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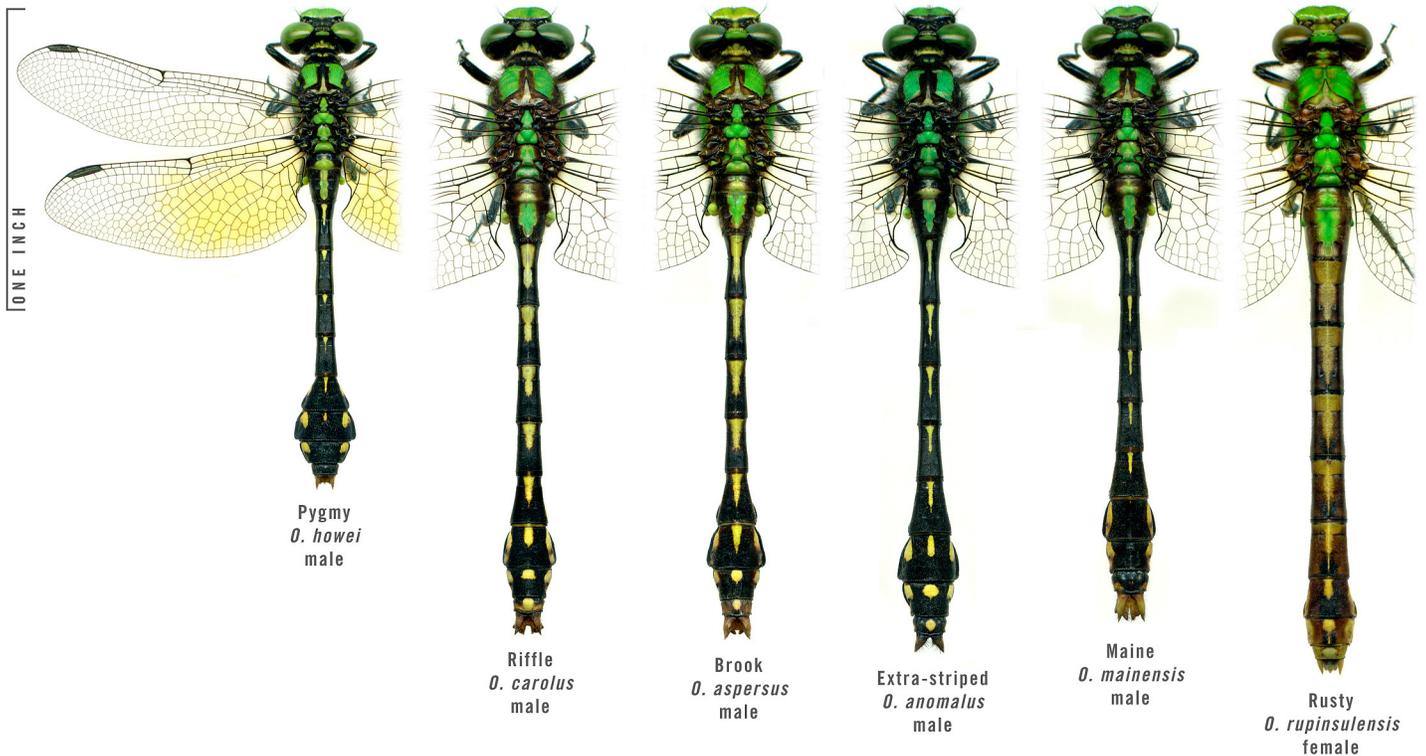
The News Journal of the Dragonfly Society of the Americas

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Six Snaketails (*Ophiogomphus*) from Maine



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In This Issue

We start off 2010 with some very unusual weather patterns around the country. It may prove to be an interesting year for odonates as a result. There are a number of meetings scheduled already for this year including our annual DSA meeting in Orono, Maine. Be sure to check out the calendar of events and meeting announcements in this issue so you can plan to attend those near you.

One of our members, Rob Cannings, received a notable national award (the Bruce Naylor award) from the Canadian Museum Network for his decades of contributions to natural history in Canada. Congratulations Rob! Another of our members, Duncan Cuyler, donated his collection and library to the IORI/FSCA. You will find Bill Mauffray's account of the move from North Carolina to Florida in this issue.

I have the sad news of DSA member Rex Kenner's unexpected passing to report. Rex was a passionate and enthusiastic entomologist who will be missed.

Jason Bried is once again soliciting volunteers for the Dragonfly Survey Effort Project. This is a great way of accumulating a valuable long-term dataset. If you haven't seen Jason's recent 2010 paper in *Insect Conservation and Diversity* (National Review of State Wildlife Action Plans for Odonata Species of Greatest Conservation Need), I encourage you to do so. Though there are many great conservation efforts taking place around the country, there is still much to do.

Sue and John Gregoire continue to monitor ponds in New York. This time they describe a survival story of a spreading species that continued emerging despite numerous obstacles.

Bob DuBois reports on his finding of Twin-spotted

Spiketail (*Cordulegaster maculata*) nymphs in the unusual habitat of a drainage lake in Wisconsin. Nathan Kohler provides the first report of *Sympetrum vicinum* (Autumn Meadowhawk) for the state of Montana. This large state deserves more attention, as there are certainly several other species to turn up there.

Dennis Paulson recounts a trip to the Hawaiian island of Maui where things are not looking good for the *Megalagrion* populations. Mike Dillon has been working on documenting the odonates of Wright Patman Lake in northeast Texas and gives a summary of his work there. Giff Beaton and Marion Dobbs give a summary of the tremendous work they have been doing in Georgia in the last year and Walter Chadwick provides an account of the odonates he has documented in Yonkers, New York.

Finally, Nick Donnelly reviews the latest book to be published on odonates: Allen Barlow, David Golden and Jim Bangma's *Field Guide to Dragonflies and Damselflies of New Jersey*. 

Thank You!

Dick Walton generously donated 100 copies of the wonderful "Common Dragonflies and Damselflies of Eastern North America" DVD that he and Greg Dodge made, to the DSA. These will be used as membership incentives and given to new DSA members with a paid membership. Please use the opportunity to spread the word and help us boost the DSA's membership. If you are not familiar with the video, visit <<http://www.rkwalton.com/drags.html>>.

Calendar of Events

For additional information, see <<http://www.odonatacentral.org/index.php/PageAction.get/name/DSAOtherMeetings>>.

Event	Date	Location	Contact
2010 DSA Annual Meeting	24–27 Jun 2010	Orono, Maine	< http://www.wingsenvironmental.com/dsa/ >
CalOdes 2010 Dragonfly Blitz	26–27 Jun 2010	Trinity Co., Calif.	Kathy Biggs < biggsnest@sonic.net >
1st European Cong. on Odonat.	2–5 Jul 2010	Portugal	< http://www.europeandragonflies.com/ >
2010 SE DSA Meeting	8–10 Jul 2010	Panama City, Florida	Jerrell Daigle < jdaigle@nettally.com >
Great Lakes Odonata Meeting	9–11 Jul 2010	Central Ohio	Bob Glotzhober < bglotzhober@ohiohistory.org >
2011 Int. Congress of Odonat.	19–24 Jul 2011	Odawara, Japan	< http://www.odonata.jp/wda2011/ > 

2010 DSA Annual Meeting in Orono, Maine

Bryan Pfeiffer <Bryan@VermontBirdTours.com>

Maine is closer than you think. If you haven't done so already, here's a reminder to book lodging and prepare for the 2010 Dragonfly Society of the Americas annual meeting in Orono, Maine, 24–27 June 2010.

This region of Maine offers an abundance of bogs and fens, rivers and streams in some of wildest country in the Northeast. You'll be busy. The meeting web site is at <<http://www.wingsenvironmental.com/dsa/>>. Orono is 11 miles from Bangor International Airport in Bangor, Maine, and 130 miles from the Portland International Jetport in Portland, Maine. Here are the some key updates:

Lodging: A limited number of rooms remain available at our home base—the Best Western Black Bear Inn & Conference Center in Orono, Maine (207-866-7120 or <http://www.blackbearinnorono.com/>). We have a block of rooms reserved at \$69.95 per night plus tax for single or double occupancy. You must book your room by 1 May. When you reserve your room, ask for the Dragonfly Society of the Americas rate. We are also investigating alternative lodging and camping nearby.

Presentations: We are still seeking presentations for the meeting. Send your proposals for 20- to 30-minute presentations on most any topic in odonatology to Mike Blust (BlustM@greenmtn.edu).

Maps: Using data from Paul-Michael Brunelle and the Maine Damselfly and Dragonfly Survey, we're developing innovative digital maps for meeting participants. These are not yet final, but check the meeting web site's "Resources" page. Our goal here is for you to use these maps before the meeting to mark key species locations on your Delorme Gazetteer for Maine (recommended) or other map for use in the field. We'll also have printed site maps for participants at the meeting.

