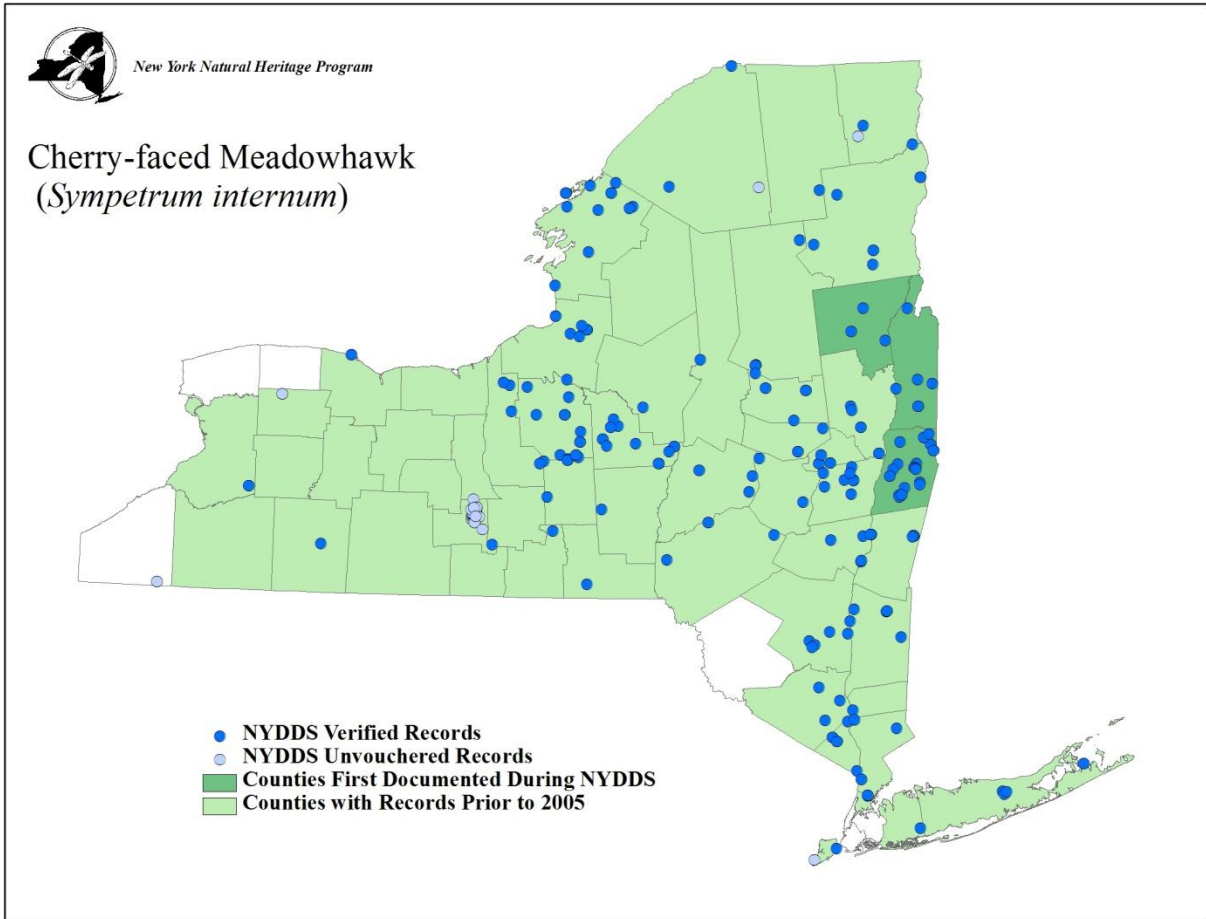
- NYDDS Verified Records
- NYDDS Unvouchered Records
- Counties First Documented During NYDDS
- Counties with Records Prior to 2005



**LIBELLULIDAE**

**Cherry-faced Meadowhawk (*Sympetrum internum*)**

Pre-NYDDS Status: G5, S5

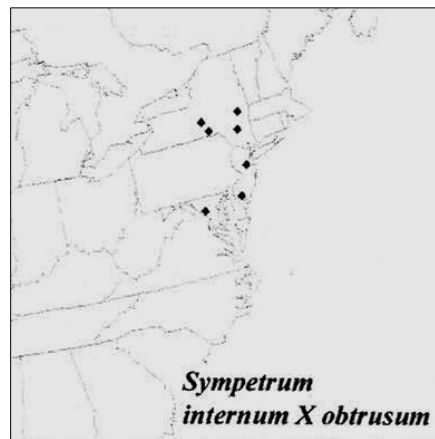
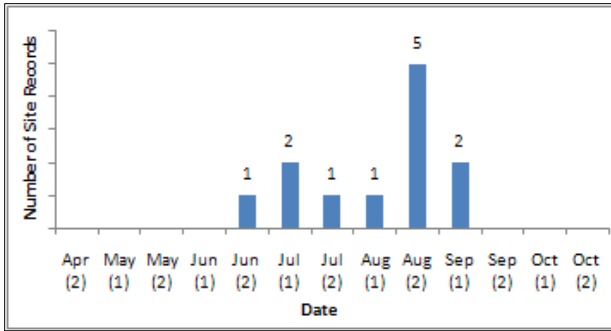
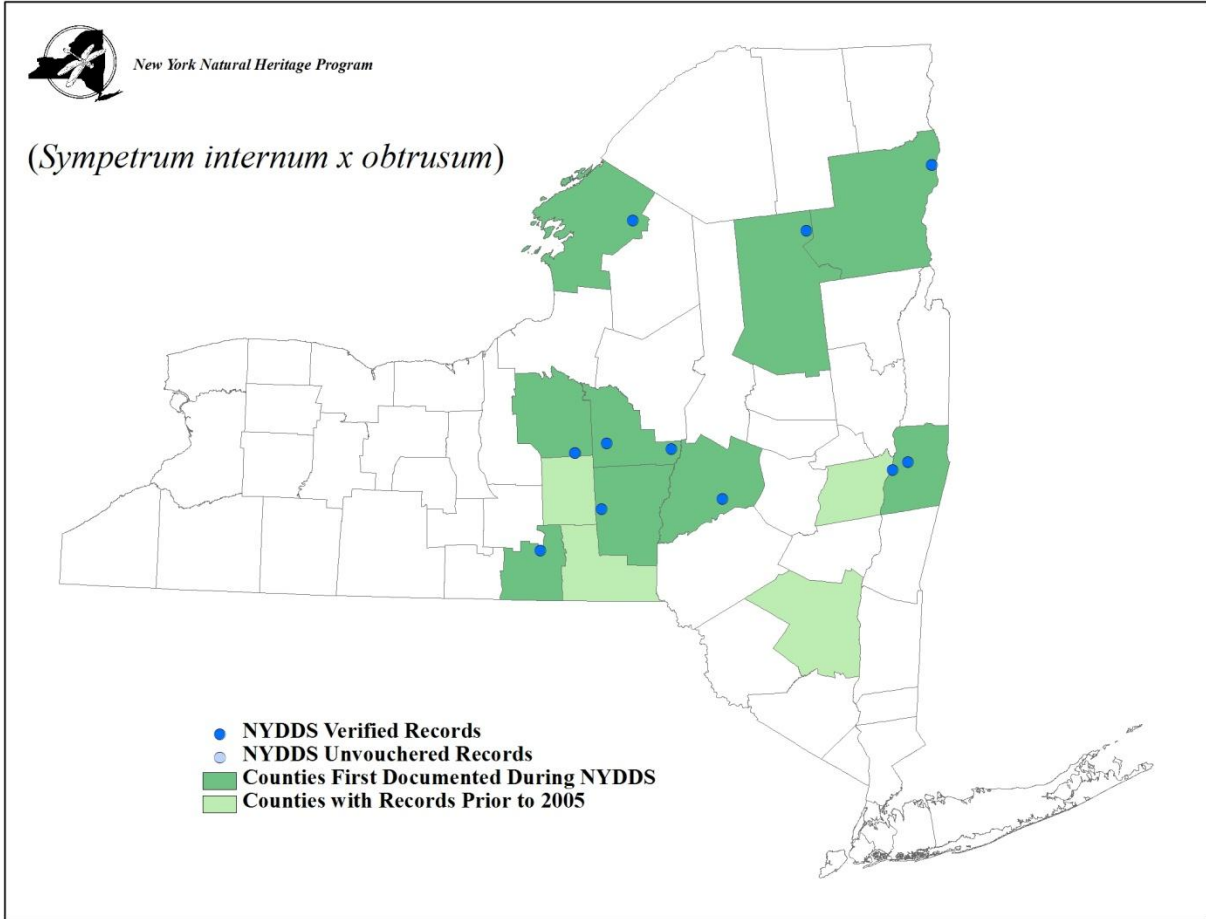


(Donnelly 2004d)



**LIBELLULIDAE**

**Hybrid (*Sympetrum internum x obtrusum*)**

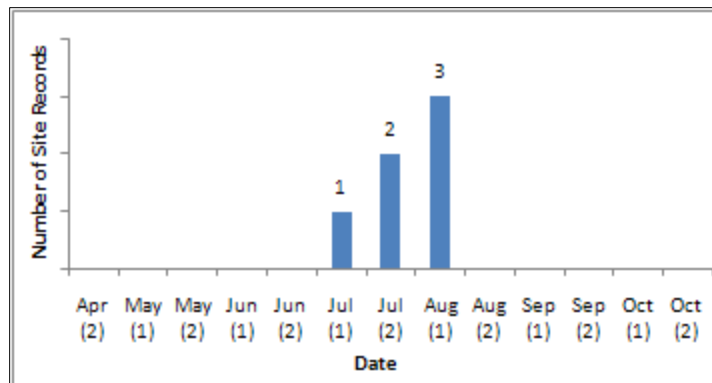
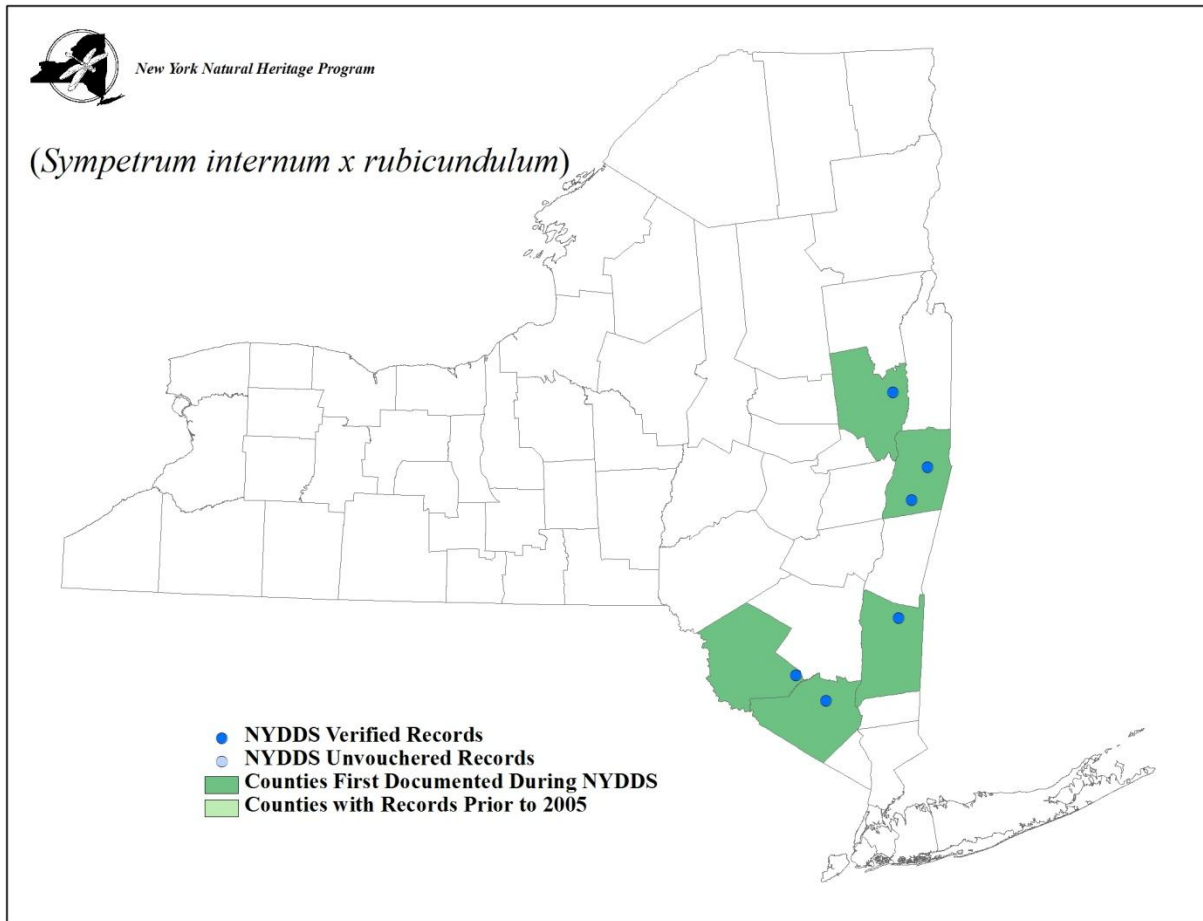


(Donnelly 2004d)



**LIBELLULIDAE**

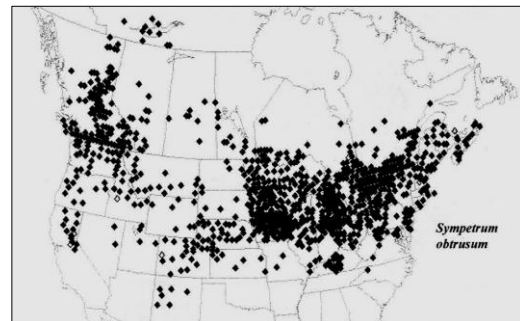
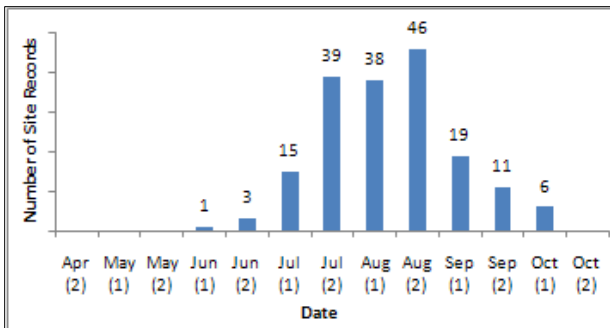
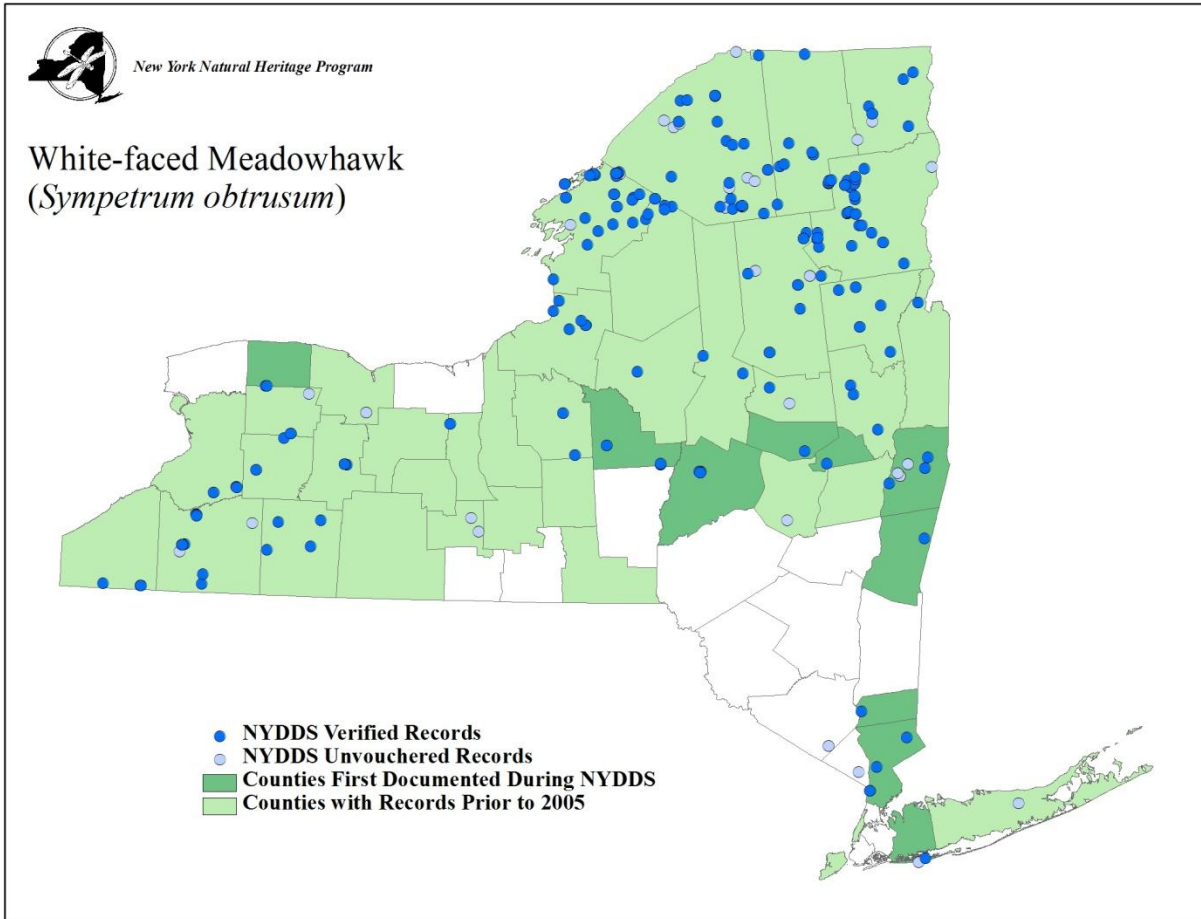
Hybrid (*Sympetrum internum x rubicundulum*)



**LIBELLULIDAE**

**White-faced Meadowhawk (*Sympetrum obtrusum*)**

Pre-NYDDS Status: G5, S4S5



(Donnelly 2004d)

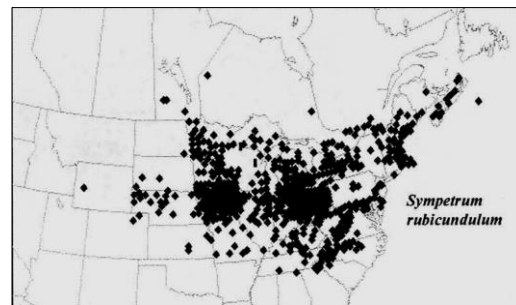
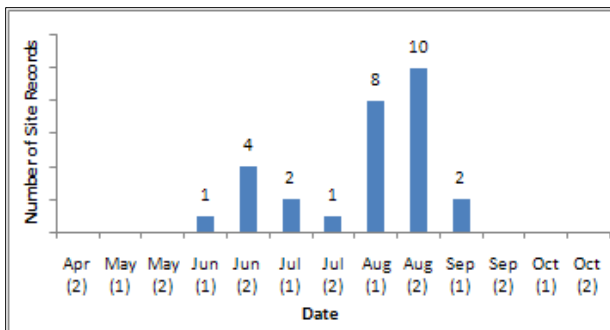
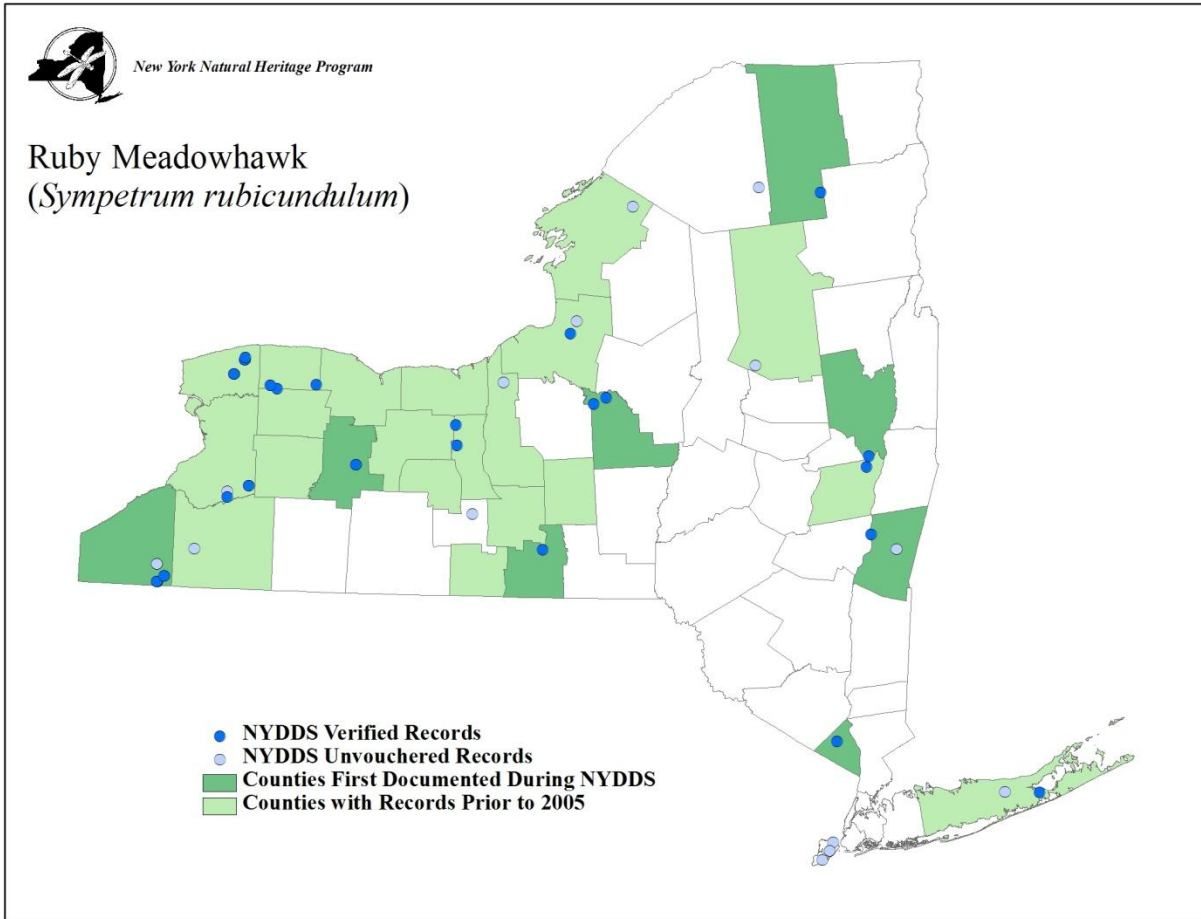


**LIBELLULIDAE**

**Ruby Meadowhawk (*Sympetrum rubicundulum*)**

**Pre-NYDDS Status: G5, S3**

**Draft Revised Status: S3**



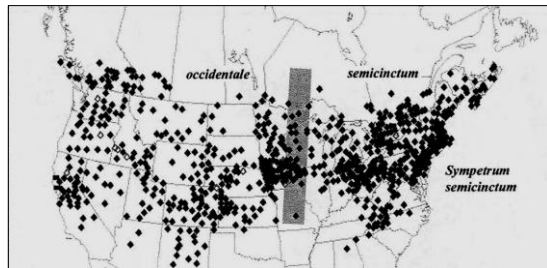
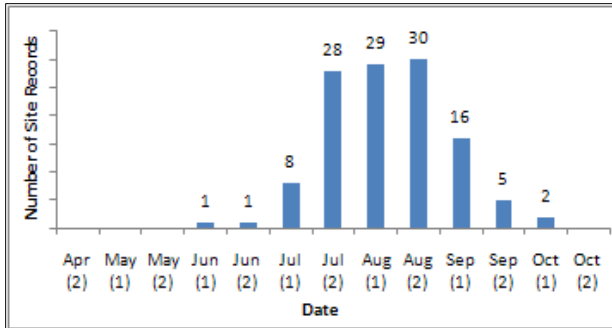
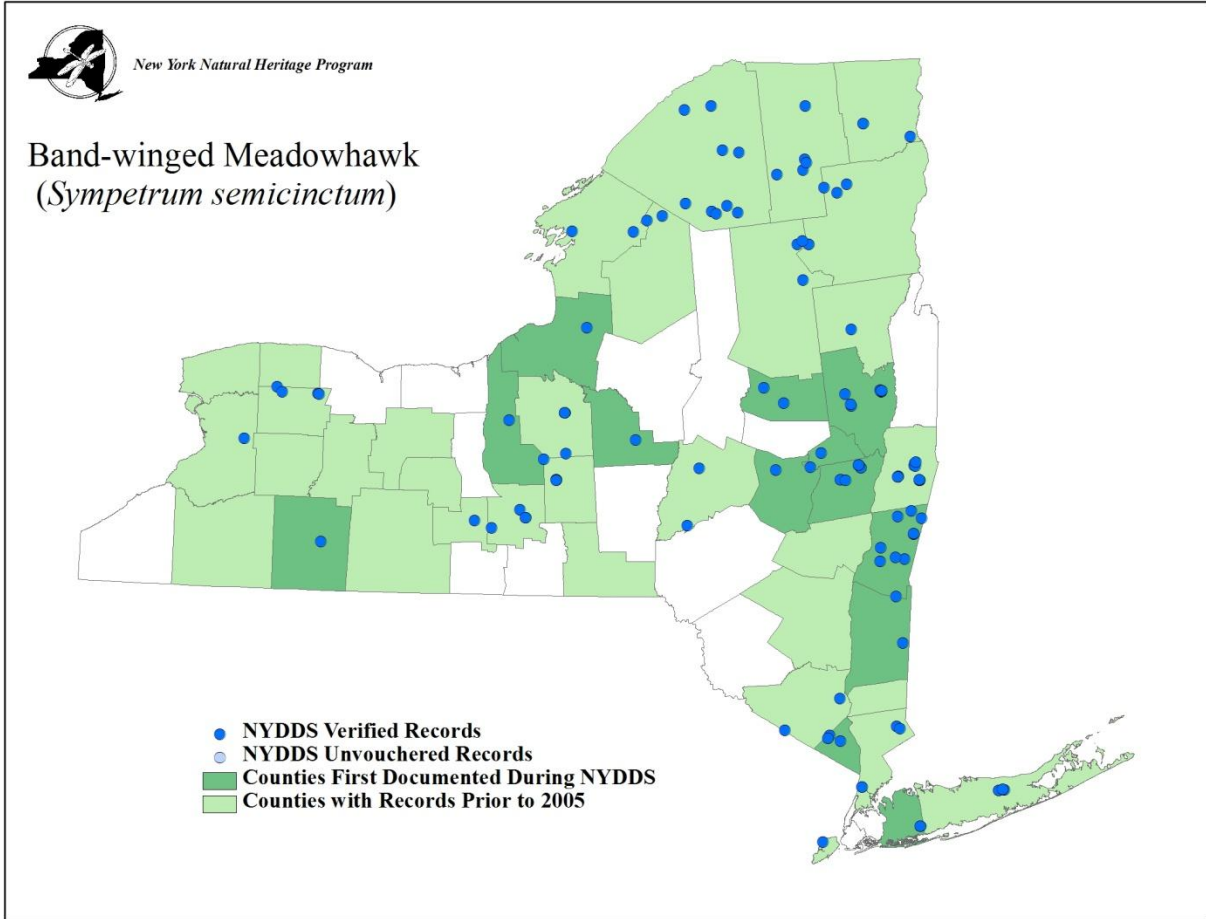
(Donnelly 2004d)



**LIBELLULIDAE**

**Band-winged Meadowhawk (*Sympetrum semicinatum*)**

**Pre-NYDDS Status: G5, S4S5**



(Donnelly 2004d)

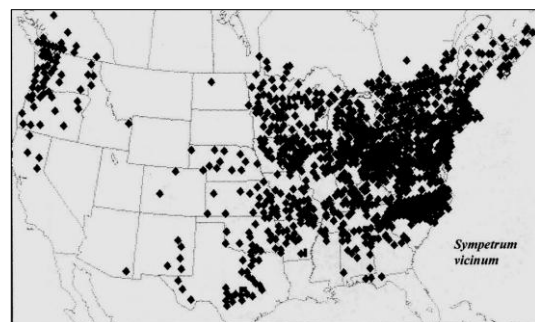
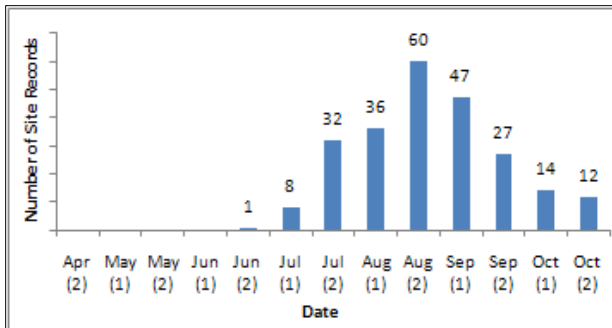
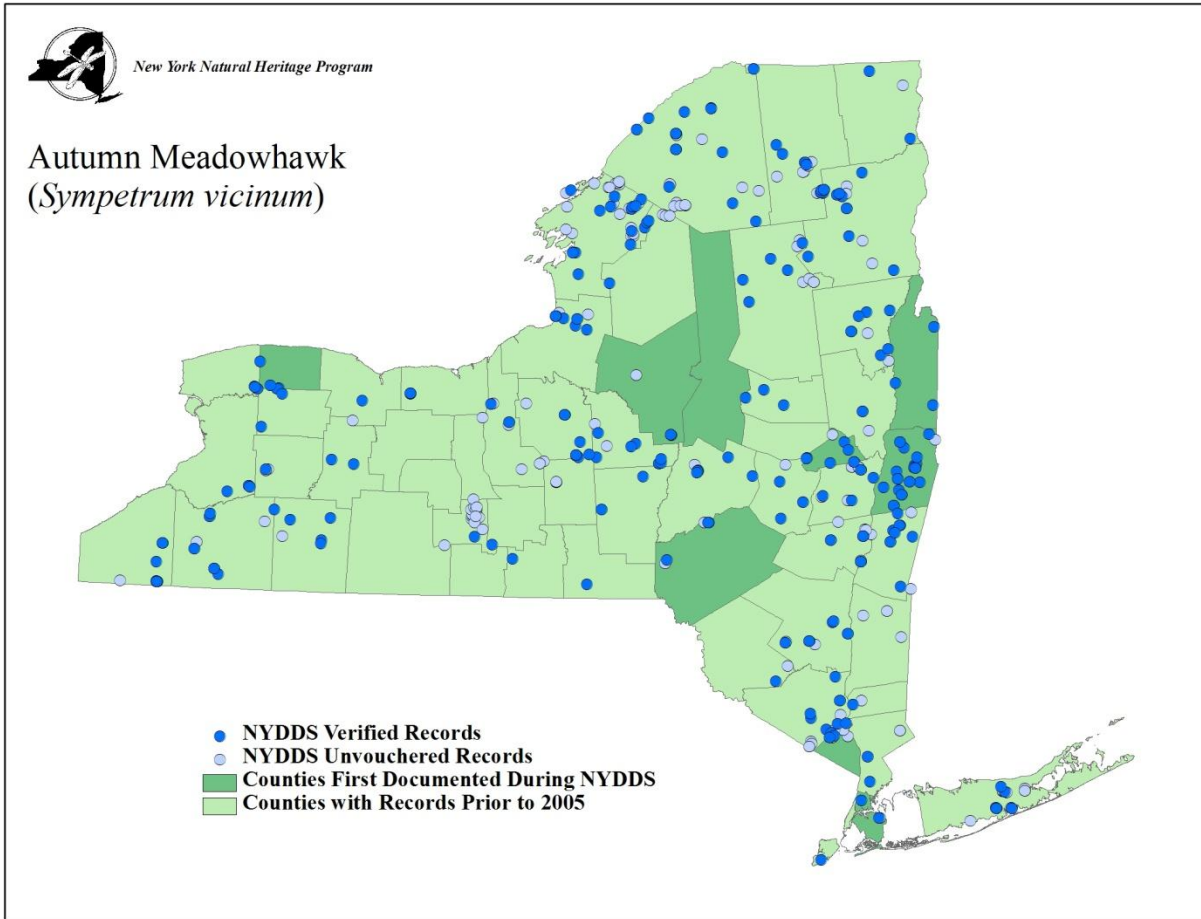




**LIBELLULIDAE**

**Autumn Meadowhawk (*Sympetrum vicinum*)**

**Pre-NYDDS Status: G5, S5**



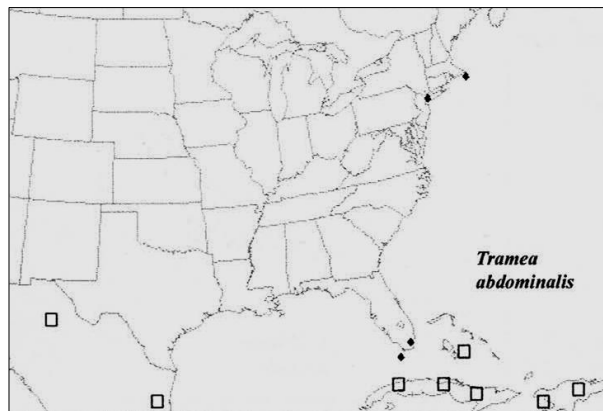
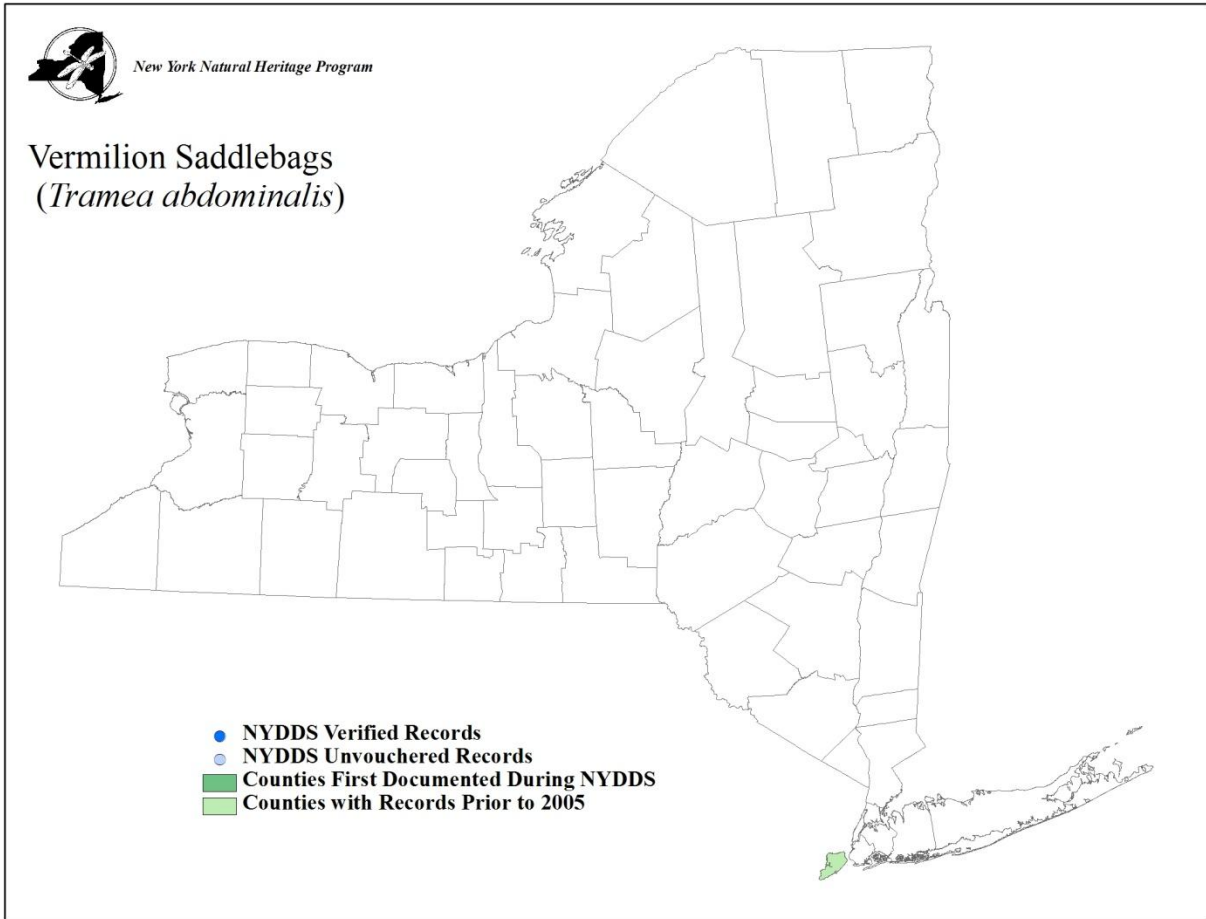
(Donnelly 2004d)



