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CHECKLIST OF THE MOTHS OF RESOURCES CENTER, HIDDEN VALLEY METROPARK, LAKE COUNTY, OHIO (1988-1992) WITH ANALYSES OF ABUNDANCE

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ABSTRACT

The biodiversity of moths at Resources Center, Hidden Valley Metropark, in Lake County, Ohio was studied by placing an ultraviolet light trap at the same location each year. The checklist tabulates five consecutive years of trapping (1988-1992) and includes 16,959 specimens representing 528 species. The study began in 1987 and continued through 1996, but only data for 1988-1992 are included here. The checklist is a historical record of the species that were present in 1988-1992 and the techniques used were designed so they can be duplicated in the future. The accumulation of species collected over time illustrates the importance of long-term studies. Species were still being added after ten years of trapping. The Shannon-Wiener Diversity Index for the moths collected in 1988-1992 is 7.19 and the Shannon-Wiener Evenness Index is 0.80. Two hundred thirty-five of the 528 species are widespread in northeast Ohio, having also been collected in Columbiana, Stark, and Ashland Counties. The less abundant species at Resources Center are not less likely to be widespread than the more abundant species at Resources Center, except for the singletons. Five species of owl moths that were collected at Resources Center are of special interest in Ohio. All specimens collected are deposited at The Cleveland Museum of Natural History, Cleveland, Ohio.

Introduction

The objective of this study was to document the population changes of native moths for ten years at several sites within the drainage basin of the Grand River in Trumbull, Ashtabula, and Lake Counties, Ohio, during gypsy moth invasion and control. This is the fifth in a series of checklists that tabulate the moths collected at each site during 1988–1992.

Over this same period, the population of the gypsy moth increased in the entire drainage basin. Pheromone trap catches of male gypsy moths increased at Resources Center from $33 \pm 7(7)$ per trap in 1987 [mean \pm standard error (number of traps)], to $69 \pm 24(4)$ in 1988, $276 \pm 35(4)$ in 1989, $105 \pm 20(4)$ in 1990, and $268 \pm 26(4)$ in 1991. Pheromone trapping was discontinued after 1991. Ultraviolet-light-trap catches of male gypsy moths also increased, from 2 in 1987, to 6 in 1988, 31 in 1989, 22 in 1990, 8 in 1991, and 35 in 1992, but noticeable defoliation was not observed at Resources Center.

The overall study provides baseline data on pre-outbreak moth diversity, as well as data on the impact of gypsy moth control agents.

Description of the Surveillance Site at Resources Center Metropark

Resources Center is composed of 15 ha of forest and is bordered by the Grand River to the south and a residential

area on the north. It is the northern section of Hidden Valley Metropark which spans the Grand River and totals 58 ha. Resources Center is situated on 0–6 m of Ashtabula Till over the Painesville Moraine (White, 1980, p. 6, Pl. 1).

The light trap at Resources Center was located in Madison Township in Lake County near the northern border of the Metropark on Palisade Drive at latitude $41^\circ 44' 31''$ N and longitude $81^\circ 03' 13''$ W (U.S. Geological Survey Thompson, Ohio, 7.5-minute quadrangle topographic map; Figure 1).

Resources Center is located approximately 21 km northeast of the National Oceanic and Atmospheric Administration weather station at Chardon. The station at Chardon measured an average temperature of 9° Celsius, an average annual precipitation of 120 cm, and an average annual snowfall of 220 cm for 1988–1992.

The composition of the canopy and understory was evaluated for the 2500 m² of forest centered on the surveillance trap (point-quarter technique, nine points; Cottam and Curtis, 1956; Cox, 1980). The area used for the evaluation, 0.25 ha, is smaller than the area from which the moths are drawn. The light was visible to human eyes at distances of 80–90 m at Resources. The importance values for the woody plants at the surveillance site at Resources Center are given in Table 1.

Hidden Valley Metropark contains five species of plants that appear on the 1994–1995 list of Rare Native

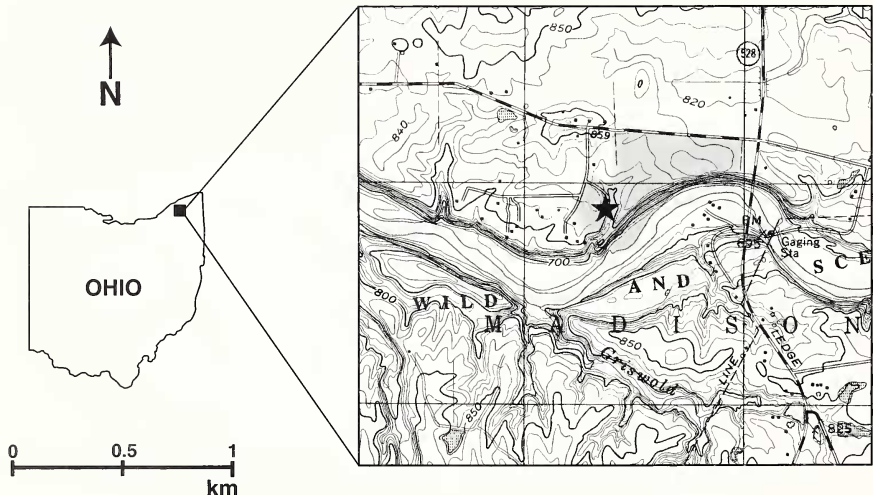


Figure 1. Map of the study area (adapted from the U.S. Geological Survey Thompson, Ohio, 7.5-minute quadrangle topographic map). Shaded area delineates Resources Center; star indicates position of surveillance trap within Hidden Valley Metropark.

Table 1. Importance values for woody plants at the surveillance site at Resources Center. The inventory included all woody stems with a circumference of five or more cm. A stem was counted as canopy only if it reached the uppermost layer of vegetation. Author citations according to Kartesz (1994); common names according to Weishaupt (1971).