Potential highlights during the Maine meeting include: Six species of *Ophiogomphus* (Snaketails), including *O. anomalus* (Extra-striped Snaketail) and perhaps *O. howei* (Pygmy Snaketail); three Species of *Neurocordulia*, including *N. michaeli* (Broad-tailed Shadowdragon); eight or more species of *Somatochlora* (Striped Emeralds), including *S. franklini* (Delicate Emerald), *S. kennedyi* (Kennedy's Emerald), *S. minor* (Ocellated Emerald) and perhaps *S. brevicincta* (Quebec Emerald); *Coenagrion interrogatum* (Subarctic Bluet) and *Nehalennia gracilis* (Sphagnum Sprite), among others.

Pre-Meeting Field Excursion

The base for pre-meeting activities will be Fryeburg, Maine, which is 50 miles west of Portland near the New Hampshire border. We'll convene in Fryeburg on Monday evening, 21 June and depart for Orono on Thursday, 24 June. From Fryeburg we will seek coastal plain and others species we won't (or may not) encounter in Orono, including: *Enallagma laterale* (New England Bluet), *E. minusculum* (Little Bluet), *Ischnura hastata* (Citrine Forktail), *Nasiaeschna pentacantha* (Cyrano Darner), *Rhionaeschna mutata* (Spatterdock Darner), *Arigomphus villosipes* (Unicorn Clubtail), *A. furcifer* (Lilypad Clubtail), *Gomphus quadricolor* (Rapids Clubtail), *Lanthus vernalis* (Southern Pygmy Clubtail), and *Progomphus obscurus* (Common Sanddragon), among others.

Our primary lodging in Fryeburg is Punkin Valley Restaurant and Motel (<http://www.punkinvalley.com/> or 207-647-2784). The room rate is \$49.95 plus tax per night.



Bronco Quick in Maine. Photo by Bryan Pfeiffer.



Male *Nebalennia gracilis* (Sphagnum Sprite). Photo by Bryan Pfeiffer

Backup lodging includes Jockey Cap Motel (<http://www.quinnsjockeycap.com/>) and Grady's West Shore Motel in Bridgton (<http://www.megalink.net/~gradywst/index.htm>).

Post-Meeting Field Excursion

The base for post-meeting activities will be Jackman, Maine, which is 162 miles from Portland and 129 miles from Orono. Our habitat here is somewhat like that of Orono, but we will have chances for *Coenagrion interrogatum* (Subarctic Bluet) (for the ambitious among you), *Ophiogomphus colubrinus* (Boreal Snaketail), another shot at *Somatochlora brevicincta* (Quebec Emerald) and perhaps *Leucorrhinia patricia* (Canada Whiteface), among other boreal and peatland specialties. We will most likely head for Jackman either Sunday evening, 27 June, or early Monday morning, 28 June, and stay in the area for a few days.

Great Lakes Odonata Meeting

Bob Glotzhober <bglotzhober@ohiohistory.org>

Friday, 9 July through Sunday, 11 July will be the dates for this year's Great Lakes Odonata Meeting (GLOM) and it will take place in central Ohio. The meeting will begin on Friday morning at 9:30 AM for those that can make it that day. Friday night is the official launching, with a cookout of shish kabobs and roast corn at the Cedar Ridge Lodge at Battelle-Darby Metro Park. Following the meal will be a series of presentations by anyone attending the GLOM. If you are interested in giving a talk, contact Erik Pilgrim at <Pilgrim.Erik@epamail.epa.gov> or by phone at 513-569-7797 to reserve a place on the evening's agenda. A brief OOS business meeting will be sandwiched between the talks. Saturday will proceed with a variety of field trips during the day (see below). Saturday evening will be either free

Our primary base of operations will be the Hillcrest Motel (<http://www.hillcrestmotel-jackman.com/index.html> or 866-965-3713). Rates are \$50 for one person, \$70 for two, and \$10 for each additional person. Secondary (more expensive lodging) is at Bishops Country Inn at a price of \$84.95 per night plus tax for one or two people (<http://www.bishopsmotel.com/> or 888-991-7669).

Despite being the meeting's main organizer, I'll be on the road and in the field between March and April with limited contact with the rest of the world. Other meeting organizers include: Mike Blust (BlustM@greenmtn.edu), Pam Hunt (PHunt@NHAudubon.org), Ed Lam (azurebluet@aol.com), Blair Nikula (odenews@odenews.org), Bronco Quick (broncoq@midmaine.com) and Michael Veit (mveit@academy.edu). 

2010 Southeast Regional Meeting

Jerrell J. Daigle <jdaigle@nettally.com>

The 2010 Southeast Regional Meeting will be held 8–10 July in Panama City, Florida. The hosts will be Ed and Lisa Keppner, and Jerrell J. Daigle. We will be surveying management lands and other sites for notable species like *Libellula jesseana* (Purple Skimmer), *Micrathyria* spp., and *Progomphus bellei* (Belle's Sanddragon). Our base motel has not been selected yet. Possible choices include Super 8 and Microtel. If you have any questions, please let me know. See you there!

time or a twilight hunt for Shadowdragons (*Neurocordulia*). Sunday's agenda will include a choice of repeat trips on the Big and Little Darby, or jaunts further afield to Clear Creek in the Hocking Hills or Cedar Bog Nature Preserve. More details on the field trips and registration forms (required) are on the Ohio Odonata Society's web site maintained by Dave McShaffrey at <<http://www.marietta.edu/~odonata/index.html>> or contact Bob Glotzhober at <bglotzhober@ohiohistory.org> or 614-298-2054.

Registration information (required), motel information, contact information, species lists and much more can be found on the Ohio Odonata Society web site at: <<http://www.marietta.edu/~odonata/index.html>>. 

Rob Cannings Receives National Award from Canadian Museum Network

Dr. Robert Cannings, a respected scientist who has devoted his career to the study of entomology (insects), is the distinguished recipient this year of the Bruce Naylor Award. This national award, presented by the Alliance of Natural History Museums of Canada (ANHMC), recognizes exceptional contributions to the study of museum-based natural history in Canada.

Dr. Cannings' contributions as a biologist go back decades, from his early days as a naturalist and nature interpreter, to his 29 years as Curator of Entomology at the Royal BC Museum (RBCM) in Victoria. He has authored several books, published more than 100 peer-reviewed scientific articles and written over 100 popular articles. Under his curatorship, the RBCM's entomology collection has grown from a few thousand specimens to the present day collection of over 250,000. He has also written text for, and contributed to the planning of, a wide range of museum exhibits.

While he publishes on many kinds of insects, his research focuses on the diversity and evolution of dragonflies and robber flies. Books that he has authored or co-authored include *The Dragonflies of British Columbia* (1977), *The World of Fresh Water* (1998), *Introducing the Dragonflies of British Columbia and the Yukon* (2002) and *The Systematics of Lasiopogon (Diptera: Asilidae)* (2002).

He joined forces with his brothers, biologists Sydney and Richard, to produce *Birds of the Okanagan Valley* (1987), and his artistic talents were put to use to illustrate the White-headed Woodpeckers on the book's cover.

For many years he has served on the executive council of the Entomological Society of British Columbia and was editor of the ESBC newsletter BOREUS (which he started in 1981) until 1991. He is a member of the Arthropod Subcommittee of COSEWIC (Committee on the Status of Endangered Wildlife in Canada) and the British Columbia Invertebrate Recovery Team. He has also been active on the Scientific Committee of the Biological Survey of Canada (Terrestrial Arthropods)

"The thing that I've always tried to do is be broad in my interests, rather than always simply focusing on particular research and collections projects," says Dr. Cannings. "I've tried to be a bit of everything. I like to think this award recognizes that versatility."



Dr. Robert Cannings (center) receiving the Bruce Naylor Award

Periodically he teaches at the University of Victoria and has brought fourth-year students into the RBCM's labs to give them direct exposure to the kind of work done by museum biologists.

"I have never known anyone so well-rounded and devoted", says Mr. Kelly Sendall, Manager of Natural History at Royal BC Museum. "In my mind he is the epitome of what a curator in a natural history museum should be."

Cannings grew up in Penticton in the Okanagan Valley. His father was the photographer for the Agriculture Canada research station in Summerland. The young Cannings frequently hung around with the scientists. An amateur biologist, his father often took the family to the Penticton museum, and at times they would donate things they found in nature to the museum.

"I was a museum kid long before I ever came here," says Cannings. "Natural history and collecting were part of our life."

Cannings recalls that his family had a long shelf of natural history books, including handbooks produced by the RBCM (formerly the British Columbia Provincial Museum). Even at a young age, one of his ambitions was to write a museum handbook. His goal was realized with *The Dragonflies of British Columbia*, which was published before he joined the museum in 1980.

In 2008, the Okanagan University College recognized Dr. Cannings and his two brothers as Honorary Fellows for their contributions to the appreciation of nature through

their writings, professional activities and dedication.