**LIBELLULIDAE**

**Vermillion Saddlebags (*Tramea abdominalis*)**

**Pre-NYDDS Status: G5, SNR**



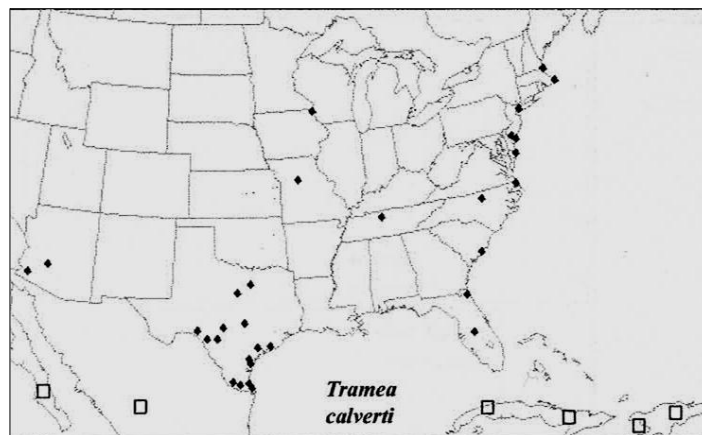
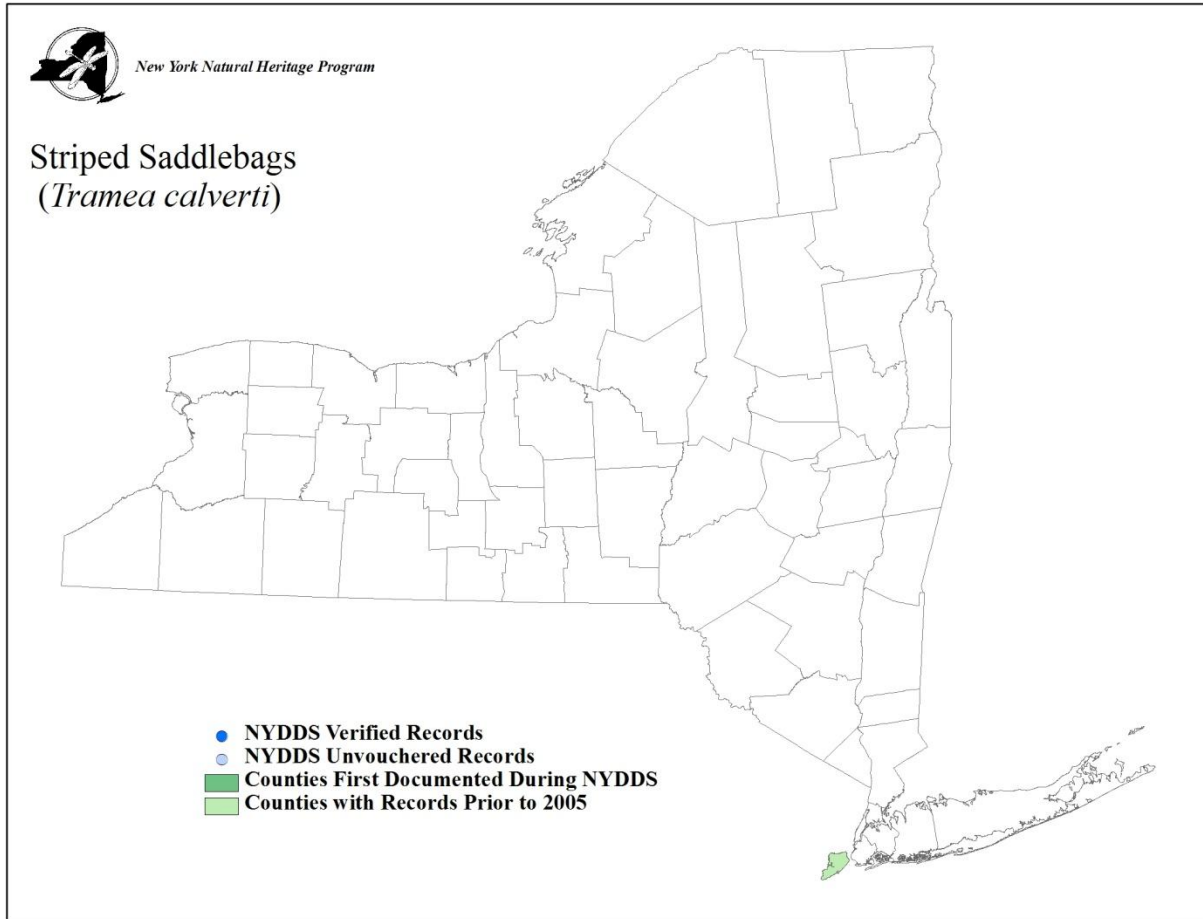
(Donnelly 2004d)



**LIBELLULIDAE**

**Striped Saddlebags (*Tramea calverti*)**

**Pre-NYDDS Status: G5, SNR**



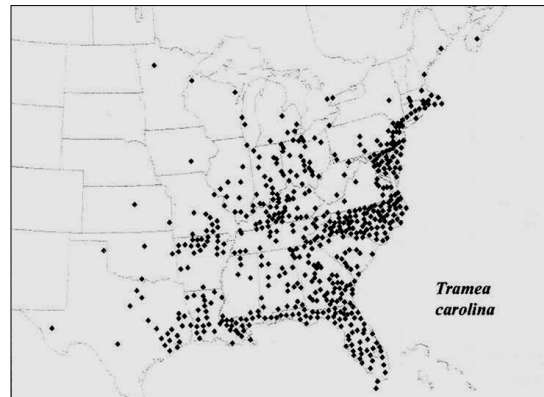
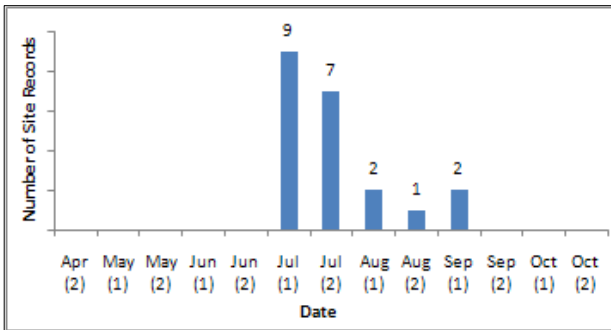
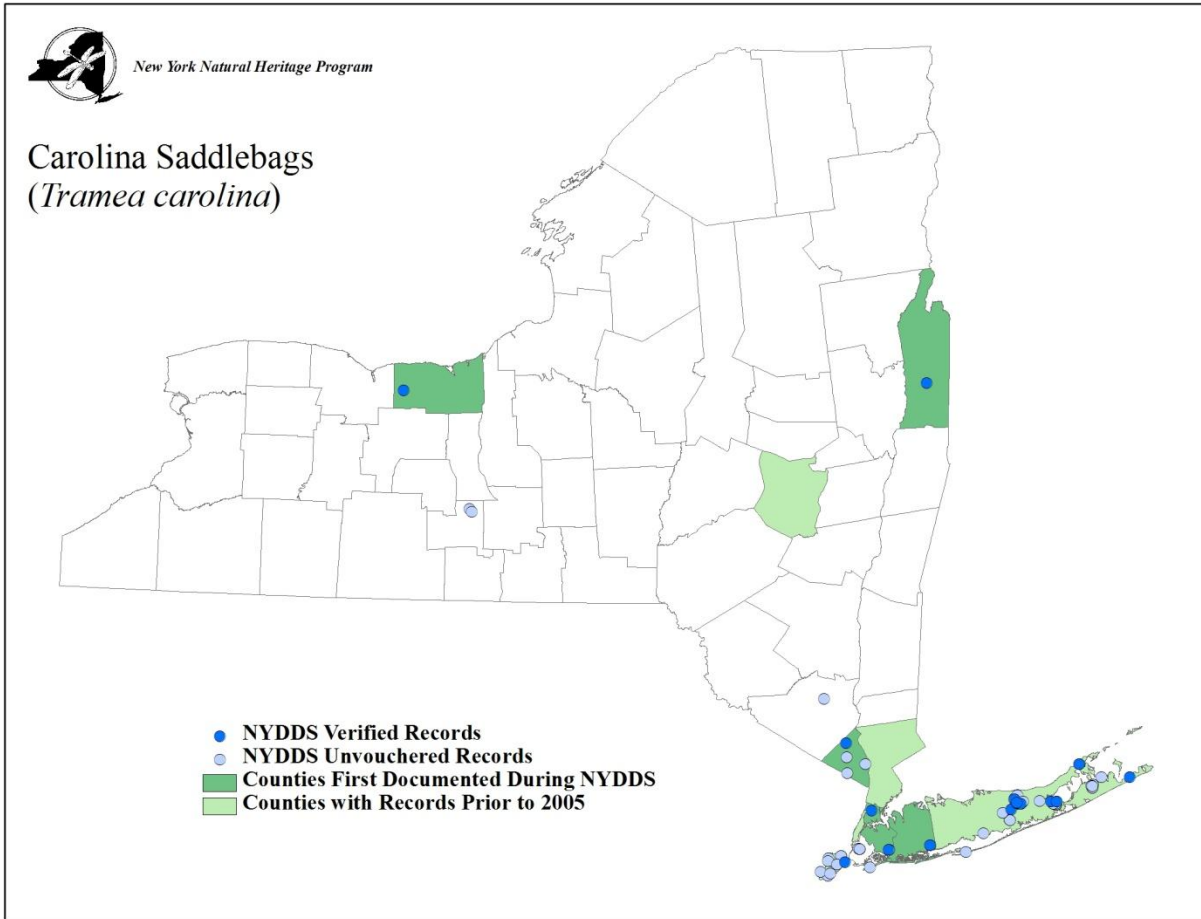
(Donnelly 2004d)



**LIBELLULIDAE**

**Carolina Saddlebags (*Tamea carolina*)**

**Pre-NYDDS Status: G5, S3S4**



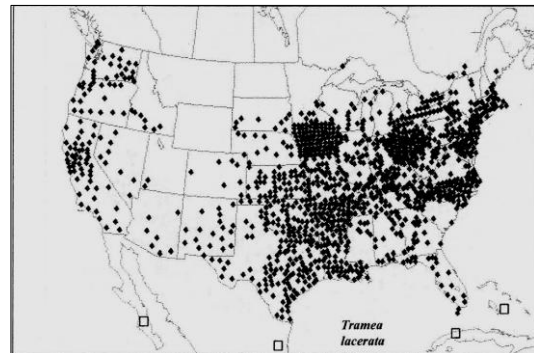
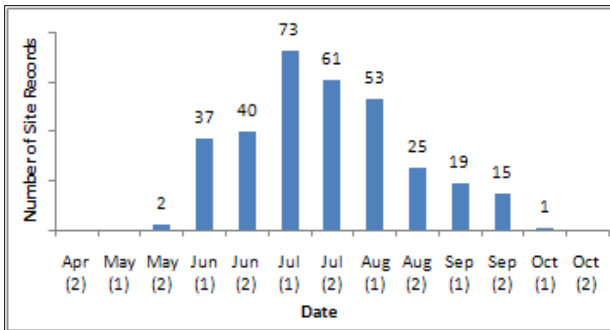
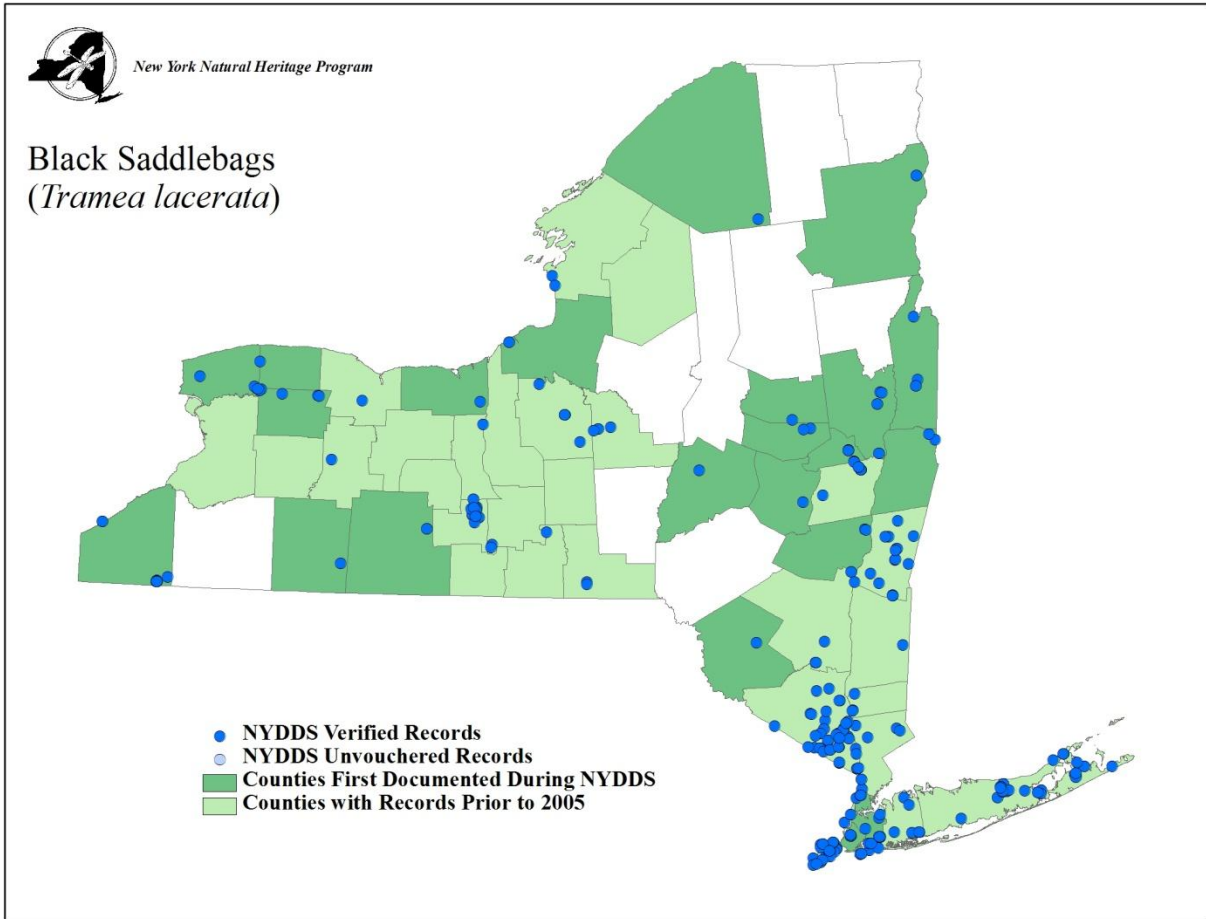
(Donnelly 2004d)



**LIBELLULIDAE**

**Black Saddlebags (*Tramea lacerata*)**

Pre-NYDDS Status: G5, S5



(Donnelly 2004d)



## State Ranking of Rare Odonate Species

### Species of Greatest Conservation Need

SGCNs are those species that have rare, imperiled, or unknown status (NYSDEC 2005). SGCNs include state and federally listed endangered and threatened species plus most species tracked in the NY Natural Heritage database.

### Active Inventory and Watch List

The NY Natural Heritage Program keeps two lists of rare animal species: the Active Inventory List and the Watch List. Species on the Active Inventory List are ones we currently track in our database; for the most part these are the most rare or most imperiled species in the state. Species on the Watch List are those that could become imperiled enough in the future to warrant active inventory, or are ones for which there is not enough data to determine their status. Species are moved between lists, or off the lists entirely, as available information warrants.

### Global and State Status Ranks

NY Natural Heritage's statewide inventory efforts revolve around lists of rare species known to occur, or to have occurred historically, in the state. These lists are based on a variety of sources including museum collections, scientific literature, information from state and local government agencies, regional and local experts, and data from neighboring states.

Each rare species is assigned a rank based on its rarity and vulnerability. Like all state Natural Heritage Programs, NY Natural Heritage's ranking system assesses rarity at two geographic scales: global and state. The global rarity rank (G-rank) reflects the status of a species throughout its range, whereas the state rarity rank (S-rank) indicates its status within New York. Global ranks are maintained and updated by NatureServe, which coordinates the network of Natural Heritage programs. Both global and state ranks are usually based on the range of the species, the number of occurrences, the viability of the occurrences, short- and long-term trends, and the vulnerability of the species around the globe or across the state. As new data become available, the ranks may be revised to reflect the most current information. Subspecific taxa are also assigned a taxon rank that indicates the subspecies' rarity rank throughout its range.

For the most part, global and state ranks follow a straightforward scale of 1 (rarest/most imperiled) to 5 (common/secure), as follows:

- G1, S1** Critically imperiled because of rarity (5 or fewer occurrences, or few remaining acres or miles of stream) or factors making it especially vulnerable to extinction rangewide (global) or in New York (state)
- G2, S2** Imperiled because of rarity (6-20 occurrences, or few remaining acres or miles of stream) or factors demonstrably making it very vulnerable to extinction (global) or extirpation from New York (state)
- G3, S3** Either uncommon or local, typically with 21 to 100 occurrences, limited acreage, or miles of stream rangewide (global) or in New York (state)



**G4, S4** Apparently secure rangewide (global) or in New York (state)

**G5, S5** Demonstrably secure, though it may be quite rare in parts of its range

Note that combination (or “range”) ranks are possible (e.g., S1S2, S2S3). These ranks reflect uncertainty in the information available such that it could not be determined whether one or the other rank was appropriate. They do not indicate a value in between the two numbers.

There are some additional codes:

**GH, SH** Only known historically rangewide (global) or not reported in New York the last 20 years

**GX, SX** Apparently extinct (global) or extirpated from New York (state)

**GU, SU** Lack of information or substantial conflicting information about status or trends makes ranking infeasible at this time

**SNA** A visitor to the state but not a regular occupant (such as a bird or insect migrating through the state), or a species that is predicted to occur in NY but that has not been found.

**SNR** No effort has yet been made to rank the species

Codes sometimes have qualifiers attached:

**T1, T2, etc.**

These ranks, which like global and state ranks run from 1 (rarest/most imperiled) to 5 (common/secure), are attached to global ranks to indicate the status of a subspecies or variety

**Q** Indicates that the species, subspecies, or variety is in taxonomic dispute

**?** Indicates that the state or global rank is uncertain and more information is needed

**N** Indicates the migratory status of a migratory species when it is not breeding in New York (for example, populations that are overwintering in the state)

**B** Indicates the state status of a migratory species when it has breeding populations in NY



## Re-Ranking Based on NYDDS Data

We calculated S-ranks for rare odonate species using NatureServe's Element Rank Calculator, version 2.0 (NatureServe 2009a). This methodology for assigning ranks is based on a process for assessing conservation status developed by NatureServe scientists (Faber-Langendoen *et al.* 2009, Master *et al.* 2009) that is closely related to the International Union for Conservation of Nature (IUCN) system. The Rank Calculator itself is a spreadsheet into which a knowledgeable biologist evaluating the rank plugs information on rarity, trends, and threats, each of which has several components (e.g., range extent, area of occupancy, population size, number of occurrences, short-term trend, long-term trend, and threat impact [itself calculated through a series of steps]). The Rank Calculator then cranks through a series of algorithms based on pre-defined or user-defined parameter weights to generate an S-rank. Because some data, population size for instance, are unavailable for many taxa, the calculator was built to accommodate missing data and to accept a great deal of uncertainty in the inputted values.

For odonates, rank calculations were based on range extent, area of occupancy, number of occurrences, long-term trend, and threat impact. Population size was not available. Generally, long-term trend was estimated based on a comparison between Donnelly's (2004d) pre-NYDDS list and the NYDDS data by county. We assumed long-term trends to be relatively stable if approximately the same number of counties were recorded pre-NYDDS and during the Survey. If this was not the case--for example, if 15 counties were documented prior to the Survey, but 10 during--then it was possible that the range had declined by as much as 33% (and range change is commonly accompanied by a change in population size; [Gaston *et al.* 2000]), or that the counties were still occupied but missed, so the long-term trends include a range of uncertainty from stable to declining by 33%. A short-term trend was generally not used for the calculations, as there was not enough information to make this estimate.

The number of occurrences was based on location information from both the NY Natural Heritage Element Occurrence Database (Biotics) as well as NYDDS data and rank specification information from NatureServe (2009b). We used NatureServe's "separation distance" for suitable habitat to determine what constituted a separate Element Occurrence for each species (NatureServe 2009b). In many cases, the calculation was made based on both the actual number of occurrences and an estimate of possible future occurrences. We typically estimated threats using the threats worksheet within the Rank Calculator, which calculated an overall threat impact based on the scope and severity of individual threats (such as residential development of habitats or degradation of water quality from herbicide use) to the species at known locations (NatureServe 2009a). Generally, estimated impacts to odonates in their aquatic breeding habitats calculated as either medium or high threat impact. Range extent and area of occupancy were estimated using NYDDS data, Biotics location information, and recent (1980 and later) pre-NYDDS information. The area of occupancy was estimated based on the number of occurrences within the range extent and whether the species was primarily a species of lentic (standing water) or lotic (flowing water) habitats. All current Active Inventory and Watch List odonate species were ranked, as well as any species with few NYDDS records. The table below outlines these species, and shows a draft revised rank based on their rarity in the state (Table 5). These ranks have not yet been fully evaluated and should be treated as preliminary; a full evaluation of the ranks for Heritage-tracked species will be reviewed by NY Natural Heritage staff and outside experts at a later date. Note that in many cases, the rank did not change.





Table 5. State ranks for rare odonate species are summarized below and include global and current state ranks (NatureServe 2009b). Species of Greatest Conservation Need (SGCN) are in **bold**. Species that had few records during the NYDDS were run through Nature Serve’s Rank Calculator (NatureServe 2009a) to obtain a suggested rank revision. Species new to the state are highlighted with an “\*”. All SGCNs are either on the NY Natural Heritage Active Inventory List (A) or the Watch List (W). Those species previously known to occur in New York, but not found during NYDDS were noted with a “#”.

Scientific Name	Common Name	Heritage List	Global Rank	Current State Rank	DRAFT Revised Rank
<i>Aeshna clepsydra</i>	Mottled Darner	A	G4	S2S3	S4
<i>Aeshna septentrionalis</i>	Azure Darner	A	G5	SNR	SNR
<i>Aeshna sitchensis</i> *	Zigzag Darner		G5	SU	S1
<b><i>Aeshna subarctica</i></b>	<b>Subarctic Darner</b>	<b>A</b>	<b>G5</b>	<b>S1</b>	<b>S1</b>
<b><i>Anax longipes</i></b>	<b>Comet Darner</b>	<b>A</b>	<b>G5</b>	<b>S2</b>	<b>S2S3</b>
<i>Archilestes grandis</i>	Great Spreadwing		G5	SNA	S1
<b><i>Argia bipunctulata</i> #</b>	<b>Seepage Dancer</b>	<b>A</b>	<b>G4</b>	<b>SH</b>	<b>SH</b>
<i>Argia apicalis</i>	Blue-fronted Dancer	W	G5	S3	S3
<b><i>Argia tibialis</i></b>	<b>Blue-tipped Dancer</b>	<b>A</b>	<b>G5</b>	<b>S2</b>	<b>S3</b>
<i>Argia translata</i>	Dusky Dancer	W	G5	S3	S1
<i>Argomphus cornutus</i> *	Horned Clubtail		G4	SNR	S1
<i>Brachymesia gravida</i> *	Four-spotted Pennant		G5	SNR	S1
<b><i>Calopteryx angustipennis</i> #</b>	<b>Appalachian Jewelwing</b>	<b>A</b>	<b>G4</b>	<b>SH</b>	<b>SH</b>
<b><i>Calopteryx dimidiata</i> #</b>	<b>Sparkling Jewelwing</b>	<b>A</b>	<b>G5</b>	<b>SH</b>	<b>SH</b>
<i>Calopteryx amata</i>	Superb Jewelwing	W	G4	S3	S3
<i>Celithemis fasciata</i>	Banded Pennant	W	G5	SNR	S3
<i>Celithemis martha</i>	Martha’s Pennant	W	G4	S3	S2
<i>Celithemis verna</i> *	Double-ringed Pennant		G5	SNR	S1
<b><i>Coenagrion interrogatum</i> #</b>	<b>Subarctic Bluet</b>	<b>W</b>	<b>G5</b>	<b>S1S3</b>	<b>S1</b>
<i>Coenagrion resolutum</i>	Taiga Bluet		G5	S4	S3
<b><i>Cordulegaster erronea</i></b>	<b>Tiger Spiketail</b>	<b>A</b>	<b>G4</b>	<b>S1</b>	<b>S1</b>
<b><i>Cordulegaster obliqua</i></b>	<b>Arrowhead Spiketail</b>	<b>A</b>	<b>G4</b>	<b>S2S3</b>	<b>S3</b>
<i>Dorocordulia lepida</i>	Petite Emerald		G5	S4S5	S3
<i>Enallagma basidens</i>	Double-striped Bluet		G5	SNR	S3
<i>Enallagma boreale</i>	Boreal Bluet		G5	S4	S3
<i>Enallagma divagans</i>	Turquoise Bluet		G5	S3S4	S3
<i>Enallagma doubledayi</i>	Atlantic Bluet		G5	S4	S1S2
<i>Enallagma durum</i>	Big Bluet	W	G5	S3	S3
<b><i>Enallagma laterale</i></b>	<b>New England Bluet</b>	<b>A</b>	<b>G3G4</b>	<b>S2</b>	<b>S3</b>
<b><i>Enallagma minusculum</i></b>	<b>Little Bluet</b>	<b>A, Threatened</b>	<b>G3G4</b>	<b>S1</b>	<b>S1</b>



Scientific Name	Common Name	Heritage List	Global Rank	Current State Rank	DRAFT Revised Rank
<i>Enallagma pictum</i>	Scarlet Bluet	A, Threatened	G3	S1	S2
<i>Enallagma recurvatum</i>	Pine Barrens Bluet	A, Threatened	G3	S1S2	S1
<i>Enallagma vernale</i>	Vernal Bluet	W	G4	SU	S3
<i>Enallagma weewa</i>	Blackwater Bluet	A	G5	S1	S1
<i>Epiaschna heros</i>	Swamp Darner		G5	S4S5	S3
<i>Epithea semiaquea</i>	Mantled Baskettail	A	G5	SH	S2
<i>Epithea spinigera</i>	Spiny Baskettail		G5	S4S5	S3
<i>Erythrodiplax berenice</i>	Seaside Dragonlet		G5	S3S4	S2
<i>Gomphaeshna antilope</i>	Taper-tailed Darner		G4	SNA	S1?
<i>Gomphus abbreviatus</i>	Spine-Crowned Clubtail	A	G3G4	S2S3	S1
<i>Gomphus adelphus</i>	Mustached Clubtail	W	G4	S3S4	S2S3
<i>Gomphus descriptus</i>	Harpoon Clubtail	W	G4	S3S4	S3
<i>Gomphus fraternus</i>	Midland Clubtail	A	G5	S1S3	S3
<i>Gomphus quadricolor</i>	Rapids Clubtail	A	G3G4	S1S2	S3
<i>Gomphus rogersi</i>	Sable Clubtail	A	G4	S1	S1
<i>Gomphus septima</i>	Septima's Clubtail	A, Special Concern	G2	S1	S1
<i>Gomphus vastus</i>	Cobra Clubtail	A	G5	SH	S1
<i>Gomphus ventricosus</i>	Skillet Clubtail	A	G3	SH	S1
<i>Gomphus viridifrons</i> #	Green-faced Clubtail	A	G3	S1	S1
<i>Helocordulia uhleri</i>	Uhler's Sundragon		G5	S4S5	S3
<i>Hetaerina americana</i>	American Rubyspot	W	G5	S3	S3
<i>Ischnura hastata</i>	Citrine Forktail	W	G5	S3	S3
<i>Ischnura kellicotti</i>	Lilypad Forktail	W	G5	S3	S3
<i>Ischnura ramburii</i>	Rambur's Forktail	A	G3	S2	S2S3
<i>Ladona deplanata</i>	Blue Corporal		G5	S4	S2S3
<i>Ladona exusta</i>	White Corporal		G4	S4	S3
<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	W	G4	S3S4	S3
<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	W	G4	SU	S1
<i>Lestes australis</i>	Southern Spreadwing		G5	S3S4	S2S3
<i>Lestes dryas</i>	Emerald Spreadwing		G5	S4	S3
<i>Lestes unguiculatus</i>	Lyre-tipped Emerald		G5	S3S4	S2S3
<i>Libellula auripennis</i>	Golden-winged Skimmer	A	G5	S1	S1S2
<i>Libellula axilena</i>	Bar-winged Skimmer	W	G5	SNA	S1?
<i>Libellula flavida</i>	Yellow-sided Skimmer	A	G5	S1	S1



Scientific Name	Common Name	Heritage List	Global Rank	Current State Rank	DRAFT Revised Rank
<i>Libellula needhami</i>	Needham's Skimmer	A	G5	S2S3	S3
<i>Libellula vibrans</i>	Great Blue Skimmer		G5	S3S4	S3
<i>Nannothemis bella</i>	Elfin Skimmer		G4	S4	S3
<i>Nasiaeshna pentacantha</i>	Cyrano Darner	W	G5	S3	S2S3
<i>Nehalennia integricollis</i>	Southern Sprite	A, Special Concern	G5	S1	S1
<i>Neurocordulia michaeli</i> *	Broad-tailed Shadowdragon		G3G4	SNR	S1
<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	W	G5	SU	S1
<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	W	G5	SU	S3
<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	A, Special Concern	G4	S1	S2S3
<i>Ophiogomphus aspersus</i>	Brook Snaketail	A	G3G4	S2	S3
<i>Ophiogomphus carolus</i>	Riffle Snaketail		G5	S4	S2S3
<i>Ophiogomphus colubrinus</i> #	Boreal Snaketail	A	G5	S1	S1
<i>Ophiogomphus howei</i>	Pygmy Snaketail	A, Special Concern	G3	S1	S1
<i>Ophiogomphus mainensis</i>	Maine Snaketail	W	G4	S3	S3
<i>Progomphus obscurus</i>	Common Sanddragon	A, Special Concern	G5	S1	S1
<i>Rhionaeschna mutata</i>	Spatterdock Darner	A	G4	S2	S2S3
<i>Somatochlora albicincta</i> #	Ringed Emerald	A	G5	SH	SH
<i>Somatochlora cingulata</i>	Lake Emerald	A	G5	S1	S1
<i>Somatochlora elongata</i>	Ski-tailed Emerald		G	S4	S3S4
<i>Somatochlora forcipata</i>	Forcinate Emerald	A	G5	S1	S1S3
<i>Somatochlora franklini</i>	Delicate Emerald		G5	SNR	S1
<i>Somatochlora hineana</i>	Hine's Emerald	A, Federally Endangered	G2G3	SNA	SNA
<i>Somatochlora incurvata</i>	Incurvate Emerald	A	G5	S1	S1S3
<i>Somatochlora kennedyi</i> #	Kennedy's Emerald	A	G5	SNA	SNA
<i>Somatochlora linearis</i>	Mocha Emerald	A	G5	S2S3	S1
<i>Somatochlora minor</i>	Ocellated Emerald	A	G5	S2S3	S1S3
<i>Somatochlora walshii</i>	Brush-tipped Emerald	W	G5	S3	S3
<i>Somatochlora williamsoni</i>	Williamson's Emerald		G5	S3S4	S3S4
<i>Stylurus amnicola</i> #	Riverine Clubtail	A	G4	SH	SH



Scientific Name	Common Name	Heritage List	Global Rank	Current State Rank	DRAFT Revised Rank
<i>Stylurus notatus</i> #	Elusive Clubtail	A	G3	SH	SH
<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	A	G5	S1	S1
<i>Stylurus scudderi</i>	Zebra Clubtail	W	G4	S3	S3S4
<i>Stylurus spiniceps</i>	Arrow Clubtail	W	G5	S3	S3
<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk		G5	S4	S3S4
<i>Sympetrum danae</i>	Black Meadowhawk	A	G5	S2S3	S1
<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	W	G5	S3	S3
<i>Tachopteryx thoreyi</i>	Gray Petaltail	A, Special Concern	G4	S2	S2
<i>Williamsonia fletcheri</i>	Ebony Boghaunter	A	G4	S1	S1
<i>Williamsonia lintneri</i> #	Ringed Boghaunter	A	G3	SH	SH

The S-rank is a primary, but not the only, determinant of which species are tracked in Biotics. We track most species with a rank of S2S3 or higher (more imperiled), and some species with a rank of S3, if warranted. Currently, there are 51 species on the NY Natural Heritage Active Inventory List and 24 on the Watch List. If the above draft rank revisions from the Rank Calculator are instituted after review, 19 species could move onto the Active List, and nine could move from the Active List to the Watch List. This would bring the number of actively tracked species to 50, approximately its current number. The Watch List would see a greater change, as 23 odonates not currently on either list would be added, 16 current Watch list species would remain on the list, and about 8 current Watch List species would move off the list, for a total of 31 Watch List species. Out of our state total of 194 odonate species, 26% of these may be critically imperiled (S1) or imperiled (S2). All of these species would be on the Active List and should be strong candidates for official state listing as Threatened or Endangered species.

A high propensity of clubtail (lotic habitats) and emerald (mainly bog or fen habitats) taxa are SGCNs in New York. Over 50% of the *Gomphus*, *Ophiogomphus*, *Stylurus*, and *Somatochlora* species known to occur in New York are designated SGCN, whereas less than 30% of *Aeshna/Rhionaeschna* and *Libellula* species have that designation. This is a similar finding to that of Bried & Mazzacano (2010), who reviewed odonate SGCN species nationwide. They found that genera in the families Corduliidae and Gomphidae contained the highest percentages of species with the SGCN designation and suggested that this could reflect habitat degradation of lotic and bog/fen habitats where these species occur on a national scale.



## County-level Richness Patterns

New York's odonate biodiversity is strongly influenced by the state's varied geology, hydrology, climate, vegetation, history of glaciation, and land use (see Edinger & Howard 2008 for a summary of ecoregions and habitats of New York). With boreal ecosystems in the Adirondacks and scattered locations elsewhere, and ecosystems typical of more southern locales on Long Island and in the Hudson Valley, New York is the northern or southern range limit for a great many species. With large rivers like the Hudson,

Delaware, Susquehanna, and Allegheny draining the state's watersheds in all directions, linking New York to large bodies of water like the Great Lakes, Chesapeake Bay, and Hudson Bay, a high diversity of aquatic life is to be expected. Sure enough, New York has one of the highest odonate diversities of any U.S. state (Donnelly pers. Comm.).

A full treatment of patterns of diversity in New York's odonate fauna is beyond the scope of this report. Here we present a simple depiction of odonate diversity by county, a basic political division that divides the state neatly into 62 blocks and a scale at which summaries of odonate fauna before the NYDDS were available (Donnelly 1992, 1999, 2004a). Further analysis of these data by more ecologically meaningful units (i.e., watershed, ecoregion) will yield additional insight into mechanisms underlying the state's odonate diversity.

NYDDS participants added five species to the fauna of New York, and 1,111 new county records for known species. Note that the totals reported in this section include verified records only. On average, each county's documented odonate richness was increased by 18 species! This shows the enormous progress that a focused, five-year effort can bring to even a relatively well known group like dragonflies and damselflies. The increases varied widely among counties, however, with some counties (Rensselaer, Warren, Washington, Schenectady, Onondaga) having more than 40 new species added and others (Erie, New York, Tompkins, Yates) having none or just a few new species added. These increases appeared strongly, but not perfectly, related to the survey effort allocated to the county. Additional data analysis can allow us to understand for future, similar atlas efforts how to allocate survey effort among different areas of the state.

From Figure 10, it is clear that odonate diversity in New York was highest in the southeast along the border with Pennsylvania and New Jersey (Orange, Ulster, Broome, Tompkins, Schuyler, and Suffolk) and in northern counties with boreal ecosystems (St. Lawrence, Essex, Lewis, Franklin, Warren, and Rensselaer). Richness was lowest in the New York City metropolitan area and in western New York. These diversity patterns roughly match those yielded by the analysis of estimated species richness in the Survey Effort section (page 17). We documented at least 75 species in 66% of the counties. For the remainder of the counties, final tallies increased to numbers in the 60s for seven of those counties, the 50s for another seven, the 40s for four, and the 20s for four of the NYC counties. Overall, the Survey clarified and strengthened existing patterns that await further exploration and ongoing analyses of these data should prove fruitful. For example, we currently have funding by State Wildlife Grants to assess the factors influencing the patterns of distribution of odonates throughout the state and relate them to issues of regional water quality and land use in concert with data on habitat preference, phylogeny, and range-wide biogeography.



Spangled Skimmer (*Libellula cyanea*),  
Alan W. Wells 2005



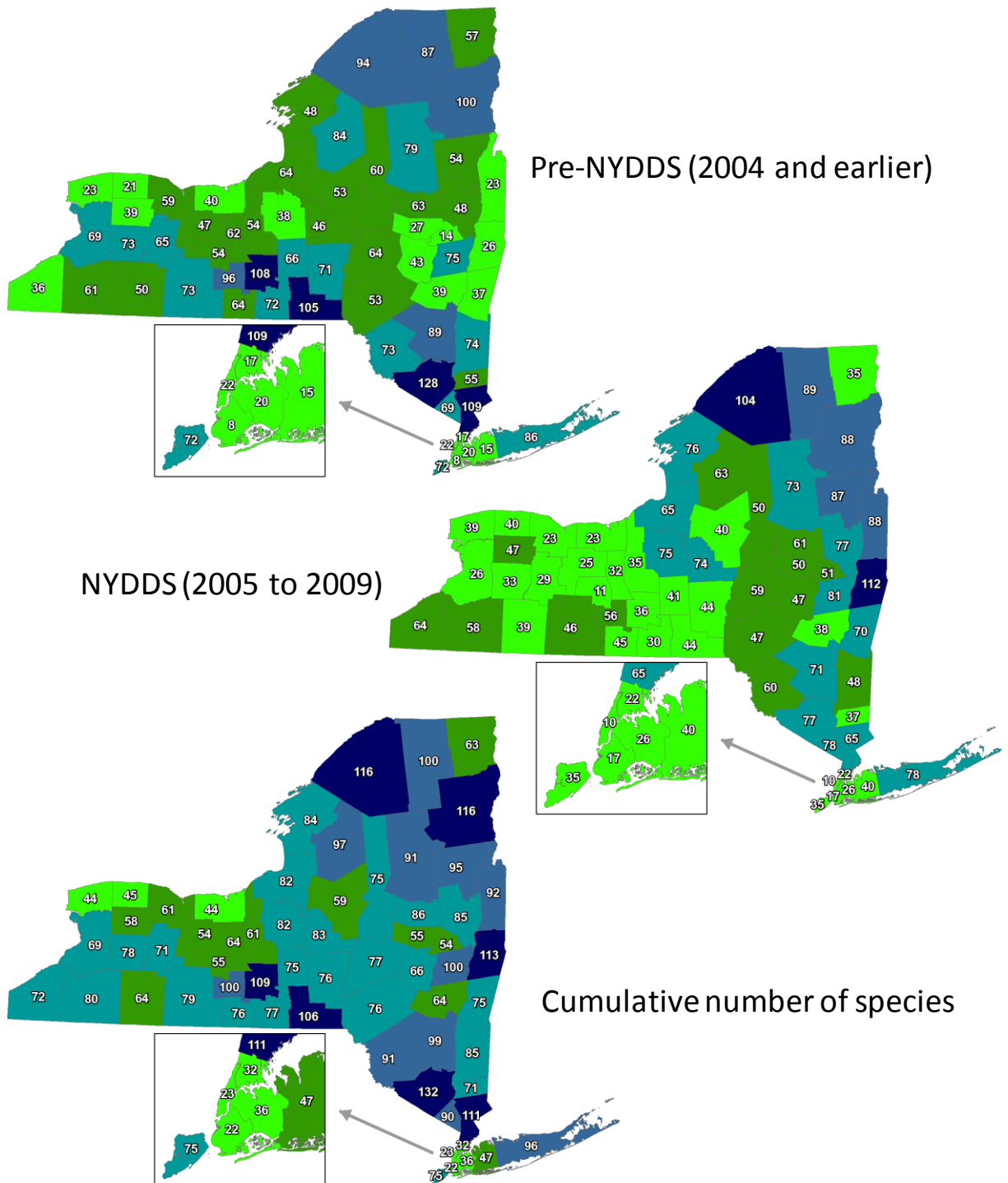


Figure 10. Number of species of dragonflies and damselflies recorded in each New York county before the NYDDS (based on Donnelly 1999, 2004a), during the NYDDS, and the total number of species as of 2009. Counties are colored by richness, from light green to dark blue. NYDDS numbers include verified records only.