Woody Plant Species		Canopy	Understory
Ash	<i>Fraxinus</i> spp.	39	36
Maple, sugar	<i>Acer saccharum</i> Marsh.	32	86
Tuliptree	<i>Liriodendron tulipifera</i> L.	32	0
Pine, eastern white	<i>Pinus strobus</i> L.	28	0
Beech, American	<i>Fagus grandifolia</i> Ehrh.	26	0
Mulberry, red	<i>Morus rubra</i> L.	22	0
Basswood	<i>Tilia americana</i> L.	21	7
Oak, northern red	<i>Quercus rubra</i> L.	18	0
Hickory, shagbark	<i>Carya ovata</i> (Mill.) K. Koch	16	0
Hickory, bitternut	<i>Carya cordiformis</i> (Wang.) K. Koch	15	7
Hickory, mockernut	<i>Carya alba</i> (L.) Nutt. ex Ell.	15	0
Buckeye, Ohio	<i>Aesculus glabra</i> Willd.	10	0
Hemlock, eastern	<i>Tsuga canadensis</i> (L.) Carr.	7	85
Spruce, white	<i>Picea glauca</i> (Moench) Voss	7	10
Hop Hornbeam, eastern	<i>Ostrya virginiana</i> (Mill.) K. Koch	7	0
Walnut, black	<i>Juglans nigra</i> L.	7	0
Dogwood, flowering	<i>Cornus florida</i> L.	0	17
Spicebush	<i>Lindera benzoin</i> (L.) Blume	0	17
Lilac	<i>Syringa vulgaris</i> L.	0	12
Apple, domesticated	<i>Malus pumila</i> Miller	0	7
Grape, summer	<i>Vitis aestivalis</i> Michx.	0	7
Cedar	<i>Thuja occidentalis</i> L.	0	7

Ohio Plants (Quinn, 1995): one endangered plant, large-leaved mountain rice *Oryzopsis asperifolia* Michx.; and four potentially threatened plants, closed gentian *Gentiana clausa* Raf., turk's-cap lily *Lilium superbum* L., sweet-scented indian plantain *Cacalia suaveolens* L., and Canadian buffalo-berry *Shepherdia canadensis* (L.) Nutt. (author citations according to Kartesz, 1994). These species were selected from a larger list of Resources species on deposit in the Herbarium at The Cleveland Museum of Natural History.

Surveillance Techniques

One Ellisco®-type ultraviolet light trap (15 watt, BL) was operated at the same location each year, usually from late May through September. The light was controlled by a timer from 7 p.m. to 8 a.m., eastern daylight time. The trap was set up before 7 p.m. the evening of operation and emptied after 8 a.m. the next morning. Two killing agents, potassium cyanide and ethyl acetate, were used during each collecting period. Using both improved the condition of the moths in the catch as compared to using only one or the other. Collections were made one week apart regardless of weather. The entire catches were sorted and archived in cellophane envelopes and all data were

computerized. All the specimens collected are deposited in the Insect Collection at The Cleveland Museum of Natural History.

Results and Discussion

A total of 16,959 specimens representing 528 species were collected in 1988–1992 (Appendix). Species were identified using Covell (1984), Ferguson (1985), Forbes (1923; 1948; 1954; 1960), Holland (1922), Rings et al. (1992), and Rockburne and Lafontaine (1976). Nomenclature for the Noctuidae was updated from that used by Hodges et al. (1983) to that used by Rings et al. (1992; after Poole, 1989). Crambidae is used according to Scholtens (1996). There are 34 species that have been designated as plus-groups (+). These are species that are easily confused with closely related species; the count for a plus group may therefore include individuals from more than one species.

The accumulation of species collected over time, from 1987 to 1996, is shown in Figure 2. In 1987 (not included in this checklist), 383 species were collected, and in 1996, after ten years, the total had reached 620 (1993–1996, also not included in this checklist). Figure 2 illustrates the importance of long-term studies. One or two years of monitoring would not have been long enough to estimate moth biodiversity at Resources Center and five years would have been a minimum. The species accumulation curve was still rising after ten years of sampling. Rings and Metzler (1989) estimated that 600 to 1000 moth species may be sampled in a locality with high host plant diversity if collections are made at frequent intervals over five or more years. Our data are consistent with that assertion. It is expected that the asymptote of the curve is well above 600 species since a number of categories of moths are missing from our checklist: many fall, winter, and early spring moths may be missing because for 1989–1991, collecting was not begun until the end of May and collecting ended in September. For 1988 and 1992, collection began as early as March and continued through to November. Some species of moths are poorly sampled by light trapping. Also, many Microlepidoptera that were collected are not included because of the difficulty of identifying them.

Our checklist is a historical record of the moth species that were present in 1988–1992. The techniques were designed so that they can be duplicated in the future to document the changes in moth diversity that follow changes in land use and weather.

Relative abundances of the 528 species are shown in Figure 3. The Shannon-Wiener Diversity function was used to measure species diversity (Krebs, 1994). This index takes into account both the number of species and the manner in which the individuals are distributed among the species. A greater number of species increases the index and a more even distribution of individuals among

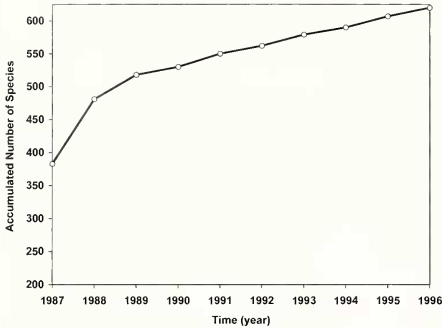


Figure 2. Plot of the annual accumulation of species collected at Resources Center, 1987–1996.

the species also increases the index. Evenness can vary from zero to one and an evenness of one indicates that all species have the same number of individuals. The Shannon-Wiener Diversity Index is 7.19 and the Shannon-Wiener Evenness Index is 0.80.

Almost nine percent of the total count was composed of lesser maple spanworm moth *Itame pustularia* (6273). The next most abundant species was sod webworm *Crambus agitatellus* (5362+) whose larva feeds on grasses and low plants. Following, in order of decreasing abundance, were: forest tent caterpillar moth *Malacosoma disstria* (7698)

whose larva feeds on trees and shrubs, especially aspens and maples; banded tussock moth *Halysidota tessellaris* (8203+) whose larva feeds on many deciduous trees; greater black-letter dart *Xestia dolosa* (10942.1+) whose larva feeds on apple, clover, maples, etc.; pale-marked angle *Semiothisa signaria* (6344+) whose larva feeds on many conifers; leafroller moth *Chloristoneura fractivittana* (3632) whose larva feeds on apples, beeches, birches, etc.; common idia *Idia aemula* (8323+) whose larva feeds on dead leaves; esther moth *Hypagyrtis esther* (6655) whose larva feeds on pines; and common eupithecia, *Eupithecia miserulata* (7474+) whose larva feeds on asters, bayberry, and various deciduous trees.