The Bruce Naylor Award is named for the former director of the Royal Tyrrell Museum of Palaeontology. Deceased in 2007, Dr. Naylor had also served as president of the ANHMC. The award will be presented at a special reception of the ANHMC on October 27, 2009 in The Speaker's Reception Room in the Centre Block of Parliament Hill, Ottawa.

Created in 2003, the ANHMC now has 16 members from coast to coast. Its goal is to increase visibility of Canada's natural history museums, which are responsible for preserving precious collections of millions of specimens that are the record of our natural heritage. The network strives to build capacity in the areas of scientific research, collections development and education about the natural environment, for the greater benefit of all Canadians. 

Dragonfly Survey Effort Project: C'mon and Join the Fun!

Jason Bried <jbried@albanypinebush.org>

We odonatists can agree that repeat visits are needed to document a "representative spectrum of Odonata species" (Schmidt 1985) at a site—one visit will not yield all the species present over the flight season. Less clear is how frequently to survey and how long each survey should last. One way to address the problem is to conduct a relatively intense data collection, incrementally drop the survey occasions and shorten the survey length, and count the species and total detections remaining with each reduction of effort.

There is a project under way that takes this approach. It is open to any wetland or pond site in North America, and to anyone who is very good with adult dragonfly and damselfly identification (at least in their chosen site). The people involved are doing a great job but the project could really use more volunteers to pick up more sites.

The protocol requires a one-hour survey, preferably about once per week (some weeks can be missed) for about 15–20 weeks (or the duration of your local flight season). You are welcome to cover one site or multiple sites. Would you be interested in doing this at your favorite wetland or pond in 2010? Are you good at identifying adult odonate species in the field? If so, please shoot me an e-mail or feel free to call (518-456-0655 x1221) and we will try to fit the project to your schedule. It is fun and often surprising to see which species, and how many, turn up during repeat visits!

References

Schmidt, E. 1985. Habitat inventarization, characterization and bioindication by a "representative spectrum of Odonata species (RSO)". *Odonatologica* 14(2):127–133. 

Lestes Survival at High Temperature and Low Water

Sue and John Gregoire 5373 Fitzgerald Rd., Burdett, NY 14818 <khmo@empacc.net>

During the 2008 odonate season we observed a large number of *Libellula luctuosa* (Widow Skimmers) emerging from a very small pond on our property. It was a bit of a surprise and we took no notes or counts or measurements but vowed to enter the 2009 season considerably more prepared. As it turned out the large *Libellula* emergence phenomenon did not repeat itself, but was replaced by a remarkable effort by a number of *Lestes* larvae that survived some very inhospitable conditions.

The pond is simply a small flat depression created to catch the overflow from a series of other wildlife ponds. It rarely reaches capacity, only in times of great snowmelt and for a very short time thereafter. Most of the time it is a foot or less deep, only 9 × 30 meters or less in area and bears little vegetation. Nonetheless it seems attractive to a number

of patrolling and ovipositing dragonflies and damselflies, most likely themselves overflowing from the other neighboring ponds.

Before winter ice set in we measured the depth of this little pond at 23 cm. It froze completely during a very cold winter, and then fared poorly due to no snowmelt or spring rains. We were dismayed at the amount of water that was left in the spring.

On 1 May 2009 the depth was a mere 12 cm, with the area only 6 × 25 meters and only a single tiny clump of vegetation. Two dips into the bottom mud with a small aquarium net produced one libellulid larva.

May was a dry month with little rain, so by 21 May the

water level had dropped to 9 cm. The area was down to 5 × 25 meters with only a clump or two of emergent vegetation. Two *Gomphus spicatus* (Dusky Clubtail) emerged and there were hundreds of tiny toad tadpoles. A few painted turtles had scoped the area, evident by their tracks in the mud, but did not remain.

By early June the weather turned very warm and the water began to evaporate and shrink rapidly. Now the water was only 6.5 cm. Some tiny clumps of *Chara* and *Eleocharis* sp. provided little cover or food but the water remained clear. We assume the tadpoles kept the algae from blooming.

On 5 June a few *Lestes* emerged on one of the short *Eleocharis*. Others were visible in the clear shallow water, milling around the clumps of *Chara* and *Eleocharis*. There were larvae queuing up at the rare emergence sites, jostling for position, so extra support was provided (by human hand) in the form of last years Goldenrod stems placed in the mud near the margin. This was well received, and by 8 June a total of 22 exuviae were collected. The heat continued.

On 9 June the water was only 4 cm, with an area of just 23 × 4.5 meters. Air temperature was stifling. Water temperature on this day was measured at 92° F. Nine *Lestes* emerged.

We thought the remaining larvae would surely perish; however they continued to emerge for the next seven days. Slightly cooler weather and a few sprinkles prevented the water level from falling any more than on that day. The final total was 76 *Lestes* of three species (*rectangularis* or Slender [64], *unguiculatus* or Lyre-tipped [11] and *congener* or Spotted [1]). The majority emerged *after* the hottest day, and no dead larvae were ever observed.

Odonate larvae may seem well equipped to survive high temperatures but most studies have been conducted with Anisoptera, many of which burrow and aestivate or seek shelter within vegetation or debris. These more delicate zygopteran larvae had no such means or refugia and were



Numerous *Lestes* emerging on a stick surrounded by American Toad tadpoles

subjected to baking conditions for several days running yet prevailed for another week.

As an aside, one libellulid did indeed survive and emerge, and all the toad tadpoles completed their development into tiny toadlets crowding the waters edge. 

***Cordulegaster maculata* (Twin-spotted Spiketail) Nymphs in a Natural Drainage Lake in Wisconsin**

Bob DuBois, Department of Natural Resources, Superior, WI <robert.dubois@wisconsin.gov>

On 5 June 2009 I was dip netting for nymphs in Upper St. Croix Lake, Douglas County, Wisconsin, and collected two nymphs of *Cordulegaster maculata*. The nymphs, both males, were F-2 and F-3 instars. I reared the F-2 nymph through to emergence (16 January 2010). The adult was at

the small end of the size range of the species (64 mm in total length).

Upper St. Croix Lake is a softwater, natural drainage lake that forms the headwaters of the St. Croix River in north-

western Wisconsin. It is a fairly large, clear lake of 346 surface hectares. Bottom substrates are predominantly sand and gravel with small, scattered areas of muck (Sather & Johannes, 1973). The lake has a typical coolwater fishery for northern Wisconsin that includes black basses, bluegill, walleye, yellow perch, and northern pike. There are eight significant streams that empty into the lake, all of which likely contain populations of *C. maculata*. The area sampled was along the sandy edge of a swimming beach at Lucius Woods County Park in the Village of Solon Springs. The nymphs were collected from a sandy area in about 35 cm of water. The sampling site was about 120 m south of the nearest creek mouth (Park Creek).

To my knowledge, *Cordulegaster maculata* appears to be an obligate forested-stream species. Although some lotic odonates are also found along windswept shorelines of large lakes, I have not found any published reference to *C. maculata* inhabiting lakes. I suspect that the nymphs I collected originated from Park Creek and that oviposition

did not occur in the lake proper, but obviously this is just a guess. Systematic exuvial searches along various shoreline areas of the lake during spring might support or refute this notion. I would be interested in knowing if others have found *C. maculata* (or other species of *Cordulegaster*) in lake or flowage areas not in the immediate vicinity of a creek mouth.

Literature cited

Sather, L.M. and S.I. Johannes. 1973. Surface water resources of Douglas County. Wisconsin Department of Natural Resources. Madison. 

New Listserve—Colorado Odes

http://www.groups.yahoo.com/groups/Co_Odes/

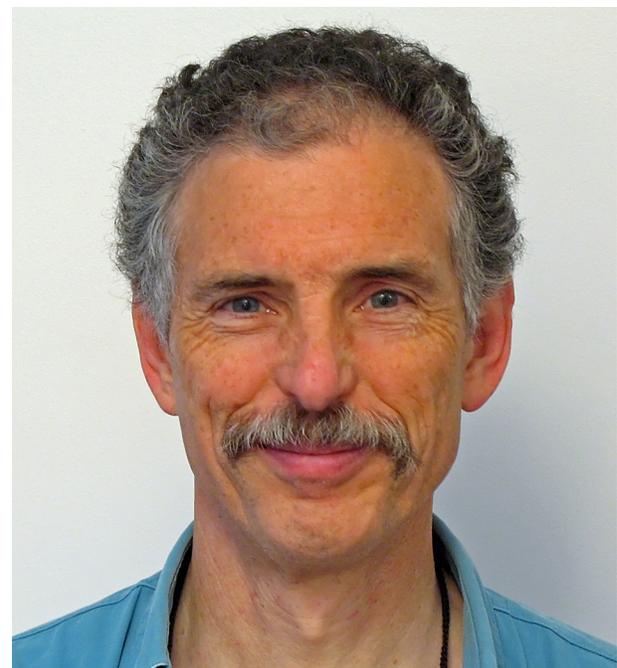
Rex Kenner (1950–2010)

Rob Cannings, Curator of Entomology, Royal British Columbia Museum, 675 Belleville Street, Victoria, BC V8W 9W2 <rcannings@royalbcmuseum.bc.ca>

Rex Donal Kenner, PhD—entomologist, vertebrate zoologist, chemist, teacher, conservationist—died of an aortic aneurysm in Vancouver, British Columbia on 23 January 2009. He was 59 years old.