## Special Efforts

Secondary goals of the NYDDS included special efforts for the state historical Ringed Boghaunter (*Williamsonia lintneri*), the Federally Endangered Hine's Emerald (*Somatochlora hineana*), and New York's three state threatened damselflies.

### Ringed Boghaunter (*Williamsonia lintneri*)

During the NYDDS, we devoted a significant amount of effort, especially in spring 2006 to 2008, in searching for this species and potential habitats in New York. Virginia Brown, Paul Novak, Erin White, and NYDDS participants visited locations in Albany, Columbia, Rensselaer, Oneida, Oswego, and Franklin counties to assess habitats for their suitability for harboring *W. lintneri* populations. Throughout their range, Ringed Boghaunters are known to occur in acidic sedge fens and sphagnum bogs that contain "soupy" sphagnum pools and are surrounded by wooded uplands (Massachusetts NHESP 2003). For more detailed information on habitat, see the species account above (page 232). The species is known historically (1874) from "a sandy pine woods region", which is now Colonie in the Albany area (Howe Jr 1923, Donnelly 1999). Previous survey work in the Albany Pine Bush in 1998 had not revealed the species, although potential habitats were found (Novak & Gifford 1998). In 2007, NYDDS contractor Virginia Brown, who has done extensive work with *W. lintneri* in Rhode Island, assessed habitats at the Wilton Wildlife Preserve in Saratoga county, the Rome Sand Plains in Oneida county, and fen habitats in Oswego county.

Of the areas surveyed, Huckleberry Swamp of Rome received the most favorable review from Brown (2007d). She considered the habitat to be ideal for the species, with areas of soupy sphagnum, emergent graminoids including *Dulichium arundinaceum*, and shrubs. She suggested repeated visits with reverence for the fragility of the habitat, but cautioned that it is unknown if the species' range ever extended that far west of Albany (Brown 2007d). In 2008, the most promising site with ideal habitat for *W. lintneri* was identified in Grafton near Dyken Pond Environmental Center. Two wetland habitats in this area had the above habitat characteristics and the location is much closer to Albany, the site of the original record. Future survey work and repeat visits to the Grafton sites is needed to assess if a population may exist in New York. This species has been recommended for federal listing (Carpenter 1993) and finding locations in New York would be remarkable after a near 100-year period of nondetection. However, there are extant populations in New Jersey and Massachusetts, and a New York occurrence is within the realm of possibility. This species is rare globally, however, with a brief and early flight season in the spring. Odonate surveyors will continue the search for suitable habitats and populations of Ringed Boghaunters in New York.

### Hine's Emerald (*Somatochlora hineana*)

The Federally Endangered Hine's Emerald (*Somatochlora hineana*) was a focus of special effort in the summers of 2007 and 2008 for the NYDDS. Known to inhabit calcareous spring-fed marshes, sedge meadows, and fens, overlaying dolomitic bedrock in midwestern states, this dragonfly was sought in western New York which contains appropriate geology and habitat to support the species, although none have ever been found here. A workshop was held on July 9 and 10, 2007, at the Buffalo State College Field Station in Buffalo. The workshop was organized and sponsored by the USFWS Cortland Office and the NY Natural Heritage to train



professionals with an introduction to the genus *Somatochlora*, and to the Hine's Emerald in particular. Under contract to the NYNHP, Tim Vogt, a Hine's Emerald expert and a member of the Hine's Emerald Recovery Team, attended the workshop and provided much of the background information, as well as reference specimens for identification practice.

The second day of the workshop was spent in the field surveying two sites in western New York for habitat and *Somatochlora* species. Vogt determined that one of the sites (privately-owned) had an extensive fen habitat with the potential to support Hine's Emerald, as well as the known population of Clamp-tipped Emerald (*Somatochlora tenebrosa*). One male *Somatochlora* observed by Vogt was tentatively identified as Hine's Emerald, but could not be captured for confirmation. This led to a site revisit in late July of 2007, when NYDDS participants were able to capture 21 *Somatochlora* of three species (*Somatochlora tenebrosa*, *Somatochlora walshii*, and *Somatochlora williamsoni*). Survey work at the site continued in 2008 with repeated visits earlier in the season, timed with the known flight season for Hine's in the midwest.

Three females appeared to have "Hine's-like" characteristics, as the position of the ovipositor did not seem quite right for *S. tenebrosa* in comparison to others that were captured. These three were sent to Dr. Everett Cashatt at the Illinois State Museum for identification and DNA analysis and all were later identified as *S. tenebrosa*. One of the females was analyzed and appeared not to have any introgression with Hine's and was similar to a cluster of *S. tenebrosa* from Wisconsin. In addition, a male was observed hovering about 4 feet from the ground, a behavior not typical of the other *Somatochlora* we observed, and similar to Hine's behavior that has been observed in the Midwest (Ailsa Donnelly pers. Comm). We cannot conclude, based on the initial visit and the follow-up surveys, that Hine's Emerald does not occur at this property or in western New York, although it seems unlikely at this point. Multiple surveys have often been required before the presence of Hine's Emerald was confirmed at new sites discovered in Wisconsin and other states, and the observations of Hine's-like behaviors from *Somatochlora* were intriguing, so future survey work may yet prove fruitful. However, we devoted at least five group surveys to this effort during the NYDDS and the nearest known population occurs in Michigan, so its presence is not necessarily probable. Should the search for Hine's continue here, recommendations for future survey work in fen habitats of western New York include repeated visits to sites with appropriate habitat and evening surveys to coincide with higher activity of *Somatochlora*. All currently known sites for the Hine's Emerald also support the burrowing crayfish, *Cambarus diogenes*, and the dragonfly nymphs or larvae are known to live in, and over winter in, the crayfish burrows (Vogt pers. Comm.). Further surveys at known and new locations of these crayfish is also recommended.

### **Three State Threatened Bluet Damselflies**

At the inception of the NYDDS, relatively little was known about the status of the previously documented New York State populations of three damselflies that are the only State-listed odonate species: the Pine Barrens Bluet (*Enallagma recurvatum*), the Scarlet Bluet (*Enallagma pictum*), and the Little Bluet (*Enallagma minusculum*). All three are listed as Threatened. At the time, Pine Barrens Bluet was known from 9 separate ponds, all in eastern Suffolk County. Scarlet Bluet was known from just 3 separate ponds, with all three of these ponds also supporting Pine Barrens Bluet. The Little Bluet was known from two small lakes in eastern Suffolk County, neither of which was known to support the other two species. Understanding the relative abundance of these three state Threatened damselfly species in their





respective occurrences was one objective of the NYDDS. Specifically, relative abundance was to be estimated by conducting counts and making an estimate of the number of individuals present, in at least seven sites for the Pine Barrens Bluet, three sites for Scarlet Bluet, and one site for Little Bluet. This work was completed through contract work by Virginia “Ginger” Brown (nee Carpenter), who is amongst the country’s most knowledgeable biologists with respect to these three species.

Two new sites were documented for Pine Barrens Bluet, both in 2005 (one of which was identified by the collection of a specimen by a Brookhaven Lab intern); while seven new sites for Scarlet Bluet were documented: two in 2005, two in 2006, and one each in 2007, 2008, and 2009. Two of the new Scarlet Bluet sites were surveyed during a subsequent year as well. No new sites for Little Bluet were documented by Brown during her surveys despite searches of a number of sites with at least some suitable habitat. While some new sites were added, there were some sites visited where bluet populations for one of the three species had been previously noted, but were not observed during this study.

Recommendations for future inventory of these species include surveys in pond complexes where they are known to occur when water levels are not extremely high, as this factor limited work during the NYDDS in some cases. Investigating new areas may prove fruitful as well. Future monitoring should include continued counts of threatened bluets at known sites, especially those with imminent threats, and detection probability should be investigated. These damselflies are known to associate with specific native emergent rushes and floating plants that are required for successful reproduction (Gibbons *et al.* 2002). Considerations for the management of these species should include addressing the following threats: *Phragmites*, which appears to be eliminating those plants required for egg laying and Canada Goose browse, which appears to have the same effect and may also increase egg mortality by overgrazing (New York Natural Heritage Program 2010). Vehicle use on pond shoreline vegetation and reduction in native shoreline vegetation and surrounding wooded upland habitat should also be considered as threats. Another consideration is that these damselflies have dispersing capabilities and study shows that they may undergo metapopulation dynamics (Gibbons *et al.* 2002), relying on a source population and/or several small populations within a pond complex. These recommendations, and the development of a Recovery Plan and monitoring plan is suggested for these three *Enallagma*, and the current information relating to the odonates of coastal plain ponds should be reviewed and updated in the NYSDEC CWCS.

## Inventory Needs

Inventory and research needs for all SGCN were addressed in the species accounts section. From these accounts and the county richness analysis (Table 3, Figure 10), it is clear that the Odonate fauna of New York is very dynamic, and species’ populations are actively changing their ranges within the state as well as moving into and out of different political boundaries. This high level of population flux is well known for this group of mobile insects (Beatty & Beatty 1968), and many recent studies have examined the effects that climate change is having on the distribution of Odonates worldwide (see Bried & Mazzacano 2010), and in New York in particular (Corser 2010). Thus, our five-year snapshot of the Odonata fauna in New York is affected by this flux as well as the amount of survey effort and area effects. We feel that our adherence to a protocol for specimen verification (White 2007) greatly reduced our potential for mis-identification which can confound an understanding of true patterns. An important





Rainbow Bluet (*Enallagma antennatum*), Jeremy Martin 2006

question that often arises is whether the patterns revealed in Figure 10 and the individual species dot maps are real, or are more an artifact of survey effort, or a result of area or scale effects. The Odonate fauna of a particular area (i.e., a County) is a function of the available habitats, and the species-area rule in ecology states that larger areas will have, on average, more different types of habitats than smaller areas, and thus greater potential for more odonate species (Kalkman *et al.* 2008). So all things being equal, larger counties like St. Lawrence would be expected to have more

species than smaller counties like Putnam. Nevertheless, size alone does not dictate the amount of suitable habitat; for instance, if a large area is rather homogenous (i.e., agricultural lands), fewer species would be expected to find successful breeding sites, and so habitat diversity is an important driver of species diversity (Kalkman *et al.* 2008).

Survey effort also has important effects on the number of species known to a particular area and the survey effort section and Figure 7 shows clearly that more survey effort invariably turns up more species. Areas with particularly active and skilled surveyors have higher percentages of expected species detected (Figure 7). Therefore, area, effort, distributional flux, and the true species richness at any point in time are all confounded with one another. This makes answering important questions like “are there really fewer Odonate species in western New York compared to eastern New York, or is it just under-surveyed?” very complicated, and the answer is probably yes—both are true. Yet, it is desirable to know where to focus additional inventory efforts to get the highest return for survey effort. What areas of the state have the highest potential for harboring undiscovered and rarer species? Focusing survey efforts in a particular county simply because it currently has relatively lower numbers of species could be misguided because it may be that there are fewer odonate species for purely ecological and/or biogeographical reasons (Kalkman *et al.* 2008).

Figure 11 is a graphical summary to help sort out these confounded variables and to aid in determining which counties might benefit most from additional inventory effort. It displays the relationship between numbers of species detected, and survey effort, controlled for the size of the sample unit (in this case, a County). We used the data in Table 3 in a least squares linear regression analysis to control for the effects of county size by creating scatterplots of residuals. In other words, large and small counties have an equal chance of harboring a given number of species that depends on its true richness and the level of survey effort. Figure 11 shows that even with area effects removed, counties with more survey effort had significantly ( $R^2 = 0.64$ ;  $p < 0.0001$ ) more species detected partially because bigger counties did tend to have somewhat more survey effort ( $R^2 = 0.1$ ;  $p = 0.02$ ). Those counties that fall along or near the regression line have about the expected number of species for a given level of survey effort, while those that fall below the line have fewer species than expected. The graph can be broken down into four quadrants. The upper right quadrant consists of counties whose Odonate fauna is both quite well surveyed and that have high richness, so that additional survey efforts in these counties would not be expected to turn up lots of new species. Many of these counties contain, or are near the residences of very active and skilled surveyors. The lower right quadrant consists of counties that have had a relatively high number of surveys, but the number of species is lower than would be expected given the higher survey effort. Additional survey efforts here would also not be



expected to turn up many new species. Several of these counties are around the New York City area where much of the natural habitat has been destroyed.

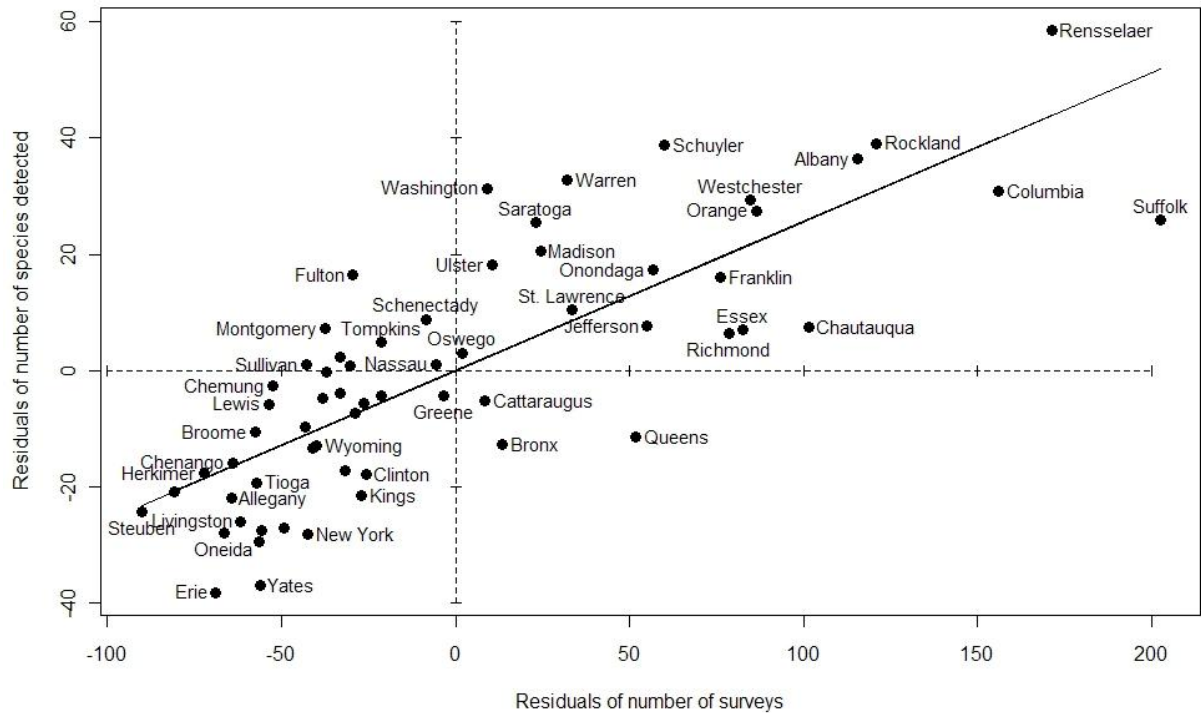


Figure 11. A residual scatterplot statistically controlling for the effect of the size of each county. The graph can be interpreted as a typical scatterplot (the axis numbers are arbitrary) that shows how NYDDS survey effort related to the numbers of species (verified and unvouchered) that were detected in each county. For example Rensselaer County had large numbers of species and effort, while Steuben had the lowest. Bronx and Washington Counties had about the same level of effort (# surveys), but Washington had approximately two times as many species per area. Not all of the counties are labeled; see text for additional details.

The lower left quadrant consists of counties that have lower than expected numbers of species, and although the survey effort in these counties has been relatively light, more species would have been expected given the observed level of survey effort. Additional survey efforts in these counties would be expected to turn up marginally more species, but not at highly efficient rates. Many of these counties are in western New York and the Finger Lakes region, and this analysis suggests that comparatively lower richness levels in this part of the state (Figure 10) is not solely due to it being under-surveyed, but that there are ecological and/or biogeographical explanations. Because similar patterns are also found in other well studied animals such as birds (McGowan & Corwin 2008) and herpetofauna (NYSDEC 2009), it could be due to lower habitat diversity, possibly owing to the large amount of acreage that has been cleared for agriculture. Biogeographical explanations are also a factor in a state that is both on the northern range margin for numerous southern species, as well as on the southern range margin for numerous boreal



species (Beatty & Beatty 1968, Corser 2010, Bried & Mazzacano 2010). Finally, the upper left quadrant consists of the counties where we feel additional inventory efforts would be most fruitful. These counties had relatively low levels of survey effort but accumulated more species than would have been expected given the modest number of surveys. This suggests that additional species, especially the rarer ones, are waiting to be discovered in these counties. Many of them are in the transition area between western and eastern New York where a potential contact zone exists between Atlantic coastal and Midwestern forms (Beatty & Beatty 1968). We expect that the Odonate fauna of New York will continue to be dynamic into the future and many of those more southern and midwestern species now found near the borders of New York will eventually be found here. At the same time it appears that the many of the boreal species are retreating northward. Interested parties should consult White (2007) as well as Donnelly (2004b,c,d) for specific examples.

## Conservation and Monitoring

Odonates appeal to many, as they are charismatic insects with incredible flight capabilities and consume large numbers of insects humans consider pests, like mosquitoes. People like to observe them for the same reasons they enjoy bird-watching (although many will tell you it is difficult to focus on both groups at the same time): The adults have remarkable color patterns and interesting behaviors, and many species are distinguishable with close-focusing binoculars. These creatures spark the interest of people of all age groups and are excellent animals to highlight in freshwater education programs (Ramsay & Cannings 2004). We can look to these insects to tell us how we are doing as stewards of the natural ecosystems they inhabit through study and inventory (Bried & Mazzacano 2010).



Student at Dragonfly Day on Long Island, Annette Oliveira 2008

Odonates are found in nearly every aquatic habitat in New York, from ponds, bogs, and marshes to rivers, streams, and seeps. Adults breed and oviposit and larvae develop in these aqueous environments for as long as several years. However, adults also use surrounding uplands to fulfill other requirements such as feeding, roosting, thermoregulation, and maturation of teneral (newly emerged) adults. For example, many odonates, such as *Williamsonia lintneri* in the northeast (Carpenter 1993, Massachusetts NHESP 2003b), forage for insect prey in fields and woodlands. Deforestation is thus a threat to odonate diversity globally, especially in the tropics (Corbet 2006) where there is a high density of aquatic habitats (Kalkman *et al.* 2008). In New York, the forested surroundings around breeding habitats are essential for maintaining viable populations. Even more important is protecting larval and breeding habitats since odonates spend most of their lives in the water and these environments are essential to their development. A high diversity of odonates generally indicates good water quality, especially if larvae are present (Corbet 2004). The tolerance of individual species to pollution and other environmental stressors varies, as do habitat requirements. Some are generalists found in a variety of habitats, others are specialists, with more specific habitat requirements (Barbour *et al.* 1999, Kalkman *et al.* 2008).

Globally, odonate species that occupy lotic habitats such as rivers and streams have a greater risk of extinction (when looking at the percentages of IUCN listed species) than those



occupying lentic habitats (Clausnitzer *et al.* 2009). A decline in the biodiversity of freshwater lotic habitats has been attributed to alterations of flow, pollution, deforestation in riparian areas, and increased road construction and impoundments (SaintOurs 2002). Any activity that might lead to water contamination, eutrophication, or the alteration of natural hydrology could affect odonate populations (NYSDEC 2005). Such threats might include agricultural run-off (i.e., pesticides) and other pollutants, shoreline modifications, increases in the sediment load of rivers, and changes in dissolved oxygen content (SaintOurs 2002, NYSDEC 2005). River impoundment is known to cause sediment coarsening downstream, which is an obstacle for burrowing invertebrates (Donnelly 1993). Several of the above threats also apply to lentic habitats, as well as groundwater withdrawal and invasive plant species replacing native plants required for oviposition (New York Natural Heritage Program 2010).

Some species appear to be showing effects of climate change. At the local level, drought could strand nymphs in breeding habitats (Biber 2002) and flooding could render emergence substrates unavailable. Effects have been seen at the rangewide level as well. Southern species of dragonflies in Europe are expanding their ranges while others in temperate climates are shifting flight seasons, leading to distributional changes (Kalkman *et al.* 2008). Corser (2010) provides some evidence that *S. plagiatus*, a more southerly distributed dragonfly, has recently expanded its range in New York. Corbet (2003) hypothesized that individuals at the northern portion of their range may emerge earlier than southern ones, responding to temperature and photoperiod, which is longer in northern latitudes. He further suggests that odonates adapted to cold climates may have increased their development rate (provided conditions are right, like ample prey availability) in northern habitats with shorter summers. Both emergence rates and/or species ranges may shift for odonate species as a result of global warming. Kalkman *et al.* (2008) state that there are currently no known northern species in which populations are decreasing due to climate change; however, researchers are on the lookout for these patterns as odonates gain attention in climate change studies (Ott 2008).

Clausnitzer *et al.* (2009) found that one in 10 species of odonates is threatened with extinction worldwide, which is a low proportion compared with other taxa that have been similarly assessed using IUCN criteria (birds, mammals, and amphibians). While management considerations should address all habitat requirements to maintain odonate diversity and rare species on a local scale, these insects may be better able to sustain viable populations due to their unique life history and reproductive strategy than some other taxa. We found (Table 5) that 26% of New York's odonate fauna are potentially imperiled or critically imperiled. New York also had a higher percentage (42%) of species likely to be ranked as vulnerable (S3) or higher (S1,S2) than the national percentage of vulnerable odonates (18%) (Bried & Mazzacano 2010). While New York appears to have higher proportions of rare species than national and global averages, it also has one of the highest diversity of odonates in the United States (Abbott 2010, Donnelly pers. comm.) and we added five species to the list during the Survey. At the same time, we were unable to confirm the presence of 15 of the 189 Odonata species ever documented in New York by Donnelly 2004a) (Table 1), and every one of these species was rare in the state to begin with. It is quite likely that some of these rare and/or elusive species were missed by our sampling protocol, and some were never represented by established breeding populations. However, there is some reason to believe that this flux is a result of active range changes by Odonata species in response to climate (Ott 2008) and habitat changes (Kalkman *et al.* 2008). Flenner and Sahlen (2008) discuss the high turnover of Odonata populations at their range margins; 12 of our 15



undocumented species were near their northern distributional limits in New York, while the remainder were near their southern limits.

Our knowledge of the distribution and habitats utilized by these species in New York will help inform conservation. As odonates are noted as indicators of water quality (Barbour *et al.* 1999), biodiversity, and ecological change, these data will help inform future conservation efforts in freshwater habitats for many other species as well (Bried & Mazzacano 2010).

NYDDS information will add to Donnelly's (2004d) effort, providing excellent baseline information on the distribution and status of odonates in New York. Much like the 2000-2005 Breeding Bird Atlas (McGowan & Corwin 2008) followed up on the 1980-1985 Atlas (Andrle & Carroll 1988), leading to some fascinating analyses of distributional change over those 20 years (e.g., Zuckerberg *et al.* 2010), we hope that in the future this survey effort will be similarly revisited to assess changes in odonate distributions. Monitoring of this sort may be the only way to know whether we are maintaining New York's dragonfly and damselfly biodiversity in the face of continuing global change.



Twelve-spotted Skimmer (*Libellula pulchella*), Alan W. Wells 2008

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Appendix I. Odonate list for volunteers. The table below contains all dragonfly and damselfly species recorded to date in New York State, as well as a few additional species whose range extends into states or provinces very close to New York which could be expected to occur in New York. Bolded species = species of “Greatest Conservation Need” and/or on the NY Natural Heritage Program “Active Inventory List”. Species with an asterisk = species not yet recorded in NEW YORK, but could occur here based on records in nearby states and provinces.

Identification Level: Identification level refers to the type of verification that will generally be required in order for us to be fully confident of and make maximum use of the submitted records.

Codes are as follows: SPEC = collected specimen, PHOT = photograph, OBS = site record. In the case of photographs, in many cases very close up images of particular body parts will be necessary to confirm identification and these parts are listed in parentheses after PHOT. Lateral = a side view shot of the body; term app = both dorsal and lateral views of the male terminal appendages; lateral thoracic = the lateral thoracic stripes; wings = a dorsal shot of the wings to show a particular spot or pattern; abdomen – dorsal = a dorsal view of the abdomen; top of head = the top of the head in front of the eyes. NOTE that in many cases different levels of verification are needed for males vs. females.

<b>Family</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Identification Level</b>	<b>Habitat</b>
Calopterygidae	River Jewelwing	Calopteryx aequabilis	OBS	
Calopterygidae	Superb Jewelwing	Calopteryx amata	PHOT	
Calopterygidae	<b>Appalachian Jewelwing</b>	<b>Calopteryx angustipennis</b>	<b>M – PHOT, F SPEC</b>	<b>rivers</b>
Calopterygidae	<b>Sparkling Jewelwing</b>	<b>Calopteryx dimidiata</b>	<b>PHOT</b>	<b>brooks, rivers</b>
Calopterygidae	Ebony Jewelwing	Calopteryx maculata	OBS	
Calopterygidae	<b>American Rubyspot</b>	<b>Hetaerina americana</b>	<b>PHOT</b>	<b>streams, rivers</b>
Lestidae	Great Spreadwing	Archilestes grandis	PHOT	
Lestidae	Spotted Spreadwing	Lestes congener	SPEC	
Lestidae	Common Spreadwing	Lestes disjunctus	SPEC	
Lestidae	Common Spreadwing	Lestes australis	SPEC	
Lestidae	Emerald Spreadwing	Lestes dryas	M – OBS, F - SPEC	
Lestidae	Amber-winged Spreadwing	Lestes eurinus	M – PHOT (term app), F - SPEC	
Lestidae	Sweetflag Spreadwing	Lestes forcipatus	SPEC	
Lestidae	Elegant Spreadwing	Lestes inaequalis	M – PHOT (term app), F - SPEC	



Family	Common Name	Scientific Name	Identification Level	Habitat
Lestidae	Slender Spreadwing	Lestes rectangularis	M – PHOT (term app), F - SPEC	
Lestidae	Lyre-tipped Spreadwing	Lestes unguiculatus	M – PHOT (term app), F - SPEC	
Lestidae	Swamp Spreadwing	Lestes vigilax	M – PHOT (term app), F - SPEC	
Coenagrionidae	Eastern Red Damsel	Amphiagrion saucium	PHOT (lateral)	
Coenagrionidae	Blue-fronted Dancer	Argia apicalis	M - PHOT (lateral), F - SPEC	
Coenagrionidae	<b>Seepage Dancer</b>	<b>Argia bipunctulata</b>	<b>SPEC</b>	<b>seeps, rivulets, bogs</b>
Coenagrionidae	Variable Dancer	Argia fumipennis violacea	OBS	
Coenagrionidae	Powdered Dancer	Argia moesta	OBS	
Coenagrionidae	<b>Blue-tipped Dancer</b>	<b>Argia tibialis</b>	<b>M - PHOT (lateral), F - SPEC</b>	<b>rivers, brooks</b>
Coenagrionidae	Dusky Dancer	Argia translata	M - PHOT (lateral, term app), F - SPEC	
Coenagrionidae	Aurora Damsel	Chromagrion conditum	M - PHOT (lateral, term app), F - SPEC	
Coenagrionidae	<b>Subarctic Bluet</b>	<b>Coenagrion interrogatum</b>	<b>SPEC</b>	<b>ponds, bogs</b>
Coenagrionidae	Taiga Bluet	Coenagrion resolutum	M - PHOT (term app), F - SPEC	
Coenagrionidae	Rainbow Bluet	Enallagma antennatum	M - PHOT (term app), F - SPEC	
Coenagrionidae	Azure Bluet	Enallagma aspersum	M - PHOT (term app), F - SPEC	
Coenagrionidae	Double-striped Bluet	Enallagma basidens	M - PHOT (term app), F - SPEC	
Coenagrionidae	Boreal Bluet	Enallagma boreale	SPEC	



<b>Family</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Identification Level</b>	<b>Habitat</b>
Coenagrionidae	Tule Bluet	<i>Enallagma carunculatum</i>	SPEC	
Coenagrionidae	Familiar Bluet	<i>Enallagma civile</i>	M - PHOT (term app), F - SPEC	
Coenagrionidae	Northern Bluet	<i>Enallagma annexum</i>	SPEC	
Coenagrionidae	Attenuated Bluet *	<i>Enallagma daeckii</i>	SPEC	
Coenagrionidae	Turquoise Bluet	<i>Enallagma divagans</i>	M - PHOT (term app), F - SPEC	
Coenagrionidae	Atlantic Bluet	<i>Enallagma doubledayi</i>	SPEC	
Coenagrionidae	Big Bluet	<i>Enallagma durum</i>	M - PHOT (term app), F - SPEC	
Coenagrionidae	Marsh Bluet	<i>Enallagma ebrium</i>	M - PHOT (term app), F - SPEC	
Coenagrionidae	Stream Bluet	<i>Enallagma exsulans</i>	M - PHOT (term app), F - SPEC	
Coenagrionidae	Skimming Bluet	<i>Enallagma geminatum</i>	M - PHOT (term app), F - SPEC	
Coenagrionidae	Hagen's Bluet	<i>Enallagma hageni</i>	M - PHOT (term app), F - SPEC	
Coenagrionidae	<b>New England Bluet</b>	<b><i>Enallagma laterale</i></b>	<b>M - PHOT (term app), F - SPEC</b>	<b>ponds, lakes</b>
Coenagrionidae	<b>Little Bluet</b>	<b><i>Enallagma minusculum</i></b>	<b>M - PHOT (term app), F - SPEC</b>	<b>coastal plain ponds, lakes</b>
Coenagrionidae	<b>Scarlet Bluet</b>	<b><i>Enallagma pictum</i></b>	<b>M - PHOT (lateral), F - SPEC</b>	<b>coastal plain ponds, lakes</b>
Coenagrionidae	<b>Pine Barrens Bluet</b>	<b><i>Enallagma recurvatum</i></b>	<b>M - PHOT (term app), F - SPEC</b>	<b>coastal plain ponds, lakes</b>
Coenagrionidae	Orange Bluet	<i>Enallagma signatum</i>	M - OBS, F - SPEC	



<b>Family</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Identification Level</b>	<b>Habitat</b>
Coenagrionidae	Slender Bluet	Enallagma traviatum	M - PHOT (term app), F - SPEC	
Coenagrionidae	Northern Bluet	Enallagma vernale	SPEC	
Coenagrionidae	Vesper Bluet	Enallagma vesperum	M - OBS, F - SPEC	
Coenagrionidae	Blackwater Bluet	Enallagma weewa	M - PHOT (term app), F - SPEC	streams, rivers
Coenagrionidae	Citrine Forktail	Ischnura hastata	M – PHOT, F - SPEC	
Coenagrionidae	Lilypad Forktail	Ischnura kellicotti	M – PHOT, F - SPEC	
Coenagrionidae	Fragile Forktail	Ischnura posita	OBS	
Coenagrionidae	<b>Furtive Forktail</b>	<b>Ischnura prognata</b>	<b>M – PHOT, F - SPEC</b>	
Coenagrionidae	<b>Rambur's Forktail</b>	<b>Ischnura ramburii</b>	<b>M – PHOT, F - SPEC</b>	<b>brackish ponds, marshes</b>
Coenagrionidae	Eastern Forktail	Ischnura verticalis	OBS	
Coenagrionidae	Sphagnum Sprite	Nehalennia gracilis	M – OBS, F - PHOT	
Coenagrionidae	<b>Southern Sprite</b>	<b>Nehalennia integricollis</b>	<b>SPEC</b>	<b>ponds, bogs</b>
Coenagrionidae	Sedge Sprite	Nehalennia irene	M – OBS, F - PHOT	
Petaluridae	<b>Gray Petaltail</b>	<b>Tachopteryx thoreyi</b>	<b>PHOT</b>	<b>seeps, rivulets, ravines</b>
Aeshnidae	Canada Darner	Aeshna canadensis	PHOT (lateral thoracic, term app)	
Aeshnidae	<b>Mottled Darner</b>	<b>Aeshna clepsydra</b>	<b>PHOT (lateral thoracic, term app)</b>	<b>ponds, bogs</b>
Aeshnidae	Lance-tipped Darner	Aeshna constricta	PHOT (lateral thoracic, term app)	
Aeshnidae	Lake Darner	Aeshna eremita	PHOT (lateral thoracic, term app)	



Family	Common Name	Scientific Name	Identification Level	Habitat
Aeshnidae	Variable Darner	Aeshna interrupta	PHOT (lateral thoracic, term app)	
Aeshnidae	Sedge Darner *	Aeshna juncea	SPEC	
Aeshnidae	<b>Spatterdock Darner</b>	<b>Rhionaeschna mutata</b>	<b>PHOT in hand only (lateral thoracic,face)</b>	<b>ponds, lakes</b>
Aeshnidae	Zigzag Darner *	Aeshna sitchensis	SPEC	
Aeshnidae	<b>Subarctic Darner</b>	<b>Aeshna subarctica</b>	<b>PHOT (in hand only - lateral thoracic, term app)</b>	<b>bogs</b>
Aeshnidae	Black-tipped Darner	Aeshna tuberculifera	PHOT (lateral thoracic, term app)	
Aeshnidae	Shadow Darner	Aeshna umbrosa	PHOT (lateral thoracic, term app)	
Aeshnidae	Green-striped Darner	Aeshna verticalis	PHOT (lateral thoracic, term app)	
Aeshnidae	Common Green Darner	Anax junius	OBS	
Aeshnidae	<b>Comet Darner</b>	<b>Anax longipes</b>	<b>M – OBS, F – PHOT (top of head)</b>	<b>ponds, lakes</b>
Aeshnidae	Springtime Darner	Basiaeschna janata	PHOT (lateral thoracic, wings)	
Aeshnidae	Ocellated Darner	Boyeria grafiana	PHOT in hand only	
Aeshnidae	Fawn Darner	Boyeria vinosa	PHOT	
Aeshnidae	Swamp Darner	Epiaeschna heros	PHOT	
Aeshnidae	<b>Taper-tailed Darner</b>	<b>Gomphaeschna antilope</b>	SPEC	<b>bogs</b>
Aeshnidae	Harlequin Darner	Gomphaeschna furcillata	PHOT	
Aeshnidae	Cyrano Darner	Nasiaeschna pentacantha	PHOT	
Gomphidae	Horned Clubtail *	Arigomphus cornutus	SPEC	



<b>Family</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Identification Level</b>	<b>Habitat</b>
Gomphidae	Lilypad Clubtail	Arigomphus furcifer	M – PHOT (term app), F - SPEC	
Gomphidae	Unicorn Clubtail	Arigomphus villosipes	M – PHOT (term app), F - SPEC	
Gomphidae	Black-shouldered Spinyleg	Dromogomphus spinosus	PHOT	
Gomphidae	<b>Spine-crowned Clubtail</b>	<b>Gomphus abbreviatus</b>	<b>SPEC</b>	<b>rivers, lakes</b>
Gomphidae	Mustached Clubtail	Gomphus adelphus	SPEC	
Gomphidae	Beaverpond Clubtail	Gomphus borealis	SPEC	
Gomphidae	Harpoon Clubtail	Gomphus desertus	SPEC	
Gomphidae	Lancet Clubtail	Gomphus exilis	SPEC	
Gomphidae	<b>Midland Clubtail</b>	<b>Gomphus fraternus</b>	<b>M – PHOT (in hand – dorsal view of end of abdomen), F - SPEC</b>	<b>rivers, lakes</b>
Gomphidae	Pronghorn Clubtail *	Gomphus graslinellus	SPEC	
Gomphidae	Splendid Clubtail *	Gomphus lineatifrons	SPEC	
Gomphidae	Ashy Clubtail	Gomphus lividus	M – PHOT (term app), F - SPEC	
Gomphidae	<b>Rapids Clubtail</b>	<b>Gomphus quadricolor</b>	<b>SPEC</b>	<b>rivers</b>
Gomphidae	<b>Sable Clubtail</b>	<b>Gomphus rogersi</b>	<b>SPEC</b>	<b>forest streams</b>
Gomphidae	<b>Septima's Clubtail</b>	<b>Gomphus septima</b>	<b>SPEC</b>	<b>rivers</b>
Gomphidae	Dusky Clubtail	Gomphus spicatus	SPEC	
Gomphidae	<b>Cobra Clubtail</b>	<b>Gomphus vastus</b>	<b>M – PHOT (in hand – dorsal view of end of abdomen), F - SPEC</b>	<b>rivers</b>