Figure 3 also indicates, with a vertical line, every species that had been collected at single locations in Columbiana County (Rings and Metzler, 1992), Stark County (Rings et al., 1987), and Ashland County (Rings and Metzler, 1989). A total of 235 Resources Center species have been collected at all four sites and can be considered to be widespread in northeast Ohio. Data on a wide variety of plants and animals show a broad positive correlation between abundance and distribution (Gaston, 1988; 1990). Three explanations have been proposed (Krebs, 1994). First, the relationship is an artifact of sampling because rarer species are less likely to be found. Second, species that use a restricted variety of resources are less likely to be abundant and widespread. And third, species that disperse more are more common and widespread. Our data (Figure 3) suggest that a positive correlation between abundance and distribution does not

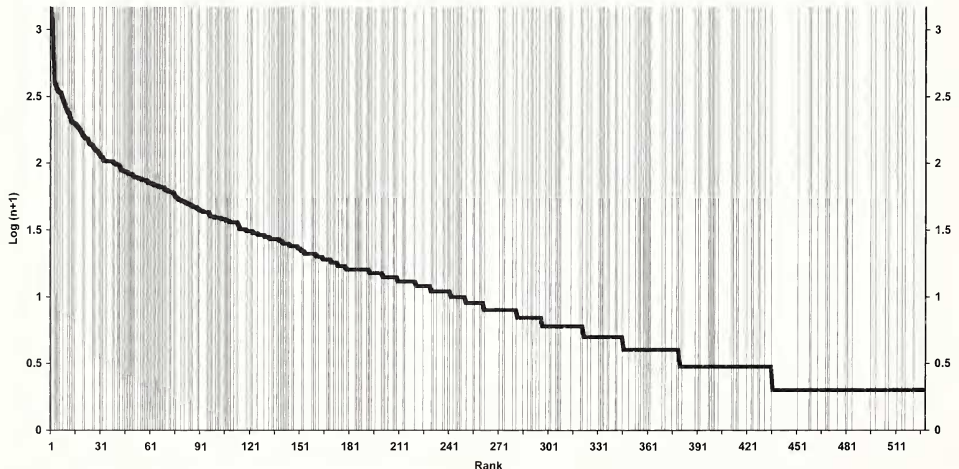


Figure 3. Plot of the logarithm of abundance versus rank. Vertical lines indicate species that are widespread in northeast Ohio. Species collected at Resources Center, 1988–1992.

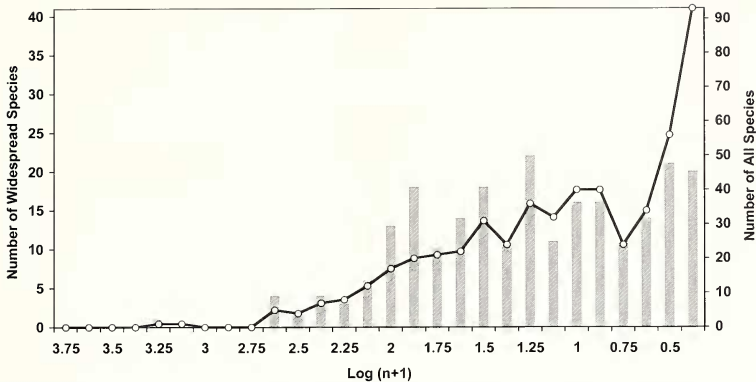


Figure 4. Correspondence between the total number of Resources Center species in an abundance interval (line, scale at right) and the number of widespread Resources Center species in the same abundance interval (bar, scale at left). Note that the y-axis scale for the widespread species is larger than the y-axis scale for the total number of species.

exist, when abundance is viewed from the perspective of abundance at Resources Center. Of the 235 Resources Center species which are widespread in northeast Ohio, 105 had total counts of 10 or fewer at Resources Center.

Overall, there is a close correspondence between the number of widespread species in an abundance interval and the total number of species (Figure 4). Only the decrease in the proportion of widespread species in the singleton interval conforms to expectation. The 93 singleton species at Resources Center include only 20 widespread species whereas the 56 doubleton species include 21 widespread species.

Five species of owl moths collected at Resources Center are listed as being of special interest in Rings et al. (1992): *Idia laurenti* (8331) whose larval host is unrecorded; gray-banded zale *Zale squamularis* (8700) whose larva feeds on pine; large looper moth *Autographa ampla* (8923) whose larva feeds on trembling alder, birch, poplars, willows, and other woody plants; *Lithophane disposita* (9892) whose larva feeds on willows; and scurfy quaker *Homorthodes fufurata* (10532) whose larva feeds on maples. One species, *Eurotis occulta* (10929) whose larva feeds on birch and willow, is listed as status unknown.

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References

- Cottam, G., and J. T. Curtis. 1956. The use of distance measures in phytosociological sampling. *Ecology*, 37:451-460.
- Covell, C. V., Jr. 1984. A Field Guide to the Moths of Eastern North America. Boston, Houghton-Mifflin. 496 p.
- Cox, G. W. 1980. Laboratory Manual of General Ecology. Fourth edition. Dubuque, Brown. 232 p.
- Ferguson, D. C. 1985. The Moths of America North of Mexico Including Greenland, Fascicle 18.1. Geometroidea: Geometridae (part). Washington, Wedge Entomological Research Foundation. 131p.
- Forbes, W. T. M. 1923-1960. Lepidoptera of New York and neighboring states. Cornell University Agricultural Experiment Station Memoir 68 (Part I, 1923), Memoir 274 (Part II, 1948), Memoir 329 (Part III, 1954) and Memoir 371 (Part IV, 1960).
- Gaston, K. J. 1988. Patterns in the local and regional dynamics of moth populations. *Oikos*, 53:49-57.
- Gaston, K. J. 1990. Patterns in the geographical ranges of species. *Biological Reviews*, 65:105-129.
- Hodges, R. W., T. Dominick, D. R. Davis, D. C. Ferguson, J. G. Franclemont, E. G. Munroe, and J. A. Powell (eds.). 1983. Check List of the Lepidoptera of America North of Mexico. London, E. W. Classey, and Washington, Wedge Entomological Research Foundation. 284 p.