Rex was born on 14 November 1950 in Chicago, Illinois, but grew up in Natchitoches, Louisiana, where his family had moved when he was 9 months old. In 1971 he received a Bachelor of Science degree from Northwestern State University of Louisiana and in 1976 earned his doctorate in physical chemistry from Michigan State University. Rex first came to Vancouver as a post-doctoral fellow in the Chemistry Department at the University of BC (1977–1980) and remained there until 1983 as a research associate. He met his future wife, Gail, in 1978 in Vancouver and they married there in 1980. From 1983 to 1988 Rex was a research chemist at the Ruhr-Universität Bochum in Bochum, Germany and, between 1990 and 1993, he was a researcher at CSIRO in Australia. He and Gail then returned to Vancouver, where Rex focused his life on biology and the natural history of the region. As a boy, Rex had collected insects until he started university; this interest was reawakened when he began watching dragonflies during a Vancouver Natural History Society outing in 1994.

Although Rex had an academic science background, he was a self-taught entomologist and vertebrate biologist



Rex Kenner, 2008. Photo by Gail Kenner

who spent much of his time studying insects and teaching others about them. His favourite insects were the aquatic groups, and he concentrated on the taxonomy and distribution of dragonflies, water bugs and beetles. Rex was

a strong supporter of the Entomological Society of BC, presented papers at our meetings, and published often in the *Journal* and in *BOREUS*. Most of his entomological publications are listed below. Periodically, he also undertook contracts associated with aquatic entomology, such as ecological impact studies; he was an associate of Robertson Environmental Services in Langley.

Most of Rex's recent publications were on the Haliplidae (crawling water beetles). He had unearthed an undescribed genus of halipid beetle from China (he announced the find at the 2006 ESBC annual meeting) and was preparing the description with Rob Roughley, water beetle expert at the University of Manitoba. In the meantime, Rex found another new haliplid species and, when Rob suddenly died of a stroke in November 2009, Rex decided to name it after him. But now, with Rex's death two months later, these unfinished papers are sad reminders of our double loss—two of Canada's water beetle experts suddenly gone in their prime. When he died, Rex was also studying, with several co-authors, the bird lice of BC. Some of the material was amassed long ago by George Spencer; some was collected by Rex himself. He was excited about the project, not only for its scientific value, but because it closely con-

nected two of his great loves—insects and birds.

Since 1995 Rex volunteered up to five days a week in the Spencer Entomological Collection at the University of BC. There, his accomplishments included labeling and sorting the 15,000 Diptera specimens of the Foxlee Collection, reorganizing and databasing the Odonata collection, and identifying and curating several families of aquatic beetles. In addition, as part of various research projects, he identified, curated and databased material from many other collections, including the Royal BC Museum (Victoria), Strickland Museum (University of Alberta), Oregon State Arthropod Collection (Oregon State University), Essig Museum (University of California, Berkeley), California Academy of Sciences (San Francisco), Royal Ontario Museum (Toronto), J. B. Wallis Museum (University of Manitoba), Monte L. Bean Life Science Museum (Brigham Young University) and the James Entomological Museum (Washington State University). He regularly donated aquatic insect specimens to the Spencer Collection and the Royal BC Museum. In recognition of his superb volunteer work, Rex was appointed honorary Assistant Curator of the Spencer Entomology Collection. The Entomological Society of BC nominated Rex

for the national Norman Criddle Award, presented by the Entomological Society of Canada for extraordinary contributions to entomology by an amateur. Rex received the award in Kelowna in November 2003.



Rex Kenner collecting aquatic insects at Jericho Park, Vancouver. Photo by Gail Kenner.

Since 2001 Rex's main work was as Curator of the Cowan Vertebrate Museum at the University of BC; he had volunteered in that collection since 1993. Although the position was part-time until recently, Rex kept the collection going during the lean years, largely singlehandedly, putting in far more time than he was paid for. He organized and taught a keen group of volunteers to help with specimen preparation. His keen interest in both public education and the long-term health of the collections made him invaluable when the idea of a public biological museum began to take form at the university. Rex served on the steering committee planning the Beaty Biodiversity Museum, and played a forceful and vital role in its creation and development, including the daunting task of moving the entire collection to its new location.

Education was a huge part of Rex's life. He was a natural teacher. His enthusiasm and

patience made him particularly effective with children, but he was loved by naturalists of all ages across the Vancouver region for his energetic, innovative education programs. His knowledge was wide-ranging. He could explain complex things in simple terms so that everyone understood, yet he maintained the highest scientific standards. Public awareness and appreciation of insects were significant activities. After developing a slide talk on dragonflies, Rex presented it to dozens of audiences, from natural history societies to seniors' groups, from wetland institutes to cultural societies. Newsletters and workshops are full of his programs on dragonflies and the importance of wetlands and aquatic life. Rex led many marsh and dragonfly programs for the Vancouver Natural History Society (now Nature Vancouver) and its Young Naturalists' Club. He published often in the Society's journal *Discovery*. In 2001, in recognition of his exceptional service, the VNHS presented Rex with its Garibaldi Award.

Rex was an instructor at Science World's summer Science Camp for teachers and was active in the Richmond Nature Park, Friends of Boundary Bay, Stanley Park Ecology Society and many other educational and conservation groups. Initially through his passion for birds, but also later through his natural history teaching, Rex was involved with the Taiwanese-Canadian Intercultural Green Club and became a prominent liaison between Taiwanese and Canadian naturalists.

Rex was a keen and committed conservationist. When an extensive environmental survey of Burns Bog was undertaken as part of the effort to preserve this extraordinary habitat, Rex was a major player in the aquatic insect component of the study. This not only involved surveys, but specimen identification, report writing and public presentations. He also helped organize aquatic insect surveys of the Terra Nova Natural Area in Richmond and Lulu Island Bog. The latter includes the Richmond Nature Park and adjacent National Defense lands, and the survey was part of a study directed at preserving the DND lands from development. In 1996 and 1997 Rex surveyed Odonata for the BC Conservation Data Centre and the Royal BC Museum in the Lower Mainland and Peace River region, respectively.

Rex Kenner was a kind, intelligent and committed man, generous of his time and knowledge. He loved the details of the world and he loved sharing them. He and his wife Gail lived modestly but well, committed to an unpretentious and positive view of life. Rex was green before green was cool; didn't drive a car, didn't own a home, didn't need a lot of stuff. He stepped lightly on the earth. We are all better for having known him.

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Duncan Cuyler Collection now in IORI/FSCA

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R. Duncan Cuyler has recently donated his entire lifetime odonata collection and library to the IORI/FSCA. Last November, Jerrell J. Daigle and I drove a Penske Truck from Gainesville to Durham, North Carolina. The next morning, we met John S. Thomas, his caretaker, at Duncan's home. With the assistance of some church helpers, we loaded four Cornell cabinets of well-curated material, a herbarium cabinet of odonates, and nine barrels of odonates, beetles, and butterflies at various stages of curation. In addition, we loaded many boxes of books from his extensive odonata and insect library plus field notes and literature.

After a brief visit with Duncan, we headed back to Gainesville for the night. The next day, Paul Skelly



and his sons, along with Earl, the DPI security guard, and Esther Mauffray helped us unload the truck and store the collection in the IORI Odonata section at DPI/FSCA. Over the next several days, the specimens were fumigated as per DPI policy.

This is a valuable addition to the FSCA/IORI collection and will be incorporated into the main collection over

the next several months. The four Lane cabinets with 61 Cornell drawers were given to the Center for Systematic Entomology which is also housed at DPI. All of Duncan's previous donations have been data based, and along with the current material, will be used in his forthcoming list of the Odonata of North Carolina. 

Damsels in Distress—or Maui Phooey

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Netta Smith and I spent almost a week on Maui, Hawaii, this winter (9–15 December 2009). We went there to take the edge off winter, after a particularly cold spell in Seattle, with great hopes of finding some of the native damselflies (*Megalagrion*).

Jerrell Daigle (Daigle, 1993) reported finding six species of this endemic genus on a visit to Maui in July 1993. As Netta had broken her ankle earlier in the fall and was still not fully recovered, we were looking forward to hunting for *Megalagrion* where streams crossed roads, not like our experience in Kauai when we hiked up and up and up on slippery trails and still didn't make it to the damselfly hotspots.