<b>Family</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Identification Level</b>	<b>Habitat</b>
Gomphidae	<b>Skillet Clubtail</b>	<b>Gomphus ventricosus</b>	M – PHOT (in hand – dorsal view of end of abdomen), F - SPEC	rivers
Gomphidae	<b>Green-faced Clubtail</b>	<b>Gomphus viridifrons</b>	M – PHOT (term app), F - SPEC	rivers
Gomphidae	Dragonhunter	Hagenius brevistylus	OBS	
Gomphidae	Northern Pygmy Clubtail	Lanthus parvulus	SPEC	
Gomphidae	Southern Pygmy Clubtail	Lanthus vernalis	SPEC	
Gomphidae	<b>Extra-striped Snaketail</b>	<b>Ophiogomphus anomalus</b>	SPEC	rivers
Gomphidae	<b>Brook Snaketail</b>	<b>Ophiogomphus aspersus</b>	SPEC	brooks, rivers
Gomphidae	Riffle Snaketail	Ophiogomphus carolus	SPEC	
Gomphidae	<b>Boreal Snaketail</b>	<b>Ophiogomphus colubrinus</b>	SPEC	brooks, rivers
Gomphidae	<b>Pygmy Snaketail</b>	<b>Ophiogomphus howei</b>	SPEC	rivers
Gomphidae	Maine Snaketail	Ophiogomphus mainensis	SPEC	
Gomphidae	Rusty Snaketail	Ophiogomphus rupinsulensis	SPEC	
Gomphidae	<b>Common Sanddragon</b>	<b>Progomphus obscurus</b>	PHOT (TERM APP)	brooks, rivers (sandy)
Gomphidae	Least Clubtail	Stylogomphus albistylus	PHOT (term app)	
Gomphidae	<b>Riverine Clubtail</b>	<b>Stylurus annicola</b>	SPEC	rivers
Gomphidae	Laura's Clubtail *	Stylurus laurae	SPEC	
Gomphidae	<b>Elusive Clubtail</b>	<b>Stylurus notatus</b>	SPEC	rivers, lakes
Gomphidae	<b>Russet-tipped Clubtail</b>	<b>Stylurus plagiatus</b>	SPEC	rivers
Gomphidae	Zebra Clubtail	Stylurus scudderi	SPEC	
Gomphidae	<b>Arrow Clubtail</b>	<b>Stylurus spiniceps</b>	SPEC	rivers, lakes



Family	Common Name	Scientific Name	Identification Level	Habitat
Cordulegastridae	Brown Spiketail *	<i>Cordulegaster bilineata</i>	SPEC	
Cordulegastridae	Delta-spotted Spiketail	<i>Cordulegaster diastatops</i>	PHOT	
Cordulegastridae	<b>Tiger Spiketail</b>	<b><i>Cordulegaster erronea</i></b>	<b>PHOT (abdomen – dorsal)</b>	<b>seeps, rivulets, brooks</b>
Cordulegastridae	Twin-spotted Spiketail	<i>Cordulegaster maculata</i>	PHOT	
Cordulegastridae	<b>Arrowhead Spiketail</b>	<b><i>Cordulegaster obliqua</i></b>	<b>PHOT (abdomen – dorsal)</b>	<b>seeps, rivulets, brooks</b>
Macromiidae	Stream Cruiser	<i>Didymops transversa</i>	OBS	
Macromiidae	Allegheny River Cruiser	<i>Macromia alleghaniensis</i> *	SPEC	
Macromiidae	Illinois River Cruiser	<i>Macromia illinoensis</i>	SPEC	
Macromiidae	Royal River Cruiser	<i>Macromia taeniolata</i> *	SPEC	
Corduliidae	American Emerald	<i>Cordulia shurtleffi</i>	M – PHOT (term app), F - SPEC	
Corduliidae	Petite Emerald	<i>Dorocordulia lepida</i>	M – PHOT (term app), F - SPEC	
Corduliidae	Racket-tailed Emerald	<i>Dorocordulia libera</i>	M – PHOT (term app), F - SPEC	
Corduliidae	Prince Baskettail	<i>Epicordulia princeps</i>	OBS	
Corduliidae	Beaverpond Baskettail	<i>Epitheca canis</i>	M – PHOT (term app), F - SPEC	
Corduliidae	Stripe-winged Baskettail *	<i>Epitheca costalis</i>	SPEC	
Corduliidae	Common Baskettail	<i>Epitheca cynosura</i>	SPEC	
Corduliidae	<b>Mantled Baskettail</b>	<b><i>Epitheca semiaquea</i></b>	<b>SPEC</b>	<b>lakes, ponds, bogs</b>
Corduliidae	Spiny Baskettail	<i>Epitheca spinigera</i>	M – PHOT (abdomen – dorsal or ventral view), F - SPEC	



<b>Family</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Identification Level</b>	<b>Habitat</b>
Corduliidae	Uhler's Sundragon	<i>Helocordulia uhleri</i>	PHOT	
Corduliidae	Broadtailed Shadowdragon *	<i>Neurocordulia michaeli</i>	SPEC	
Corduliidae	Umber Shadowdragon	<i>Neurocordulia obsoleta</i>	SPEC	
Corduliidae	Stygian Shaddowdragon	<i>Neurocordulia yamaskanensis</i>	SPEC	
Corduliidae	<b>Ringed Emerald</b>	<b><i>Somatochlora albicincta</i></b>	SPEC	<b>bogs</b>
Corduliidae	<b>Lake Emerald</b>	<b><i>Somatochlora cingulata</i></b>	SPEC	<b>lakes, rivers</b>
Corduliidae	Ski-tailed Emerald	<i>Somatochlora elongata</i>	SPEC	
Corduliidae	<b>Forcipate Emerald</b>	<b><i>Somatochlora forcipata</i></b>	SPEC	<b>bogs</b>
Corduliidae	<b>Delicate Emerald</b>	<b><i>Somatochlora franklini</i></b>	SPEC	<b>bogs</b>
Corduliidae	Hine's Emerald *	<i>Somatochlora hineana</i>	PHOT (term app)	
Corduliidae	<b>Incurvate Emerald</b>	<b><i>Somatochlora incurvata</i></b>	SPEC	<b>bogs</b>
Corduliidae	<b>Kennedy's Emerald</b>	<b><i>Somatochlora kennedyi</i></b>	SPEC	<b>bogs</b>
Corduliidae	<b>Mocha Emerald</b>	<b><i>Somatochlora linearis</i></b>	SPEC	<b>forest streams</b>
Corduliidae	<b>Ocellated Emerald</b>	<b><i>Somatochlora minor</i></b>	SPEC	<b>forest streams</b>
Corduliidae	Clamp-tipped Emerald	<i>Somatochlora tenebrosa</i>	M – PHOT (term app), F - spec	
Corduliidae	Brush-tipped Emerald	<i>Somatochlora walshii</i>	M – PHOT (term app), F - spec	
Corduliidae	Williamson's Emerald	<i>Somatochlora williamsoni</i>	M – PHOT (term app), F - spec	
Corduliidae	Coppery Emerald *	<i>Somatochlora georgiana</i>	SPEC	
Corduliidae	<b>Ebony Boghaunter</b>	<b><i>Williamsonia fletcheri</i></b>	SPEC	<b>bogs</b>
Corduliidae	<b>Ringed Boghaunter</b>	<b><i>Williamsonia lintneri</i></b>	PHOT	<b>bogs</b>
Libellulidae	Calico Pennant	<i>Celithemis elisa</i>	OBS	




<b>Family</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Identification Level</b>	<b>Habitat</b>
Libellulidae	Halloween Pennant	Celithemis eponina	OBS	
Libellulidae	Banded Pennant	Celithemis fasciata	OBS	
Libellulidae	Martha's Pennant	Celithemis martha	OBS	
Libellulidae	Double-ringed Pennant	Celithemis verna	SPEC	
Libellulidae	Eastern Pondhawk	Erythemis simplicicollis	OBS	
Libellulidae	Seaside Dragonlet	Erythrodiplax berenice	PHOT	
Libellulidae	Little Blue Dragonlet	Erythrodiplax minuscula	SPEC	
Libellulidae	Blue Corporal	Ladona deplanata	M – OBS, F - SPEC	
Libellulidae	White Corporal	Ladona exusta	M – OBS, F - SPEC	
Libellulidae	Chalk-fronted Corporal	Ladona julia	M – OBS, F - SPEC	
Libellulidae	Frosted Whiteface	Leucorrhinia frigida	M – PHOT (hamules), F - SPEC	
Libellulidae	Crimson-ringed Whiteface	Leucorrhinia glacialis	M – PHOT (hamules), F - SPEC	
Libellulidae	Hudsonian Whiteface	Leucorrhinia hudsonica	M – PHOT (hamules), F - SPEC	
Libellulidae	Dot-tailed Whiteface	Leucorrhinia intacta	M – OBS, F - SPEC	
Libellulidae	Red-waisted Whiteface	Leucorrhinia proxima	M – PHOT (hamules), F - SPEC	
Libellulidae	<b>Golden-winged Skimmer</b>	<b>Libellula auripennis</b>	<b>SPEC</b>	<b>ponds</b>
Libellulidae	Bar-winged Skimmer	Libellula axilena	M – PHOT, F - SPEC	
Libellulidae	Spangled Skimmer	Libellula cyanea	OBS	
Libellulidae	<b>Yellow-sided Skimmer</b>	<b>Libellula flava</b>	<b>SPEC</b>	<b>bogs, ponds</b>
Libellulidae	Slaty Skimmer	Libellula incesta	M – OBS, F - SPEC	
Libellulidae	Widow Skimmer	Libellula luctuosa	OBS	



Family	Common Name	Scientific Name	Identification Level	Habitat
Libellulidae	<b>Needham's Skimmer</b>	<b>Libellula needhami</b>	<b>SPEC</b>	<b>brackish ponds, marshes</b>
Libellulidae	Twelve-spotted Skimmer	Libellula pulchella	OBS	
Libellulidae	Four-spotted Skimmer	Libellula quadrimaculata	OBS	
Libellulidae	Painted Skimmer	Libellula semifasciata	OBS	
Libellulidae	Great Blue Skimmer	Libellula vibrans	M – OBS, F - SPEC	
Libellulidae	Elfin Skimmer	Nannothemis bella	OBS	
Libellulidae	Blue Dasher	Pachydiplax longipennis	M – OBS, F - PHOT	
Libellulidae	Wandering Glider	Pantala flavescens	PHOT	
Libellulidae	Spot-winged Glider	Pantala hymenaea	PHOT	
Libellulidae	Eastern Amberwing	Perithemis tenera	OBS	
Libellulidae	Common Whitetail	Plathemis lydia	OBS	
Libellulidae	Variigated Meadowhawk	Sympetrum corruptum	PHOT	
Libellulidae	Saffron-winged Meadowhawk	Sympetrum costiferum	M – OBS, F - SPEC	
Libellulidae	<b>Black Meadowhawk</b>	<b>Sympetrum danae</b>	<b>M – PHOTO, F - SPEC</b>	<b>ponds, bogs</b>
Libellulidae	Cherry-faced Meadowhawk	Sympetrum internum	SPEC	
Libellulidae	Jane's Meadowhawk	Sympetrum janeae	SPEC	
Libellulidae	White-faced Meadowhawk	Sympetrum obtrusum	SPEC	
Libellulidae	Ruby Meadowhawk	Sympetrum rubicundulum	SPEC	
Libellulidae	Band-winged Meadowhawk	Sympetrum semicinctum	OBS	
Libellulidae	Yellow-legged Meadowhawk	Sympetrum vicinum	M – OBS, F - SPEC	
Libellulidae	Vermilion Saddlebags	Tamea abdominalis	PHOT (lateral, wings)	
Libellulidae	Striped Saddlebags	Tamea calverti	PHOT (lateral, wings)	
Libellulidae	Carolina Saddlebags	Tamea carolina	PHOT	
Libellulidae	Black Saddlebags	Tamea lacerata	OBS	



# Appendix II. Survey site visit form.



## NEW YORK DRAGONFLY AND DAMSELFLY SURVEY SITE VISIT FORM

NY Natural Heritage Program, NYSDDEC, 625 Broadway, 5th Floor, Albany, NY 12233-4757

Please use pencil.

COUNTY: \_\_\_\_\_ TOWN: \_\_\_\_\_ MANAGED AREA (if applicable): \_\_\_\_\_ SITE ID #: \_\_\_\_\_

SURVEY SITE NAME (eg Long Pond, Rocky Creek, Chenango River at Rt. 15): \_\_\_\_\_

ADDITIONAL SITE LOCATION DIRECTIONS: \_\_\_\_\_

OBSERVERS (principal observer first): \_\_\_\_\_ VOL. ID: \_\_\_\_\_

WEATHER CONDITIONS: \_\_\_\_\_

MAPPING METHOD: \_\_\_\_\_ Topo Map \_\_\_\_\_ Software \_\_\_\_\_ GPS \_\_\_\_\_ DATUM: \_\_\_\_\_ NAD83 \_\_\_\_\_ NAD27 \_\_\_\_\_ WGS84 \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: from \_\_\_\_\_ am or pm (circle) to \_\_\_\_\_ am or pm (circle)

UTM ZONE \_\_\_\_\_ UTM E \_\_\_\_\_ UTM N \_\_\_\_\_ (UTM preferred) or \_\_\_\_\_ Longitude \_\_\_\_\_ Latitude \_\_\_\_\_

HABITAT		BOTTOM SUBSTRATE	WATER QUALITY
<input type="checkbox"/> Marsh <input type="checkbox"/> Sedge/grass <input type="checkbox"/> Cattail/reed <input type="checkbox"/> Shrub <input type="checkbox"/> Running Water <input type="checkbox"/> Swamp <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed <input type="checkbox"/> Openings <input type="checkbox"/> Field <input type="checkbox"/> Forest gap <input type="checkbox"/> Stream/creek <input type="checkbox"/> River	<input type="checkbox"/> Bog/Fen <input type="checkbox"/> Shrub dominated <input type="checkbox"/> Sedge/grass dominated <input type="checkbox"/> Black spruce/tamarack <input type="checkbox"/> Other	<input type="checkbox"/> Rock/boulder <input type="checkbox"/> Sand/gravel <input type="checkbox"/> Mud/silt/clay <input type="checkbox"/> Muck	<input type="checkbox"/> Clear <input type="checkbox"/> Stained <input type="checkbox"/> Turbid <input type="checkbox"/> Algaed (green)
SURROUNDING LANDSCAPE			
<input type="checkbox"/> Coniferous Woods <input type="checkbox"/> Deciduous Woods <input type="checkbox"/> Mixed Woods		<input type="checkbox"/> Field <input type="checkbox"/> Residential <input type="checkbox"/> Other <input type="checkbox"/> Agriculture <input type="checkbox"/> Urban	

OTHER NOTES (including habitat notes): \_\_\_\_\_

**SPECIES LIST.** List species observed and mark appropriate columns.

**Species Name:** For unfamiliar species indicate, for example, "Enallagma sp. 1" or "Spiketail sp. 2". It must be a unique identifier in order to correspond to a species card.

**Number Observed:** Choose the category that fits best based on either a count or estimate of the number of individuals present.

SPECIES NAME	IDENTIFICATION METHOD		NUMBER ESTIMATED		REPRODUCTIVE BEHAVIORS OBSERVED				
	<input type="checkbox"/> M	<input type="checkbox"/> F	Few <input type="checkbox"/> 1-5	Common <input type="checkbox"/> 21-100	<input type="checkbox"/> GRD	<input type="checkbox"/> TAND	<input type="checkbox"/> COP	<input type="checkbox"/> OVIP	<input type="checkbox"/> TEN
	<input type="checkbox"/>	<input type="checkbox"/>	Few <input type="checkbox"/> 1-5	Common <input type="checkbox"/> 21-100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	Few <input type="checkbox"/> 1-5	Common <input type="checkbox"/> 21-100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	Few <input type="checkbox"/> 1-5	Common <input type="checkbox"/> 21-100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	Few <input type="checkbox"/> 1-5	Common <input type="checkbox"/> 21-100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Identification Method Codes**  
Select more than one if applicable.

SPEC	collected specimen
PHOT	photographed
CAPT	captured & released
OBS	observed (sight record)

**Reproductive Behavior Codes**  
Select more than one if applicable.

GRD	guarding / territorial
TAND	tandem pair
COP	en copula (wheel position)
OVIP	ovipositing
TEN	emergence or teneral individuals

Information in gray area is mainly important for species of greatest conservation need.



Appendix III. This appendix lists odonates for each county in New York, sorted by scientific name within each county. “pre” = pre-NYDDS (Donnelly 2004); “NYDDS” = 2005-2009, verified records only. There were 1,111 new county records as a result of this effort, which are indicated with a “\*” after the final column. This total includes fewer than 20 new county records for hybrids of *Sympetrum* and other taxa that were documented for the first time.

County	Scientific name	Common name	pre	NYDDS
Albany	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Albany	<i>Aeshna clepsydra</i>	Mottled Darner	Y	
Albany	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Albany	<i>Aeshna interrupta</i>	Variable Darner	Y	Y
Albany	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Albany	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Albany	<i>Aeshna verticalis</i>	Green-striped Darner	Y	Y
Albany	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Albany	<i>Anax junius</i>	Common Green Darner	Y	Y
Albany	<i>Anax longipes</i>	Comet Darner	Y	Y
Albany	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Albany	<i>Argia fumipennis violacea</i>	Variable Dancer		Y *
Albany	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Albany	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Albany	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Albany	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Albany	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Albany	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Albany	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Albany	<i>Calopteryx amata</i>	Superb Jewelwing		Y *
Albany	<i>Calopteryx maculata</i>	Ebony Jewelwing		Y *
Albany	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Albany	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Albany	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Albany	<i>Coenagrion resolutum</i>	Taiga Bluet		Y *
Albany	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Albany	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Albany	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Albany	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Albany	<i>Dorocordulia lepida</i>	Petite Emerald	Y	
Albany	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Albany	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Albany	<i>Enallagma annexum</i>	Northern Bluet	Y	
Albany	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Albany	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Albany	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Albany	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Albany	<i>Enallagma durum</i>	Big Bluet	Y	Y
Albany	<i>Enallagma ebrium</i>	Marsh Bluet		Y *
Albany	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Albany	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Albany	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Albany	<i>Enallagma signatum</i>	Orange Bluet	Y	Y

County	Scientific name	Common name	pre	NYDDS
Albany	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Albany	<i>Enallagma traviatum traviatum</i>	Slender Bluet		Y
Albany	<i>Enallagma vernale</i>	Northern Bluet		Y *
Albany	<i>Enallagma vesperum</i>	Vesper Bluet	Y	Y
Albany	<i>Epiaeschna heros</i>	Swamp Darner	Y	Y
Albany	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Albany	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Albany	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Albany	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Albany	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Albany	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Albany	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Albany	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Albany	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Albany	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Albany	<i>Gomphus vastus</i>	Cobra Clubtail	Y	Y
Albany	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Albany	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Albany	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Albany	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Albany	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Albany	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Albany	<i>Lestes dryas</i>	Emerald Spreadwing		Y *
Albany	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Albany	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Albany	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Albany	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Albany	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Albany	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Albany	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Albany	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Albany	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Albany	<i>Libellula pulchella</i>	Twelve-spotted Skimmer		Y *
Albany	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Albany	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Albany	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	Y
Albany	<i>Nehalennia irene</i>	Sedge Sprite		Y *
Albany	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon		Y *
Albany	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon		Y *
Albany	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Albany	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Albany	<i>Pantala flavescens</i>	Wandering Glider	Y	Y
Albany	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
Albany	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Albany	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Albany	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	
Albany	<i>Somatochlora kennedyi</i>	Kennedy's Emerald	Y	
Albany	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald		Y *
Albany	<i>Stylurus amnicola</i>	Riverine Clubtail	Y	



County	Scientific name	Common name	pre	NYDDS
Albany	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail		Y *
Albany	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	Y
Albany	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Albany	<i>Sympetrum internum</i> x <i>obtrusum</i>		Y	
Albany	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Albany	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	Y
Albany	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Albany	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Albany	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Albany	<i>Williamsonia lintneri</i>	Ringed Boghaunter	Y	
Allegany	<i>Aeshna canadensis</i>	Canada Darner		Y *
Allegany	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Allegany	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Allegany	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Allegany	<i>Anax junius</i>	Common Green Darner	Y	Y
Allegany	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Allegany	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Allegany	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Allegany	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Allegany	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Allegany	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Allegany	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Allegany	<i>Celithemis elisa</i>	Calico Pennant	Y	
Allegany	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Allegany	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Allegany	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Allegany	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Allegany	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Allegany	<i>Enallagma annexum</i>	Northern Bluet	Y	
Allegany	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Allegany	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Allegany	<i>Enallagma carunculatum</i>	Tule Bluet		Y *
Allegany	<i>Enallagma civile</i>	Familiar Bluet		Y *
Allegany	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Allegany	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Allegany	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Allegany	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Allegany	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Allegany	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Allegany	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Allegany	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Allegany	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Allegany	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Allegany	<i>Gomphus exilis</i>	Lancet Clubtail		Y *
Allegany	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Allegany	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Allegany	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Allegany	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Allegany	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y

County	Scientific name	Common name	pre	NYDDS
Allegany	<i>Lestes disjunctus</i>	Common Spreadwing		Y *
Allegany	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Allegany	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Allegany	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Allegany	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Allegany	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Allegany	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	
Allegany	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Allegany	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Allegany	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Allegany	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Allegany	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	
Allegany	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Allegany	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Allegany	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Allegany	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Allegany	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Allegany	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Allegany	<i>Rhionaeschna mutata</i>	Spatdock Darner		Y *
Allegany	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald		Y *
Allegany	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Allegany	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Allegany	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Allegany	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Allegany	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Bronx	<i>Anax junius</i>	Common Green Darner		Y *
Bronx	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Bronx	<i>Argia fumipennis violacea</i>	Variable Dancer		Y *
Bronx	<i>Argomphus villosipes</i>	Unicorn Clubtail	Y	
Bronx	<i>Calopteryx aquabilis</i>	River Jewelwing	Y	
Bronx	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	
Bronx	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Bronx	<i>Enallagma civile</i>	Familiar Bluet		Y *
Bronx	<i>Enallagma divagans</i>	Turquoise Bluet		Y *
Bronx	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Bronx	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Bronx	<i>Enallagma signatum</i>	Orange Bluet		Y *
Bronx	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Bronx	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Bronx	<i>Erythrodiplax berenice</i>	Seaside Dragonlet	Y	Y
Bronx	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	Y	
Bronx	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Bronx	<i>Ischnura posita</i>	Fragile Forktail		Y *
Bronx	<i>Ischnura verticalis</i>	Eastern Forktail		Y *
Bronx	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Bronx	<i>Libellula cyanea</i>	Spangled Skimmer	Y	
Bronx	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Bronx	<i>Libellula pulchella</i>	Twelve-spotted Skimmer		Y *
Bronx	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	

County	Scientific name	Common name	pre	NYDDS
Bronx	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Bronx	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Bronx	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Bronx	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Bronx	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
Bronx	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Bronx	<i>Tramea carolina</i>	Carolina Saddlebags		Y *
Bronx	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Broome	<i>Aeshna canadensis</i>	Canada Darner	Y	
Broome	<i>Aeshna clepsydra</i>	Mottled Darner	Y	
Broome	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Broome	<i>Aeshna interrupta</i>	Variable Darner	Y	
Broome	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Broome	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Broome	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Broome	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Broome	<i>Anax junius</i>	Common Green Darner	Y	Y
Broome	<i>Anax longipes</i>	Comet Darner	Y	
Broome	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	
Broome	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Broome	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Broome	<i>Argia translata</i>	Dusky Dancer	Y	
Broome	<i>Argiomphus furcifer</i>	Lilypad Clubtail	Y	Y
Broome	<i>Argiomphus villosipes</i>	Unicorn Clubtail	Y	Y
Broome	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Broome	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Broome	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Broome	<i>Calopteryx aquabilis</i>	River Jewelwing	Y	
Broome	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Broome	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Broome	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Broome	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Broome	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Broome	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Broome	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	
Broome	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Broome	<i>Didymops transversa</i>	Stream Cruiser	Y	
Broome	<i>Dorocordulia lepida</i>	Petite Emerald	Y	
Broome	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Broome	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Broome	<i>Enallagma annexum</i>	Northern Bluet	Y	
Broome	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Broome	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Broome	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Broome	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Broome	<i>Enallagma civile</i>	Familiar Bluet	Y	
Broome	<i>Enallagma civile x carunculatum</i>	Hybrid		Y
Broome	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Broome	<i>Enallagma exsulans</i>	Stream Bluet	Y	

County	Scientific name	Common name	pre	NYDDS
Broome	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Broome	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Broome	<i>Enallagma signatum</i>	Orange Bluet	Y	
Broome	<i>Enallagma vernale</i>	Northern Bluet	Y	
Broome	<i>Epiaeschna heros</i>	Swamp Darner	Y	Y
Broome	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Broome	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Broome	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Broome	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Broome	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
Broome	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Broome	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Broome	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Broome	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Broome	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	
Broome	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Broome	<i>Gomphus vastus</i>	Cobra Clubtail	Y	
Broome	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Broome	<i>Hetaerina americana</i>	American Rubyspot	Y	
Broome	<i>Ischnura hastata</i>	Citrine Forktail	Y	
Broome	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Broome	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Broome	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Broome	<i>Lestes australis</i>	Southern Spreadwing	Y	
Broome	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Broome	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Broome	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Broome	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Broome	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Broome	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Broome	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Broome	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Broome	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Broome	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Broome	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Broome	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Broome	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	
Broome	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Broome	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Broome	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Broome	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Broome	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Broome	<i>Libellula semifasciata</i>	Painted Skimmer	Y	
Broome	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	Y
Broome	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Broome	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
Broome	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Broome	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	Y	
Broome	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	

County	Scientific name	Common name	pre	NYDDS
Broome	<i>Ophiogomphus howei</i>	Pygmy Snaketail	Y	
Broome	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Broome	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Broome	<i>Pantala flavescens</i>	Wandering Glider	Y	
Broome	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
Broome	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Broome	<i>Rhionaeschna mutata</i>	Spatterdock Darner	Y	
Broome	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Broome	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
Broome	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Broome	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Broome	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Broome	<i>Sympetrum internum x obtrusum</i>		Y	
Broome	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Broome	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk	Y	
Broome	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Broome	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Broome	<i>Williamsonia fletcheri</i>	Ebony Boghaunter	Y	
Cattaraugus	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Cattaraugus	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Cattaraugus	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Cattaraugus	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Cattaraugus	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Cattaraugus	<i>Anax junius</i>	Common Green Darner	Y	Y
Cattaraugus	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Cattaraugus	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Cattaraugus	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Cattaraugus	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Cattaraugus	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Cattaraugus	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Cattaraugus	<i>Calopteryx amata</i>	Superb Jewelwing	Y	
Cattaraugus	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Cattaraugus	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Cattaraugus	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Cattaraugus	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Cattaraugus	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Cattaraugus	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Cattaraugus	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Cattaraugus	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Cattaraugus	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Cattaraugus	<i>Enallagma annexum</i>	Northern Bluet	Y	Y
Cattaraugus	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	Y
Cattaraugus	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Cattaraugus	<i>Enallagma civile</i>	Familiar Bluet		Y *
Cattaraugus	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Cattaraugus	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Cattaraugus	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Cattaraugus	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y

County	Scientific name	Common name	pre	NYDDS
Cattaraugus	<i>Enallagma signatum</i>	Orange Bluet		Y *
Cattaraugus	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Cattaraugus	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Cattaraugus	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Cattaraugus	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Cattaraugus	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Cattaraugus	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Cattaraugus	<i>Gomphus descriptus</i>	Harpoon Clubtail		Y *
Cattaraugus	<i>Gomphus exilis</i>	Lancet Clubtail		Y *
Cattaraugus	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Cattaraugus	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Cattaraugus	<i>Hetaerina americana</i>	American Rubyspot	Y	
Cattaraugus	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Cattaraugus	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Cattaraugus	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Cattaraugus	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	Y
Cattaraugus	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	Y	
Cattaraugus	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Cattaraugus	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Cattaraugus	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Cattaraugus	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Cattaraugus	<i>Lestes rectangularis</i>	Slender Spreadwing		Y *
Cattaraugus	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Cattaraugus	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Cattaraugus	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Cattaraugus	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	Y
Cattaraugus	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Cattaraugus	<i>Libellula auripennis</i>	Golden-winged Skimmer	Y	
Cattaraugus	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Cattaraugus	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Cattaraugus	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Cattaraugus	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	
Cattaraugus	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
Cattaraugus	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Cattaraugus	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Cattaraugus	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	
Cattaraugus	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Cattaraugus	<i>Pantala flavescens</i>	Wandering Glider	Y	
Cattaraugus	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Cattaraugus	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Cattaraugus	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	
Cattaraugus	<i>Somatochlora linearis</i>	Mocha Emerald	Y	
Cattaraugus	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Cattaraugus	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	
Cattaraugus	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Cattaraugus	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Cattaraugus	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Cattaraugus	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Cattaraugus	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	

County	Scientific name	Common name	pre	NYDDS
Cattaraugus	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Cayuga	<i>Aeshna canadensis</i>	Canada Darner	Y	
Cayuga	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Cayuga	<i>Anax junius</i>	Common Green Darner	Y	Y
Cayuga	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Cayuga	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Cayuga	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Cayuga	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Cayuga	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Cayuga	<i>Basiaeschna janata</i>	Springtime Darner		Y *
Cayuga	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Cayuga	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Cayuga	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Cayuga	<i>Celithemis elisa</i>	Calico Pennant	Y	
Cayuga	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Cayuga	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Cayuga	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Cayuga	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Cayuga	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Cayuga	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Cayuga	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Cayuga	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Cayuga	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Cayuga	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Cayuga	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Cayuga	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Cayuga	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Cayuga	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Cayuga	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Cayuga	<i>Epithea cynosura</i>	Common Baskettail	Y	Y
Cayuga	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Cayuga	<i>Gomphus desertus</i>	Harpoon Clubtail	Y	
Cayuga	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Cayuga	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Cayuga	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Cayuga	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Cayuga	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Cayuga	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Cayuga	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Cayuga	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Cayuga	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Cayuga	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Cayuga	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Cayuga	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Cayuga	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Cayuga	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Cayuga	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Cayuga	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Cayuga	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y

County	Scientific name	Common name	pre	NYDDS
Cayuga	<i>Pantala flavescens</i>	Wandering Glider	Y	
Cayuga	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Cayuga	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Cayuga	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Cayuga	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Cayuga	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
Cayuga	<i>Stylurus scudderi</i>	Zebra Clubtail	Y	
Cayuga	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Cayuga	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Cayuga	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Cayuga	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Cayuga	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Cayuga	<i>Tramea lacerata</i>	Black Saddlebags	Y	
Chautauqua	<i>Aeshna canadensis</i>	Canada Darner		Y *
Chautauqua	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Chautauqua	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Chautauqua	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Chautauqua	<i>Anax junius</i>	Common Green Darner	Y	Y
Chautauqua	<i>Anax longipes</i>	Comet Darner		Y *
Chautauqua	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Chautauqua	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Chautauqua	<i>Argia moesta</i>	Powdered Dancer	Y	
Chautauqua	<i>Argia tibialis</i>	Blue-tipped Dancer		Y *
Chautauqua	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Chautauqua	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Chautauqua	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Chautauqua	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Chautauqua	<i>Celithemis elisa</i>	Calico Pennant		Y *
Chautauqua	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Chautauqua	<i>Celithemis fasciata</i>	Banded Pennant	Y	
Chautauqua	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Chautauqua	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Chautauqua	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Chautauqua	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Chautauqua	<i>Enallagma basidens</i>	Double-striped Bluet		Y *
Chautauqua	<i>Enallagma carunculatum</i>	Tule Bluet		Y *
Chautauqua	<i>Enallagma civile</i>	Familiar Bluet		Y *
Chautauqua	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Chautauqua	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Chautauqua	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Chautauqua	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Chautauqua	<i>Enallagma signatum</i>	Orange Bluet		Y *
Chautauqua	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Chautauqua	<i>Enallagma traviatum westfalli</i>	Slender Bluet		Y
Chautauqua	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Chautauqua	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Chautauqua	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Chautauqua	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Chautauqua	<i>Epitheca cynosura</i>	Common Baskettail		Y *



County	Scientific name	Common name	pre	NYDDS
Chautauqua	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Chautauqua	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Chautauqua	<i>Gomphus descriptus</i>	Harpoon Clubtail		Y *
Chautauqua	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Chautauqua	<i>Gomphus fraternus</i>	Midland Clubtail		Y *
Chautauqua	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Chautauqua	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Chautauqua	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Chautauqua	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Chautauqua	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Chautauqua	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Chautauqua	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Chautauqua	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Chautauqua	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Chautauqua	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Chautauqua	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Chautauqua	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Chautauqua	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface		Y *
Chautauqua	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Chautauqua	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Chautauqua	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Chautauqua	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Chautauqua	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Chautauqua	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Chautauqua	<i>Nehalennia gracilis</i>	Sphagnum Sprite		Y *
Chautauqua	<i>Nehalennia irene</i>	Sedge Sprite		Y *
Chautauqua	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Chautauqua	<i>Pantala flavescens</i>	Wandering Glider		Y *
Chautauqua	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Chautauqua	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Chautauqua	<i>Rhionaeschna mutata</i>	Spatdock Darner		Y *
Chautauqua	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Chautauqua	<i>Stylurus spiniceps</i>	Arrow Clubtail		Y *
Chautauqua	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Chautauqua	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk		Y *
Chautauqua	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Chautauqua	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Chemung	<i>Aeshna canadensis</i>	Canada Darner	Y	
Chemung	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Chemung	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Chemung	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Chemung	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Chemung	<i>Anax junius</i>	Common Green Darner	Y	Y
Chemung	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	
Chemung	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	
Chemung	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Chemung	<i>Argia translata</i>	Dusky Dancer	Y	
Chemung	<i>Argomphus furcifer</i>	Lilypad Clubtail	Y	Y
Chemung	<i>Argomphus villosipes</i>	Unicorn Clubtail	Y	Y

County	Scientific name	Common name	pre	NYDDS
Chemung	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Chemung	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Chemung	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Chemung	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Chemung	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Chemung	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Chemung	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Chemung	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Chemung	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Chemung	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Chemung	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Chemung	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Chemung	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	Y
Chemung	<i>Enallagma basidens</i>	Double-striped Bluet	Y	
Chemung	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Chemung	<i>Enallagma civile</i>	Familiar Bluet	Y	
Chemung	<i>Enallagma annexum</i>	Northern Bluet	Y	
Chemung	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Chemung	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Chemung	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Chemung	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Chemung	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Chemung	<i>Enallagma traviatum westfalli</i>	Slender Bluet	Y	
Chemung	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Chemung	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Chemung	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Chemung	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Chemung	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Chemung	<i>Gomphus borealis</i>	Beaverpond Clubtail		Y *
Chemung	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Chemung	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Chemung	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Chemung	<i>Gomphus vastus</i>	Cobra Clubtail	Y	
Chemung	<i>Ischnura hastata</i>	Citrine Forktail	Y	
Chemung	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Chemung	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Chemung	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Chemung	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail		Y *
Chemung	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Chemung	<i>Lestes dryas</i>	Emerald Spreadwing	Y	Y
Chemung	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Chemung	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Chemung	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Chemung	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Chemung	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Chemung	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Chemung	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Chemung	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	
Chemung	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y

County	Scientific name	Common name	pre	NYDDS
Chemung	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Chemung	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Chemung	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Chemung	<i>Macromia illinoiensis</i>	Illinois River Cruiser		Y *
Chemung	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Chemung	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon		Y *
Chemung	<i>Ophiogomphus carolus</i>	Riffle Snaketail		Y *
Chemung	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Chemung	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
Chemung	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Chemung	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Chemung	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Chemung	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Chemung	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
Chemung	<i>Tramea lacerata</i>	Black Saddlebags	Y	
Chenango	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Chenango	<i>Aeshna canadensis x clepsydra</i>	Hybrid		Y
Chenango	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Chenango	<i>Aeshna interrupta</i>	Variable Darner	Y	
Chenango	<i>Aeshna subarctica</i>	Subarctic Darner	Y	Y
Chenango	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Chenango	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Chenango	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Chenango	<i>Anax junius</i>	Common Green Darner	Y	Y
Chenango	<i>Anax longipes</i>	Comet Darner	Y	Y
Chenango	<i>Argia fumipennis violacea</i>	Variable Dancer		Y *
Chenango	<i>Argia moesta</i>	Powdered Dancer	Y	
Chenango	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Chenango	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Chenango	<i>Boyeria grafiana</i>	Ocellated Darner	Y	Y
Chenango	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Chenango	<i>Calopteryx amata</i>	Superb Jewelwing	Y	
Chenango	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Chenango	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Chenango	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Chenango	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Chenango	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Chenango	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Chenango	<i>Didymops transversa</i>	Stream Cruiser	Y	
Chenango	<i>Dorocordulia lepida</i>	Petite Emerald	Y	Y
Chenango	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Chenango	<i>Enallagma annexum</i>	Northern Bluet	Y	
Chenango	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Chenango	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Chenango	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Chenango	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Chenango	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Chenango	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Chenango	<i>Enallagma hageni</i>	Hagen's Bluet	Y	

County	Scientific name	Common name	pre	NYDDS
Chenango	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Chenango	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Chenango	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Chenango	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Chenango	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Chenango	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Chenango	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Chenango	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Chenango	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Chenango	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Chenango	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Chenango	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Chenango	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Chenango	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Chenango	<i>Lestes australis</i>	Southern Spreadwing	Y	
Chenango	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Chenango	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Chenango	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Chenango	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Chenango	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Chenango	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing		Y *
Chenango	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Chenango	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Chenango	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	Y
Chenango	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	
Chenango	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Chenango	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	
Chenango	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Chenango	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Chenango	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Chenango	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Chenango	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	Y
Chenango	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Chenango	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Chenango	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	
Chenango	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Chenango	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
Chenango	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Chenango	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Chenango	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Chenango	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
Chenango	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Chenango	<i>Sympetrum internum x obtrusum</i>			Y *
Chenango	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Clinton	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Clinton	<i>Aeshna interrupta</i>	Variable Darner		Y *
Clinton	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Clinton	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Clinton	<i>Aeshna verticalis</i>	Green-striped Darner	Y	