- Holland, W. J. 1922. *The Moth Book*. Reprinted 1968 with updating by A. E. Brower. New York, Dover Press. 479 p.
- Kartesz, J. T. 1994. *A Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland*. Second edition. Portland, Timber Press. 1438 p. (2 volumes)
- Krebs, C. J. 1994. *Ecology: The Experimental Analysis of Distribution and Abundance*. Fourth edition. New York, HarperCollins. 801 p.
- Poole, R. W. 1989. *Lepidopterorum Catalogus (new series) Fascicle 118: Noctuidae*. Leiden, E. J. Brill. 1314 p. (3 volumes)
- Quinn, E. 1995. *Hidden Valley Park Natural Resource Management Plan, Lake County Metroparks*. Lake County, Ohio. 43 p.
- Rings, R. W., and E. H. Metzler. 1989. A preliminary checklist of the Lepidoptera of Mohican State Forest and Mohican State Park, Ashland County, Ohio. *Ohio Journal of Science*, 89(4):78-88.
- Rings, R. W., and E. H. Metzler. 1992. A check list of the Lepidoptera of Beaver Creek State Park, Columbiana County, Ohio. *The Great Lakes Entomologist*, 25(2):115-131.
- Rings, R. W., E. H. Metzler, F. J. Arnold, and D. H. Harris. 1992. The owl moths of Ohio. *Ohio Biological Survey, New Series, Bulletin*, 9(2):1-219.
- Rings, R. W., R. M. Ritter, R. W. Hawes, and E. H. Metzler. 1987. A nine-year study of the Lepidoptera of the Wilderness Center, Stark County, Ohio. *Ohio Journal of Science*, 87(3):55-61.
- Rockburne, E. W., and J. D. Lafontaine. 1976. The cutworm moths of Ontario and Quebec. Ottawa, Ontario. Canada Department of Agriculture Research Publication 1593:1-164.
- Scholten, B. 1996. Moths of the Douglas Lake region (Emmet and Cheboygan Counties), Michigan: V. Crambidae and Pyralidae (Lepidoptera). *The Great Lakes Entomologist*, 29(3):141-160.
- Weishaup, C. G. 1971. *Vascular Plants of Ohio*. Third edition. Dubuque, Kendall/Hunt. 293 p.
- White, G. W. 1980. *Glacial geology of Lake County, Ohio*. Ohio Division of Geological Survey Report of Investigations 117. 20 p.

Appendix. Checklist of species collected at Resources Center, 1988–92. Numbers preceding the species names are checklist numbers from Hodges et al. (1983). A plus-group (+) is a species that is easily confused with closely related species. Following the checklist number is the species name including author (abbreviations as listed in Hodges et al., 1983), date of collection and count of specimens collected. When more than one collection date is listed, the first is the earliest seasonal date of collection and the second is the latest, both with the year in which that occurred. The count is the total number of specimens collected in 1988–1992.

Family OECOPHORIDAE		3635	<i>Choristoneura rosaceana</i> (Harr.)	
882	<i>Agonopterix robinella</i> (Pack.) July 8, 1988–Aug. 21, 1989	Count 2	June 12, 1992–Sep. 7, 1990	
951	<i>Machimia tenoriferella</i> Clem. Sep. 30, 1988	Count 1	3648 <i>Archips argyrosspila</i> (Wik.) June 22, 1988	
957	<i>Psilocorsis reflexella</i> Clem. June 15, 1988–Aug. 21, 1992	Count 43	3658 <i>Archips purpurana</i> (Clem.) July 10, 1989	
1014+	<i>Antacotricha lencillana</i> (Zell.) May 12, 1988–Aug. 27, 1992	Count 241	3672 <i>Syndemis afflictana</i> (Wik.) May 12–May 18, 1988	
1046	<i>Callima argenticinctella</i> Clem. July 24, 1989–Aug. 9, 1990	Count 11	3686 <i>Clepsis melaleucana</i> (Wik.) May 30, 1991–June 26, 1989	
Family COLEOPHORIDAE		3720	<i>Sparganothis reticulatana</i> (Clem.) July 4–Sep. 9, 1989	
1387	<i>Coleophora spissicornis</i> (Haw.) June 6, 1991	Count 1	3725 <i>Sparganothis pettitana</i> (Rob.) June 20, 1991–July 24, 1989	
Family GELECHIIDAE		3748	<i>Amorbia humerosana</i> Clem. June 15, 1988	
2295	<i>Trichotaple flavocostella</i> (Clem.) July 4, 1989	Count 1	Family ZYGAENIDAE	
Family YPONOMEUTIDAE		4624	<i>Harrisina americana</i> (Guer.) June 27, 1991	Count 1
2401	<i>Atteva pinctella</i> (Cram.) July 5, 1991–July 29, 1988	Count 7	Family LIMACODIDAE	
2420	<i>Yponomeuta multipunctella</i> Clem. June 20, 1991–July 24, 1989	Count 152	4652	<i>Tortricidia testacea</i> Pack. May 30, 1991–July 15, 1988
Family SESIIDAE		4654	<i>Tortricidia flexuosa</i> (Grt.) June 6, 1991–July 24, 1992	Count 124
2554	<i>Synanthedon aceris</i> (Clem.) June 12, 1989	Count 1	4659	<i>Packardia geminata</i> (Pack.) May 30, 1991–July 8, 1988
Family TORTRICIDAE		4661	<i>Packardia elegans</i> (Pack.) June 13, 1991	Count 1
2863	<i>Hedya chionosema</i> (Zell.) July 29, 1988	Count 1	4665	<i>Lithacodes fasciola</i> (H.-S.) June 15, 1988–July 31, 1989
3361	<i>Aucylis semiovana</i> (Zell.) June 1–Aug. 19, 1988	Count 31	4667	<i>Apoda y-inversum</i> (Pack.) May 30, 1991–July 24, 1992
3503	<i>Croesia semipurpurana</i> (Kft.) June 22, 1988	Count 1	4669	<i>Apoda biguttata</i> (Pack.) June 15–July 22, 1988
3594	<i>Pandemis limitata</i> (Rob.) June 8, 1990–Sep. 10, 1988	Count 38	4671	<i>Prolimacodes badia</i> (Hbn.) July 12, 1991
3597	<i>Argyrotaenia velutinana</i> (Wik.) May 4, 1988–June 26, 1989	Count 4	4681	<i>Isa textula</i> (H.-S.) June 22, 1990–July 12, 1991
3623	<i>Argyrotaenia quercifoliaria</i> (Fitch) June 6, 1991–July 24, 1992	Count 52	4685	<i>Adoneta spinuloides</i> (H.-S.) July 29, 1988
3624	<i>Argyrotaenia alisellana</i> (Rob.) June 6, 1991–July 3, 1992	Count 42	4697	<i>Euclea delphini</i> (Bdv.) June 22, 1988–July 17, 1992
3625	<i>Argyrotaenia mariana</i> (Fern.) May 2–June 1, 1988	Count 28	Family CRAMBIDAE	
3632	<i>Choristoneura fractivittana</i> (Clem.) May 30, 1991–Sep. 9, 1989	Count 332	4703	<i>Gesneria centuriella</i> (D. & S.) June 1, 1990–Aug. 21, 1989
3633	<i>Choristoneura parallela</i> (Rob.) June 19, 1989–Sep. 7, 1990	Count 17	4748	<i>Mimroessa iccinsalis</i> (Wik.) July 12, 1991–July 31, 1989