Although our main goal was to get warm, enjoy the sun, and go snorkeling as much as possible, we were also keen to get in some odonate experiences. We spent a day on the Hana Road, on the wet windward side of the island, and looked at as many streams as we could, including one at the roadside at Pua Aka'a State Park that Jerrell had described.

We found many of the streams along that road inaccessible, with bridges high above the stream and banks too steep for us to risk our lives and cameras. However, we were able to work several of them that had trails leading to them, in several cases to a plunge pool with a waterfall at its head. We never went above the first waterfall, as when there was a trail it seemed too precarious. We never saw a damselfly on that day, although we saw the endemic *Anax strenuus* (Hawaiian Darner) at several of the streams. The weather was variable but warm, and it was sunny at a few of the streams.

On another day we visited the Iao Valley, described by Jerrell as another great *Megalagrion* locality. We went to the Hawaii Nature Center and Iao Valley State Park, and again never saw a *Megalagrion*, although the stream habitats looked good. We talked to an employee at the nature

center, and he said he saw about three damselflies per year and considered them very rare there.

If several species of *Megalagrion* were common at these sites in 1993 (and these localities were also mentioned by Polhemus & Asquith, 1996), there is reason for concern because of their absence in 2009. One factor I have been unable to assess is seasonality. However, neither Polhemus and Asquith (1996) nor Daigle (2000) make any mention of seasonality. Also, of 28 collections (a species from a given locality and date) of *Megalagrion* I have from the islands, 12 are from December to March, the "winter" season, so the adult insects presumably remain active throughout the year.

Maui was in somewhat of a drought during our visit, but the streams had plenty of water. We saw crayfish and *Gambusia* (both introduced) at a number of the stream crossings, and my understanding was that both of them, as well as other fish species introduced in the lower reaches of many of the streams, could have adverse effects on *Megalagrion* populations. I wonder if they have increased and/or spread farther since Jerrell was there in 1993.

We also saw no damselflies but a very few *Ischnura ramburii* (Rambur's Forktail) at Kealia and Kanaha Ponds, where the lowland *Megalagrion xanthomelas* has been reintroduced (J.J. Daigle, pers. comm.). Kanaha Pond seems clearly to be brackish and had no odonates at all except for a few stray *Pantala flavescens* (Wandering Glider) and a single *ramburii*. Kealia Ponds furnished the best freshwater habitat we were able to find, and there were good numbers of *Anax junius* (Common Green Darner), *Orthemis ferruginea* (Roseate Skimmer), *P. flavescens*, and *Tramea lacerata* (Black Saddlebags) there, all breeding. The glider presumably reached these islands on its own. The others probably were introduced, although Donnelly (1998) pointed out an average morphological difference between Hawaiian and mainland *A. junius* that might indicate a lengthy presence in the islands.

I was surprised at the virtual absence of the three introduced damselfly species (the others are *Ischnura posita*, Fragile Forktail, and *Enallagma civile*, Familiar Bluet) that are considered widespread in the islands. I wonder if the very conspicuous *E. civile*, which I never saw on Maui, Kauai, or the Big Island, has largely disappeared from Hawaii. Or perhaps it is just very local.

Bronco Quick (pers. comm.) visited Maui in January 2007 and found *Megalagrion blackburni* at low elevations in the Waihee Valley, which we did not visit. He also found *Megalagrion calliphya* and the two endemic dragonflies *Anax strenuus* and *Nesogonia blackburni* (Hawaiian Skimmer) at higher elevations. I would ask other naturalists visiting Hawaii to check as many freshwater habitats as they can

to add further information about the current status of the odonate fauna of these islands, both the potentially expanding introduced species and the vulnerable endemic species.

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First Records of *Sympetrum vicinum* (Autumn Meadowhawk) in Montana

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Noting that *Sympetrum vicinum* (Autumn Meadowhawk) had been documented just west of Montana in Idaho (Donnelly, 2004), this meadowhawk had been on my radar as a possible new species for the state. Thus it was not too unexpected that on 15 September 2009 a discovery was made. During the period of 15–23 September 2009, I was able to document *S. vicinum* from four separate sites located in three western Montana counties. Although *S. vicinum* was not found in large numbers at any of the sites I visited last fall, I was a bit surprised to find a new species for the state to be so widespread and using such varied habitats. I'm finding that much of Montana is under-surveyed for Odonata and the absence of previous records of *S. vicinum* may be due to the lack of investigations conducted in this region late in the season.



Sympetrum vicinum (Autumn Meadowhawk), male. Bearmouth Spring Ponds, Granite Co., Montana. 15 September 2009.

The first sightings of *Sympetrum vicinum* (OC #315419) came on 15 September 2009 while surveying a man-made pond complex west of Drummond in Granite County, Montana. I was joined this day by friend and fellow dragonfly enthusiast, Bob Martinka. That afternoon I captured a male *Sympetrum* which was unfamiliar to me. Bob and I looked the specimen over and we both agreed that it may very well be an Autumn Meadowhawk. Not wanting to cry "State Record" yet, I photographed and collected the specimen for future examination. Deciding to call it a day, we headed back to the vehicles and while saying our good-

byes, Bob netted a female *Sympetrum* near the tailgate of my truck. One look at the large, scoop-shaped subgenital plate was all we needed to proclaim its identity, as well as confirm that of the male caught previously. More photos were taken and the specimen was collected. Confident that we had just documented the first record of *S. vicinum* in the state of Montana, I stayed on for another hour, but was unable to locate any more in the area that day.

The following week I spent two days collecting in Sanders and Lincoln Counties located in northwest Montana. I

was joined on this outing by my father, Steve Kohler. His main focus is Lepidoptera, but he has enjoyed chasing a few Odes with me the last few years. Three female and one male *S. vicinum* were collected from three separate locations on this trip.

On the morning of 22 September 2009 my father and I visited a site near the Little Bitterroot River north of Hot Springs in Sanders County, Montana. Here, I netted one female *S. vicinum* (OC #315433) about 100 meters from the river in a patch of rabbitbrush. That afternoon we visited Lilypad Lake, southeast of Libby in Lincoln County, Montana. Shortly after our arrival, another female *S. vicinum* was captured by my father.

The following day, 23 September 2009, we visited Kilbrennan Lake which is north of Troy in Lincoln County,

Montana. Near the outlet of this lake we were able to capture one pair of *S. vicinum* (OC #315442) in copula and observed one other male defending his favorite perch.

Based on my findings from last fall, it would appear that *S. vicinum* is fairly widespread throughout the western part of Montana, and further investigations should find the species in several other western counties.

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Odonates of Wright Patman Lake in Northeast Texas

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Wright Patman Lake is nine miles southwest of Texarkana on the Sulphur River in Texas. The Wright Patman Dam straddles the Bowie–Cass county line just west of US Highway 59. Habitat includes the lake and shore, mixed pine and hardwood forests, parks, grasslands, lake tributaries, and small ponds. Access is obtained at the dam and other US Army Corps of Engineer properties, and at Atlanta State Park on the south side of the lake. The lake extends on the west end to around US Highway 67.

Although I had spent time at the lake I began a more intensive study of the odonates in 2008 and obtained access to all Corps of Engineer properties. High lake levels restricted access to several of the sites until late May. In 2009 I continued the study, although high lake levels again restricted access.

In addition to the 32 species previously found at Wright Patman Lake, 19 new odonate species were added to the list for a total of 51 species. In 2009, six more species were added for a total of 57 species. It is interesting that some species are found one year, but not the next.

Species Found

Species found at Wright Patman Lake are listed below. New species for 2008 are marked with an asterisk (*). New species for 2009 are marked with a double asterisk (**). Most common were Prince Baskettail, Eastern Pondhawk, Slaty Skimmer, Blue Dasher, Eastern Amberwing, and Common Whitetail.