County	Scientific name	Common name	pre	NYDDS
Clinton	<i>Anax junius</i>	Common Green Darner	Y	Y
Clinton	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	
Clinton	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Clinton	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Clinton	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Clinton	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Clinton	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
Clinton	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Clinton	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Clinton	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Clinton	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Clinton	<i>Didymops transversa</i>	Stream Cruiser	Y	
Clinton	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Clinton	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Clinton	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Clinton	<i>Enallagma boreale</i>	Boreal Bluet	Y	Y
Clinton	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Clinton	<i>Enallagma civile</i>	Familiar Bluet		Y *
Clinton	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Clinton	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Clinton	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Clinton	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Clinton	<i>Enallagma signatum</i>	Orange Bluet	Y	
Clinton	<i>Epitheca canis</i>	Beaverpond Baskettail		Y *
Clinton	<i>Epitheca cynosura</i>	Common Baskettail	Y	
Clinton	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Clinton	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Clinton	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
Clinton	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Clinton	<i>Hetaerina americana</i>	American Rubyspot		Y *
Clinton	<i>Ischnura posita</i>	Fragile Forktail	Y	
Clinton	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Clinton	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Clinton	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Clinton	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Clinton	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Clinton	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Clinton	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Clinton	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Clinton	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	
Clinton	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Clinton	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	
Clinton	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Clinton	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Clinton	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Clinton	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	Y
Clinton	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Clinton	<i>Ophiogomphus colubrinus</i>	Boreal Snaketail	Y	
Clinton	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	Y

County	Scientific name	Common name	pre	NYDDS
Clinton	<i>Pantala flavescens</i>	Wandering Glider	Y	
Clinton	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Clinton	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Clinton	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Clinton	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Clinton	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Clinton	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Clinton	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Clinton	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Columbia	<i>Aeshna canadensis</i>	Canada Darner		Y *
Columbia	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Columbia	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Columbia	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Columbia	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Columbia	<i>Anax junius</i>	Common Green Darner		Y *
Columbia	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Columbia	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Columbia	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Columbia	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Columbia	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Columbia	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
Columbia	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Columbia	<i>Celithemis elisa</i>	Calico Pennant		Y *
Columbia	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Columbia	<i>Celithemis fasciata</i>	Banded Pennant	Y	Y
Columbia	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Columbia	<i>Didymops transversa</i>	Stream Cruiser		Y *
Columbia	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Columbia	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Columbia	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Columbia	<i>Enallagma basidens</i>	Double-striped Bluet	Y	
Columbia	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Columbia	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Columbia	<i>Enallagma divagans</i>	Turquoise Bluet		Y *
Columbia	<i>Enallagma durum</i>	Big Bluet	Y	Y
Columbia	<i>Enallagma ebrium</i>	Marsh Bluet		Y *
Columbia	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Columbia	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Columbia	<i>Enallagma hageni</i>	Hagen's Bluet		Y *
Columbia	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Columbia	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Columbia	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Columbia	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Columbia	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Columbia	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Columbia	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail		Y *
Columbia	<i>Gomphus adelphus</i>	Mustached Clubtail		Y *
Columbia	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Columbia	<i>Gomphus lividus</i>	Ashy Clubtail	Y	Y

County	Scientific name	Common name	pre	NYDDS
Columbia	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Columbia	<i>Hagenius brevistylus</i>	Dragonhunter		Y *
Columbia	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Columbia	<i>Ischnura posita</i>	Fragile Forktail		Y *
Columbia	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Columbia	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Columbia	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Columbia	<i>Lestes rectangularis</i>	Slender Spreadwing		Y *
Columbia	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Columbia	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Columbia	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Columbia	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Columbia	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Columbia	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Columbia	<i>Libellula pulchella</i>	Twelve-spotted Skimmer		Y *
Columbia	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Columbia	<i>Macromia illinoiensis</i>	Illinois River Cruiser		Y *
Columbia	<i>Nehalennia irene</i>	Sedge Sprite		Y *
Columbia	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon		Y *
Columbia	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	Y
Columbia	<i>Ophiogomphus carolus</i>	Riffle Snaketail		Y *
Columbia	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail		Y *
Columbia	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Columbia	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Columbia	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Columbia	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Columbia	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	Y	Y
Columbia	<i>Stylurus scudderi</i>	Zebra Clubtail		Y *
Columbia	<i>Stylurus spiniceps</i>	Arrow Clubtail		Y *
Columbia	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Columbia	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Columbia	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk		Y *
Columbia	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk		Y *
Columbia	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Columbia	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Cortland	<i>Aeshna canadensis</i>	Canada Darner	Y	
Cortland	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Cortland	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Cortland	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Cortland	<i>Anax junius</i>	Common Green Darner	Y	Y
Cortland	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Cortland	<i>Argia moesta</i>	Powdered Dancer	Y	
Cortland	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Cortland	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Cortland	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Cortland	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Cortland	<i>Calopteryx aquabilis</i>	River Jewelwing	Y	
Cortland	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Cortland	<i>Celithemis elisa</i>	Calico Pennant		Y *

County	Scientific name	Common name	pre	NYDDS
Cortland	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Cortland	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Cortland	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Cortland	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Cortland	<i>Didymops transversa</i>	Stream Cruiser	Y	
Cortland	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Cortland	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Cortland	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Cortland	<i>Enallagma basidens</i>	Double-striped Bluet	Y	Y
Cortland	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Cortland	<i>Enallagma civile</i>	Familiar Bluet	Y	
Cortland	<i>Enallagma annexum</i>	Northern Bluet	Y	
Cortland	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Cortland	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Cortland	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Cortland	<i>Enallagma signatum</i>	Orange Bluet	Y	
Cortland	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Cortland	<i>Enallagma vernale</i>	Northern Bluet	Y	
Cortland	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Cortland	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Cortland	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Cortland	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Cortland	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Cortland	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Cortland	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Cortland	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Cortland	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Cortland	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Cortland	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Cortland	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	Y
Cortland	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Cortland	<i>Lestes dryas</i>	Emerald Spreadwing	Y	Y
Cortland	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Cortland	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Cortland	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Cortland	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Cortland	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Cortland	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Cortland	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Cortland	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Cortland	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Cortland	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	
Cortland	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Cortland	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Cortland	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Cortland	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Cortland	<i>Libellula semifasciata</i>	Painted Skimmer	Y	Y
Cortland	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Cortland	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	



County	Scientific name	Common name	pre	NYDDS
Cortland	<i>Pantala flavescens</i>	Wandering Glider	Y	
Cortland	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Cortland	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Cortland	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Cortland	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Cortland	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Cortland	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Cortland	<i>Sympetrum internum x obtrusum</i>		Y	
Cortland	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Cortland	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Cortland	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Cortland	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
Cortland	<i>Tramea lacerata</i>	Black Saddlebags	Y	
Delaware	<i>Aeshna canadensis</i>	Canada Darner		Y *
Delaware	<i>Aeshna interrupta</i>	Variable Darner		Y *
Delaware	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Delaware	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Delaware	<i>Anax junius</i>	Common Green Darner	Y	Y
Delaware	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Delaware	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Delaware	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Delaware	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Delaware	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Delaware	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Delaware	<i>Calopteryx aequalis</i>	River Jewelwing	Y	
Delaware	<i>Calopteryx maculata</i>	Ebony Jewelwing		Y *
Delaware	<i>Celithemis elisa</i>	Calico Pennant	Y	
Delaware	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Delaware	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Delaware	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Delaware	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Delaware	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Delaware	<i>Didymops transversa</i>	Stream Cruiser		Y *
Delaware	<i>Dorocordulia lepida</i>	Petite Emerald		Y *
Delaware	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Delaware	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Delaware	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Delaware	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Delaware	<i>Enallagma divagans</i>	Turquoise Bluet	Y	
Delaware	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Delaware	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Delaware	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Delaware	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Delaware	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Delaware	<i>Epitheca canis</i>	Beaverpond Baskettail		Y *
Delaware	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Delaware	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Delaware	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y

County	Scientific name	Common name	pre	NYDDS
Delaware	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	Y	
Delaware	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
Delaware	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Delaware	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	
Delaware	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Delaware	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Delaware	<i>Gomphus septima</i>	Septima's Clubtail	Y	
Delaware	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Delaware	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Delaware	<i>Ischnura posita</i>	Fragile Forktail		Y *
Delaware	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Delaware	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Delaware	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	Y	
Delaware	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Delaware	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Delaware	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Delaware	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Delaware	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Delaware	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Delaware	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Delaware	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Delaware	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Delaware	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Delaware	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Delaware	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Delaware	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	
Delaware	<i>Nehalennia irene</i>	Sedge Sprite		Y *
Delaware	<i>Neurocordulia michaeli</i>	Broadtailed Shadowdragon		Y *
Delaware	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	Y	Y
Delaware	<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	Y	
Delaware	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	Y
Delaware	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	Y
Delaware	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Delaware	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Delaware	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Delaware	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Delaware	<i>Somatochlora walshii</i>	Brush-tipped Emerald		Y *
Delaware	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
Delaware	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Delaware	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Delaware	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Dutchess	<i>Aeshna canadensis</i>	Canada Darner	Y	
Dutchess	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Dutchess	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Dutchess	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Dutchess	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Dutchess	<i>Anax junius</i>	Common Green Darner	Y	Y
Dutchess	<i>Anax longipes</i>	Comet Darner	Y	

County	Scientific name	Common name	pre	NYDDS
Dutchess	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Dutchess	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Dutchess	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Dutchess	<i>Argia translata</i>	Dusky Dancer		Y *
Dutchess	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Dutchess	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Dutchess	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Dutchess	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Dutchess	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Dutchess	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Dutchess	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Dutchess	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Dutchess	<i>Celithemis fasciata</i>	Banded Pennant	Y	
Dutchess	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Dutchess	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Dutchess	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Dutchess	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Dutchess	<i>Didymops transversa</i>	Stream Cruiser		Y *
Dutchess	<i>Enallagma annexum</i>	Northern Bluet	Y	
Dutchess	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Dutchess	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Dutchess	<i>Enallagma divagans</i>	Turquoise Bluet	Y	
Dutchess	<i>Enallagma durum</i>	Big Bluet	Y	Y
Dutchess	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Dutchess	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Dutchess	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Dutchess	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Dutchess	<i>Enallagma signatum</i>	Orange Bluet	Y	
Dutchess	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Dutchess	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
Dutchess	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Dutchess	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Dutchess	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Dutchess	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Dutchess	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Dutchess	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Dutchess	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Dutchess	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Dutchess	<i>Gomphus lividus</i>	Ashy Clubtail	Y	Y
Dutchess	<i>Ischnura kellicotti</i>	Lilypad Forktail	Y	
Dutchess	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Dutchess	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Dutchess	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Dutchess	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail		Y *
Dutchess	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Dutchess	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Dutchess	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Dutchess	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Dutchess	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	

County	Scientific name	Common name	pre	NYDDS
Dutchess	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Dutchess	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Dutchess	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Dutchess	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Dutchess	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Dutchess	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Dutchess	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Dutchess	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Dutchess	<i>Libellula semifasciata</i>	Painted Skimmer	Y	
Dutchess	<i>Nasiaeschna pentacantha</i>	Cyrano Darner	Y	
Dutchess	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Dutchess	<i>Ophiogomphus aspersus</i>	Brook Snaketail		Y *
Dutchess	<i>Ophiogomphus mainensis</i>	Maine Snaketail		Y *
Dutchess	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail		Y *
Dutchess	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Dutchess	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
Dutchess	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Dutchess	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Dutchess	<i>Rhionaeschna mutata</i>	Spatterdock Darner	Y	
Dutchess	<i>Somatochlora linearis</i>	Mocha Emerald	Y	
Dutchess	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Dutchess	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	
Dutchess	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Dutchess	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Dutchess	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	Y	
Dutchess	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Dutchess	<i>Sympetrum internum x rubicundulum</i>			Y *
Dutchess	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Dutchess	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
Dutchess	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Erie	<i>Aeshna canadensis</i>	Canada Darner	Y	
Erie	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Erie	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Erie	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Erie	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Erie	<i>Anax junius</i>	Common Green Darner	Y	Y
Erie	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	
Erie	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Erie	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Erie	<i>Argia tibialis</i>	Blue-tipped Dancer	Y	
Erie	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Erie	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Erie	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Erie	<i>Celithemis elisa</i>	Calico Pennant	Y	
Erie	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Erie	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Erie	<i>Cordulegaster erronea</i>	Tiger Spiketail	Y	
Erie	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	

County	Scientific name	Common name	pre	NYDDS
Erie	<i>Didymops transversa</i>	Stream Cruiser	Y	
Erie	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Erie	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	Y
Erie	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Erie	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Erie	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Erie	<i>Enallagma ebrium</i>	Marsh Bluet	Y	
Erie	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Erie	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Erie	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Erie	<i>Enallagma signatum</i>	Orange Bluet	Y	
Erie	<i>Enallagma traviatum westfalli</i>	Slender Bluet	Y	
Erie	<i>Epiaeschna heros</i>	Swamp Darner	Y	Y
Erie	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Erie	<i>Epitheca cynosura</i>	Common Baskettail	Y	
Erie	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Erie	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Erie	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Erie	<i>Gomphus fraternus</i>	Midland Clubtail	Y	
Erie	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Erie	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Erie	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Erie	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Erie	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Erie	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	Y	
Erie	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Erie	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Erie	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Erie	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Erie	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Erie	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Erie	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	
Erie	<i>Libellula luctuosa</i>	Widow Skimmer	Y	
Erie	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Erie	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Erie	<i>Libellula semifasciata</i>	Painted Skimmer	Y	
Erie	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	
Erie	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Erie	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Erie	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Erie	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Erie	<i>Somatochlora linearis</i>	Mocha Emerald	Y	
Erie	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Erie	<i>Sympetrum corruptum</i>	Variiegated Meadowhawk	Y	
Erie	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Erie	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Erie	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Erie	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	Y

County	Scientific name	Common name	pre	NYDDS
Erie	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Erie	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Erie	<i>Tramea lacerata</i>	Black Saddlebags	Y	
Essex	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Essex	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Essex	<i>Aeshna eremita</i>	Lake Darner	Y	Y
Essex	<i>Aeshna interrupta</i>	Variable Darner	Y	Y
Essex	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Essex	<i>Aeshna verticalis</i>	Green-striped Darner	Y	Y
Essex	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Essex	<i>Anax junius</i>	Common Green Darner	Y	Y
Essex	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Essex	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Essex	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Essex	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Essex	<i>Boyeria grafiana</i>	Ocellated Darner	Y	Y
Essex	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Essex	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
Essex	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
Essex	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Essex	<i>Celithemis elisa</i>	Calico Pennant		Y *
Essex	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Essex	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Essex	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Essex	<i>Cordulegaster erronea</i>	Tiger Spiketail	Y	
Essex	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Essex	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Essex	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Essex	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Essex	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Essex	<i>Enallagma annexum</i>	Northern Bluet	Y	Y
Essex	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Essex	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Essex	<i>Enallagma boreale</i>	Boreal Bluet	Y	Y
Essex	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Essex	<i>Enallagma civile</i>	Familiar Bluet		Y *
Essex	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Essex	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Essex	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Essex	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Essex	<i>Enallagma signatum</i>	Orange Bluet		Y *
Essex	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Essex	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Essex	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Essex	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Essex	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	Y
Essex	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	
Essex	<i>Erythrodiplax minuscula</i>	Little Blue Dragonlet	Y	
Essex	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *

County	Scientific name	Common name	pre	NYDDS
Essex	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
Essex	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Essex	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	Y
Essex	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Essex	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Essex	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	Y
Essex	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Essex	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Essex	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	Y
Essex	<i>Hetaerina americana</i>	American Rubyspot	Y	
Essex	<i>Ischnura hastata</i>	Citrine Forktail	Y	
Essex	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Essex	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Essex	<i>Ladona exusta</i>	White Corporal		Y *
Essex	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Essex	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	Y
Essex	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail		Y *
Essex	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Essex	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Essex	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Essex	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Essex	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Essex	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Essex	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Essex	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Essex	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	Y
Essex	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Essex	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Essex	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Essex	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Essex	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Essex	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Essex	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Essex	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Essex	<i>Macromia illinoensis</i>	Illinois River Cruiser		Y *
Essex	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Essex	<i>Nasiaeschna pentacantha</i>	Cyrano Darner	Y	
Essex	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
Essex	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Essex	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	Y	Y
Essex	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	Y
Essex	<i>Ophiogomphus carolus</i>	Riffle Snaketail		Y *
Essex	<i>Ophiogomphus colubrinus</i>	Boreal Snaketail	Y	
Essex	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	Y
Essex	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	
Essex	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Essex	<i>Pantala flavescens</i>	Wandering Glider	Y	
Essex	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Essex	<i>Progomphus obscurus</i>	Common Sanddragon	Y	

County	Scientific name	Common name	pre	NYDDS
Essex	<i>Somatochlora albicincta</i>		Y	
Essex	<i>Somatochlora cingulata</i>	Lake Emerald	Y	Y
Essex	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	Y
Essex	<i>Somatochlora forcipata</i>	Forcipate Emerald	Y	
Essex	<i>Somatochlora incurvata</i>	Incurvate Emerald	Y	
Essex	<i>Somatochlora minor</i>	Ocellated Emerald	Y	
Essex	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Essex	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	
Essex	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	Y
Essex	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Essex	<i>Stylurus notatus</i>	Elusive Clubtail	Y	
Essex	<i>Stylurus scudderi</i>	Zebra Clubtail	Y	Y
Essex	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	Y
Essex	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk		Y *
Essex	<i>Sympetrum danae</i>	Black Meadowhawk	Y	Y
Essex	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Essex	<i>Sympetrum internum x obtrusum</i>			Y *
Essex	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Essex	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk	Y	Y
Essex	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Essex	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Essex	<i>Williamsonia fletcheri</i>	Ebony Boghaunter	Y	
Franklin	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Franklin	<i>Aeshna clepsydra</i>	Mottled Darner	Y	Y
Franklin	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Franklin	<i>Aeshna eremita</i>	Lake Darner	Y	Y
Franklin	<i>Aeshna interrupta</i>	Variable Darner	Y	Y
Franklin	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Franklin	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Franklin	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Franklin	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Franklin	<i>Anax junius</i>	Common Green Darner	Y	Y
Franklin	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Franklin	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Franklin	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Franklin	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Franklin	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Franklin	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Franklin	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
Franklin	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
Franklin	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Franklin	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Franklin	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Franklin	<i>Coenagrion interrogatum</i>	Subarctic Bluet	Y	
Franklin	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Franklin	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Franklin	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Franklin	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y



County	Scientific name	Common name	pre	NYDDS
Franklin	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Franklin	<i>Dorocordulia lepida</i>	Petite Emerald	Y	
Franklin	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Franklin	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Franklin	<i>Enallagma annexum</i>	Northern Bluet	Y	Y
Franklin	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Franklin	<i>Enallagma boreale</i>	Boreal Bluet		Y *
Franklin	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Franklin	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Franklin	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Franklin	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Franklin	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Franklin	<i>Enallagma vernale</i>	Northern Bluet	Y	Y
Franklin	<i>Enallagma vesperum</i>	Vesper Bluet	Y	Y
Franklin	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Franklin	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Franklin	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Franklin	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	Y
Franklin	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	
Franklin	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Franklin	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
Franklin	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Franklin	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	Y
Franklin	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Franklin	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Franklin	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Franklin	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	Y
Franklin	<i>Ischnura posita</i>	Fragile Forktail		Y *
Franklin	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Franklin	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Franklin	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Franklin	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Franklin	<i>Lestes dryas</i>	Emerald Spreadwing	Y	Y
Franklin	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Franklin	<i>Lestes forcipatus</i>	Sweetflag Spreadwing		Y *
Franklin	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Franklin	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Franklin	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Franklin	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Franklin	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Franklin	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	Y
Franklin	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Franklin	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Franklin	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Franklin	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Franklin	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Franklin	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Franklin	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Franklin	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	Y

County	Scientific name	Common name	pre	NYDDS
Franklin	<i>Nannothemis bella</i>	Elfin Skimmer		Y *
Franklin	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	Y
Franklin	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Franklin	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	Y	
Franklin	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	Y
Franklin	<i>Ophiogomphus mainensis</i>	Maine Snaketail		Y *
Franklin	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Franklin	<i>Somatochlora cingulata</i>	Lake Emerald		Y *
Franklin	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	Y
Franklin	<i>Somatochlora forcipata</i>	Forcipate Emerald	Y	Y
Franklin	<i>Somatochlora franklini</i>	Delicate Emerald	Y	Y
Franklin	<i>Somatochlora incurvata</i>	Incurvate Emerald		Y *
Franklin	<i>Somatochlora minor</i>	Ocellated Emerald	Y	Y
Franklin	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Franklin	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	Y
Franklin	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	Y
Franklin	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Franklin	<i>Stylurus scudderi</i>	Zebra Clubtail	Y	Y
Franklin	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Franklin	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Franklin	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Franklin	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk		Y *
Franklin	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Franklin	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Franklin	<i>Williamsonia fletcheri</i>	Ebony Boghaunter	Y	Y
Fulton	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Fulton	<i>Aeshna interrupta</i>	Variable Darner	Y	Y
Fulton	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Fulton	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Fulton	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Fulton	<i>Anax junius</i>	Common Green Darner	Y	Y
Fulton	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Fulton	<i>Argia moesta</i>	Powdered Dancer	Y	
Fulton	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Fulton	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Fulton	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Fulton	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Fulton	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Fulton	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
Fulton	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Fulton	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Fulton	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Fulton	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Fulton	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Fulton	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Fulton	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Fulton	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Fulton	<i>Dorocordulia lepida</i>	Petite Emerald		Y *

County	Scientific name	Common name	pre	NYDDS
Fulton	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Fulton	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg		Y *
Fulton	<i>Enallagma annexum</i>	Northern Bluet	Y	
Fulton	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Fulton	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Fulton	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Fulton	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Fulton	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Fulton	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Fulton	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
Fulton	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Fulton	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Fulton	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Fulton	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Fulton	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Fulton	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Fulton	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Fulton	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Fulton	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	Y
Fulton	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Fulton	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Fulton	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Fulton	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	Y
Fulton	<i>Ischnura hastata</i>	Citrine Forktail	Y	
Fulton	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Fulton	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Fulton	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Fulton	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Fulton	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Fulton	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Fulton	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Fulton	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Fulton	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Fulton	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Fulton	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Fulton	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Fulton	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	Y
Fulton	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Fulton	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Fulton	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Fulton	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Fulton	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Fulton	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Fulton	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Fulton	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Fulton	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Fulton	<i>Nehalennia gracilis</i>	Sphagnum Sprite		Y *
Fulton	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Fulton	<i>Ophiogomphus mainensis</i>	Maine Snaketail		Y *

County	Scientific name	Common name	pre	NYDDS
Fulton	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail		Y *
Fulton	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Fulton	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Fulton	<i>Somatochlora elongata</i>	Ski-tailed Emerald		Y *
Fulton	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald		Y *
Fulton	<i>Somatochlora walshii</i>	Brush-tipped Emerald		Y *
Fulton	<i>Somatochlora williamsoni</i>	Williamson's Emerald		Y *
Fulton	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Fulton	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Fulton	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Fulton	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Fulton	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk		Y *
Fulton	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Fulton	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Genesee	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Genesee	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Genesee	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Genesee	<i>Anax junius</i>	Common Green Darner	Y	Y
Genesee	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Genesee	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Genesee	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Genesee	<i>Argia tibialis</i>	Blue-tipped Dancer		Y *
Genesee	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Genesee	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Genesee	<i>Celithemis elisa</i>	Calico Pennant		Y *
Genesee	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Genesee	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Genesee	<i>Enallagma annexum</i>	Northern Bluet	Y	
Genesee	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Genesee	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Genesee	<i>Enallagma civile</i>	Familiar Bluet		Y *
Genesee	<i>Enallagma ebrium</i>	Marsh Bluet		Y *
Genesee	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Genesee	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Genesee	<i>Enallagma hageni</i>	Hagen's Bluet		Y *
Genesee	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Genesee	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Genesee	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Genesee	<i>Epitheca cynosura</i>	Common Baskettail		Y *
Genesee	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Genesee	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Genesee	<i>Gomphus desertus</i>	Harpoon Clubtail	Y	
Genesee	<i>Gomphus fraternus</i>	Midland Clubtail		Y *
Genesee	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Genesee	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Genesee	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Genesee	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Genesee	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *

County	Scientific name	Common name	pre	NYDDS
Genesee	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Genesee	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Genesee	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Genesee	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Genesee	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Genesee	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface		Y *
Genesee	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Genesee	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Genesee	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Genesee	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Genesee	<i>Nannothemis bella</i>	Elfin Skimmer	Y	Y
Genesee	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Genesee	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Genesee	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Genesee	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Genesee	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	Y
Genesee	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Genesee	<i>Sympetrum danae</i>	Black Meadowhawk	Y	
Genesee	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Genesee	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Genesee	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	Y
Genesee	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Genesee	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Genesee	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Greene	<i>Aeshna canadensis</i>	Canada Darner		Y *
Greene	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Greene	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Greene	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Greene	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Greene	<i>Anax junius</i>	Common Green Darner	Y	Y
Greene	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Greene	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Greene	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Greene	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Greene	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Greene	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Greene	<i>Calopteryx maculata</i>	Ebony Jewelwing		Y *
Greene	<i>Celithemis elisa</i>	Calico Pennant		Y *
Greene	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Greene	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Greene	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Greene	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Greene	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Greene	<i>Dorocordulia lepida</i>	Petite Emerald	Y	
Greene	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Greene	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Greene	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Greene	<i>Enallagma durum</i>	Big Bluet	Y	Y
Greene	<i>Enallagma ebrium</i>	Marsh Bluet	Y	

County	Scientific name	Common name	pre	NYDDS
Greene	<i>Enallagma exulans</i>	Stream Bluet	Y	
Greene	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Greene	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Greene	<i>Enallagma signatum</i>	Orange Bluet	Y	
Greene	<i>Epiaeschna heros</i>	Swamp Darner		Y *
Greene	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Greene	<i>Epitheca cynosura</i>	Common Baskettail		Y *
Greene	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Greene	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Greene	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Greene	<i>Hetaerina americana</i>	American Rubyspot		Y *
Greene	<i>Ischnura kellicotti</i>	Lilypad Forktail		Y *
Greene	<i>Ischnura posita</i>	Fragile Forktail		Y *
Greene	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Greene	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Greene	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Greene	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Greene	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Greene	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Greene	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Greene	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface		Y *
Greene	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Greene	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Greene	<i>Libellula luctuosa</i>	Widow Skimmer		Y *
Greene	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Greene	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Greene	<i>Ophiogomphus carolus</i>	Riffle Snaketail		Y *
Greene	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Greene	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Greene	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Greene	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Greene	<i>Somatochlora walshii</i>	Brush-tipped Emerald		Y *
Greene	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Greene	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail		Y *
Greene	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Greene	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Greene	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
Greene	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Greene	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Hamilton	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Hamilton	<i>Aeshna clepsydra</i>	Mottled Darner		Y *
Hamilton	<i>Aeshna eremita</i>	Lake Darner	Y	Y
Hamilton	<i>Aeshna interrupta</i>	Variable Darner	Y	Y
Hamilton	<i>Aeshna subarctica</i>	Subarctic Darner	Y	
Hamilton	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Hamilton	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Hamilton	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Hamilton	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *

County	Scientific name	Common name	pre	NYDDS
Hamilton	<i>Anax junius</i>	Common Green Darner	Y	Y
Hamilton	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Hamilton	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Hamilton	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Hamilton	<i>Boyeria grafiana</i>	Ocellated Darner	Y	Y
Hamilton	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Hamilton	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
Hamilton	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
Hamilton	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Hamilton	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Hamilton	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Hamilton	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Hamilton	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Hamilton	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Hamilton	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Hamilton	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Hamilton	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Hamilton	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Hamilton	<i>Enallagma annexum</i>	Northern Bluet	Y	
Hamilton	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Hamilton	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Hamilton	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Hamilton	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Hamilton	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Hamilton	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Hamilton	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Hamilton	<i>Enallagma signatum</i>	Orange Bluet		Y *
Hamilton	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
Hamilton	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Hamilton	<i>Eitheca canis</i>	Beaverpond Baskettail	Y	Y
Hamilton	<i>Eitheca cynosura</i>	Common Baskettail	Y	Y
Hamilton	<i>Eitheca spinigera</i>	Spiny Baskettail	Y	
Hamilton	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Hamilton	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
Hamilton	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Hamilton	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	Y
Hamilton	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Hamilton	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Hamilton	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Hamilton	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	Y
Hamilton	<i>Ischnura posita</i>	Fragile Forktail		Y *
Hamilton	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Hamilton	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Hamilton	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail		Y *
Hamilton	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Hamilton	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Hamilton	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Hamilton	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Hamilton	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y

County	Scientific name	Common name	pre	NYDDS
Hamilton	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Hamilton	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Hamilton	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Hamilton	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Hamilton	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Hamilton	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Hamilton	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Hamilton	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Hamilton	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Hamilton	<i>Libellula luctuosa</i>	Widow Skimmer		Y *
Hamilton	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Hamilton	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Hamilton	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	
Hamilton	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Hamilton	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	Y
Hamilton	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Hamilton	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	Y	
Hamilton	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	
Hamilton	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	
Hamilton	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Hamilton	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	Y
Hamilton	<i>Somatochlora forcipata</i>	Forcipate Emerald	Y	Y
Hamilton	<i>Somatochlora minor</i>	Ocellated Emerald	Y	
Hamilton	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	Y
Hamilton	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	Y
Hamilton	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Hamilton	<i>Stylurus scudderi</i>	Zebra Clubtail	Y	Y
Hamilton	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	Y
Hamilton	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Hamilton	<i>Sympetrum internum x obtrusum</i>			Y *
Hamilton	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Hamilton	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Hamilton	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk	Y	Y
Hamilton	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Herkimer	<i>Aeshna interrupta</i>	Variable Darner	Y	
Herkimer	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Herkimer	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Herkimer	<i>Anax junius</i>	Common Green Darner	Y	Y
Herkimer	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Herkimer	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Herkimer	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Herkimer	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Herkimer	<i>Basiaeschna janata</i>	Springtime Darner		Y *
Herkimer	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Herkimer	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Herkimer	<i>Calopteryx aquabilis</i>	River Jewelwing	Y	Y
Herkimer	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
Herkimer	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y



County	Scientific name	Common name	pre	NYDDS
Herkimer	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Herkimer	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Herkimer	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Herkimer	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Herkimer	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Herkimer	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Herkimer	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Herkimer	<i>Enallagma annexum</i>	Northern Bluet		Y *
Herkimer	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Herkimer	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Herkimer	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Herkimer	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Herkimer	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Herkimer	<i>Epiheca canis</i>	Beaverpond Baskettail	Y	Y
Herkimer	<i>Epiheca cynosura</i>	Common Baskettail	Y	Y
Herkimer	<i>Epiheca spinigera</i>	Spiny Baskettail		Y *
Herkimer	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Herkimer	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
Herkimer	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Herkimer	<i>Gomphus borealis</i>	Beaverpond Clubtail		Y *
Herkimer	<i>Gomphus desertus</i>	Harpoon Clubtail	Y	
Herkimer	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Herkimer	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Herkimer	<i>Gomphus quadricolor</i>	Rapids Clubtail		Y *
Herkimer	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Herkimer	<i>Gomphus ventricosus</i>	Skillet Clubtail	Y	
Herkimer	<i>Hagenius brevistylus</i>	Dragonhunter	Y	
Herkimer	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	Y
Herkimer	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Herkimer	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Herkimer	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Herkimer	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Herkimer	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Herkimer	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Herkimer	<i>Lestes rectangularis</i>	Slender Spreadwing		Y *
Herkimer	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Herkimer	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Herkimer	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Herkimer	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	Y
Herkimer	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	
Herkimer	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	
Herkimer	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Herkimer	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Herkimer	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Herkimer	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Herkimer	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	
Herkimer	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Herkimer	<i>Nehalennia gracilis</i>	Sphagnum Sprite		Y *
Herkimer	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y

County	Scientific name	Common name	pre	NYDDS
Herkimer	<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	Y	
Herkimer	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	Y
Herkimer	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Herkimer	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Herkimer	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald		Y *
Herkimer	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Herkimer	<i>Stylurus scudderii</i>	Zebra Clubtail	Y	
Herkimer	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Herkimer	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk		Y *
Herkimer	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Herkimer	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Herkimer	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Jefferson	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Jefferson	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Jefferson	<i>Aeshna eremita</i>	Lake Darner		Y *
Jefferson	<i>Aeshna interrupta</i>	Variable Darner		Y *
Jefferson	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Jefferson	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Jefferson	<i>Aeshna verticalis</i>	Green-striped Darner	Y	Y
Jefferson	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Jefferson	<i>Anax junius</i>	Common Green Darner	Y	Y
Jefferson	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Jefferson	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Jefferson	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Jefferson	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Jefferson	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Jefferson	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
Jefferson	<i>Calopteryx amata</i>	Superb Jewelwing		Y *
Jefferson	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Jefferson	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Jefferson	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Jefferson	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Jefferson	<i>Coenagrion resolutum</i>	Taiga Bluet		Y *
Jefferson	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Jefferson	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Jefferson	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Jefferson	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg		Y *
Jefferson	<i>Enallagma annexum</i>	Northern Bluet	Y	
Jefferson	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Jefferson	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Jefferson	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Jefferson	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Jefferson	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Jefferson	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Jefferson	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Jefferson	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Jefferson	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Jefferson	<i>Enallagma signatum</i>	Orange Bluet	Y	Y

County	Scientific name	Common name	pre	NYDDS
Jefferson	<i>Enallagma vesperum</i>	Vesper Bluet	Y	Y
Jefferson	<i>Epiaeschna heros</i>	Swamp Darner		Y *
Jefferson	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Jefferson	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Jefferson	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Jefferson	<i>Epitheca spinigera</i>	Spiny Baskettail		Y *
Jefferson	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Jefferson	<i>Erythrodiplax berenice</i>	Seaside Dragonlet	Y	
Jefferson	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Jefferson	<i>Gomphus quadricolor</i>	Rapids Clubtail		Y *
Jefferson	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Jefferson	<i>Hagenius brevistylus</i>	Dragonhunter		Y *
Jefferson	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Jefferson	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Jefferson	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Jefferson	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Jefferson	<i>Lestes disjunctus</i>	Common Spreadwing		Y *
Jefferson	<i>Lestes dryas</i>	Emerald Spreadwing	Y	Y
Jefferson	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Jefferson	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
Jefferson	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Jefferson	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Jefferson	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing		Y *
Jefferson	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Jefferson	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Jefferson	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Jefferson	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Jefferson	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Jefferson	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Jefferson	<i>Libellula luctuosa</i>	Widow Skimmer		Y *
Jefferson	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Jefferson	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Jefferson	<i>Macromia illinoiensis</i>	Illinois River Cruiser		Y *
Jefferson	<i>Nannothemis bella</i>	Elfin Skimmer		Y *
Jefferson	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
Jefferson	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Jefferson	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon		Y *
Jefferson	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Jefferson	<i>Pantala flavescens</i>	Wandering Glider	Y	
Jefferson	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Jefferson	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Jefferson	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Jefferson	<i>Sympetrum internum x obtrusum</i>			Y *
Jefferson	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Jefferson	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Jefferson	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Jefferson	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Jefferson	<i>Tamea lacerata</i>	Black Saddlebags	Y	Y
Jefferson	<i>Williamsonia fletcheri</i>	Ebony Boghaunter	Y	

County	Scientific name	Common name	pre	NYDDS
Kings	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Kings	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Kings	<i>Anax junius</i>	Common Green Darner		Y *
Kings	<i>Celithemis elisa</i>	Calico Pennant		Y *
Kings	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Kings	<i>Erythrodiplax berenice</i>	Seaside Dragonlet	Y	
Kings	<i>Gomphaeschna antilope</i>	Taper-tailed Darner		Y *
Kings	<i>Ischnura hastata</i>	Citrine Forktail		Y *
Kings	<i>Ischnura posita</i>	Fragile Forktail		Y *
Kings	<i>Ischnura ramburii</i>	Rambur's Forktail		Y *
Kings	<i>Ischnura verticalis</i>	Eastern Forktail		Y *
Kings	<i>Lestes rectangularis</i>	Slender Spreadwing		Y *
Kings	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Kings	<i>Libellula needhami</i>	Needham's Skimmer	Y	
Kings	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Kings	<i>Libellula vibrans</i>	Great Blue Skimmer		Y *
Kings	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Kings	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Kings	<i>Pantala flavescens</i>	Wandering Glider		Y *
Kings	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Kings	<i>Plathemis lydia</i>	Common Whitetail		Y *
Kings	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Lewis	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Lewis	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Lewis	<i>Aeshna eremita</i>	Lake Darner	Y	
Lewis	<i>Aeshna interrupta</i>	Variable Darner	Y	
Lewis	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Lewis	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Lewis	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Lewis	<i>Anax junius</i>	Common Green Darner	Y	Y
Lewis	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Lewis	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Lewis	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Lewis	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Lewis	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Lewis	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Lewis	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Lewis	<i>Calopteryx amata</i>	Superb Jewelwing	Y	
Lewis	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Lewis	<i>Celithemis elisa</i>	Calico Pennant	Y	
Lewis	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Lewis	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Lewis	<i>Coenagrion resolutum</i>	Taiga Bluet		Y *
Lewis	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Lewis	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Lewis	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Lewis	<i>Didymops transversa</i>	Stream Cruiser	Y	
Lewis	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Lewis	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y

County	Scientific name	Common name	pre	NYDDS
Lewis	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Lewis	<i>Enallagma boreale</i>	Boreal Bluet	Y	Y
Lewis	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Lewis	<i>Enallagma civile</i>	Familiar Bluet	Y	
Lewis	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Lewis	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Lewis	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Lewis	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Lewis	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Lewis	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Lewis	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Lewis	<i>Epiheca canis</i>	Beaverpond Baskettail	Y	Y
Lewis	<i>Epiheca cynosura</i>	Common Baskettail		Y *
Lewis	<i>Epiheca semiaquea</i>	Mantled Baskettail		Y *
Lewis	<i>Epiheca spinigera</i>	Spiny Baskettail	Y	
Lewis	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Lewis	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
Lewis	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Lewis	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Lewis	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	Y
Lewis	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Lewis	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Lewis	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Lewis	<i>Helocordulia uhleri</i>	Uhler's Sundragon		Y *
Lewis	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Lewis	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Lewis	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Lewis	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Lewis	<i>Lestes australis</i>	Southern Spreadwing		Y *
Lewis	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Lewis	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Lewis	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Lewis	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Lewis	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
Lewis	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Lewis	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Lewis	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Lewis	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Lewis	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Lewis	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Lewis	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Lewis	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Lewis	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Lewis	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Lewis	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Lewis	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Lewis	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Lewis	<i>Nannothemis bella</i>	Elfin Skimmer		Y *
Lewis	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	Y