4774	<i>Petrophila bifascialis</i> (Rob.) July 24–Aug. 21, 1989	Count 11
4889	<i>Dicymolomia julianalis</i> (Wlk.) Aug. 2, 1991	Count 2
4897	<i>Evergestis pallidata</i> (Hufn.) June 15–Sep. 10, 1988	Count 7
4937	<i>Nascia acutella</i> (Wlk.) July 3, 1992–July 8, 1988	Count 2
4944	<i>Crocidophora serratissimalis</i> Zell. June 22–Sep. 10, 1988	Count 11
4945	<i>Crocidophora tubercularis</i> Led. June 20–July 26, 1991	Count 20
4949	<i>Ostrinia nubilalis</i> (Hbn.) May 30–Sep. 13, 1991	Count 65
4950	<i>Fumibotys fumalis</i> (Gn.) Aug. 7, 1992–Aug. 21, 1989	Count 2
4951	<i>Perispasta caecularis</i> Zell. June 26, 1992–Aug. 16, 1991	Count 3
4953a	<i>Phlyctaenia coronata tertialis</i> (Gn.) June 1, 1988–Aug. 14, 1989	Count 4
4962	<i>Hahnccapsia marculenta</i> (G. & R.) June 1–July 15, 1988	Count 7
5040	<i>Pyrausta bicoloralis</i> (Gn.) June 6, 1991–Sep. 9, 1989	Count 9
5071	<i>Pyrausta acronialis</i> (Wlk.) June 5, 1992–Aug. 19, 1988	Count 12
5079	<i>Udea rubigalis</i> (Gn.) May 30, 1991–Oct. 10, 1992	Count 102
5142	<i>Diacne clealis</i> (Wlk.) May 21–Aug. 14, 1989	Count 19
5156	<i>Nomophila nearctica</i> Mun. July 5, 1991–Sep. 9, 1989	Count 7
5159	<i>Desmia funeralis</i> (Hbn.) June 1, 1988–Sep. 7, 1990	Count 82
5182	<i>Blepharomastix ranalis</i> (Gn.) July 5, 1991–July 13, 1990	Count 4
5226	<i>Palpita magniferalis</i> (Wlk.) May 30, 1991–Aug. 27, 1992	Count 102
5228	<i>Polygrammodes flavidalis</i> (Gn.) June 22, 1988–July 26, 1991	Count 5
5241	<i>Pantograph limata</i> (G. & R.) June 20, 1991–Sep. 9, 1989	Count 128
5272	<i>Herpetogramma bipunctalis</i> (F.) June 15–Aug. 19, 1988	Count 23
5275	<i>Herpetogramma pertextalis</i> (Led.) July 4–Aug. 21, 1989	Count 22
5280	<i>Herpetogramma aeglealis</i> (Wlk.) June 20–Aug. 2, 1991	Count 18
5362+	<i>Crambus agitatellus</i> Clem. May 30, 1991–Sep. 2, 1989	Count 1035
5403	<i>Agriphila vulgiragella</i> (Clem.) Sep. 10, 1992	Count 2
5413	<i>Pediasia trisecta</i> (Wlk.) July 26, 1991	Count 1
5464	<i>Urola nivalis</i> (Drury) June 27–Aug. 30, 1991	Count 27

Family PYRALIDAE

5518	<i>Agllossa cupriana</i> Zell. June 6–Aug. 30, 1991	Count 98
5524	<i>Hypsopygia costalis</i> (F.) July 3, 1992–Sep. 10, 1988	Count 10
5532	<i>Herculia infimbrialis</i> Dyar July 3, 1992–Aug. 21, 1989	Count 5
5533	<i>Herculia olinalis</i> (Gn.) July 8, 1988–July 24, 1989	Count 3
5552	<i>Galasa nigrinodis</i> (Zell.) June 20–July 5, 1991	Count 2
5556	<i>Tosale oviplagalalis</i> (Wlk.) July 13, 1990	Count 2
5571	<i>Condylolomia partipicalis</i> Grt. June 20, 1991–July 27, 1990	Count 42
5577	<i>Epipaschia superatalis</i> Clem. July 8, 1988	Count 1
5622	<i>Galleria mellonella</i> (L.) Aug. 21–Sep. 9, 1989	Count 3
5997	<i>Euzophera ostricorella</i> Hulst June 15, 1988–July 12, 1991	Count 4
6053	<i>Peoria approximella</i> (Wlk.) July 4, 1989–Sep. 30, 1988	Count 4