Damselflies

- Ebony Jewelwing (*Calopteryx maculata*)
- Southern Spreadwing (*Lestes australis*)
- Swamp Spreadwing (*Lestes vigilax*)
- * Blue-fronted Dancer (*Argia apicalis*)
- Powdered Dancer (*Argia moesta*)
- * Azure Bluet (*Enallagma aspersum*)
- Familiar Bluet (*Enallagma civile*)
- * Skimming Bluet (*Enallagma geminatum*)
- Orange Bluet (*Enallagma signatum*)
- Vesper Bluet (*Enallagma vesperum*)
- Citrine Forktail (*Ischnura hastata*)
- Fragile Forktail (*Ischnura posita*)
- Rambur's Forktail (*Ischnura ramburii*)

Dragonflies

- * Gray Petaltail (*Tachopteryx thoreyi*)
- Common Green Darner (*Anax junius*)
- ** Springtime Darner (*Basiaeschna janata*)
- * Swamp Darner (*Epiaeschna heros*)
- * Cyrano Darner (*Nasiaeschna pentacantha*)
- Jade Clubtail (*Arigomphus submedianus*)
- * Flag-tailed Spinyleg (*Dromogomphus spoliatus*)
- ** Cocoa Clubtail (*Gomphus hybridus*)
- Pronghorn Clubtail (*Gomphus graslinellus*)
- ** Ashy Clubtail (*Gomphus lividus*)
- * Oklahoma Clubtail (*Gomphus oklahomensis*)
- ** Common Sanddragon (*Progomphus obscurus*)
- * Arrowhead Spiketail (*Cordulegaster obliqua*)
- ** Stream Cruiser (*Didymops transversa*)
- ** Royal River Cruiser (*Macromia taeniolata*)
- Prince Baskettail (*Epithea princeps*)
- * Slender Baskettail (*Epithea costalis*)
- * Common Baskettail (*Epithea cynosura*)

- * Mantled Baskettail (*Epithea semiaquea*)
- Four-spotted Pennant (*Brachymesia gravida*)
- * Calico Pennant (*Celithemis elisa*)
- Halloween Pennant (*Celithemis eponina*)
- Banded Pennant (*Celithemis fasciata*)
- Eastern Pondhawk (*Erythemis simplicicollis*)
- * Little Blue Dragonlet (*Erythrodiplax minuscula*)
- Blue Corporal (*Ladona deplanata*)
- * Golden-winged Skimmer (*Libellula auripennis*)
- Spangled Skimmer (*Libellula cyanea*)
- Yellow-sided Skimmer (*Libellula flavida*)
- Slaty Skimmer (*Libellula incesta*)
- Widow Skimmer (*Libellula luctuosa*)
- * Twelve-spotted Skimmer (*Libellula pulchella*)
- * Painted Skimmer (*Libellula semifasciata*)
- * Great Blue Skimmer (*Libellula vibrans*)
- Roseate Skimmer (*Orthemis ferruginea*)
- Blue Dasher (*Pachydiplax longipennis*)
- Wandering Glider (*Pantala flavescens*)
- Spot-winged Glider (*Pantala hymenaea*)
- Eastern Amberwing (*Perithemis tenera*)
- Common Whitetail (*Plathemis lydia*)
- * Blue-faced Meadowhawk (*Sympetrum ambiguum*)
- Variiegated Meadowhawk (*Sympetrum corruptum*)
- Black Saddlebags (*Tamea lacerata*)
- Red Saddlebags (*Tamea onusta*)

Potential Species

Other species have been found in counties contiguous to Bowie and Cass Counties and may be found at the lake with further investigation (although some are unlikely because of habitat and rarity). These species include those found in McCurtain County Oklahoma, the Texas Counties of Red River, Morris and Marion, in Little River and Miller Counties in Arkansas, and Caddo Parish in Louisiana. These are listed below.

Damselflies

- American Rubyspot (*Hetaerina americana*)
- Elegant Spreadwing (*Lestes inaequalis*)
- Slender Spreadwing (*Lestes rectangularis*)
- Chalky Spreadwing (*Lestes sigma*)
- Seepage Dancer (*Argia bipunctulata*)
- Violet Dancer (*Argia fumipennis violacea*)
- Kiowa Dancer (*Argia immunda*)
- Aztec Dancer (*Argia nahuana*)
- Springwater Dancer (*Argia plana*)
- Blue-ringed Dancer (*Argia sedula*)
- Blue-tipped Dancer (*Argia tibialis*)
- Dusky Dancer (*Argia translata*)
- Aurora Damsel (*Chromagrion conditum*)
- Double-striped Bluet (*Enallagma basidens*)
- Attenuated Bluet (*Enallagma daeckii*)
- Turquoise Bluet (*Enallagma divagans*)
- Burgundy Bluet (*Enallagma dubium*)
- Stream Bluet (*Enallagma exsulans*)
- Slender Bluet (*Enallagma traviatum*)
- Lilypad Forktail (*Ischnura kellicotti*)

Dragonflies

- Comet Darner (*Anax longipes*)
- Fawn Darner (*Boyeria vinosa*)
- Regal Darner (*Coryphaeschna ingens*)
- Harlequin Darner (*Gomphaeschna fuscillata*)
- Blue-eyed Darner (*Rhionaeschna multicolor*)
- Two-striped Forceptail (*Aphylla williamsoni*)
- Stillwater Clubtail (*Arigomphus lentulus*)
- Bayou Clubtail (*Arigomphus maxwelli*)
- Black-shouldered Spinyleg (*Dromogomphus spinosus*)
- Eastern Ringtail (*Erpetogomphus designatus*)
- Plains Clubtail (*Gomphus externus*)
- Cobra Clubtail (*Gomphus vastus*)
- Sulphur-tipped Clubtail (*Gomphus militaris*)
- Ozark Clubtail (*Gomphus ozarkensis*)
- Dragonhunter (*Hagenius brevistylus*)
- Interior Least Clubtail (*Stylogomphus albistylus*)
- Russet-tipped Clubtail (*Stylurus plagiatus*)
- Twin-spotted Spiketail (*Cordulegaster maculata*)
- Georgia River Cruiser (*Macromia illinoensis georgina*)
- Gilded River Cruiser (*Macromia pacifica*)
- Dot-winged Baskettail (*Epithea petechialis*)
- Selys' Sundragon (*Helocordulia selysii*)
- Uhler's Sundragon (*Helocordulia uhleri*)
- Smoky Shadowdragon (*Neurocordulia molesta*)
- Cinnamon Shadowdragon (*Neurocordulia virginienensis*)
- Orange Shadowdragon (*Neurocordulia xanthosoma*)
- Mocha Emerald (*Somatochlora linearis*)
- Ozark Emerald (*Somatochlora ozarkensis*)
- Clamp-tipped Emerald (*Somatochlora tenebrosa*)
- Ornate (Faded) Pennant (*Celithemis ornata*)
- Double-ringed Pennant (*Celithemis verna*)
- Swift Setwing (*Dythemis velox*)
- Great Pondhawk (*Erythemis vesiculosa*)
- Band-winged Dragonlet (*Erythrodiplax umbrata*)
- Neon Skimmer (*Libellula croceipennis*)
- Hyacinth Glider (*Miathyria marcella*)
- Autumn Meadowhawk (*Sympetrum vicinum*)
- Evening Skimmer (*Tholymis citrina*)
- Striped Saddlebags (*Tamea calverti*)
- Carolina Saddlebags (*Tamea carolina*)

Acknowledgements

I wish to thank Mike Bransford (Onsite Manager) and Bill Smith of the US Army Corps of Engineers at the Wright Patman Lake Office for the help they gave me and for providing access to their areas around the lake. Those new areas resulted in new habitats to look through and new species. I also wish to thank David Arbour (Biologist's Aide) at Red Slough Wildlife Management Area in Oklahoma for sharing his information on sightings at Red Slough. Also, thanks to Kody Waters (Manager) of Atlanta State Park for access at that park. 

2008–2009 Summary of Odonate Research in Georgia

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The known status and distribution of Georgia Odonata has recently been summarized in Mauffray and Beaton (2005), and Beaton and Dobbs (2006, 2007, 2008). This article will summarize the additional work done in Georgia during 2008 and 2009. Georgia has 159 counties and since the end of 2007 there have been 176 new records for a total of 4439. Dobbs continues to maintain county record maps for each species at <<http://www.mamomi.net/>>.

The bulk of the new records added during the two years were collected by Lois Stacey and Dobbs. Beaton, R. Steve Krotzer and a few others contributed a small number of additional records. The drought was finally broken this year, but it will take a few years to figure out the long-term effects.

The best finds were a huge new population of *Ophiogomphus edmundo* (Edmund's Snaketail) and new state records for *Gomphus viridifrons* (Green-faced Clubtail) and *Brachymesia furcata* (Red-tailed Pennant). Some of the good Georgia records were from the Chattooga River and furnished South Carolina records also (Hill 2009). See below for details, but these additions raise the state list to 180 taxa comprising 177 species. Of these, 53 species (55 taxa) are Zygoptera and 124 species (125 taxa) are Anisoptera.

Following is a summary of interesting new records:

Calopteryx angustipennis (Appalachian Jewelwing): Found by Dobbs in Rabun County on 13 May 2008 for the ninth county and farthest east, on the edge of the species' range.

Argia bipunctulata (Seepage Dancer): Found by Beaton in Fannin County on 22 Jun 2008 for the farthest north record in the state, the eleventh county record. Hard to find in the Blue Ridge physiographic region.

Enallagma davisii (Sandhill Bluet): The fourth county record was found by Dobbs in Talbot County on 9 Apr 2008.

Ischnura kelleicotti (Lilypad Forktail): A great find above the Fall Line in Clarke County, the most northerly record in Georgia and among the most northerly inland records in the southeast. Found by Steven Holland on 27 Jul 2008.



Gomphus (Hylogomphus) viridifrons (Green-faced Clubtail).



Ophiogomphus edmundo (Edmund's Snaketail).