County	Scientific name	Common name	pre	NYDDS
Lewis	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Lewis	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Lewis	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	
Lewis	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Lewis	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Lewis	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Lewis	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	
Lewis	<i>Somatochlora forcipata</i>	Forcipate Emerald	Y	
Lewis	<i>Somatochlora minor</i>	Ocellated Emerald	Y	
Lewis	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Lewis	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	Y
Lewis	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	Y
Lewis	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Lewis	<i>Stylurus scudderii</i>	Zebra Clubtail	Y	
Lewis	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Lewis	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Lewis	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Lewis	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk	Y	Y
Lewis	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Lewis	<i>Tachopteryx thoreyi</i>	Gray Petaltail	Y	
Lewis	<i>Tramea lacerata</i>	Black Saddlebags	Y	
Livingston	<i>Aeshna canadensis</i>	Canada Darner	Y	
Livingston	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Livingston	<i>Aeshna interrupta</i>	Variable Darner	Y	
Livingston	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Livingston	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Livingston	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Livingston	<i>Anax junius</i>	Common Green Darner	Y	Y
Livingston	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	
Livingston	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	
Livingston	<i>Argia moesta</i>	Powdered Dancer	Y	
Livingston	<i>Argia tibialis</i>	Blue-tipped Dancer	Y	Y
Livingston	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Livingston	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Livingston	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Livingston	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Livingston	<i>Celithemis eponina</i>	Halloween Pennant	Y	
Livingston	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Livingston	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Livingston	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	
Livingston	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Livingston	<i>Didymops transversa</i>	Stream Cruiser	Y	
Livingston	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Livingston	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Livingston	<i>Enallagma annexum</i>	Northern Bluet	Y	
Livingston	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Livingston	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Livingston	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Livingston	<i>Enallagma exsulans</i>	Stream Bluet	Y	

County	Scientific name	Common name	pre	NYDDS
Livingston	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Livingston	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Livingston	<i>Enallagma signatum</i>	Orange Bluet	Y	
Livingston	<i>Enallagma traviatum westfalli</i>	Slender Bluet	Y	
Livingston	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Livingston	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Livingston	<i>Epitheca cynosura</i>	Common Baskettail	Y	
Livingston	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Livingston	<i>Gomphus fraternus</i>	Midland Clubtail	Y	
Livingston	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Livingston	<i>Ischnura posita</i>	Fragile Forktail	Y	
Livingston	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Livingston	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Livingston	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Livingston	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	Y	
Livingston	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Livingston	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Livingston	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Livingston	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Livingston	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Livingston	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Livingston	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Livingston	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Livingston	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface		Y *
Livingston	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface		Y *
Livingston	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Livingston	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Livingston	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Livingston	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Livingston	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Livingston	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	
Livingston	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Livingston	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Livingston	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Livingston	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
Livingston	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Livingston	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Livingston	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Livingston	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk		Y *
Livingston	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
Livingston	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Livingston	<i>Tachopteryx thoreyi</i>	Gray Petaltail	Y	
Livingston	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Madison	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Madison	<i>Aeshna interrupta</i>	Variable Darner		Y *
Madison	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Madison	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Madison	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Madison	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y

County	Scientific name	Common name	pre	NYDDS
Madison	<i>Anax junius</i>	Common Green Darner	Y	Y
Madison	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Madison	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Madison	<i>Argia tibialis</i>	Blue-tipped Dancer		Y *
Madison	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Madison	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Madison	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Madison	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Madison	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Madison	<i>Calopteryx aquabilis</i>	River Jewelwing	Y	Y
Madison	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Madison	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Madison	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Madison	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Madison	<i>Coenagrion resolutum</i>	Taiga Bluet		Y *
Madison	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Madison	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Madison	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Madison	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Madison	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg		Y *
Madison	<i>Enallagma annexum</i>	Northern Bluet		Y *
Madison	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Madison	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Madison	<i>Enallagma boreale</i>	Boreal Bluet		Y *
Madison	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Madison	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Madison	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Madison	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Madison	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Madison	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Madison	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Madison	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Madison	<i>Enallagma vernale</i>	Northern Bluet	Y	
Madison	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Madison	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Madison	<i>Epitheca cynosura</i>	Common Baskettail		Y *
Madison	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Madison	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Madison	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Madison	<i>Gomphus lividus</i>	Ashy Clubtail	Y	Y
Madison	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Madison	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Madison	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Madison	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Madison	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail		Y *
Madison	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail		Y *
Madison	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Madison	<i>Lestes disjunctus</i>	Common Spreadwing		Y *
Madison	<i>Lestes dryas</i>	Emerald Spreadwing	Y	



County	Scientific name	Common name	pre	NYDDS
Madison	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Madison	<i>Lestes forcipatus</i>	Sweetflag Spreadwing		Y *
Madison	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Madison	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Madison	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Madison	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Madison	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Madison	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Madison	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Madison	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Madison	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Madison	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Madison	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Madison	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Madison	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Madison	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
Madison	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
Madison	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Madison	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Madison	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	
Madison	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Madison	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Madison	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Madison	<i>Sympetrum internum x obtrusum</i>			Y *
Madison	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Madison	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk		Y *
Madison	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Madison	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Madison	<i>Tamea lacerata</i>	Black Saddlebags	Y	Y
Monroe	<i>Aeshna canadensis</i>	Canada Darner	Y	
Monroe	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Monroe	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Monroe	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Monroe	<i>Aeshna verticalis</i>	Green-striped Darner	Y	Y
Monroe	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Monroe	<i>Anax junius</i>	Common Green Darner	Y	Y
Monroe	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	
Monroe	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	
Monroe	<i>Argia moesta</i>	Powdered Dancer	Y	
Monroe	<i>Argia tibialis</i>	Blue-tipped Dancer	Y	
Monroe	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Monroe	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Monroe	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Monroe	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Monroe	<i>Enallagma divagans</i>	Turquoise Bluet	Y	
Monroe	<i>Enallagma ebrium</i>	Marsh Bluet	Y	
Monroe	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Monroe	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Monroe	<i>Enallagma hageni</i>	Hagen's Bluet	Y	

County	Scientific name	Common name	pre	NYDDS
Monroe	<i>Enallagma signatum</i>	Orange Bluet	Y	
Monroe	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
Monroe	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Monroe	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Monroe	<i>Epithea cynosura</i>	Common Baskettail	Y	Y
Monroe	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Monroe	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Monroe	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Monroe	<i>Gomphus fraternus</i>	Midland Clubtail	Y	
Monroe	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Monroe	<i>Hagenius brevistylus</i>	Dragonhunter	Y	
Monroe	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Monroe	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Monroe	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Monroe	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Monroe	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Monroe	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Monroe	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Monroe	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Monroe	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Monroe	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Monroe	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Monroe	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Monroe	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Monroe	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	
Monroe	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Monroe	<i>Libellula semifasciata</i>	Painted Skimmer	Y	
Monroe	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Monroe	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Monroe	<i>Pantala flavescens</i>	Wandering Glider	Y	
Monroe	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Monroe	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Monroe	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Monroe	<i>Stylurus notatus</i>	Elusive Clubtail	Y	
Monroe	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Monroe	<i>Sympetrum corruptum</i>	Variiegated Meadowhawk	Y	
Monroe	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Monroe	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Monroe	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Monroe	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Monroe	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Montgomery	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Montgomery	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Montgomery	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Montgomery	<i>Anax junius</i>	Common Green Darner	Y	Y
Montgomery	<i>Argia moesta</i>	Powdered Dancer		Y *
Montgomery	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Montgomery	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Montgomery	<i>Basiaeschna janata</i>	Springtime Darner		Y *

County	Scientific name	Common name	pre	NYDDS
Montgomery	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Montgomery	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Montgomery	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Montgomery	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Montgomery	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg		Y *
Montgomery	<i>Enallagma annexum</i>	Northern Bluet		Y *
Montgomery	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Montgomery	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Montgomery	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Montgomery	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Montgomery	<i>Enallagma exsulans</i>	Stream Bluet		Y *
Montgomery	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Montgomery	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Montgomery	<i>Epiheca canis</i>	Beaverpond Baskettail		Y *
Montgomery	<i>Epiheca cynosura</i>	Common Baskettail	Y	Y
Montgomery	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Montgomery	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Montgomery	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Montgomery	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Montgomery	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Montgomery	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Montgomery	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Montgomery	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Montgomery	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Montgomery	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Montgomery	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Montgomery	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface		Y *
Montgomery	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Montgomery	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Montgomery	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Montgomery	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Montgomery	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Montgomery	<i>Macromia illinoensis</i>	Illinois River Cruiser		Y *
Montgomery	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Montgomery	<i>Ophiogomphus aspersus</i>	Brook Snaketail		Y *
Montgomery	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Montgomery	<i>Pachydiplax longipennis</i>	Blue Dasher		Y *
Montgomery	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
Montgomery	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Montgomery	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Montgomery	<i>Rhionaeschna mutata</i>	Spatterdock Darner		Y *
Montgomery	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Montgomery	<i>Stylurus spiniceps</i>	Arrow Clubtail		Y *
Montgomery	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Montgomery	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Montgomery	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
Montgomery	<i>Tamea lacerata</i>	Black Saddlebags		Y *
Nassau	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Nassau	<i>Amphiagrion saucium</i>	Eastern Red Damselfly	Y	

County	Scientific name	Common name	pre	NYDDS
Nassau	<i>Anax junius</i>	Common Green Darner		Y *
Nassau	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Nassau	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Nassau	<i>Argia moesta</i>	Powdered Dancer		Y *
Nassau	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Nassau	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Nassau	<i>Celithemis elisa</i>	Calico Pennant	Y	
Nassau	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Nassau	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Nassau	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Nassau	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Nassau	<i>Enallagma divagans</i>	Turquoise Bluet	Y	
Nassau	<i>Enallagma durum</i>	Big Bluet		Y *
Nassau	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Nassau	<i>Enallagma signatum</i>	Orange Bluet		Y *
Nassau	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Nassau	<i>Enallagma traviatum traviatum</i>	Slender Bluet		Y
Nassau	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Nassau	<i>Epiaeschna heros</i>	Swamp Darner		Y *
Nassau	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Nassau	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Nassau	<i>Erythrodiplax berenice</i>	Seaside Dragonlet		Y *
Nassau	<i>Hagenius brevistylus</i>	Dragonhunter	Y	
Nassau	<i>Ischnura hastata</i>	Citrine Forktail		Y *
Nassau	<i>Ischnura kellicotti</i>	Lilypad Forktail		Y *
Nassau	<i>Ischnura posita</i>	Fragile Forktail		Y *
Nassau	<i>Ischnura ramburii</i>	Rambur's Forktail		Y *
Nassau	<i>Ischnura verticalis</i>	Eastern Forktail		Y *
Nassau	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Nassau	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Nassau	<i>Libellula luctuosa</i>	Widow Skimmer		Y *
Nassau	<i>Libellula needhami</i>	Needham's Skimmer		Y *
Nassau	<i>Libellula pulchella</i>	Twelve-spotted Skimmer		Y *
Nassau	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Nassau	<i>Libellula vibrans</i>	Great Blue Skimmer		Y *
Nassau	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Nassau	<i>Pantala flavescens</i>	Wandering Glider		Y *
Nassau	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
Nassau	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Nassau	<i>Plathemis lydia</i>	Common Whitetail		Y *
Nassau	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	Y	
Nassau	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Nassau	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Nassau	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Nassau	<i>Tamea carolina</i>	Carolina Saddlebags		Y *
Nassau	<i>Tamea lacerata</i>	Black Saddlebags	Y	Y
New York	<i>Anax junius</i>	Common Green Darner	Y	Y
New York	<i>Archilestes grandis</i>	Great Spreadwing	Y	
New York	<i>Calopteryx dimidiata</i>	Sparkling Jewelwing	Y	

County	Scientific name	Common name	pre	NYDDS
New York	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
New York	<i>Celithemis eponina</i>	Halloween Pennant	Y	
New York	<i>Enallagma aspersum</i>	Azure Bluet		Y *
New York	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
New York	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
New York	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
New York	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
New York	<i>Libellula incesta</i>	Slaty Skimmer	Y	
New York	<i>Libellula luctuosa</i>	Widow Skimmer	Y	
New York	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
New York	<i>Libellula semifasciata</i>	Painted Skimmer	Y	
New York	<i>Libellula vibrans</i>	Great Blue Skimmer	Y	
New York	<i>Pantala flavescens</i>	Wandering Glider	Y	
New York	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
New York	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
New York	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
New York	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
New York	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
New York	<i>Tamea carolina</i>	Carolina Saddlebags	Y	
New York	<i>Tamea lacerata</i>	Black Saddlebags	Y	Y
Niagara	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Niagara	<i>Anax junius</i>	Common Green Darner	Y	Y
Niagara	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Niagara	<i>Argia fumipennis violacea</i>	Variable Dancer		Y *
Niagara	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Niagara	<i>Argia tibialis</i>	Blue-tipped Dancer		Y *
Niagara	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Niagara	<i>Calopteryx maculata</i>	Ebony Jewelwing		Y *
Niagara	<i>Celithemis elisa</i>	Calico Pennant		Y *
Niagara	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Niagara	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Niagara	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Niagara	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Niagara	<i>Enallagma civile</i>	Familiar Bluet		Y *
Niagara	<i>Enallagma ebrium</i>	Marsh Bluet	Y	
Niagara	<i>Enallagma exsulans</i>	Stream Bluet		Y *
Niagara	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Niagara	<i>Enallagma hageni</i>	Hagen's Bluet		Y *
Niagara	<i>Enallagma signatum</i>	Orange Bluet		Y *
Niagara	<i>Enallagma traviatum westfalli</i>	Slender Bluet		Y *
Niagara	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Niagara	<i>Epithea cynosura</i>	Common Baskettail	Y	Y
Niagara	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Niagara	<i>Gomphus fraternus</i>	Midland Clubtail		Y *
Niagara	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Niagara	<i>Ischnura posita</i>	Fragile Forktail		Y *
Niagara	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Niagara	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Niagara	<i>Lestes dryas</i>	Emerald Spreadwing		Y *

County	Scientific name	Common name	pre	NYDDS
Niagara	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
Niagara	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Niagara	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Niagara	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Niagara	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Niagara	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Niagara	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Niagara	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Niagara	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Niagara	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Niagara	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Niagara	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	Y
Niagara	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
Niagara	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Niagara	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Oneida	<i>Aeshna canadensis</i>	Canada Darner	Y	
Oneida	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Oneida	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Oneida	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Oneida	<i>Anax junius</i>	Common Green Darner	Y	Y
Oneida	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	
Oneida	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Oneida	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Oneida	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Oneida	<i>Celithemis elisa</i>	Calico Pennant		Y *
Oneida	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Oneida	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Oneida	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Oneida	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Oneida	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Oneida	<i>Enallagma annexum</i>	Northern Bluet	Y	
Oneida	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Oneida	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Oneida	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Oneida	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Oneida	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Oneida	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Oneida	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Oneida	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Oneida	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Oneida	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Oneida	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Oneida	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Oneida	<i>Epitheca spinigera</i>	Spiny Baskettail		Y *
Oneida	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Oneida	<i>Gomphus fraternus</i>	Midland Clubtail	Y	
Oneida	<i>Gomphus lividus</i>	Ashy Clubtail	Y	Y
Oneida	<i>Hagenius brevistylus</i>	Dragonhunter	Y	
Oneida	<i>Ischnura posita</i>	Fragile Forktail	Y	Y

County	Scientific name	Common name	pre	NYDDS
Oneida	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Oneida	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Oneida	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Oneida	<i>Lestes dryas</i>	Emerald Spreadwing	Y	Y
Oneida	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Oneida	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Oneida	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Oneida	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Oneida	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Oneida	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Oneida	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Oneida	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Oneida	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Oneida	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Oneida	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Oneida	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Oneida	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Oneida	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Oneida	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Oneida	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Oneida	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Oneida	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
Oneida	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Oneida	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Oneida	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Onondaga	<i>Aeshna canadensis</i>	Canada Darner		Y *
Onondaga	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Onondaga	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Onondaga	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Onondaga	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Onondaga	<i>Anax junius</i>	Common Green Darner		Y *
Onondaga	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Onondaga	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Onondaga	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Onondaga	<i>Argia tibialis</i>	Blue-tipped Dancer		Y *
Onondaga	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Onondaga	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Onondaga	<i>Basiaeschna janata</i>	Springtime Darner		Y *
Onondaga	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Onondaga	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Onondaga	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Onondaga	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Onondaga	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Onondaga	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Onondaga	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Onondaga	<i>Cordulegaster erronea</i>	Tiger Spiketail		Y *
Onondaga	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Onondaga	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Onondaga	<i>Didymops transversa</i>	Stream Cruiser		Y *

County	Scientific name	Common name	pre	NYDDS
Onondaga	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Onondaga	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Onondaga	<i>Enallagma annexum</i>	Northern Bluet		Y *
Onondaga	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Onondaga	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Onondaga	<i>Enallagma basidens</i>	Double-striped Bluet	Y	Y
Onondaga	<i>Enallagma boreale</i>	Boreal Bluet		Y *
Onondaga	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Onondaga	<i>Enallagma civile</i>	Familiar Bluet		Y *
Onondaga	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Onondaga	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Onondaga	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Onondaga	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Onondaga	<i>Enallagma signatum</i>	Orange Bluet		Y *
Onondaga	<i>Enallagma vernale</i>	Northern Bluet		Y *
Onondaga	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Onondaga	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Onondaga	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Onondaga	<i>Epitheca canis</i>	Beaverpond Baskettail		Y *
Onondaga	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Onondaga	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Onondaga	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Onondaga	<i>Gomphus borealis</i>	Beaverpond Clubtail		Y *
Onondaga	<i>Gomphus descriptus</i>	Harpoon Clubtail		Y *
Onondaga	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Onondaga	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Onondaga	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Onondaga	<i>Ischnura hastata</i>	Citrine Forktail		Y *
Onondaga	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Onondaga	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Onondaga	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Onondaga	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Onondaga	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Onondaga	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Onondaga	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Onondaga	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Onondaga	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Onondaga	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface		Y *
Onondaga	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Onondaga	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Onondaga	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Onondaga	<i>Libellula pulchella</i>	Twelve-spotted Skimmer		Y *
Onondaga	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Onondaga	<i>Nasiaeschna pentacantha</i>	Cyrano Darner	Y	
Onondaga	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Onondaga	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon		Y *
Onondaga	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Onondaga	<i>Pantala flavescens</i>	Wandering Glider		Y *
Onondaga	<i>Perithemis tenera</i>	Eastern Amberwing		Y *



County	Scientific name	Common name	pre	NYDDS
Onondaga	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Onondaga	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	
Onondaga	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Onondaga	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Onondaga	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Onondaga	<i>Sympetrum internum x obtrusum</i>			Y *
Onondaga	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Onondaga	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Onondaga	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Onondaga	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Ontario	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Ontario	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Ontario	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Ontario	<i>Anax junius</i>	Common Green Darner	Y	Y
Ontario	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Ontario	<i>Argia moesta</i>	Powdered Dancer	Y	
Ontario	<i>Argia tibialis</i>	Blue-tipped Dancer	Y	
Ontario	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Ontario	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Ontario	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Ontario	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Ontario	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Ontario	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Ontario	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	
Ontario	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Ontario	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Ontario	<i>Enallagma annexum</i>	Northern Bluet	Y	
Ontario	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Ontario	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Ontario	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Ontario	<i>Enallagma civile</i>	Familiar Bluet	Y	
Ontario	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Ontario	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Ontario	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Ontario	<i>Enallagma hageni</i>	Hagen's Bluet		Y *
Ontario	<i>Enallagma signatum</i>	Orange Bluet	Y	
Ontario	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Ontario	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Ontario	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Ontario	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Ontario	<i>Hetaerina americana</i>	American Rubyspot	Y	
Ontario	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Ontario	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Ontario	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Ontario	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Ontario	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Ontario	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Ontario	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Ontario	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	

County	Scientific name	Common name	pre	NYDDS
Ontario	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Ontario	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Ontario	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Ontario	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Ontario	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Ontario	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Ontario	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
Ontario	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Ontario	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Ontario	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Ontario	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Ontario	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Ontario	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
Ontario	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
Ontario	<i>Tramea lacerata</i>	Black Saddlebags	Y	
Orange	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Orange	<i>Aeshna clepsydra</i>	Mottled Darner	Y	
Orange	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Orange	<i>Aeshna interrupta</i>	Variable Darner	Y	
Orange	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Orange	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Orange	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Orange	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Orange	<i>Anax junius</i>	Common Green Darner	Y	Y
Orange	<i>Anax longipes</i>	Comet Darner	Y	
Orange	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Orange	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Orange	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Orange	<i>Argia tibialis</i>	Blue-tipped Dancer	Y	Y
Orange	<i>Argia translata</i>	Dusky Dancer	Y	Y
Orange	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Orange	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Orange	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Orange	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Orange	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Orange	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Orange	<i>Calopteryx amata</i>	Superb Jewelwing	Y	
Orange	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Orange	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Orange	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Orange	<i>Celithemis fasciata</i>	Banded Pennant	Y	Y
Orange	<i>Celithemis martha</i>	Martha's Pennant	Y	
Orange	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Orange	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Orange	<i>Cordulegaster erronea</i>	Tiger Spiketail		Y *
Orange	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Orange	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	
Orange	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Orange	<i>Didymops transversa</i>	Stream Cruiser	Y	Y

County	Scientific name	Common name	pre	NYDDS
Orange	<i>Dorocordulia lepida</i>	Petite Emerald	Y	Y
Orange	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Orange	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Orange	<i>Enallagma annexum</i>	Northern Bluet	Y	
Orange	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Orange	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Orange	<i>Enallagma divagans</i>	Turquoise Bluet	Y	Y
Orange	<i>Enallagma durum</i>	Big Bluet	Y	
Orange	<i>Enallagma ebrium</i>	Marsh Bluet	Y	
Orange	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Orange	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Orange	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Orange	<i>Enallagma laterale</i>	New England Bluet	Y	Y
Orange	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Orange	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Orange	<i>Enallagma traviatum traviatum</i>	Slender Bluet	Y	
Orange	<i>Enallagma vesperum</i>	Vesper Bluet	Y	Y
Orange	<i>Epiaeschna heros</i>	Swamp Darner	Y	Y
Orange	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Orange	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Orange	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Orange	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Orange	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Orange	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
Orange	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	Y	Y
Orange	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
Orange	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Orange	<i>Gomphus fraternus</i>	Midland Clubtail	Y	Y
Orange	<i>Gomphus lividus</i>	Ashy Clubtail	Y	Y
Orange	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	Y
Orange	<i>Gomphus rogersi</i>	Sable Clubtail	Y	Y
Orange	<i>Gomphus septima</i>	Septima's Clubtail	Y	
Orange	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Orange	<i>Gomphus vastus</i>	Cobra Clubtail	Y	
Orange	<i>Gomphus ventricosus</i>	Skillet Clubtail	Y	
Orange	<i>Gomphus viridifrons</i>	Green-faced Clubtail	Y	
Orange	<i>Hagenius brevistylus</i>	Dragonhunter		Y *
Orange	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	Y
Orange	<i>Ischnura hastata</i>	Citrine Forktail	Y	
Orange	<i>Ischnura kellicotti</i>	Lilypad Forktail	Y	Y
Orange	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Orange	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Orange	<i>Ladona deplanata</i>	Blue Corporal	Y	Y
Orange	<i>Ladona exusta</i>	White Corporal	Y	Y
Orange	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Orange	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	Y	
Orange	<i>Lestes australis</i>	Southern Spreadwing	Y	Y
Orange	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Orange	<i>Lestes disjunctus</i>	Common Spreadwing		Y *

County	Scientific name	Common name	pre	NYDDS
Orange	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Orange	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Orange	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Orange	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Orange	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Orange	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Orange	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Orange	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Orange	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Orange	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface		Y *
Orange	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Orange	<i>Libellula auripennis</i>	Golden-winged Skimmer	Y	
Orange	<i>Libellula axilena</i>	Bar-winged Skimmer	Y	
Orange	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Orange	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Orange	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Orange	<i>Libellula needhami</i>	Needham's Skimmer	Y	
Orange	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Orange	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Orange	<i>Libellula semifasciata</i>	Painted Skimmer	Y	Y
Orange	<i>Libellula vibrans</i>	Great Blue Skimmer	Y	Y
Orange	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	
Orange	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Orange	<i>Nasiaeschna pentacantha</i>	Cyrano Darner	Y	
Orange	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	Y
Orange	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Orange	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	Y	
Orange	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	Y	
Orange	<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	Y	
Orange	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	
Orange	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Orange	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	
Orange	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Orange	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Orange	<i>Pantala flavescens</i>	Wandering Glider	Y	Y
Orange	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
Orange	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Orange	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Orange	<i>Rhionaeschna mutata</i>	Spatterdock Darner	Y	
Orange	<i>Somatochlora linearis</i>	Mocha Emerald	Y	
Orange	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Orange	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	
Orange	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Orange	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Orange	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Orange	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Orange	<i>Sympetrum internum x rubicundulum</i>			Y *
Orange	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y

County	Scientific name	Common name	pre	NYDDS
Orange	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Orange	<i>Tachopteryx thoreyi</i>	Gray Petaltail	Y	
Orange	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Orleans	<i>Anax junius</i>	Common Green Darner		Y *
Orleans	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Orleans	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Orleans	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Orleans	<i>Argia tibialis</i>	Blue-tipped Dancer		Y *
Orleans	<i>Argomphus villosipes</i>	Unicorn Clubtail		Y *
Orleans	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Orleans	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Orleans	<i>Celithemis elisa</i>	Calico Pennant		Y *
Orleans	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Orleans	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Orleans	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	Y
Orleans	<i>Enallagma civile</i>	Familiar Bluet		Y *
Orleans	<i>Enallagma ebrium</i>	Marsh Bluet		Y *
Orleans	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Orleans	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Orleans	<i>Enallagma hageni</i>	Hagen's Bluet		Y *
Orleans	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Orleans	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Orleans	<i>Epiaeschna heros</i>	Swamp Darner		Y *
Orleans	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Orleans	<i>Epitheca cynosura</i>	Common Baskettail		Y *
Orleans	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Orleans	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Orleans	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Orleans	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Orleans	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Orleans	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Orleans	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Orleans	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Orleans	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Orleans	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Orleans	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Orleans	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Orleans	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Orleans	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Orleans	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Orleans	<i>Pachydiplax longipennis</i>	Blue Dasher		Y *
Orleans	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
Orleans	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Orleans	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Orleans	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	Y
Orleans	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
Orleans	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Orleans	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Oswego	<i>Aeshna canadensis</i>	Canada Darner		Y *

County	Scientific name	Common name	pre	NYDDS
Oswego	<i>Aeshna clepsydra</i>	Mottled Darner		Y *
Oswego	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Oswego	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Oswego	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Oswego	<i>Anax junius</i>	Common Green Darner	Y	Y
Oswego	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Oswego	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Oswego	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Oswego	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Oswego	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Oswego	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Oswego	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Oswego	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Oswego	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Oswego	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Oswego	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Oswego	<i>Didymops transversa</i>	Stream Cruiser	Y	
Oswego	<i>Dorocordulia lepida</i>	Petite Emerald	Y	Y
Oswego	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Oswego	<i>Enallagma annexum</i>	Northern Bluet		Y *
Oswego	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Oswego	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Oswego	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Oswego	<i>Enallagma civile</i>	Familiar Bluet	Y	
Oswego	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Oswego	<i>Enallagma exsulans</i>	Stream Bluet		Y *
Oswego	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Oswego	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Oswego	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Oswego	<i>Enallagma vernale</i>	Northern Bluet	Y	Y
Oswego	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Oswego	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Oswego	<i>Epitheca cynosura</i>	Common Baskettail		Y *
Oswego	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Oswego	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Oswego	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Oswego	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Oswego	<i>Gomphus descriptus</i>	Harpoon Clubtail		Y *
Oswego	<i>Gomphus exilis</i>	Lancet Clubtail		Y *
Oswego	<i>Gomphus lividus</i>	Ashy Clubtail	Y	Y
Oswego	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Oswego	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Oswego	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Oswego	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Oswego	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Oswego	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Oswego	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Oswego	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Oswego	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *

County	Scientific name	Common name	pre	NYDDS
Oswego	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Oswego	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Oswego	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Oswego	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Oswego	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Oswego	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Oswego	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Oswego	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Oswego	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Oswego	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Oswego	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Oswego	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Oswego	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Oswego	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Oswego	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	
Oswego	<i>Nannothemis bella</i>	Elfin Skimmer	Y	Y
Oswego	<i>Nasiaeschna pentacantha</i>	Cyrano Darner		Y *
Oswego	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	Y
Oswego	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Oswego	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Oswego	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Oswego	<i>Somatochlora linearis</i>	Mocha Emerald	Y	
Oswego	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Oswego	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	
Oswego	<i>Somatochlora williamsoni</i>	Williamson's Emerald		Y *
Oswego	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
Oswego	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Oswego	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Oswego	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	Y
Oswego	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Oswego	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Oswego	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Otsego	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Otsego	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Otsego	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Otsego	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Otsego	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Otsego	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Otsego	<i>Anax junius</i>	Common Green Darner	Y	Y
Otsego	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Otsego	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Otsego	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Otsego	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Otsego	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Otsego	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Otsego	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Otsego	<i>Calopteryx amata</i>	Superb Jewelwing		Y *
Otsego	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Otsego	<i>Celithemis elisa</i>	Calico Pennant	Y	Y

County	Scientific name	Common name	pre	NYDDS
Otsego	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Otsego	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Otsego	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Otsego	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Otsego	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Otsego	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Otsego	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Otsego	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Otsego	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Otsego	<i>Enallagma boreale</i>	Boreal Bluet	Y	Y
Otsego	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Otsego	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Otsego	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Otsego	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Otsego	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Otsego	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Otsego	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Otsego	<i>Enallagma vesperum</i>	Vesper Bluet	Y	Y
Otsego	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Otsego	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Otsego	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Otsego	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Otsego	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Otsego	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Otsego	<i>Gomphus descriptus</i>	Harpoon Clubtail		Y *
Otsego	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Otsego	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Otsego	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Otsego	<i>Ischnura posita</i>	Fragile Forktail		Y *
Otsego	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Otsego	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Otsego	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Otsego	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Otsego	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Otsego	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Otsego	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Otsego	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Otsego	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Otsego	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Otsego	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Otsego	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Otsego	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Otsego	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Otsego	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Otsego	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Otsego	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Otsego	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	
Otsego	<i>Nehalennia gracilis</i>	Sphagnum Sprite		Y *
Otsego	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y



County	Scientific name	Common name	pre	NYDDS
Otsego	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	Y	
Otsego	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Otsego	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Otsego	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Otsego	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Otsego	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Otsego	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Otsego	<i>Sympetrum internum x obtrusum</i>			Y *
Otsego	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Otsego	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Otsego	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Otsego	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Putnam	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Putnam	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Putnam	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Putnam	<i>Anax junius</i>	Common Green Darner	Y	Y
Putnam	<i>Anax longipes</i>	Comet Darner		Y *
Putnam	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Putnam	<i>Argia translata</i>	Dusky Dancer	Y	
Putnam	<i>Argomphus villosipes</i>	Unicorn Clubtail	Y	Y
Putnam	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Putnam	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Putnam	<i>Calopteryx aequalis</i>	River Jewelwing	Y	
Putnam	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	
Putnam	<i>Celithemis elisa</i>	Calico Pennant	Y	
Putnam	<i>Celithemis eponina</i>	Halloween Pennant	Y	
Putnam	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Putnam	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Putnam	<i>Cordulegaster erronea</i>	Tiger Spiketail	Y	
Putnam	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	Y
Putnam	<i>Didymops transversa</i>	Stream Cruiser		Y *
Putnam	<i>Dorocordulia lepida</i>	Petite Emerald	Y	
Putnam	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Putnam	<i>Enallagma annexum</i>	Northern Bluet	Y	
Putnam	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Putnam	<i>Enallagma civile</i>	Familiar Bluet	Y	
Putnam	<i>Enallagma divagans</i>	Turquoise Bluet	Y	Y
Putnam	<i>Enallagma durum</i>	Big Bluet	Y	
Putnam	<i>Enallagma ebrium</i>	Marsh Bluet		Y *
Putnam	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Putnam	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Putnam	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Putnam	<i>Enallagma traviatum traviatum</i>	Slender Bluet	Y	
Putnam	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Putnam	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Putnam	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Putnam	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Putnam	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y

County	Scientific name	Common name	pre	NYDDS
Putnam	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Putnam	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Putnam	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Putnam	<i>Hagenius brevistylus</i>	Dragonhunter		Y *
Putnam	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Putnam	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Putnam	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Putnam	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Putnam	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Putnam	<i>Lestes forcipatus</i>	Sweetflag Spreadwing		Y *
Putnam	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Putnam	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Putnam	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Putnam	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Putnam	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Putnam	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Putnam	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Putnam	<i>Libellula needhami</i>	Needham's Skimmer		Y *
Putnam	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Putnam	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Putnam	<i>Libellula semifasciata</i>	Painted Skimmer	Y	
Putnam	<i>Libellula vibrans</i>	Great Blue Skimmer	Y	
Putnam	<i>Nasiaeschna pentacantha</i>	Cyrano Darner	Y	
Putnam	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
Putnam	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	Y	
Putnam	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Putnam	<i>Pantala flavescens</i>	Wandering Glider	Y	
Putnam	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
Putnam	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Putnam	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	Y	
Putnam	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Putnam	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Putnam	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk	Y	
Putnam	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Putnam	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Queens	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Queens	<i>Anax junius</i>	Common Green Darner		Y *
Queens	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	
Queens	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Queens	<i>Celithemis eponina</i>	Halloween Pennant	Y	
Queens	<i>Enallagma civile</i>	Familiar Bluet	Y	
Queens	<i>Enallagma durum</i>	Big Bluet	Y	Y
Queens	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Queens	<i>Enallagma minusculum</i>	Little Bluet		Y *
Queens	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Queens	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Queens	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Queens	<i>Erythrodiplax berenice</i>	Seaside Dragonlet	Y	
Queens	<i>Ischnura hastata</i>	Citrine Forktail		Y *

County	Scientific name	Common name	pre	NYDDS
Queens	<i>Ischnura kellicotti</i>	Lilypad Forktail		Y *
Queens	<i>Ischnura posita</i>	Fragile Forktail		Y *
Queens	<i>Ischnura ramburii</i>	Rambur's Forktail		Y *
Queens	<i>Ischnura verticalis</i>	Eastern Forktail		Y *
Queens	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Queens	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Queens	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Queens	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Queens	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Queens	<i>Libellula luctuosa</i>	Widow Skimmer	Y	
Queens	<i>Libellula needhami</i>	Needham's Skimmer		Y *
Queens	<i>Libellula pulchella</i>	Twelve-spotted Skimmer		Y *
Queens	<i>Libellula semifasciata</i>	Painted Skimmer	Y	Y
Queens	<i>Libellula vibrans</i>	Great Blue Skimmer		Y *
Queens	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Queens	<i>Pantala flavescens</i>	Wandering Glider		Y *
Queens	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
Queens	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Queens	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Queens	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Queens	<i>Tamea carolina</i>	Carolina Saddlebags		Y *
Queens	<i>Tamea lacerata</i>	Black Saddlebags		Y *
Rensselaer	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Rensselaer	<i>Aeshna clepsydra</i>	Mottled Darner		Y *
Rensselaer	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Rensselaer	<i>Aeshna eremita</i>	Lake Darner		Y *
Rensselaer	<i>Aeshna interrupta</i>	Variable Darner		Y *
Rensselaer	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Rensselaer	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Rensselaer	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Rensselaer	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Rensselaer	<i>Anax junius</i>	Common Green Darner	Y	Y
Rensselaer	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Rensselaer	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Rensselaer	<i>Argia moesta</i>	Powdered Dancer		Y *
Rensselaer	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Rensselaer	<i>Basiaeschna janata</i>	Springtime Darner		Y *
Rensselaer	<i>Boyeria grafiana</i>	Ocellated Darner		Y *
Rensselaer	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Rensselaer	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
Rensselaer	<i>Calopteryx amata</i>	Superb Jewelwing		Y *
Rensselaer	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Rensselaer	<i>Celithemis elisa</i>	Calico Pennant		Y *
Rensselaer	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Rensselaer	<i>Celithemis fasciata</i>	Banded Pennant		Y *
Rensselaer	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Rensselaer	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Rensselaer	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Rensselaer	<i>Cordulia shurtleffi</i>	American Emerald		Y *

County	Scientific name	Common name	pre	NYDDS
Rensselaer	<i>Didymops transversa</i>	Stream Cruiser		Y *
Rensselaer	<i>Dorocordulia lepida</i>	Petite Emerald		Y *
Rensselaer	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Rensselaer	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Rensselaer	<i>Enallagma annexum</i>	Northern Bluet		Y *
Rensselaer	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Rensselaer	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Rensselaer	<i>Enallagma carunculatum</i>	Tule Bluet		Y *
Rensselaer	<i>Enallagma civile</i>	Familiar Bluet		Y *
Rensselaer	<i>Enallagma durum</i>	Big Bluet		Y *
Rensselaer	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Rensselaer	<i>Enallagma exsulans</i>	Stream Bluet		Y *
Rensselaer	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Rensselaer	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Rensselaer	<i>Enallagma signatum</i>	Orange Bluet		Y *
Rensselaer	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Rensselaer	<i>Enallagma vernale</i>	Northern Bluet		Y *
Rensselaer	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Rensselaer	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Rensselaer	<i>Epitheca canis</i>	Beaverpond Baskettail		Y *
Rensselaer	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Rensselaer	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Rensselaer	<i>Gomphus adelphus</i>	Mustached Clubtail		Y *
Rensselaer	<i>Gomphus borealis</i>	Beaverpond Clubtail		Y *
Rensselaer	<i>Gomphus descriptus</i>	Harpoon Clubtail		Y *
Rensselaer	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Rensselaer	<i>Gomphus fraternus</i>	Midland Clubtail		Y *
Rensselaer	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Rensselaer	<i>Gomphus quadricolor</i>	Rapids Clubtail		Y *
Rensselaer	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Rensselaer	<i>Gomphus vastus</i>	Cobra Clubtail		Y *
Rensselaer	<i>Hagenius brevistylus</i>	Dragonhunter		Y *
Rensselaer	<i>Helocordulia uhleri</i>	Uhler's Sundragon		Y *
Rensselaer	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Rensselaer	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Rensselaer	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Rensselaer	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail		Y *
Rensselaer	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail		Y *
Rensselaer	<i>Lestes australis</i>	Southern Spreadwing		Y *
Rensselaer	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Rensselaer	<i>Lestes disjunctus</i>	Common Spreadwing		Y *
Rensselaer	<i>Lestes dryas</i>	Emerald Spreadwing		Y *
Rensselaer	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Rensselaer	<i>Lestes forcipatus</i>	Sweetflag Spreadwing		Y *
Rensselaer	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Rensselaer	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Rensselaer	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Rensselaer	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Rensselaer	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface		Y *