Family THYRIDIDAE

6079	<i>Dysodia granulata</i> (Neum.) Aug. 21, 1989	Count 12
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Family THYATRIDAE

6240	<i>Euthyatira pudens</i> (Gn.) May 12–May 18, 1988	Count 2
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Family DREPANIDAE

6251	<i>Drepana arcuata</i> Wlk. July 10, 1989	Count 1
6253	<i>Eudeilinia herminata</i> (Gn.) May 30–July 12, 1991	Count 2
6255	<i>Oreta rosea</i> (Wlk.) June 22, 1988–Sep. 7, 1990	Count 5

Family GEOMETRIDAE

6261	<i>Helimata cycladata</i> G. & R. May 30, 1991–June 22, 1988	Count 2
6270	<i>Proitame virginialis</i> (Hulst) June 15–July 22, 1988	Count 4
6273	<i>Itame pustularia</i> (Gn.) June 20, 1991–Sep. 9, 1989	Count 1480
6299	<i>Itame coartaria</i> (Hulst) June 22, 1988–July 10, 1992	Count 3
6335+	<i>Semiothisa aequiferaria</i> (Wlk.) May 12–Sep. 10, 1988	Count 65
6340	<i>Semiothisa minorata</i> (Pack.) May 30, 1991–Aug. 27, 1992	Count 43
6342	<i>Semiothisa bisignata</i> (Wlk.) June 15–Sep. 30, 1988	Count 54
6344+	<i>Semiothisa signaria</i> (Hbn.) May 4, 1988–Sep. 14, 1990	Count 340
6386	<i>Semiothisa ocellinata</i> (Gn.) June 15–Aug. 26, 1988	Count 51

6405	<i>Semiothisa gnophosaria</i> (Gn.) July 8, 1988–Aug. 2, 1991	Count 4	6797	<i>Emmomos maguaria</i> Gn. July 19, 1991–Oct. 27, 1988	Count 13
6583	<i>Anacamptodes ephyraria</i> (Wlk.) June 20, 1991–Aug. 3, 1990	Count 89	6798	<i>Emmomos subsignaria</i> (Hbn.) June 13, 1991–Aug. 7, 1989	Count 103
6584	<i>Anacamptodes humaria</i> (Gn.) July 8, 1988–Aug. 2, 1991	Count 7	6819	<i>Metanema inatomaria</i> Gn. June 6, 1991–July 8, 1988	Count 2
6586	<i>Anacamptodes defectoria</i> (Gn.) July 31, 1989	Count 1	6823	<i>Metarranthis angularia</i> B. & McD. June 22, 1988	Count 1
6588	<i>Iridopsis larvaria</i> (Gn.) May 30–Aug. 16, 1991	Count 12	6825	<i>Metarranthis indeclinata</i> (Wlk.) June 5–June 19, 1992	Count 10
6590	<i>Anavitrinella pampinaria</i> (Gn.) May 21, 1989–Sep. 10, 1988	Count 37	6826	<i>Metarranthis hypocharia</i> (H.-S.) June 6, 1991–July 3, 1992	Count 45
6597	<i>Ectropis crepuscularia</i> (D. & S.) May 4, 1988–Oct. 10, 1992	Count 60	6835	<i>Cepphis armataria</i> (H.-S.) June 15, 1988–July 10, 1989	Count 3
6598	<i>Protoboarmia porcelaria</i> (Gn.) Sep. 13, 1991	Count 1	6836	<i>Anagoga occidaria</i> (Wlk.) May 12, 1988–Aug. 14, 1989	Count 4
6599	<i>Epinecis hortaria</i> (F.) May 4, 1988–Aug. 16, 1990	Count 21	6838+	<i>Probole amicaria</i> (H.-S.) May 28, 1992–July 31, 1989	Count 62
6620+	<i>Melanolophia canadaria</i> (Gn.) May 4, 1988–Aug. 27, 1992	Count 68	6840	<i>Plagodis serinaria</i> H.-S. May 28–June 26, 1989	Count 86
6638	<i>Eufidonia notataria</i> (Wlk.) May 21, 1989–June 15, 1988	Count 60	6841	<i>Plagodis kuetzingi</i> (Grt.) June 1, 1990–June 5, 1992	Count 5
6640a	<i>Biston betularia cognataria</i> (Gn.) June 15–July 15, 1988	Count 2	6842	<i>Plagodis phlogosaria</i> (Gn.) June 20, 1991–Aug. 14, 1989	Count 29
6654	<i>Hypagyrtis unipunctata</i> (Haw.) June 6, 1991–Sep. 7, 1990	Count 13	6843	<i>Plagodis fervidaria</i> (H.-S.) May 12, 1988	Count 4
6655	<i>Hypagyrtis esther</i> (Barnes) May 30–Sep. 13, 1991	Count 282	6844	<i>Plagodis alcolaria</i> (Gn.) May 12, 1988–Aug. 7, 1989	Count 65
6656	<i>Hypagyrtis piniata</i> (Pack.) May 12, 1988–June 20, 1991	Count 2	6863	<i>Caripeta divisata</i> Wlk. June 20, 1991–Aug. 26, 1988	Count 46
6660	<i>Phigalia strigataria</i> (Minot) Mar. 23–May 4, 1988	Count 7	6884	<i>Besma endropiaria</i> (G. & R.) May 28–Sep. 4, 1992	Count 60
6662	<i>Palaecrita vernata</i> (Peck) Mar. 23, 1988	Count 1	6885	<i>Besma quercivoraria</i> (Gn.) May 12, 1988–Sep. 2, 1989	Count 23
6665	<i>Erannis tiliaria</i> (Harr.) Nov. 3–Nov. 21, 1992	Count 13	6888	<i>Lambdina fiscellaria</i> (Gn.) June 1, 1988–Oct. 23, 1992	Count 8
6667	<i>Lomographa vestaliata</i> (Gn.) May 30, 1991–July 8, 1988	Count 39	6894a	<i>Lambdina fervidaria athasaria</i> (Wlk.) May 18, 1988	Count 1
6668	<i>Lomographa glomeraria</i> (Grt.) May 4, 1988–May 14, 1989	Count 8	6906	<i>Nepytia canosaria</i> (Wlk.) May 21, 1989–Oct. 27, 1988	Count 20
6677	<i>Cabera erythemaria</i> Gn. May 30, 1991–Aug. 27, 1992	Count 11	6909	<i>Nepytia pellucidaria</i> (Pack.) Oct. 10, 1992	Count 13
6720	<i>Lytrosia unitaria</i> (H.-S.) June 6, 1991–July 10, 1989	Count 26	6912	<i>Sicya macularia</i> (Harr.) June 22, 1990–July 10, 1989	Count 28
6724	<i>Euclaela serrata</i> (Drury) July 8, 1988	Count 1	6941	<i>Eusarca confusaria</i> Hbn. June 5, 1992–Sep. 10, 1988	Count 35
6725	<i>Euclaela muzaria</i> (Wlk.) June 6, 1991–June 26, 1989	Count 13	6963	<i>Tetracis crocallata</i> Gn. June 15–July 8, 1988	Count 3
6729	<i>Euclaela johnsonaria</i> (Fitch) July 19, 1991–Aug. 24, 1990	Count 4	6964	<i>Tetracis cachexiata</i> Gn. May 30, 1991–July 3, 1992	Count 96
6739	<i>Euclaela irroraria</i> (B. & McD.) June 6, 1991–June 26, 1989	Count 6	6965	<i>Eugonobapta nivosaria</i> (Gn.) July 27, 1991–July 17, 1992	Count 31
6740+	<i>Xanthotype urticaria</i> Swett May 30, 1991–Aug. 16, 1990	Count 10	6966	<i>Entrapela clemataria</i> (J.E. Smith) May 4, 1988–Aug. 7, 1992	Count 42
6753+	<i>Pero honestaria</i> (Wlk.) May 4, 1988–Aug. 21, 1989	Count 70	6982	<i>Prochoerodes transversata</i> (Drury) June 20, 1991–Oct. 10, 1992	Count 51
6796	<i>Campaea perlata</i> (Gn.) May 30, 1991–Sep. 25, 1992	Count 198	6987	<i>Antepione thisoaria</i> (Gn.) July 12, 1991–July 31, 1989	Count 4