Aphylla williamsoni (Two-striped Forceptail): Five new county records in 2008–2009, but the significant one is Clarke County, now the second most northern state record and further sign of range expansion northward. This was also found by Holland, on 23 Aug 2008.

Dromogomphus armatus (Southeastern Spinyleg): Always a good find, an adult of this species was found in Taylor County by Rachel Cass on 19 Jul 2009 (six county records).

Gomphus (Hylogomphus) viridifrons (Green-faced Clubtail): Dobbs photographed an unknown *Hylogomphus* on the Chattooga River on 13 May 2008, suspecting it was this species, and specimens were finally vouchered by Beaton on 22 May 2008. This is a new species for both Georgia and South Carolina, and they were seen here through 15 June 2008 (Beaton).

Ophiogomphus howei (Pygmy Snaketail): Beaton collected several tiny *Ophiogomphus* exuviae along the Chattooga River in early Jun 2008. Krotzer has examined them and commented that even though they have more pronounced dorsal hooks than this species normally has they appear to match *O. howei* in every other aspect. Of course we will continue searching for adults and more exuviae at this location. This would be a new state record as well as a range extension.

Ophiogomphus incurvatus (Appalachian Snaketail): Some nymphs were collected in White County on 17 Apr 2008 by Krotzer, who reared out two males and one female. They emerged on 25 and 26 Apr; surprisingly, the adults match the description for *O. i. alleghaniensis*. This location, on the eastern side of the Appalachians, should not have this subspecies. On 13 May 2008 Dobbs found this species flying in Rabun County along the Chattooga River, and then in Sep 2008 Krotzer collected nymphs at a different site in Rabun County.

***Ophiogomphus* sp.** Some adult *Ophiogomphus* have been found in Early County in southwest Georgia since 2005, but they still haven't been assigned to any known species or subspecies based on current knowledge. It is beginning to look like they may be *Ophiogomphus australis* (Southern Snaketail), which would be a new species for the state and a range extension, but this and other scarce southern *Ophiogomphus* are still being investigated. See a web page at <<http://www.giffbeaton.com/Ophio.htm>> for more details, close-up photos of the specimens and appendages, and further discussion.

Ophiogomphus edmundo (Edmund's Snaketail): On her way back from the DSA meeting in South Carolina on 13 May 2008, Dobbs found several individuals of this species along the Chattooga River, a new site for this state-listed dragonfly. Subsequent surveys by Dobbs and Beaton showed very good numbers of this species along at least 18 miles of the river, an important new site and perhaps the largest of the few known populations in any state (only known from Georgia, North Carolina, and Tennessee, plus now South Carolina at this location). Males were easy to find all the way until almost the very end of June (29 Jun 2008, Jerrell Daigle), but females were very hard to find. A few were seen while ovipositing, mostly when resting on rocks while holding the tip of the abdomen up in the air, and one was collected by Dobbs on shoreline shrubbery on 15 Jun 2008.

Progomphus alachuensis (Tawny Sanddragon): Krotzer discovered this species in 2007 at a pond in Charlton County for the first record outside Florida, and Dobbs recently found a photo from 4 Jul 2007 that shows a sec-



Macromia margarita (Mountain River Cruiser).

ond location in Charlton County for the species. Intriguingly, the second location is along a river which also has *P. obscurus*, so it will be interesting to see how the two species interact there. The species was observed again at the pond in 2009.

Stylurus laurae (Laura's Clubtail): Found by Dobbs on 9 Aug 2008 in Rabun County for the eighth county record.

Stylurus spiniceps (Arrow Clubtail): Krotzer found nymphs of this enigmatic species in both Rabun County (new site) and in Fannin County (known site) in 2008. We have had dismal results (i.e. none!) in trying to find flying adults, but will keep trying.

Macromia alleghaniensis (Allegheny River Cruiser): On 15 Apr 2008 Krotzer collected some nymphs from Murray County for the fourth county record. One male was collected by Beaton on the Chattooga River on 15 Jun 2008, for the fifth county record for Georgia (Rabun). Several females were also found by Beaton and Dobbs that may be this species, but the specific identification of some of these female *Macromias* is tricky.

Macromia margarita (Mountain River Cruiser): One male was captured by Beaton along the Chattooga River on 31



Brachymesia furcata (Red-tailed Pennant).

May 2008, making Rabun the third Georgia county with records of this species. Females were again found later by Beaton and Dobbs that may pertain to this species.

Helocordulia selysii (Selys' Sundragon): One was photographed by Dan Vickers in Jones County on 16 Mar 2008 for the seventh county record.

Neurocordulia virginienis (Cinnamon Shadowdragon): Beaton collected adults of this species along the Chattooga River on 14 Jun 2008 for the fifth county record. Many exuviae were also collected at the same location that didn't seem typical for this species. When examined by Krotzer he noted that, although dorsal knobs on abdominal segments 7–9 were bigger and more erect than is normal for the species, they were still *virginienis*.

Brachymesia furcata (Red-tailed Pennant): One of the oddest finds of the period was a male in Clayton County, near Atlanta, on 12 Jul 2009 by Beaton. Photographs were obtained, and, in an attempt to collect one over the ensuing weeks, one male was seen again through 20 Jul; on 20 Jul a female was seen ovipositing (all at the same location, a settling pond at a wastewater treatment site). To have at least two individuals of this species so far out of range is a little mind-boggling, and we will watch this area in 2010 to see how many, if any, are there. Almost as shocking was another male photographed by Dennis Paulson on 11 Jul 2009 in the Florida panhandle; with two such records north of the normal range without any weather to explain it, some sort of movement from their south Florida stronghold seems to be afoot.

Celithemis berthae (Red-veined Pennant): Dobbs found this species in Towns County in 2009, joining previous

records in Rabun and Stephens for records from north Georgia, where it is rarely found and the true status poorly known.

Celithemis ornata (Ornate Pennant): An excellent photo was made of this species in Towns County on 30 Aug 2008 by Dobbs. This record from the Blue Ridge is the only record we have above the Fall Line!

Sympetrum corruptum (Variegated Meadowhawk): One very surprising record was made on 16 Apr 2008 when Beaton found and photographed one near the top of Kennesaw Mountain in Cobb County near Atlanta, the farthest north in the state and the only spring record (ninth overall).

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The authors thank Steve Krotzer for reviewing an early draft of this article. 

Nick and Ailsa Donnelly Fellowship for 2010

DSA offers assistance with travel of presenters to DSA meetings. The fellowship is open to anyone presenting a talk or poster at the DSA annual meeting, but preference will be given to individuals from outside the United States presenting a talk who would otherwise not be able to attend due to financial constraints. Typically the fellowship will be in the amount of \$1000, but ultimate discretion is given to the Executive Council. Applications are now being accepted for the 2010 Meeting in Orono, Maine. If you would like to apply, please send an e-mail to John Abbott, <jcabbott@mail.utexas.edu>, with the title and abstract of your talk or poster, a brief statement indicating your financial need, and a CV or resume. The deadline for applications is 1 May 2010.

Yonkers Odonates

Walter Chadwick, Yonkers, New York <mrcnaturally@optonline.net>

Yonkers with a population of over 400,000 is the fourth most populous city in New York State and the largest city in Westchester County. It has a number of open spaces with a variety of habitats such as rivers, marshes, lakes, meadows and forests. In 2009 the Yonkers sites where I searched for odonates were Lenoir Nature Preserve (1), Tibbetts Brook Park (2), and the Bronx River (3). The sites were visited throughout the flight season and at various times of the day. The majority of the observations were done as a volunteer with the New York Dragonfly and Damselfly Survey. Site 1 was visited eleven times, site 2 five times and site 3 two times.

The Bronx River has different characteristics along its length. In places it is a fast flowing, narrow, shaded river with a rocky/sandy bottom. In other places it widens, has a muddy bottom, moves slowly, and is in full sunlight. Lenoir Nature Preserve has a pond which was made to attract odonates, meadows and forest. Tibbetts Brook Park is a multi-use park with ball fields, picnic areas and a swimming pool that is being redone. Natural areas include a lake, stream, field, freshwater marsh and wooded areas.

Urban areas such as Yonkers can provide much needed habitat for wildlife. Wildlife finds welcome areas that provide food, water, shelter and space. These areas also serve to introduce people to their local wildlife which hopefully will lead to a desire to protect the wildlife.

Thanks to Ed Lam and Dennis Paulson for their help with identification.

Book Review: “Field Guide to the Dragonflies and Damselflies of New Jersey”

by Allen E. Barlow, David M. Golden, and Jim Bangma. New Jersey Department of Environmental Protection, Division of Fish and Wildlife, 2009, 285 pages (many in color), spiral bound. The price is \$36 and it can be ordered through the Conserve Wildlife New Jersey Foundation, <<http://www.conservewildlifenj.org/support/cwf/publications.html>>

Reviewed by Nick Donnelly <tdonnelly@binghamton.edu>

This attractive guide will suit the needs of beginners to the study of dragonflies and damselflies for one of our most productive states. New Jersey habitats range from southern pine forest (the “Pine Barrens” of central-southern New Jersey) to northern montane habitats (northern tier of counties), and include piedmont streams and pond in between. The total list of 182 species places this state among the most speciose in the entire United States.