County	Scientific name	Common name	pre	NYDDS
Rensselaer	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface		Y *
Rensselaer	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface		Y *
Rensselaer	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Rensselaer	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Rensselaer	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Rensselaer	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Rensselaer	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Rensselaer	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Rensselaer	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Rensselaer	<i>Libellula vibrans</i>	Great Blue Skimmer	Y	
Rensselaer	<i>Macromia illinoiensis</i>	Illinois River Cruiser		Y *
Rensselaer	<i>Nannothemis bella</i>	Elfin Skimmer		Y *
Rensselaer	<i>Nehalennia gracilis</i>	Sphagnum Sprite		Y *
Rensselaer	<i>Nehalennia irene</i>	Sedge Sprite		Y *
Rensselaer	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon		Y *
Rensselaer	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon		Y *
Rensselaer	<i>Ophiogomphus aspersus</i>	Brook Snaketail		Y *
Rensselaer	<i>Ophiogomphus carolus</i>	Riffle Snaketail		Y *
Rensselaer	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail		Y *
Rensselaer	<i>Pachydiplax longipennis</i>	Blue Dasher		Y *
Rensselaer	<i>Pantala flavescens</i>	Wandering Glider		Y *
Rensselaer	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
Rensselaer	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Rensselaer	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Rensselaer	<i>Somatochlora elongata</i>	Ski-tailed Emerald		Y *
Rensselaer	<i>Somatochlora forcipata</i>	Forcipate Emerald		Y *
Rensselaer	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald		Y *
Rensselaer	<i>Somatochlora walshii</i>	Brush-tipped Emerald		Y *
Rensselaer	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Rensselaer	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail		Y *
Rensselaer	<i>Stylurus scudderi</i>	Zebra Clubtail	Y	Y
Rensselaer	<i>Stylurus spiniceps</i>	Arrow Clubtail		Y *
Rensselaer	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk		Y *
Rensselaer	<i>Sympetrum internum x obtrusum</i>			Y *
Rensselaer	<i>Sympetrum internum x rubicundulum</i>			Y *
Rensselaer	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Rensselaer	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Rensselaer	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Rensselaer	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Richmond	<i>Aeshna canadensis</i>	Canada Darner	Y	
Richmond	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Richmond	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Richmond	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Richmond	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Richmond	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Richmond	<i>Anax junius</i>	Common Green Darner	Y	Y
Richmond	<i>Anax longipes</i>	Comet Darner	Y	Y
Richmond	<i>Archilestes grandis</i>	Great Spreadwing	Y	

County	Scientific name	Common name	pre	NYDDS
Richmond	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Richmond	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Richmond	<i>Argomphus villosipes</i>	Unicorn Clubtail	Y	Y
Richmond	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Richmond	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Richmond	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Richmond	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Richmond	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Richmond	<i>Celithemis fasciata</i>	Banded Pennant		Y *
Richmond	<i>Celithemis martha</i>	Martha's Pennant		Y *
Richmond	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Richmond	<i>Dorocordulia lepida</i>	Petite Emerald	Y	
Richmond	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Richmond	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Richmond	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Richmond	<i>Enallagma divagans</i>	Turquoise Bluet	Y	
Richmond	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Richmond	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Richmond	<i>Enallagma signatum</i>	Orange Bluet	Y	
Richmond	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Richmond	<i>Epiheca cynosura</i>	Common Baskettail	Y	
Richmond	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Richmond	<i>Erythrodiplax berenice</i>	Seaside Dragonlet	Y	
Richmond	<i>Erythrodiplax minuscula</i>	Little Blue Dragonlet	Y	
Richmond	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Richmond	<i>Ischnura hastata</i>	Citrine Forktail	Y	Y
Richmond	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Richmond	<i>Ischnura ramburii</i>	Rambur's Forktail	Y	Y
Richmond	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Richmond	<i>Lestes australis</i>	Southern Spreadwing	Y	
Richmond	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Richmond	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Richmond	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Richmond	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Richmond	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Richmond	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Richmond	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Richmond	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Richmond	<i>Libellula axilena</i>	Bar-winged Skimmer	Y	
Richmond	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Richmond	<i>Libellula flavida</i>	Yellow-sided Skimmer	Y	
Richmond	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Richmond	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Richmond	<i>Libellula needhami</i>	Needham's Skimmer	Y	Y
Richmond	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Richmond	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Richmond	<i>Libellula semifasciata</i>	Painted Skimmer	Y	Y
Richmond	<i>Libellula vibrans</i>	Great Blue Skimmer	Y	Y
Richmond	<i>Nannothemis bella</i>	Elfin Skimmer	Y	Y

County	Scientific name	Common name	pre	NYDDS
Richmond	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
Richmond	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Richmond	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Richmond	<i>Pantala flavescens</i>	Wandering Glider	Y	
Richmond	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
Richmond	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Richmond	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Richmond	<i>Somatochlora linearis</i>	Mocha Emerald	Y	
Richmond	<i>Sympetrum corruptum</i>	Variiegated Meadowhawk	Y	
Richmond	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Richmond	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Richmond	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Richmond	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Richmond	<i>Tramea abdominalis</i>	Vermilion Saddlebags	Y	
Richmond	<i>Tramea calverti</i>	Striped Saddlebags	Y	
Richmond	<i>Tramea carolina</i>	Carolina Saddlebags	Y	Y
Richmond	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Rockland	<i>Aeshna clepsydra</i>	Mottled Darner		Y *
Rockland	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Rockland	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Rockland	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Rockland	<i>Anax junius</i>	Common Green Darner	Y	Y
Rockland	<i>Anax longipes</i>	Comet Darner	Y	
Rockland	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Rockland	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Rockland	<i>Argia moesta</i>	Powdered Dancer		Y *
Rockland	<i>Argia translata</i>	Dusky Dancer	Y	Y
Rockland	<i>Argomphus furcifer</i>	Lilypad Clubtail	Y	Y
Rockland	<i>Argomphus villosipes</i>	Unicorn Clubtail	Y	Y
Rockland	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Rockland	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Rockland	<i>Calopteryx angustipennis</i>	Appalachian Jewelwing	Y	
Rockland	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Rockland	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Rockland	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Rockland	<i>Celithemis fasciata</i>	Banded Pennant		Y *
Rockland	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Rockland	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Rockland	<i>Cordulegaster erronea</i>	Tiger Spiketail		Y *
Rockland	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Rockland	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	Y
Rockland	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Rockland	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg		Y *
Rockland	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Rockland	<i>Enallagma basidens</i>	Double-striped Bluet	Y	Y
Rockland	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Rockland	<i>Enallagma divagans</i>	Turquoise Bluet	Y	Y
Rockland	<i>Enallagma durum</i>	Big Bluet	Y	Y
Rockland	<i>Enallagma ebrium</i>	Marsh Bluet		Y *

County	Scientific name	Common name	pre	NYDDS
Rockland	<i>Enallagma exulans</i>	Stream Bluet	Y	Y
Rockland	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Rockland	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Rockland	<i>Enallagma laterale</i>	New England Bluet	Y	Y
Rockland	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Rockland	<i>Enallagma traviatum traviatum</i>	Slender Bluet	Y	
Rockland	<i>Epiaeschna heros</i>	Swamp Darner	Y	Y
Rockland	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Rockland	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Rockland	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Rockland	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Rockland	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
Rockland	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Rockland	<i>Gomphus lividus</i>	Ashy Clubtail	Y	Y
Rockland	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Rockland	<i>Hagenius brevistylus</i>	Dragonhunter		Y *
Rockland	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	Y
Rockland	<i>Ischnura kellicotti</i>	Lilypad Forktail	Y	Y
Rockland	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Rockland	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Rockland	<i>Ladona deplanata</i>	Blue Corporal		Y *
Rockland	<i>Ladona exusta</i>	White Corporal	Y	
Rockland	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Rockland	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	Y	
Rockland	<i>Lestes australis</i>	Southern Spreadwing		Y *
Rockland	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
Rockland	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Rockland	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Rockland	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Rockland	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Rockland	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Rockland	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Rockland	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Rockland	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Rockland	<i>Libellula needhami</i>	Needham's Skimmer	Y	Y
Rockland	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Rockland	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Rockland	<i>Libellula vibrans</i>	Great Blue Skimmer		Y *
Rockland	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	
Rockland	<i>Nasiaeschna pentacantha</i>	Cyrano Darner		Y *
Rockland	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Rockland	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Rockland	<i>Pantala flavescens</i>	Wandering Glider	Y	Y
Rockland	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
Rockland	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Rockland	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Rockland	<i>Rhionaeschna mutata</i>	Spatterdock Darner		Y *
Rockland	<i>Somatochlora linearis</i>	Mocha Emerald	Y	Y
Rockland	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y



County	Scientific name	Common name	pre	NYDDS
Rockland	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Rockland	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	Y	
Rockland	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Rockland	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk		Y *
Rockland	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Rockland	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Rockland	<i>Tachopteryx thoreyi</i>	Gray Petaltail	Y	Y
Rockland	<i>Tramea carolina</i>	Carolina Saddlebags		Y *
Rockland	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Saratoga	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Saratoga	<i>Aeshna clepsydra</i>	Mottled Darner		Y *
Saratoga	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Saratoga	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Saratoga	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Saratoga	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Saratoga	<i>Anax junius</i>	Common Green Darner	Y	Y
Saratoga	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Saratoga	<i>Argia moesta</i>	Powdered Dancer		Y *
Saratoga	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Saratoga	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Saratoga	<i>Calopteryx aequabilis</i>	River Jewelwing		Y *
Saratoga	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Saratoga	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Saratoga	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Saratoga	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Saratoga	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Saratoga	<i>Didymops transversa</i>	Stream Cruiser	Y	
Saratoga	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Saratoga	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Saratoga	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Saratoga	<i>Enallagma boreale</i>	Boreal Bluet	Y	Y
Saratoga	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Saratoga	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Saratoga	<i>Enallagma durum</i>	Big Bluet		Y *
Saratoga	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Saratoga	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Saratoga	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Saratoga	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Saratoga	<i>Enallagma signatum</i>	Orange Bluet		Y *
Saratoga	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Saratoga	<i>Enallagma vernale</i>	Northern Bluet		Y *
Saratoga	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Saratoga	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Saratoga	<i>Epitheca canis</i>	Beaverpond Baskettail		Y *
Saratoga	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Saratoga	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Saratoga	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Saratoga	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail		Y *
Saratoga	<i>Gomphus adelphus</i>	Mustached Clubtail		Y *

County	Scientific name	Common name	pre	NYDDS
Saratoga	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Saratoga	<i>Gomphus fraternus</i>	Midland Clubtail		Y *
Saratoga	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Saratoga	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Saratoga	<i>Gomphus vastus</i>	Cobra Clubtail		Y *
Saratoga	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Saratoga	<i>Ischnura hastata</i>	Citrine Forktail	Y	
Saratoga	<i>Ischnura posita</i>	Fragile Forktail		Y *
Saratoga	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Saratoga	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Saratoga	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Saratoga	<i>Lestes dryas</i>	Emerald Spreadwing		Y *
Saratoga	<i>Lestes forcipatus</i>	Sweetflag Spreadwing		Y *
Saratoga	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Saratoga	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Saratoga	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing		Y *
Saratoga	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Saratoga	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Saratoga	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Saratoga	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
Saratoga	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Saratoga	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Saratoga	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Saratoga	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Saratoga	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	Y
Saratoga	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Saratoga	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	Y	
Saratoga	<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	Y	Y
Saratoga	<i>Ophiogomphus howei</i>	Pygmy Snaketail		Y *
Saratoga	<i>Ophiogomphus mainensis</i>	Maine Snaketail		Y *
Saratoga	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Saratoga	<i>Pantala flavescens</i>	Wandering Glider		Y *
Saratoga	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
Saratoga	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Saratoga	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Saratoga	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	
Saratoga	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail		Y *
Saratoga	<i>Stylurus scudderii</i>	Zebra Clubtail		Y *
Saratoga	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	Y
Saratoga	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Saratoga	<i>Sympetrum internum x rubicundulum</i>			Y *
Saratoga	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Saratoga	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk		Y *
Saratoga	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Saratoga	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Saratoga	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Schenectady	<i>Aeshna canadensis</i>	Canada Darner		Y *
Schenectady	<i>Aeshna umbrosa</i>	Shadow Darner		Y *

County	Scientific name	Common name	pre	NYDDS
Schenectady	<i>Anax junius</i>	Common Green Darner		Y *
Schenectady	<i>Argia fumipennis violacea</i>	Variable Dancer		Y *
Schenectady	<i>Argia moesta</i>	Powdered Dancer		Y *
Schenectady	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Schenectady	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *
Schenectady	<i>Basiaeschna janata</i>	Springtime Darner		Y *
Schenectady	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Schenectady	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Schenectady	<i>Celithemis elisa</i>	Calico Pennant		Y *
Schenectady	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Schenectady	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Schenectady	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *
Schenectady	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Schenectady	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Schenectady	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Schenectady	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg		Y *
Schenectady	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Schenectady	<i>Enallagma civile</i>	Familiar Bluet		Y *
Schenectady	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Schenectady	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Schenectady	<i>Enallagma hageni</i>	Hagen's Bluet		Y *
Schenectady	<i>Enallagma signatum</i>	Orange Bluet		Y *
Schenectady	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
Schenectady	<i>Epitheca cynosura</i>	Common Baskettail		Y *
Schenectady	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Schenectady	<i>Gomphus fraternus</i>	Midland Clubtail		Y *
Schenectady	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Schenectady	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Schenectady	<i>Ischnura posita</i>	Fragile Forktail		Y *
Schenectady	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Schenectady	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Schenectady	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Schenectady	<i>Lestes disjunctus</i>	Common Spreadwing		Y *
Schenectady	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Schenectady	<i>Lestes rectangularis</i>	Slender Spreadwing		Y *
Schenectady	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Schenectady	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Schenectady	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Schenectady	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	
Schenectady	<i>Libellula luctuosa</i>	Widow Skimmer		Y *
Schenectady	<i>Libellula pulchella</i>	Twelve-spotted Skimmer		Y *
Schenectady	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Schenectady	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Schenectady	<i>Pachydiplax longipennis</i>	Blue Dasher		Y *
Schenectady	<i>Pantala flavescens</i>	Wandering Glider		Y *
Schenectady	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Schenectady	<i>Plathemis lydia</i>	Common Whitetail		Y *
Schenectady	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Schenectady	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *

County	Scientific name	Common name	pre	NYDDS
Schenectady	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk		Y *
Schenectady	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Schenectady	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Schoharie	<i>Aeshna canadensis</i>	Canada Darner		Y *
Schoharie	<i>Aeshna clepsydra</i>	Mottled Darner	Y	
Schoharie	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Schoharie	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Schoharie	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Schoharie	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Schoharie	<i>Anax junius</i>	Common Green Darner	Y	Y
Schoharie	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Schoharie	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Schoharie	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Schoharie	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Schoharie	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Schoharie	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Schoharie	<i>Celithemis elisa</i>	Calico Pennant		Y *
Schoharie	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Schoharie	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Schoharie	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail		Y *
Schoharie	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Schoharie	<i>Enallagma annexum</i>	Northern Bluet		Y *
Schoharie	<i>Enallagma aspersum</i>	Azure Bluet		Y *
Schoharie	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Schoharie	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Schoharie	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Schoharie	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Schoharie	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Schoharie	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Schoharie	<i>Enallagma signatum</i>	Orange Bluet	Y	
Schoharie	<i>Epiheca cynosura</i>	Common Baskettail		Y *
Schoharie	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Schoharie	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Schoharie	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Schoharie	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Schoharie	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	Y
Schoharie	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Schoharie	<i>Ischnura posita</i>	Fragile Forktail		Y *
Schoharie	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Schoharie	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Schoharie	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Schoharie	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Schoharie	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Schoharie	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Schoharie	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Schoharie	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Schoharie	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Schoharie	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Schoharie	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	

County	Scientific name	Common name	pre	NYDDS
Schoharie	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Schoharie	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Schoharie	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Schoharie	<i>Macromia illinoiensis</i>	Illinois River Cruiser		Y *
Schoharie	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Schoharie	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Schoharie	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	
Schoharie	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Schoharie	<i>Pachydiplax longipennis</i>	Blue Dasher		Y *
Schoharie	<i>Pantala flavescens</i>	Wandering Glider		Y *
Schoharie	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Schoharie	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Schoharie	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald		Y *
Schoharie	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk		Y *
Schoharie	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Schoharie	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Schoharie	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk		Y *
Schoharie	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Schoharie	<i>Tramea carolina</i>	Carolina Saddlebags	Y	
Schoharie	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Schuyler	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Schuyler	<i>Aeshna clepsydra</i>	Mottled Darner	Y	
Schuyler	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Schuyler	<i>Aeshna interrupta</i>	Variable Darner	Y	
Schuyler	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Schuyler	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Schuyler	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Schuyler	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Schuyler	<i>Anax junius</i>	Common Green Darner	Y	Y
Schuyler	<i>Anax longipes</i>	Comet Darner	Y	Y
Schuyler	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Schuyler	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Schuyler	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Schuyler	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Schuyler	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Schuyler	<i>Boyeria grafiana</i>	Ocellated Darner	Y	Y
Schuyler	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Schuyler	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Schuyler	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Schuyler	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Schuyler	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Schuyler	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Schuyler	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Schuyler	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Schuyler	<i>Cordulegaster erronea</i>	Tiger Spiketail	Y	Y
Schuyler	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Schuyler	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	
Schuyler	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y

County	Scientific name	Common name	pre	NYDDS
Schuyler	<i>Didymops transversa</i>	Stream Cruiser	Y	
Schuyler	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Schuyler	<i>Enallagma annexum</i>	Northern Bluet	Y	Y
Schuyler	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	Y
Schuyler	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Schuyler	<i>Enallagma basidens</i>	Double-striped Bluet	Y	Y
Schuyler	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Schuyler	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Schuyler	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Schuyler	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Schuyler	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Schuyler	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Schuyler	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Schuyler	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Schuyler	<i>Enallagma traviatum westfalli</i>	Slender Bluet	Y	
Schuyler	<i>Enallagma vesperum</i>	Vesper Bluet	Y	Y
Schuyler	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Schuyler	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Schuyler	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Schuyler	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Schuyler	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	Y
Schuyler	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Schuyler	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Schuyler	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
Schuyler	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	
Schuyler	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Schuyler	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Schuyler	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
Schuyler	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Schuyler	<i>Ischnura hastata</i>	Citrine Forktail	Y	Y
Schuyler	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Schuyler	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Schuyler	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Schuyler	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Schuyler	<i>Lestes australis</i>	Southern Spreadwing	Y	
Schuyler	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Schuyler	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Schuyler	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Schuyler	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Schuyler	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Schuyler	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Schuyler	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Schuyler	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Schuyler	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Schuyler	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Schuyler	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Schuyler	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface		Y *
Schuyler	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Schuyler	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y

County	Scientific name	Common name	pre	NYDDS
Schuyler	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Schuyler	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Schuyler	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Schuyler	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Schuyler	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Schuyler	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Schuyler	<i>Nasiaeschna pentacantha</i>	Cyrano Darner	Y	
Schuyler	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Schuyler	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Schuyler	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Schuyler	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Schuyler	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Schuyler	<i>Rhionaeschna mutata</i>	Spatdock Darner	Y	Y
Schuyler	<i>Somatochlora elongata</i>	Ski-tailed Emerald		Y *
Schuyler	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	
Schuyler	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	Y
Schuyler	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Schuyler	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Schuyler	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Schuyler	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Schuyler	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Schuyler	<i>Tachopteryx thoreyi</i>	Gray Petaltail	Y	Y
Schuyler	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Seneca	<i>Aeshna canadensis</i>	Canada Darner	Y	
Seneca	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Seneca	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Seneca	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Seneca	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Seneca	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Seneca	<i>Anax junius</i>	Common Green Darner	Y	Y
Seneca	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Seneca	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Seneca	<i>Argia moesta</i>	Powdered Dancer	Y	
Seneca	<i>Argia tibialis</i>	Blue-tipped Dancer	Y	
Seneca	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Seneca	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Seneca	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Seneca	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Seneca	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Seneca	<i>Celithemis eponina</i>	Halloween Pennant	Y	
Seneca	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Seneca	<i>Enallagma annexum</i>	Northern Bluet	Y	
Seneca	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	Y
Seneca	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Seneca	<i>Enallagma basidens</i>	Double-striped Bluet	Y	Y
Seneca	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
Seneca	<i>Enallagma civile</i>	Familiar Bluet	Y	
Seneca	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Seneca	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y

County	Scientific name	Common name	pre	NYDDS
Seneca	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Seneca	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Seneca	<i>Enallagma signatum</i>	Orange Bluet	Y	
Seneca	<i>Enallagma traviatum westfalli</i>	Slender Bluet	Y	
Seneca	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Seneca	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Seneca	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Seneca	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Seneca	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Seneca	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Seneca	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Seneca	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Seneca	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Seneca	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Seneca	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Seneca	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Seneca	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Seneca	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Seneca	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Seneca	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Seneca	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	
Seneca	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Seneca	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Seneca	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Seneca	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Seneca	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Seneca	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Seneca	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Seneca	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Seneca	<i>Pantala flavescens</i>	Wandering Glider	Y	
Seneca	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
Seneca	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Seneca	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Seneca	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Seneca	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Seneca	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	Y
Seneca	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
Seneca	<i>Tamea lacerata</i>	Black Saddlebags	Y	Y
St. Lawrence	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
St. Lawrence	<i>Aeshna clepsydra</i>	Mottled Darner	Y	
St. Lawrence	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
St. Lawrence	<i>Aeshna eremita</i>	Lake Darner	Y	Y
St. Lawrence	<i>Aeshna interrupta</i>	Variable Darner	Y	Y
St. Lawrence	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
St. Lawrence	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
St. Lawrence	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
St. Lawrence	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
St. Lawrence	<i>Anax junius</i>	Common Green Darner	Y	Y
St. Lawrence	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y



County	Scientific name	Common name	pre	NYDDS
St. Lawrence	<i>Argia moesta</i>	Powdered Dancer	Y	Y
St. Lawrence	<i>Arigomphus cornutus</i>	Horned Clubtail		Y *
St. Lawrence	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
St. Lawrence	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
St. Lawrence	<i>Boyeria grafiata</i>	Ocellated Darner	Y	Y
St. Lawrence	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
St. Lawrence	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
St. Lawrence	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
St. Lawrence	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
St. Lawrence	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
St. Lawrence	<i>Celithemis eponina</i>	Halloween Pennant		Y *
St. Lawrence	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
St. Lawrence	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	Y
St. Lawrence	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
St. Lawrence	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
St. Lawrence	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail		Y *
St. Lawrence	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
St. Lawrence	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
St. Lawrence	<i>Dorocordulia lepida</i>	Petite Emerald		Y *
St. Lawrence	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
St. Lawrence	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
St. Lawrence	<i>Enallagma annexum</i>	Northern Bluet	Y	Y
St. Lawrence	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	Y
St. Lawrence	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
St. Lawrence	<i>Enallagma boreale</i>	Boreal Bluet	Y	Y
St. Lawrence	<i>Enallagma carunculatum</i>	Tule Bluet	Y	Y
St. Lawrence	<i>Enallagma civile</i>	Familiar Bluet	Y	
St. Lawrence	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
St. Lawrence	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
St. Lawrence	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
St. Lawrence	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
St. Lawrence	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
St. Lawrence	<i>Enallagma vernale</i>	Northern Bluet		Y *
St. Lawrence	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
St. Lawrence	<i>Epiaeschna heros</i>	Swamp Darner	Y	
St. Lawrence	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
St. Lawrence	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	Y
St. Lawrence	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
St. Lawrence	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	Y
St. Lawrence	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
St. Lawrence	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
St. Lawrence	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
St. Lawrence	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	Y
St. Lawrence	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	Y
St. Lawrence	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
St. Lawrence	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
St. Lawrence	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	Y
St. Lawrence	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	Y
St. Lawrence	<i>Gomphus ventricosus</i>	S skillet Clubtail		Y *

County	Scientific name	Common name	pre	NYDDS
St. Lawrence	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
St. Lawrence	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	Y
St. Lawrence	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
St. Lawrence	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
St. Lawrence	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
St. Lawrence	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail		Y *
St. Lawrence	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
St. Lawrence	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
St. Lawrence	<i>Lestes dryas</i>	Emerald Spreadwing		Y *
St. Lawrence	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
St. Lawrence	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
St. Lawrence	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
St. Lawrence	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing		Y *
St. Lawrence	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
St. Lawrence	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
St. Lawrence	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	Y
St. Lawrence	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
St. Lawrence	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
St. Lawrence	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface	Y	Y
St. Lawrence	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
St. Lawrence	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
St. Lawrence	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
St. Lawrence	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
St. Lawrence	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
St. Lawrence	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	Y
St. Lawrence	<i>Nasiaeschna pentacantha</i>	Cyrano Darner		Y *
St. Lawrence	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
St. Lawrence	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
St. Lawrence	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon		Y *
St. Lawrence	<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	Y	Y
St. Lawrence	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	
St. Lawrence	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	Y
St. Lawrence	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	
St. Lawrence	<i>Pachydiplax longipennis</i>	Blue Dasher		Y *
St. Lawrence	<i>Pantala flavescens</i>	Wandering Glider	Y	Y
St. Lawrence	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
St. Lawrence	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
St. Lawrence	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
St. Lawrence	<i>Somatochlora cingulata</i>	Lake Emerald	Y	Y
St. Lawrence	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	Y
St. Lawrence	<i>Somatochlora forcipata</i>	Forcipate Emerald	Y	
St. Lawrence	<i>Somatochlora incurvata</i>	Incurvate Emerald	Y	
St. Lawrence	<i>Somatochlora kennedyi</i>	Kennedy's Emerald	Y	
St. Lawrence	<i>Somatochlora minor</i>	Ocellated Emerald	Y	
St. Lawrence	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
St. Lawrence	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	Y
St. Lawrence	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	Y
St. Lawrence	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
St. Lawrence	<i>Stylurus scudderi</i>	Zebra Clubtail		Y *

County	Scientific name	Common name	pre	NYDDS
St. Lawrence	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
St. Lawrence	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	Y
St. Lawrence	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
St. Lawrence	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
St. Lawrence	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
St. Lawrence	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
St. Lawrence	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Steuben	<i>Aeshna canadensis</i>	Canada Darner	Y	
Steuben	<i>Aeshna clepsydra</i>	Mottled Darner	Y	
Steuben	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Steuben	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Steuben	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Steuben	<i>Aeshna verticalis</i>	Green-striped Darner	Y	Y
Steuben	<i>Anax junius</i>	Common Green Darner	Y	Y
Steuben	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	
Steuben	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Steuben	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Steuben	<i>Argia translata</i>	Dusky Dancer	Y	
Steuben	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Steuben	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Steuben	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Steuben	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Steuben	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Steuben	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Steuben	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Steuben	<i>Celithemis elisa</i>	Calico Pennant		Y *
Steuben	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Steuben	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Steuben	<i>Coenagrion resolutum</i>	Taiga Bluet	Y	
Steuben	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail		Y *
Steuben	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Steuben	<i>Didymops transversa</i>	Stream Cruiser	Y	
Steuben	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Steuben	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Steuben	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	Y
Steuben	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Steuben	<i>Enallagma basidens</i>	Double-striped Bluet	Y	
Steuben	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Steuben	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Steuben	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Steuben	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Steuben	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Steuben	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Steuben	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Steuben	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Steuben	<i>Enallagma vesperum</i>	Vesper Bluet	Y	Y
Steuben	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Steuben	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	

County	Scientific name	Common name	pre	NYDDS
Steuben	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Steuben	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Steuben	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Steuben	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Steuben	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	Y	
Steuben	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Steuben	<i>Gomphus borealis</i>	Beaverpond Clubtail		Y *
Steuben	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Steuben	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Steuben	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Steuben	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Steuben	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Steuben	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Steuben	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Steuben	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Steuben	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Steuben	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Steuben	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Steuben	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Steuben	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Steuben	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Steuben	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Steuben	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Steuben	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	Y
Steuben	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Steuben	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	
Steuben	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Steuben	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Steuben	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Steuben	<i>Rhionaeschna mutata</i>	Spatdock Darner	Y	Y
Steuben	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Steuben	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Steuben	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Steuben	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Steuben	<i>Sympetrum semicinctorum</i>	Band-winged Meadowhawk	Y	
Steuben	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
Steuben	<i>Tachopteryx thoreyi</i>	Gray Petaltail	Y	
Steuben	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Suffolk	<i>Aeshna clepsydra</i>	Mottled Darner	Y	Y
Suffolk	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Suffolk	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Suffolk	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Suffolk	<i>Anax junius</i>	Common Green Darner	Y	Y
Suffolk	<i>Anax longipes</i>	Comet Darner	Y	Y
Suffolk	<i>Archilestes grandis</i>	Great Spreadwing	Y	
Suffolk	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Suffolk	<i>Argia moesta</i>	Powdered Dancer	Y	
Suffolk	<i>Arigomphus villosipes</i>	Unicorn Clubtail		Y *

County	Scientific name	Common name	pre	NYDDS
Suffolk	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Suffolk	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Suffolk	<i>Brachymesia gravida</i>	Four-spotted Pennant		Y *
Suffolk	<i>Calopteryx maculata</i>	Ebony Jewelwing		Y *
Suffolk	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Suffolk	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Suffolk	<i>Celithemis fasciata</i>	Banded Pennant	Y	Y
Suffolk	<i>Celithemis martha</i>	Martha's Pennant	Y	Y
Suffolk	<i>Celithemis verna</i>	Double-ringed Pennant		Y *
Suffolk	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Suffolk	<i>Dorocordulia lepida</i>	Petite Emerald	Y	Y
Suffolk	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Suffolk	<i>Enallagma annexum</i>	Northern Bluet	Y	
Suffolk	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Suffolk	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Suffolk	<i>Enallagma divagans</i>	Turquoise Bluet	Y	
Suffolk	<i>Enallagma doubledayi</i>	Atlantic Bluet	Y	Y
Suffolk	<i>Enallagma durum</i>	Big Bluet	Y	
Suffolk	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Suffolk	<i>Enallagma laterale</i>	New England Bluet	Y	Y
Suffolk	<i>Enallagma minusculum</i>	Little Bluet	Y	Y
Suffolk	<i>Enallagma pictum</i>	Scarlet Bluet	Y	Y
Suffolk	<i>Enallagma recurvatum</i>	Pine Barrens Bluet	Y	Y
Suffolk	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Suffolk	<i>Enallagma traviatum</i>	Slender Bluet		Y
Suffolk	<i>Enallagma traviatum traviatum</i>	Slender Bluet	Y	
Suffolk	<i>Enallagma vesperum</i>	Vesper Bluet	Y	Y
Suffolk	<i>Enallagma weewa</i>	Blackwater Bluet	Y	Y
Suffolk	<i>Epiaeschna heros</i>	Swamp Darner	Y	Y
Suffolk	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Suffolk	<i>Epithea cynosura</i>	Common Baskettail	Y	Y
Suffolk	<i>Epithea semiaquea</i>	Mantled Baskettail	Y	Y
Suffolk	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Suffolk	<i>Erythrodiplax berenice</i>	Seaside Dragonlet	Y	Y
Suffolk	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
Suffolk	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Suffolk	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Suffolk	<i>Ischnura hastata</i>	Citrine Forktail	Y	Y
Suffolk	<i>Ischnura kellicotti</i>	Lilypad Forktail	Y	Y
Suffolk	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Suffolk	<i>Ischnura ramburii</i>	Rambur's Forktail	Y	Y
Suffolk	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Suffolk	<i>Ladona deplanata</i>	Blue Corporal	Y	Y
Suffolk	<i>Ladona exusta</i>	White Corporal	Y	Y
Suffolk	<i>Lestes australis</i>	Southern Spreadwing	Y	Y
Suffolk	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Suffolk	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Suffolk	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
Suffolk	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y

County	Scientific name	Common name	pre	NYDDS
Suffolk	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Suffolk	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Suffolk	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Suffolk	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Suffolk	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	
Suffolk	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Suffolk	<i>Libellula auripennis</i>	Golden-winged Skimmer		Y *
Suffolk	<i>Libellula axilena</i>	Bar-winged Skimmer	Y	Y
Suffolk	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Suffolk	<i>Libellula flavida</i>	Yellow-sided Skimmer	Y	
Suffolk	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Suffolk	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Suffolk	<i>Libellula needhami</i>	Needham's Skimmer	Y	Y
Suffolk	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Suffolk	<i>Libellula semifasciata</i>	Painted Skimmer	Y	Y
Suffolk	<i>Libellula vibrans</i>	Great Blue Skimmer		Y *
Suffolk	<i>Nannothemis bella</i>	Elfin Skimmer	Y	Y
Suffolk	<i>Nasiaeschna pentacantha</i>	Cyrano Darner	Y	
Suffolk	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	Y
Suffolk	<i>Nehalennia integricollis</i>	Southern Sprite	Y	Y
Suffolk	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Suffolk	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Suffolk	<i>Pantala flavescens</i>	Wandering Glider		Y *
Suffolk	<i>Pantala hymenaea</i>	Spot-winged Glider		Y *
Suffolk	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Suffolk	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Suffolk	<i>Progomphus obscurus</i>	Common Sanddragon	Y	Y
Suffolk	<i>Rhionaeschna mutata</i>	Spatterdock Darner		Y *
Suffolk	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Suffolk	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	Y	
Suffolk	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	Y
Suffolk	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Suffolk	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Suffolk	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	Y
Suffolk	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Suffolk	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Suffolk	<i>Tamea carolina</i>	Carolina Saddlebags	Y	Y
Suffolk	<i>Tamea lacerata</i>	Black Saddlebags	Y	Y
Sullivan	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Sullivan	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Sullivan	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Sullivan	<i>Anax junius</i>	Common Green Darner	Y	Y
Sullivan	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Sullivan	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Sullivan	<i>Argia translata</i>	Dusky Dancer	Y	
Sullivan	<i>Arigomphus furcifer</i>	Lilypad Clubtail		Y *
Sullivan	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Sullivan	<i>Basiaeschna janata</i>	Springtime Darner	Y	

County	Scientific name	Common name	pre	NYDDS
Sullivan	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Sullivan	<i>Boyeria vinosa</i>	Fawn Darner		Y *
Sullivan	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
Sullivan	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
Sullivan	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Sullivan	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Sullivan	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Sullivan	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Sullivan	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Sullivan	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Sullivan	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Sullivan	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Sullivan	<i>Dorocordulia lepida</i>	Petite Emerald	Y	Y
Sullivan	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Sullivan	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Sullivan	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Sullivan	<i>Enallagma boreale</i>	Boreal Bluet		Y *
Sullivan	<i>Enallagma ebrium</i>	Marsh Bluet	Y	
Sullivan	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Sullivan	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Sullivan	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Sullivan	<i>Enallagma signatum</i>	Orange Bluet	Y	
Sullivan	<i>Enallagma vernale</i>	Northern Bluet		Y *
Sullivan	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
Sullivan	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Sullivan	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Sullivan	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Sullivan	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Sullivan	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	Y	Y
Sullivan	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
Sullivan	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	
Sullivan	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Sullivan	<i>Gomphus lividus</i>	Ashy Clubtail	Y	Y
Sullivan	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	
Sullivan	<i>Gomphus septima</i>	Septima's Clubtail	Y	
Sullivan	<i>Gomphus viridifrons</i>	Green-faced Clubtail	Y	
Sullivan	<i>Hagenius brevistylus</i>	Dragonhunter	Y	
Sullivan	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Sullivan	<i>Hetaerina americana</i>	American Rubyspot	Y	
Sullivan	<i>Ischnura posita</i>	Fragile Forktail		Y *
Sullivan	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Sullivan	<i>Ladona exusta</i>	White Corporal	Y	
Sullivan	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Sullivan	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	Y	
Sullivan	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Sullivan	<i>Lestes eurinus</i>	Amber-winged Spreadwing		Y *
Sullivan	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Sullivan	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Sullivan	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y

County	Scientific name	Common name	pre	NYDDS
Sullivan	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Sullivan	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface		Y *
Sullivan	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface		Y *
Sullivan	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Sullivan	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Sullivan	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Sullivan	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Sullivan	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Sullivan	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Sullivan	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Sullivan	<i>Libellula semifasciata</i>	Painted Skimmer	Y	Y
Sullivan	<i>Libellula vibrans</i>	Great Blue Skimmer	Y	
Sullivan	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	
Sullivan	<i>Nehalennia gracilis</i>	Sphagnum Sprite		Y *
Sullivan	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Sullivan	<i>Neurocordulia michaeli</i>	Broadtailed Shadowdragon		Y *
Sullivan	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	Y	Y
Sullivan	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon	Y	Y
Sullivan	<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	Y	
Sullivan	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	Y
Sullivan	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	Y
Sullivan	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	Y
Sullivan	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Sullivan	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Sullivan	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Sullivan	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Sullivan	<i>Rhionaeschna mutata</i>	Spatterdock Darner	Y	
Sullivan	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Sullivan	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Sullivan	<i>Sympetrum internum x rubicundulum</i>			Y *
Sullivan	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Sullivan	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Tioga	<i>Aeshna canadensis</i>	Canada Darner	Y	
Tioga	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Tioga	<i>Aeshna interrupta</i>	Variable Darner	Y	
Tioga	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Tioga	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Tioga	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Tioga	<i>Anax junius</i>	Common Green Darner	Y	Y
Tioga	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Tioga	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Tioga	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Tioga	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Tioga	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Tioga	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	
Tioga	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Tioga	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Tioga	<i>Celithemis eponina</i>	Halloween Pennant		Y *