- 7009 *Nematocampa limbata* (Haw.)
June 20, 1991–Aug. 24, 1990 Count 28
- 7046+ *Nemoria bistriaria* Hbn.
July 5, 1991–Aug. 27, 1992 Count 36
- 7047 *Nemoria rubrifrontaria* (Pack.)
June 15, 1988 Count 4
- 7048 *Nemoria mimosaria* (Gn.)
June 1, 1988–June 12, 1989 Count 7
- 7053 *Dichorda iridaria* (Gn.)
June 12, 1989–Aug. 7, 1992 Count 4
- 7058 *Synchlora aerata* (F.)
June 22, 1988–Sep. 13, 1991 Count 5
- 7071 *Chlorochlanys chlorolencaria* (Gn.)
May 4, 1988–July 24, 1989 Count 20
- 7132 *Plenoprocha insularia* (Gn.)
June 15, 1988–Sep. 9, 1989 Count 35
- 7136 *Cyclophora packardii* (Prout)
June 5, 1992–July 5, 1991 Count 2
- 7139 *Cyclophora pendulinaria* (Gn.)
June 1, 1988–Sep. 9, 1989 Count 13
- 7146 *Haematopsis grataria* (F.)
July 10, 1992 Count 1
- 7157 *Scopula cacuminaria* (Morr.)
June 20, 1991–July 24, 1992 Count 3
- 7159 *Scopula limbondata* (Haw.)
June 12, 1992–Aug. 9, 1990 Count 74
- 7169 *Scopula inductata* (Gn.)
July 12, 1991–Aug. 7, 1992 Count 7
- 7189 *Dysstroma hershiata* (Gn.)
June 8, 1988 Count 1
- 7196+ *Enlithis diversilineata* (Hbn.)
June 27, 1991–Sep. 9, 1989 Count 21
- 7236+ *Hydriomena renuciata* (Wlk.)
May 12–June 22, 1988 Count 14
- 7290 *Coryphista meadii* (Pack.)
Aug. 21, 1989 Count 1
- 7292 *Hydria prunivorata* (Fgn.)
June 1, 1988 Count 1
- 7307 *Mesolenca ruficollata* (Gn.)
July 29, 1988 Count 1
- 7329 *Anticlea vasilata* Gn.
May 4, 1988 Count 1
- 7368 *Xanthorhoe labradorensis* (Pack.)
June 26, 1989–Sep. 25, 1992 Count 7
- 7388 *Xanthorhoe ferrugata* (Cl.)
Aug. 5, 1988–Aug. 16, 1991 Count 2
- 7390 *Xanthorhoe lacustrata* (Gn.)
June 13, 1991–Sep. 9, 1989 Count 16
- 7399a *Euphyia mngulata intermediata* (Gn.)
June 6, 1991–Sep. 9, 1988 Count 10
- 7414 *Orthonama obstripata* (F.)
May 4, 1988–Nov. 21, 1992 Count 62
- 7416 *Orthonama centrostrigaria* (Woll.)
June 8, 1990–Aug. 25, 1992 Count 74
- 7422 *Hydrelia inornata* (Hulst.)
June 1, 1988–Aug. 14, 1989 Count 6
- 7430 *Trichodezia albovittata* (Gn.)
June 22–Aug. 5, 1988 Count 2
- 7440 *Eubaphe medica* (Wlk.)
June 6, 1991–July 17, 1989 Count 11
- 7445 *Horisme intestinata* (Gn.)
June 8, 1990–Sep. 2, 1989 Count 8
- 7474+ *Enpithecia miserulata* Grt.
Mar. 23–Oct. 16, 1988 Count 259
- 7638 *Cladara anguilineata* (G. & R.)
May 12, 1988–May 21, 1989 Count 22
- 7640 *Lobophora nivigerata* Wlk.
June 5, 1992 Count 1
- 7645 *Heterophleps refusaria* (Wlk.)
June 22, 1988 Count 1
- 7647 *Heterophleps triguttaria* H.-S.
July 8, 1988 Count 1
- 7648 *Dyspteris abortivaria* (H.-S.)
July 12, 1991 Count 1
- Family MIMALLONIDAE**
- 7659 *Lacosoma chiridota* Grt.
May 30, 1991 Count 1
- 7662 *Cicinnus melshheimeri* (Harr.)
June 15, 1988–June 26, 1989 Count 5
- Family APATELODIDAE**
- 7663 *Apateletes torrefacta* (J.E. Smith)
June 22–July 8, 1988 Count 5
- 7665 *Olceclostera angelica* (Grt.)
June 6, 1991–July 17, 1992 Count 5
- Family LASIOCAMPIDAE**
- 7670 *Tolype vellela* (Stoll)
July 12, 1991–Oct. 10, 1992 Count 15
- 7673 *Tolype laricis* (Fitch)
July 5, 1991–Sep. 14, 1990 Count 77
- 7698 *Malacosoma disstria* Hbn.
June 20, 1991–July 24, 1989 Count 405
- 7701 *Malacosoma americanum* (F.)
June 6, 1991–July 17, 1989 Count 96
- Family SATURNIIDAE**
- 7715 *Dryocampa rubicunda* (F.)
May 30, 1991–July 24, 1992 Count 12
- 7746 *Automeris io* (F.)
June 1–July 22, 1988 Count 5
- 7757 *Antheraea polyphemus* (Cram.)
July 12, 1991 Count 2
- 7758 *Actias luna* (L.)
May 21, 1989–July 15, 1988 Count 9
- 7764 *Callosamia promethea* (Drury)
June 27, 1991–July 8, 1988 Count 2
- Family SPHINGIDAE**
- 7787 *Ceratonia undulosa* (Wlk.)
June 29–July 20, 1990 Count 2
- 7802 *Sphinx chersis* (Hbn.)
June 15, 1988 Count 1
- 7824 *Paonias excaecatus* (J.E. Smith)
June 1–July 29, 1988 Count 14
- 7825 *Paonias myops* (J.E. Smith)
June 5, 1992–July 22, 1988 Count 3