Listed below are the species observed and the sites where seen.

Calopteryx maculata (Ebony Jewelwing) - 3
Lestes rectangularis (Slender Spreadwing) - 1
Argia apicalis (Blue-fronted Dancer) - 3
Argia fumipennis violacea (Variable Dancer) - 3
Enallagma aspersum (Azure Bluet) - 3
Enallagma civile (Familiar Bluet) - 1, 2, 3
Enallagma exsulans (Stream Bluet) - 3
Enallagma geminatum (Skimming Bluet) - 3
Enallagma signatum (Orange Bluet) - 3
Ischnura posita (Fragile Forktail) 1, 3
Ischnura verticalis (Eastern Forktail) - 1, 3
Aeshna umbrosa (Shadow Darner) - 1
Aeshna verticalis (Green-striped Darner) - 1
Anax junius (Common Green Darner) - 1, 2, 3
Boyeria vinosa (Fawn Darner) - 1
Erythemis simplicicollis (Eastern Pondhawk) - 1
Libellula cyanea (Spangled Skimmer) - 1
Libellula incesta (Slaty Skimmer) - 3
Libellula pulchella (Twelve-spotted Skimmer) - 1, 2, 3
Pachydiplax longipennis (Blue Dasher) - 1, 2, 3
Pantala hymenaea (Spot-winged Glider) - 1
Perithemis tenera (Eastern Amberwing) - 2, 3
Plathemis lydia (Common Whitetail) - 1, 2, 3
Sympetrum obtrusum (White-faced Meadowhawk) - 1, 2
Sympetrum rubicundulum (Ruby Meadowhawk) - 1
Sympetrum semicinctum (Band-winged Meadowhawk) - 2
Sympetrum vicinum (Autumn Meadowhawk) - 3
Tramea lacerata (Black Saddlebags) - 1, 2



America". Until well after World War II these provided almost all the information available to new dragonfly enthusiasts in North America. Is it any wonder that as late as 1950 there were slightly more than a dozen people in all of North America with a serious interest in these fascinating insects?

The first guide specifically aimed at beginners was Ginger Carpenters' lovely 1991 "Dragonflies and Damselflies of Cape Cod". Her book triggered a surge of beautifully presented regional field guides, which, in turn, has attracted a growing legion of enthusiasts now numbering in the many hundreds.

This New Jersey guide now fills an important gap: thorough coverage of the heart of the Middle Atlantic states. It will be very useful from Maryland to southern New England, and west at least through Pennsylvania and New York. The guide is arranged in three parts. The first, and shortest, part is introductory and covers study techniques and basic morphology. The second, and longest, part covers the description, habits, habitat of each New Jersey species. The individual accounts are fairly exhaustive, including description, statement of abundance, similar species, where and when to find them, behavior, and overall range. For a few confusing groups there are black and white illustrations of body parts necessary for identification. The third section consists of very good color illustrations of each species, with a county-level range map for New Jersey. These illustrations are all photos, and I think the printing has been faithful to the colors.

All the information that one needs for identification is here. Users of this book will have to consult two

sections (second and third) more or less simultaneously while looking at the descriptions and the color illustrations simultaneously. My only real criticism is that for the pesky group of three meadowhawk species (*Sympetrum obtrusum*, *rubicundulum*, and *internum*), which bedevil all beginners, readers are told to examine the hamules, but there are no illustrations provided.

If you live in the Middle Atlantic states, or even simply in the Northeast, you should have this book. 

A Call for Papers for BAO

The Bulletin of American Odonatology is in need of manuscript submissions. It has been one year since the last issue of BAO appeared (vol. 11, no. 1), in case you haven't kept track. That issue contained six relatively short contributions. I now have two short manuscripts in the queue and two other possible manuscripts not yet submitted, but that is not enough to put out an issue. If you have a manuscript in preparation, please contact John Abbott (Editor in Chief) or myself and let us know your timetable.

If BAO is to continue to be a vehicle for timely reporting of research results on the Odonata of the New World, you are the ones who can make it happen. We can't publish manuscripts we don't receive.

Ken Tennessen <ktennessen@centurytel.net>, Editor, BAO

ARGIA and BAO Submission Guidelines

Digital submissions of all materials (via e-mail or CD) are vastly preferred to hardcopy. If digital submissions are not possible, contact the Editor before sending anything. Material for ARGIA must be sent directly to John C. Abbott, Section of Integrative Biology, C0930, University of Texas, Austin TX, USA 78712, <jcabbott@mail.utexas.edu>; material for BAO must be sent to Ken Tennessen, P.O. Box 585, Wautoma, WI, USA 54982, <ktennessen@centurytel.net>.

Articles

All articles and notes are preferably submitted in Word or Rich Text Format, without any figures or tables, or their captions, embedded. Only minimal formatting to facilitate review is needed—single column with paragraph returns and bold/italic type where necessary. Include captions for all figures and tables in a separate document.

Begin the article with title, author name(s), and contact information (especially e-mail) with a line between each. The article or note should follow this information. Paragraphs should be separated by a line and the first line should not be indented. Where possible always refer to the scientific name of a species followed by its official common name in parentheses.

Figures

Submit figures individually as separate files, named so that each can be easily identified and matched with its caption. Requirements vary depending on the type of graphic.

Photographs and other complex (continuous tone) raster graphics should be submitted as TIFF (preferred) or JPEG files with a minimum of 300 ppi at the intended print size. If unsure about the final print size, keep in mind that over-sized graphics can be scaled down without loss of quality, but they cannot be scaled up without loss of quality. The printable area of a page of ARGIA or BAO is 6.5 × 9.0 inches, so no graphics will exceed these dimensions. Do not add any graphic features such as text, arrows, circles, etc. to photographs. If these are necessary, include a note to the Editor with the figure's caption, describing what is needed. The editorial staff will crop, scale, sample, and enhance photographs as deemed necessary and will add graphics requested by the author.

Charts, graphs, diagrams, and other vector graphics (e.g. computer-drawn maps) are best submitted in Illustrator format or EPS. If this is not possible, then submit as raster graphics (PNG or TIFF) with a minimum of 600 ppi at the intended print size. You may be asked to provide the raw data for charts and graphs if submitted graphics are deemed to be unsatisfactory. When charts and graphs are generated in Excel, please submit the Excel document with each chart or graph on a separate sheet and each sheet named appropriately (e.g. "Fig. 1", "Fig. 2", etc.)

Tables

Tables may be submitted as Word documents or Excel spreadsheets. If Excel is used, place each table on a separate sheet and name each sheet appropriately (e.g. "Table 1", "Table 2", etc.)

The Dragonfly Society Of The Americas

Business address: c/o John Abbott, Section of Integrative Biology, C0930, University of Texas, Austin TX, USA 78712

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Journals Published By The Society

ARGIA, the quarterly news journal of the DSA, is devoted to non-technical papers and news items relating to nearly every aspect of the study of Odonata and the people who are interested in them. The editor especially welcomes reports of studies in progress, news of forthcoming meetings, commentaries on species, habitat conservation, noteworthy occurrences, personal news items, accounts of meetings and collecting trips, and reviews of technical and non-technical publications. Membership in DSA includes a subscription to ARGIA.

Bulletin Of American Odonatology is devoted to studies of Odonata of the New World. This journal considers a wide range of topics for publication, including faunal synopses, behavioral studies, ecological studies, etc. The BAO publishes taxonomic studies but will not consider the publication of new names at any taxonomic level.

Membership in the Dragonfly Society of the Americas

Membership in the DSA is open to any person in any country and includes a subscription to ARGIA. Dues for individuals in the US, Canada, or Latin America are \$20 us for regular membership and \$25 us for institutions or contributing membership, payable annually on or before 1 March of membership year. Dues for members in the Old World are \$30 us. Dues for all who choose to receive ARGIA in PDF form are \$15. The Bulletin Of American Odonatology is available by a separate subscription at \$20 us for North Americans and \$25 us for non-North Americans and institutions. Membership dues and BAO subscription fees should be mailed to Jerrell Daigle, 2067 Little River Lane, Tallahassee, FL, USA 32311. More information on joining DSA and subscribing to BAO may be found at <www.dragonflysocietyamericas.org/join>.

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Back cover: (upper) *Tramea lacerata* (Black Saddlebags) flying. Photographed in Lamar Co., Texas by John C. Abbott.
(lower) *Ophiogomphus mainensis* (Maine Snaketail). One of many species likely to be seen during the 2010 annual DSA meeting in Orono, Maine. Photo by Bryan Pfeiffer.