County	Scientific name	Common name	pre	NYDDS
Tioga	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Tioga	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Tioga	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Tioga	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	
Tioga	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Tioga	<i>Enallagma annexum</i>	Northern Bluet	Y	
Tioga	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Tioga	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Tioga	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Tioga	<i>Enallagma civile</i>	Familiar Bluet	Y	
Tioga	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Tioga	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Tioga	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Tioga	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Tioga	<i>Enallagma signatum</i>	Orange Bluet	Y	
Tioga	<i>Enallagma traviatum westfalli</i>	Slender Bluet	Y	
Tioga	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Tioga	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Tioga	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Tioga	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Tioga	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Tioga	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Tioga	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	Y
Tioga	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Tioga	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Tioga	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Tioga	<i>Gomphus vastus</i>	Cobra Clubtail		Y *
Tioga	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Tioga	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Tioga	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Tioga	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Tioga	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Tioga	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Tioga	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Tioga	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Tioga	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Tioga	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Tioga	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Tioga	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Tioga	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Tioga	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Tioga	<i>Libellula cyanea</i>	Spangled Skimmer		Y *
Tioga	<i>Libellula incesta</i>	Slaty Skimmer	Y	
Tioga	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Tioga	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Tioga	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Tioga	<i>Macromia illinoensis</i>	Illinois River Cruiser		Y *
Tioga	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Tioga	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	

County	Scientific name	Common name	pre	NYDDS
Tioga	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	
Tioga	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Tioga	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
Tioga	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Tioga	<i>Rhionaeschna mutata</i>	Spatterdock Darner	Y	
Tioga	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Tioga	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
Tioga	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Tioga	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Tioga	<i>Sympetrum internum x obtrusum</i>			Y *
Tioga	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk		Y *
Tioga	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Tioga	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Tompkins	<i>Aeshna canadensis</i>	Canada Darner	Y	
Tompkins	<i>Aeshna clepsydra</i>	Mottled Darner	Y	
Tompkins	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Tompkins	<i>Aeshna interrupta</i>	Variable Darner	Y	
Tompkins	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Tompkins	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Tompkins	<i>Aeshna verticalis</i>	Green-striped Darner	Y	
Tompkins	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Tompkins	<i>Anax junius</i>	Common Green Darner	Y	Y
Tompkins	<i>Anax longipes</i>	Comet Darner	Y	
Tompkins	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Tompkins	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Tompkins	<i>Argia translata</i>	Dusky Dancer		Y *
Tompkins	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Tompkins	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Tompkins	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Tompkins	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Tompkins	<i>Calopteryx aquabilis</i>	River Jewelwing	Y	Y
Tompkins	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Tompkins	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Tompkins	<i>Celithemis eponina</i>	Halloween Pennant	Y	
Tompkins	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Tompkins	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Tompkins	<i>Cordulegaster erronea</i>	Tiger Spiketail	Y	
Tompkins	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	
Tompkins	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	
Tompkins	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Tompkins	<i>Didymops transversa</i>	Stream Cruiser	Y	
Tompkins	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Tompkins	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Tompkins	<i>Enallagma annexum</i>	Northern Bluet	Y	
Tompkins	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Tompkins	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Tompkins	<i>Enallagma basidens</i>	Double-striped Bluet	Y	Y
Tompkins	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Tompkins	<i>Enallagma carunculatum</i>	Tule Bluet	Y	

County	Scientific name	Common name	pre	NYDDS
Tompkins	<i>Enallagma civile</i>	Familiar Bluet	Y	
Tompkins	<i>Enallagma divagans</i>	Turquoise Bluet	Y	
Tompkins	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Tompkins	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Tompkins	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Tompkins	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Tompkins	<i>Enallagma signatum</i>	Orange Bluet	Y	
Tompkins	<i>Enallagma traviatum westfalli</i>	Slender Bluet	Y	
Tompkins	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Tompkins	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Tompkins	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Tompkins	<i>Epitheca cynosura</i>	Common Baskettail	Y	
Tompkins	<i>Epitheca spinigera</i>	Spiny Baskettail	Y	
Tompkins	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Tompkins	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Tompkins	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	Y	
Tompkins	<i>Gomphus borealis</i>	Beaverpond Clubtail	Y	
Tompkins	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	
Tompkins	<i>Gomphus exilis</i>	Lancet Clubtail	Y	
Tompkins	<i>Gomphus fraternus</i>	Midland Clubtail	Y	
Tompkins	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Tompkins	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	
Tompkins	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Tompkins	<i>Hagenius brevistylus</i>	Dragonhunter	Y	
Tompkins	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Tompkins	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Tompkins	<i>Ischnura hastata</i>	Citrine Forktail	Y	
Tompkins	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Tompkins	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Tompkins	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Tompkins	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	Y
Tompkins	<i>Lestes australis</i>	Southern Spreadwing	Y	
Tompkins	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Tompkins	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Tompkins	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Tompkins	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Tompkins	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
Tompkins	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Tompkins	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Tompkins	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Tompkins	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Tompkins	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Tompkins	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Tompkins	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	
Tompkins	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Tompkins	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Tompkins	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Tompkins	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Tompkins	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	

County	Scientific name	Common name	pre	NYDDS
Tompkins	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
Tompkins	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Tompkins	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Tompkins	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	
Tompkins	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Tompkins	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Tompkins	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Tompkins	<i>Somatochlora elongata</i>	Ski-tailed Emerald	Y	
Tompkins	<i>Somatochlora linearis</i>	Mocha Emerald	Y	
Tompkins	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Tompkins	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	
Tompkins	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Tompkins	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Tompkins	<i>Stylurus scudderi</i>	Zebra Clubtail	Y	
Tompkins	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Tompkins	<i>Sympetrum corruptum</i>	Variegated Meadowhawk	Y	
Tompkins	<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	Y	
Tompkins	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Tompkins	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
Tompkins	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Tompkins	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Tompkins	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Tompkins	<i>Tachopteryx thoreyi</i>	Gray Petaltail	Y	
Tompkins	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Ulster	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Ulster	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Ulster	<i>Aeshna eremita</i>	Lake Darner	Y	Y
Ulster	<i>Aeshna interrupta</i>	Variable Darner	Y	
Ulster	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Ulster	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Ulster	<i>Aeshna verticalis</i>	Green-striped Darner	Y	Y
Ulster	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	Y
Ulster	<i>Anax junius</i>	Common Green Darner	Y	Y
Ulster	<i>Anax longipes</i>	Comet Darner		Y *
Ulster	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Ulster	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Ulster	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Ulster	<i>Argomphus furcifer</i>	Lilypad Clubtail		Y *
Ulster	<i>Argomphus villosipes</i>	Unicorn Clubtail	Y	
Ulster	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Ulster	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Ulster	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Ulster	<i>Calopteryx aequabilis</i>	River Jewelwing		Y *
Ulster	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Ulster	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Ulster	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Ulster	<i>Chromagrion conditum</i>	Aurora Damsel	Y	Y
Ulster	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y

County	Scientific name	Common name	pre	NYDDS
Ulster	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	Y
Ulster	<i>Cordulia shurtleffi</i>	American Emerald	Y	Y
Ulster	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Ulster	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Ulster	<i>Enallagma annexum</i>	Northern Bluet	Y	
Ulster	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Ulster	<i>Enallagma basidens</i>	Double-striped Bluet	Y	Y
Ulster	<i>Enallagma boreale</i>	Boreal Bluet	Y	
Ulster	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Ulster	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Ulster	<i>Enallagma durum</i>	Big Bluet		Y *
Ulster	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Ulster	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Ulster	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Ulster	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Ulster	<i>Epiaeschna heros</i>	Swamp Darner	Y	Y
Ulster	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Ulster	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Ulster	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Ulster	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Ulster	<i>Gomphaeschna antilope</i>	Taper-tailed Darner	Y	
Ulster	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
Ulster	<i>Gomphus adelphus</i>	Mustached Clubtail		Y *
Ulster	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Ulster	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Ulster	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	Y
Ulster	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Ulster	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Ulster	<i>Hetaerina americana</i>	American Rubyspot	Y	
Ulster	<i>Ischnura hastata</i>	Citrine Forktail		Y *
Ulster	<i>Ischnura kellicotti</i>	Lilypad Forktail		Y *
Ulster	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Ulster	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Ulster	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Ulster	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail		Y *
Ulster	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Ulster	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Ulster	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Ulster	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	Y
Ulster	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
Ulster	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Ulster	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Ulster	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Ulster	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Ulster	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	Y
Ulster	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface	Y	Y
Ulster	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Ulster	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Ulster	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y

County	Scientific name	Common name	pre	NYDDS
Ulster	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Ulster	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Ulster	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Ulster	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Ulster	<i>Libellula vibrans</i>	Great Blue Skimmer	Y	
Ulster	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	
Ulster	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Ulster	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	Y
Ulster	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Ulster	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon		Y *
Ulster	<i>Ophiogomphus aspersus</i>	Brook Snaketail	Y	
Ulster	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Ulster	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	
Ulster	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Ulster	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Ulster	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Ulster	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Ulster	<i>Rhionaeschna mutata</i>	Spatterdock Darner	Y	
Ulster	<i>Somatochlora cingulata</i>	Lake Emerald	Y	
Ulster	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	Y
Ulster	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	Y
Ulster	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	
Ulster	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Ulster	<i>Sympetrum internum x obtrusum</i>		Y	
Ulster	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
Ulster	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Ulster	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Warren	<i>Aeshna canadensis</i>	Canada Darner	Y	Y
Warren	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Warren	<i>Aeshna eremita</i>	Lake Darner		Y *
Warren	<i>Aeshna interrupta</i>	Variable Darner	Y	
Warren	<i>Aeshna sitchensis</i>	Zigzag Darner		Y *
Warren	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	Y
Warren	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Warren	<i>Aeshna verticalis</i>	Green-striped Darner	Y	Y
Warren	<i>Amphiagrion saucium</i>	Eastern Red Damsel		Y *
Warren	<i>Anax junius</i>	Common Green Darner		Y *
Warren	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Warren	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Warren	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Warren	<i>Boyeria grafiana</i>	Ocellated Darner	Y	Y
Warren	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Warren	<i>Calopteryx aequabilis</i>	River Jewelwing		Y *
Warren	<i>Calopteryx amata</i>	Superb Jewelwing	Y	Y
Warren	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Warren	<i>Celithemis elisa</i>	Calico Pennant		Y *
Warren	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Warren	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Warren	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail		Y *

County	Scientific name	Common name	pre	NYDDS
Warren	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Warren	<i>Cordulia shurtleffi</i>	American Emerald		Y *
Warren	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Warren	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Warren	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Warren	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Warren	<i>Enallagma civile</i>	Familiar Bluet		Y *
Warren	<i>Enallagma durum</i>	Big Bluet		Y *
Warren	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Warren	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Warren	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Warren	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Warren	<i>Enallagma vernale</i>	Northern Bluet		Y *
Warren	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
Warren	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Warren	<i>Epiteca canis</i>	Beaverpond Baskettail		Y *
Warren	<i>Epiteca cynosura</i>	Common Baskettail	Y	Y
Warren	<i>Epiteca spinigera</i>	Spiny Baskettail		Y *
Warren	<i>Erythemis simplicicollis</i>	Eastern Pondhawk		Y *
Warren	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Warren	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	Y
Warren	<i>Gomphus borealis</i>	Beaverpond Clubtail		Y *
Warren	<i>Gomphus descriptus</i>	Harpoon Clubtail	Y	Y
Warren	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Warren	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Warren	<i>Gomphus quadricolor</i>	Rapids Clubtail	Y	Y
Warren	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Warren	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Warren	<i>Helocordulia uhleri</i>	Uhler's Sundragon		Y *
Warren	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Warren	<i>Ischnura posita</i>	Fragile Forktail		Y *
Warren	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Warren	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Warren	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	Y
Warren	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Warren	<i>Lestes disjunctus</i>	Common Spreadwing		Y *
Warren	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Warren	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Warren	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Warren	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	Y
Warren	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	Y
Warren	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface		Y *
Warren	<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface		Y *
Warren	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Warren	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Warren	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Warren	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Warren	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Warren	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y

County	Scientific name	Common name	pre	NYDDS
Warren	<i>Macromia illinoiensis</i>	Illinois River Cruiser	Y	Y
Warren	<i>Nannothemis bella</i>	Elfin Skimmer		Y *
Warren	<i>Nehalennia gracilis</i>	Sphagnum Sprite		Y *
Warren	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Warren	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	Y	
Warren	<i>Ophiogomphus anomalus</i>	Extra-striped Snaketail	Y	Y
Warren	<i>Ophiogomphus aspersus</i>	Brook Snaketail		Y *
Warren	<i>Ophiogomphus carolus</i>	Riffle Snaketail		Y *
Warren	<i>Ophiogomphus howei</i>	Pygmy Snaketail	Y	Y
Warren	<i>Ophiogomphus mainensis</i>	Maine Snaketail		Y *
Warren	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	Y
Warren	<i>Pachydiplax longipennis</i>	Blue Dasher		Y *
Warren	<i>Pantala flavescens</i>	Wandering Glider		Y *
Warren	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Warren	<i>Progomphus obscurus</i>	Common Sanddragon	Y	Y
Warren	<i>Somatochlora walshii</i>	Brush-tipped Emerald		Y *
Warren	<i>Somatochlora williamsoni</i>	Williamson's Emerald		Y *
Warren	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Warren	<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	Y	
Warren	<i>Stylurus spiniceps</i>	Arrow Clubtail	Y	Y
Warren	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk		Y *
Warren	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Warren	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Warren	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Washington	<i>Aeshna canadensis</i>	Canada Darner		Y *
Washington	<i>Aeshna clepsydra</i>	Mottled Darner		Y *
Washington	<i>Aeshna constricta</i>	Lance-tipped Darner		Y *
Washington	<i>Aeshna interrupta</i>	Variable Darner		Y *
Washington	<i>Aeshna tuberculifera</i>	Black-tipped Darner		Y *
Washington	<i>Aeshna umbrosa</i>	Shadow Darner		Y *
Washington	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Washington	<i>Anax junius</i>	Common Green Darner		Y *
Washington	<i>Argia apicalis</i>	Blue-fronted Dancer		Y *
Washington	<i>Argia fumipennis violacea</i>	Variable Dancer		Y *
Washington	<i>Argia moesta</i>	Powdered Dancer		Y *
Washington	<i>Argomphus furcifer</i>	Lilypad Clubtail		Y *
Washington	<i>Basiaeschna janata</i>	Springtime Darner		Y *
Washington	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Washington	<i>Calopteryx aequabilis</i>	River Jewelwing	Y	Y
Washington	<i>Calopteryx amata</i>	Superb Jewelwing		Y *
Washington	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Washington	<i>Celithemis elisa</i>	Calico Pennant		Y *
Washington	<i>Celithemis eponina</i>	Halloween Pennant		Y *
Washington	<i>Chromagrion conditum</i>	Aurora Damsel		Y *
Washington	<i>Coenagrion resolutum</i>	Taiga Bluet		Y *
Washington	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail		Y *
Washington	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail		Y *
Washington	<i>Didymops transversa</i>	Stream Cruiser		Y *
Washington	<i>Dorocordulia lepida</i>	Petite Emerald		Y *



County	Scientific name	Common name	pre	NYDDS
Washington	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	Y
Washington	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg		Y *
Washington	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Washington	<i>Enallagma carunculatum</i>	Tule Bluet		Y *
Washington	<i>Enallagma civile</i>	Familiar Bluet		Y *
Washington	<i>Enallagma durum</i>	Big Bluet		Y *
Washington	<i>Enallagma ebrium</i>	Marsh Bluet		Y *
Washington	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Washington	<i>Enallagma geminatum</i>	Skimming Bluet		Y *
Washington	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Washington	<i>Enallagma signatum</i>	Orange Bluet		Y *
Washington	<i>Enallagma vernale</i>	Northern Bluet		Y *
Washington	<i>Enallagma vesperum</i>	Vesper Bluet		Y *
Washington	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Washington	<i>Epicordulia princeps</i>	Prince Baskettail		Y *
Washington	<i>Epiteca canis</i>	Beaverpond Baskettail		Y *
Washington	<i>Epiteca cynosura</i>	Common Baskettail	Y	Y
Washington	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Washington	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Washington	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail		Y *
Washington	<i>Gomphus descriptus</i>	Harpoon Clubtail		Y *
Washington	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Washington	<i>Gomphus fraternus</i>	Midland Clubtail		Y *
Washington	<i>Gomphus lividus</i>	Ashy Clubtail		Y *
Washington	<i>Gomphus quadricolor</i>	Rapids Clubtail		Y *
Washington	<i>Gomphus spicatus</i>	Dusky Clubtail		Y *
Washington	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Washington	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Washington	<i>Ladona julia</i>	Chalk-fronted Skimmer		Y *
Washington	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail		Y *
Washington	<i>Lestes congener</i>	Spotted Spreadwing		Y *
Washington	<i>Lestes disjunctus</i>	Common Spreadwing	Y	Y
Washington	<i>Lestes dryas</i>	Emerald Spreadwing		Y *
Washington	<i>Lestes forcipatus</i>	Sweetflag Spreadwing		Y *
Washington	<i>Lestes inaequalis</i>	Elegant Spreadwing		Y *
Washington	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Washington	<i>Lestes vigilax</i>	Swamp Spreadwing		Y *
Washington	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Washington	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Washington	<i>Leucorrhinia proxima</i>	Red-waisted Whiteface		Y *
Washington	<i>Libellula incesta</i>	Slaty Skimmer		Y *
Washington	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Washington	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Washington	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer		Y *
Washington	<i>Libellula semifasciata</i>	Painted Skimmer		Y *
Washington	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	Y
Washington	<i>Nehalennia irene</i>	Sedge Sprite		Y *
Washington	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon		Y *
Washington	<i>Neurocordulia yamaskanensis</i>	Stygian Shadowdragon		Y *

County	Scientific name	Common name	pre	NYDDS
Washington	<i>Ophiogomphus aspersus</i>	Brook Snaketail		Y *
Washington	<i>Ophiogomphus carolus</i>	Riffle Snaketail		Y *
Washington	<i>Ophiogomphus mainensis</i>	Maine Snaketail		Y *
Washington	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail		Y *
Washington	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	
Washington	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	
Washington	<i>Perithemis tenera</i>	Eastern Amberwing		Y *
Washington	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Washington	<i>Somatochlora elongata</i>	Ski-tailed Emerald		Y *
Washington	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald		Y *
Washington	<i>Stylogomphus albistylus</i>	Least Clubtail		Y *
Washington	<i>Stylurus scudderi</i>	Zebra Clubtail		Y *
Washington	<i>Stylurus spiniceps</i>	Arrow Clubtail		Y *
Washington	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk		Y *
Washington	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Washington	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk		Y *
Washington	<i>Tramea carolina</i>	Carolina Saddlebags		Y *
Washington	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Wayne	<i>Aeshna canadensis</i>	Canada Darner	Y	
Wayne	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Wayne	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Wayne	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Wayne	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Wayne	<i>Anax junius</i>	Common Green Darner	Y	Y
Wayne	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Wayne	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	
Wayne	<i>Argia moesta</i>	Powdered Dancer	Y	
Wayne	<i>Argia tibialis</i>	Blue-tipped Dancer	Y	
Wayne	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	
Wayne	<i>Celithemis elisa</i>	Calico Pennant	Y	
Wayne	<i>Celithemis eponina</i>	Halloween Pennant	Y	
Wayne	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg		Y *
Wayne	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Wayne	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Wayne	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Wayne	<i>Enallagma ebrium</i>	Marsh Bluet	Y	
Wayne	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Wayne	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Wayne	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Wayne	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Wayne	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Wayne	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Wayne	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Wayne	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Wayne	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Wayne	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Wayne	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Wayne	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Wayne	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y

County	Scientific name	Common name	pre	NYDDS
Wayne	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Wayne	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Wayne	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Wayne	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Wayne	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Wayne	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Wayne	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Wayne	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Wayne	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
Wayne	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Wayne	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Wayne	<i>Tramea carolina</i>	Carolina Saddlebags		Y *
Wayne	<i>Tramea lacerata</i>	Black Saddlebags		Y *
Westchester	<i>Aeshna canadensis</i>	Canada Darner	Y	
Westchester	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	Y
Westchester	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Westchester	<i>Aeshna umbrosa</i>	Shadow Darner	Y	Y
Westchester	<i>Aeshna verticalis</i>	Green-striped Darner	Y	Y
Westchester	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Westchester	<i>Anax junius</i>	Common Green Darner	Y	Y
Westchester	<i>Anax longipes</i>	Comet Darner	Y	
Westchester	<i>Archilestes grandis</i>	Great Spreadwing	Y	Y
Westchester	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	Y
Westchester	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Westchester	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Westchester	<i>Argia translata</i>	Dusky Dancer	Y	Y
Westchester	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Westchester	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	Y
Westchester	<i>Basiaeschna janata</i>	Springtime Darner	Y	Y
Westchester	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Westchester	<i>Calopteryx aequalis</i>	River Jewelwing	Y	Y
Westchester	<i>Calopteryx dimidiata</i>	Sparkling Jewelwing	Y	
Westchester	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Westchester	<i>Celithemis elisa</i>	Calico Pennant	Y	Y
Westchester	<i>Celithemis eponina</i>	Halloween Pennant	Y	Y
Westchester	<i>Celithemis fasciata</i>	Banded Pennant	Y	
Westchester	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Westchester	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	Y
Westchester	<i>Cordulegaster erronea</i>	Tiger Spiketail	Y	Y
Westchester	<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	Y	Y
Westchester	<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	Y	Y
Westchester	<i>Didymops transversa</i>	Stream Cruiser	Y	Y
Westchester	<i>Dorocordulia lepida</i>	Petite Emerald	Y	
Westchester	<i>Dorocordulia libera</i>	Racket-tailed Emerald	Y	
Westchester	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	Y
Westchester	<i>Enallagma aspersum</i>	Azure Bluet	Y	Y
Westchester	<i>Enallagma basidens</i>	Double-striped Bluet	Y	
Westchester	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Westchester	<i>Enallagma civile</i>	Familiar Bluet	Y	Y

County	Scientific name	Common name	pre	NYDDS
Westchester	<i>Enallagma divagans</i>	Turquoise Bluet	Y	Y
Westchester	<i>Enallagma durum</i>	Big Bluet	Y	Y
Westchester	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Westchester	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Westchester	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Westchester	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Westchester	<i>Enallagma laterale</i>	New England Bluet	Y	
Westchester	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Westchester	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Westchester	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
Westchester	<i>Epiaeschna heros</i>	Swamp Darner	Y	Y
Westchester	<i>Epicordulia princeps</i>	Prince Baskettail	Y	Y
Westchester	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Westchester	<i>Epitheca cynosura</i>	Common Baskettail	Y	
Westchester	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Westchester	<i>Erythrodiplax berenice</i>	Seaside Dragonlet	Y	
Westchester	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	Y
Westchester	<i>Gomphus abbreviatus</i>	Spine-crowned Clubtail	Y	
Westchester	<i>Gomphus adelphus</i>	Mustached Clubtail	Y	
Westchester	<i>Gomphus exilis</i>	Lancet Clubtail	Y	Y
Westchester	<i>Gomphus lividus</i>	Ashy Clubtail	Y	
Westchester	<i>Hagenius brevistylus</i>	Dragonhunter	Y	Y
Westchester	<i>Helocordulia uhleri</i>	Uhler's Sundragon	Y	
Westchester	<i>Ischnura hastata</i>	Citrine Forktail	Y	Y
Westchester	<i>Ischnura kellicotti</i>	Lilypad Forktail	Y	Y
Westchester	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Westchester	<i>Ischnura prognata</i>	Furtive Forktail	Y	
Westchester	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Westchester	<i>Ladona exusta</i>	White Corporal	Y	
Westchester	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	Y
Westchester	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail	Y	
Westchester	<i>Lestes australis</i>	Southern Spreadwing	Y	
Westchester	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Westchester	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Westchester	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Westchester	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Westchester	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	
Westchester	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Westchester	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Westchester	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Westchester	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Westchester	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Westchester	<i>Libellula axilena</i>	Bar-winged Skimmer	Y	
Westchester	<i>Libellula cyanea</i>	Spangled Skimmer	Y	Y
Westchester	<i>Libellula flavida</i>	Yellow-sided Skimmer	Y	
Westchester	<i>Libellula incesta</i>	Slaty Skimmer	Y	Y
Westchester	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Westchester	<i>Libellula needhami</i>	Needham's Skimmer	Y	
Westchester	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y

County	Scientific name	Common name	pre	NYDDS
Westchester	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	Y
Westchester	<i>Libellula semifasciata</i>	Painted Skimmer	Y	Y
Westchester	<i>Libellula vibrans</i>	Great Blue Skimmer	Y	Y
Westchester	<i>Nannothemis bella</i>	Elfin Skimmer	Y	
Westchester	<i>Nasiaeschna pentacantha</i>	Cyrano Darner	Y	
Westchester	<i>Nehalennia gracilis</i>	Sphagnum Sprite	Y	
Westchester	<i>Nehalennia irene</i>	Sedge Sprite	Y	
Westchester	<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	Y	
Westchester	<i>Ophiogomphus mainensis</i>	Maine Snaketail	Y	
Westchester	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Westchester	<i>Pantala flavescens</i>	Wandering Glider	Y	Y
Westchester	<i>Pantala hymenaea</i>	Spot-winged Glider	Y	Y
Westchester	<i>Perithemis tenera</i>	Eastern Amberwing	Y	Y
Westchester	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Westchester	<i>Rhionaeschna mutata</i>	Spatterdock Darner	Y	
Westchester	<i>Somatochlora linearis</i>	Mocha Emerald	Y	Y
Westchester	<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	Y	
Westchester	<i>Somatochlora williamsoni</i>	Williamson's Emerald	Y	
Westchester	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
Westchester	<i>Stylurus scudderi</i>	Zebra Clubtail	Y	
Westchester	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	Y
Westchester	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk		Y *
Westchester	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	Y
Westchester	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Westchester	<i>Tramea carolina</i>	Carolina Saddlebags	Y	
Westchester	<i>Tramea lacerata</i>	Black Saddlebags	Y	Y
Wyoming	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Wyoming	<i>Aeshna interrupta</i>	Variable Darner	Y	
Wyoming	<i>Aeshna tuberculifera</i>	Black-tipped Darner	Y	
Wyoming	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Wyoming	<i>Aeshna verticalis</i>	Green-striped Darner		Y *
Wyoming	<i>Amphiagrion saucium</i>	Eastern Red Damsel	Y	
Wyoming	<i>Anax junius</i>	Common Green Darner	Y	Y
Wyoming	<i>Argia apicalis</i>	Blue-fronted Dancer	Y	
Wyoming	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	Y
Wyoming	<i>Argia moesta</i>	Powdered Dancer	Y	Y
Wyoming	<i>Argia tibialis</i>	Blue-tipped Dancer	Y	
Wyoming	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	
Wyoming	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Wyoming	<i>Basiaeschna janata</i>	Springtime Darner	Y	
Wyoming	<i>Boyeria grafiana</i>	Ocellated Darner	Y	
Wyoming	<i>Boyeria vinosa</i>	Fawn Darner	Y	Y
Wyoming	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	Y
Wyoming	<i>Celithemis elisa</i>	Calico Pennant	Y	
Wyoming	<i>Chromagrion conditum</i>	Aurora Damsel	Y	
Wyoming	<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	Y	
Wyoming	<i>Cordulia shurtleffi</i>	American Emerald	Y	
Wyoming	<i>Dorocordulia libera</i>	Racket-tailed Emerald		Y *
Wyoming	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	

County	Scientific name	Common name	pre	NYDDS
Wyoming	<i>Enallagma annexum</i>	Northern Bluet	Y	
Wyoming	<i>Enallagma antennatum</i>	Rainbow Bluet		Y *
Wyoming	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Wyoming	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Wyoming	<i>Enallagma civile</i>	Familiar Bluet	Y	Y
Wyoming	<i>Enallagma ebrium</i>	Marsh Bluet	Y	Y
Wyoming	<i>Enallagma exsulans</i>	Stream Bluet	Y	Y
Wyoming	<i>Enallagma geminatum</i>	Skimming Bluet	Y	
Wyoming	<i>Enallagma hageni</i>	Hagen's Bluet	Y	Y
Wyoming	<i>Enallagma signatum</i>	Orange Bluet	Y	
Wyoming	<i>Enallagma traviatum</i>	Slender Bluet		Y *
Wyoming	<i>Enallagma vesperum</i>	Vesper Bluet	Y	
Wyoming	<i>Epiaeschna heros</i>	Swamp Darner	Y	
Wyoming	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Wyoming	<i>Epiteca canis</i>	Beaverpond Baskettail	Y	
Wyoming	<i>Epiteca cynosura</i>	Common Baskettail	Y	Y
Wyoming	<i>Epiteca spinigera</i>	Spiny Baskettail	Y	
Wyoming	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Wyoming	<i>Gomphaeschna furcillata</i>	Harlequin Darner	Y	
Wyoming	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Wyoming	<i>Hetaerina americana</i>	American Rubyspot	Y	Y
Wyoming	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Wyoming	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Wyoming	<i>Ladona julia</i>	Chalk-fronted Skimmer	Y	
Wyoming	<i>Lanthus parvulus</i>	Northern Pygmy Clubtail	Y	
Wyoming	<i>Lestes congener</i>	Spotted Spreadwing	Y	Y
Wyoming	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Wyoming	<i>Lestes dryas</i>	Emerald Spreadwing	Y	Y
Wyoming	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Wyoming	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	Y
Wyoming	<i>Lestes inaequalis</i>	Elegant Spreadwing	Y	Y
Wyoming	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	Y
Wyoming	<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	Y	
Wyoming	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Wyoming	<i>Leucorrhinia frigida</i>	Frosted Whiteface		Y *
Wyoming	<i>Leucorrhinia glacialis</i>	Crimson-ringed Whiteface	Y	
Wyoming	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	Y
Wyoming	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Wyoming	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y
Wyoming	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
Wyoming	<i>Macromia illinoensis</i>	Illinois River Cruiser	Y	
Wyoming	<i>Nehalennia irene</i>	Sedge Sprite	Y	Y
Wyoming	<i>Ophiogomphus carolus</i>	Riffle Snaketail	Y	
Wyoming	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	Y	
Wyoming	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
Wyoming	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
Wyoming	<i>Plathemis lydia</i>	Common Whitetail	Y	Y
Wyoming	<i>Somatochlora walshii</i>	Brush-tipped Emerald	Y	Y
Wyoming	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	

County	Scientific name	Common name	pre	NYDDS
Wyoming	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	Y
Wyoming	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
Wyoming	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
Wyoming	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	Y
Wyoming	<i>Tachopteryx thoreyi</i>	Gray Petaltail	Y	
Wyoming	<i>Tramea lacerata</i>	Black Saddlebags	Y	
Yates	<i>Aeshna canadensis</i>	Canada Darner	Y	
Yates	<i>Aeshna constricta</i>	Lance-tipped Darner	Y	
Yates	<i>Aeshna umbrosa</i>	Shadow Darner	Y	
Yates	<i>Anax junius</i>	Common Green Darner	Y	
Yates	<i>Argia fumipennis violacea</i>	Variable Dancer	Y	
Yates	<i>Argia moesta</i>	Powdered Dancer	Y	
Yates	<i>Arigomphus furcifer</i>	Lilypad Clubtail	Y	Y
Yates	<i>Arigomphus villosipes</i>	Unicorn Clubtail	Y	
Yates	<i>Boyeria vinosa</i>	Fawn Darner	Y	
Yates	<i>Calopteryx maculata</i>	Ebony Jewelwing	Y	
Yates	<i>Celithemis elisa</i>	Calico Pennant	Y	
Yates	<i>Celithemis eponina</i>	Halloween Pennant	Y	
Yates	<i>Dromogomphus spinosus</i>	Black-shouldered Spinyleg	Y	
Yates	<i>Enallagma annexum</i>	Northern Bluet	Y	
Yates	<i>Enallagma antennatum</i>	Rainbow Bluet	Y	
Yates	<i>Enallagma aspersum</i>	Azure Bluet	Y	
Yates	<i>Enallagma basidens</i>	Double-striped Bluet	Y	
Yates	<i>Enallagma carunculatum</i>	Tule Bluet	Y	
Yates	<i>Enallagma civile</i>	Familiar Bluet	Y	
Yates	<i>Enallagma ebrium</i>	Marsh Bluet	Y	
Yates	<i>Enallagma exsulans</i>	Stream Bluet	Y	
Yates	<i>Enallagma geminatum</i>	Skimming Bluet	Y	Y
Yates	<i>Enallagma hageni</i>	Hagen's Bluet	Y	
Yates	<i>Enallagma signatum</i>	Orange Bluet	Y	Y
Yates	<i>Epicordulia princeps</i>	Prince Baskettail	Y	
Yates	<i>Epitheca canis</i>	Beaverpond Baskettail	Y	
Yates	<i>Epitheca cynosura</i>	Common Baskettail	Y	Y
Yates	<i>Erythemis simplicicollis</i>	Eastern Pondhawk	Y	Y
Yates	<i>Gomphaeschna furcillata</i>	Harlequin Darner		Y *
Yates	<i>Gomphus spicatus</i>	Dusky Clubtail	Y	
Yates	<i>Ischnura posita</i>	Fragile Forktail	Y	Y
Yates	<i>Ischnura verticalis</i>	Eastern Forktail	Y	Y
Yates	<i>Lestes congener</i>	Spotted Spreadwing	Y	
Yates	<i>Lestes disjunctus</i>	Common Spreadwing	Y	
Yates	<i>Lestes dryas</i>	Emerald Spreadwing	Y	
Yates	<i>Lestes eurinus</i>	Amber-winged Spreadwing	Y	
Yates	<i>Lestes forcipatus</i>	Sweetflag Spreadwing	Y	
Yates	<i>Lestes rectangularis</i>	Slender Spreadwing	Y	
Yates	<i>Lestes vigilax</i>	Swamp Spreadwing	Y	
Yates	<i>Leucorrhinia frigida</i>	Frosted Whiteface	Y	
Yates	<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	Y	
Yates	<i>Libellula luctuosa</i>	Widow Skimmer	Y	Y
Yates	<i>Libellula pulchella</i>	Twelve-spotted Skimmer	Y	Y

<b>County</b>	<b>Scientific name</b>	<b>Common name</b>	<b>pre</b>	<b>NYDDS</b>
<b>Yates</b>	<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	Y	
<b>Yates</b>	<i>Nehalennia irene</i>	Sedge Sprite	Y	
<b>Yates</b>	<i>Pachydiplax longipennis</i>	Blue Dasher	Y	Y
<b>Yates</b>	<i>Perithemis tenera</i>	Eastern Amberwing	Y	
<b>Yates</b>	<i>Plathemis lydia</i>	Common Whitetail	Y	
<b>Yates</b>	<i>Stylogomphus albistylus</i>	Least Clubtail	Y	
<b>Yates</b>	<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	Y	
<b>Yates</b>	<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	Y	
<b>Yates</b>	<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	Y	
<b>Yates</b>	<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	Y	
<b>Yates</b>	<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk	Y	
<b>Yates</b>	<i>Tramea lacerata</i>	Black Saddlebags	Y	

#### Literature Cited

Donnelly, T. W. 2004. The Odonata of New York State. Unpublished data, Binghamton, NY.





## The New York Natural Heritage Program

The NY Natural Heritage Program is a partnership between the NYS Department of Environmental Conservation (NYS DEC) and The Nature Conservancy. Our mission is to facilitate conservation of rare animals, rare plants, and significant ecosystems. We accomplish this mission by combining thorough field inventories, scientific analyses, expert interpretation, and the most comprehensive database on New York's distinctive biodiversity to deliver the highest quality information for natural resource planning, protection, and management.

NY Natural Heritage was established in 1985 and is a contract unit housed within NYS DEC's Division of Fish, Wildlife, & Marine Resources. The program is staffed by more than 30 scientists and specialists with expertise in ecology, zoology, botany, information management, and geographic information systems.

NY Natural Heritage maintains New York's most comprehensive database on the status and location of rare species and natural communities. We presently monitor 174 natural community types, 792 rare plant species, and 433 rare animal species across New York, keeping track of more than 12,000 locations where these species and communities are found. The database also includes detailed information on the relative rareness of each species and community, the quality of their occurrences, and descriptions of sites. The information is used by public agencies, the environmental conservation community, developers, and others to aid in land-use decisions. Our data are essential for prioritizing those species and communities in need of

protection and for guiding land-use and land-management decisions where these species and communities exist.

In 1990, NY Natural Heritage published *Ecological Communities of New York State*, an all inclusive classification of natural and human-influenced communities. From 40,000-acre beech-maple mesic forests to 40-acre maritime beech forests, sea-level salt marshes to alpine meadows, our classification quickly became the primary source for natural community classification in New York and a fundamental reference for natural community classifications in the northeastern United States and southeastern Canada. This classification, which has been continually updated as we gather new field data, has also been incorporated into the National Vegetation Classification that is being developed and refined by NatureServe, The Nature Conservancy, and Natural Heritage Programs throughout the United States (including New York).

NY Natural Heritage is an active participant in NatureServe – the international network of biodiversity data centers. There are currently Natural Heritage Programs in all 50 states and 21 Conservation Data Centers (the international equivalent of Natural Heritage Programs) in Canada, Latin America, and South America. These programs work with NatureServe to develop biodiversity data, maintain compatible standards for data management, and provide information about rare species and natural communities that is consistent across many geographic scales – from ¼-acre wetland sites to the North American continent.

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