- 7827 *Loathoe juglandis* (J.E. Smith)
May 28, 1989–July 15, 1988 Count 9
- 7828 *Pachysphinx modesta* (Harr.)
July 3, 1992 Count 1
- 7871 *Deidamia inscripta* (Harr.)
May 28, 1989 Count 1
- 7885 *Darapsa myron* (Cram.)
June 15–July 29, 1988 Count 6
- 7886 *Darapsa pholus* (Cram.)
July 19, 1991 Count 1
- Family NOTODONTIDAE**
- 7895 *Clostera albosigma* Fitch
July 4–July 24, 1989 Count 2
- 7896 *Clostera inclusa* (Hbn.)
May 12, 1988 Count 3
- 7898 *Clostera strigosa* (Grt.)
May 21, 1989–July 19, 1991 Count 3
- 7901 *Clostera apicalis* (Wlk.)
May 28, 1992–Aug. 3, 1990 Count 3
- 7902 *Datana ministrata* (Drury)
June 6, 1991–July 22, 1988 Count 7
- 7903 *Datana augustii* G. & R.
July 13, 1990 Count 1
- 7906+ *Datana contracta* Wlk.
July 17–July 24, 1989 Count 3
- 7915 *Nadatra gibbosa* (J.E. Smith)
May 12, 1988–Aug. 27, 1992 Count 109
- 7917 *Hyperaeschra georgica* (H.-S.)
May 4, 1988–July 31, 1989 Count 18
- 7919 *Peridea basitriens* (Wlk.)
May 12, 1988–Aug. 24, 1990 Count 84
- 7920 *Peridea angulosa* (J.E. Smith)
June 4, 1989–Aug. 27, 1992 Count 67
- 7922 *Pheosia rimosa* Pack.
June 27, 1991–Aug. 26, 1988 Count 3
- 7924 *Odontotia elegans* (Stkr.)
May 30, 1991–July 15, 1988 Count 2
- 7929 *Nerice bidentata* Wlk.
July 17, 1989–Aug. 9, 1990 Count 5
- 7930 *Ellida caniplaga* (Wlk.)
May 4, 1988–July 27, 1990 Count 44
- 7931 *Gluphisia septentrionis* Wlk.
May 12, 1988–July 31, 1989 Count 4
- 7936 *Furcula borealis* (Guer.-Meneville)
July 19, 1991–Aug. 16, 1990 Count 3
- 7951+ *Symmerista albifrons* (J.E. Smith)
May 30, 1991–Aug. 27, 1992 Count 42
- 7958 *Dasylophia thyatroides* (Wlk.)
May 12, 1988–July 31, 1989 Count 3
- 7974 *Misogada unicolor* (Pack.)
July 19, 1991 Count 1
- 7975 *Macrrocampa marthesia* (Cram.)
June 20–Aug. 23, 1991 Count 35
- 7994 *Heterocampa guttivitta* (Wlk.)
May 12, 1988–Aug. 21, 1989 Count 117
- 7995 *Heterocampa biundata* Wlk.
June 12, 1989 Count 1
- 7998 *Lochmaeus manteo* Doubleday
July 10, 1989–Aug. 5, 1988 Count 17
- 7999 *Lochmaeus bilineata* (Pack.)
June 6, 1991–Aug. 21, 1989 Count 25
- 8005 *Schizura iponoeae* Doubleday
July 22, 1988–July 31, 1989 Count 2
- 8007 *Schizura unicornis* (J.E. Smith)
May 30, 1991–Aug. 21, 1989 Count 24
- 8011 *Schizura leptinoides* (Grt.)
June 15–Aug. 5, 1988 Count 23
- 8012 *Oligocentria semirufescens* (Wlk.)
June 27, 1991–July 13, 1990 Count 4
- Family ARCTIIDAE**
- 8045.1 *Crambidia pallida* Pack.
July 12, 1991–Aug. 27, 1992 Count 7
- 8104 *Comachara cadburyi* Franc.
June 5, 1992 Count 1
- 8107 *Haploa clymene* (Brown)
July 12, 1991–Aug. 7, 1992 Count 23
- 8121 *Holovaelina aurantiaca* (Hbn.)
June 20, 1991–Aug. 21, 1989 Count 122
- 8129 *Pyrharctia isabella* (J.E. Smith)
June 28, 1992–Sep. 9, 1989 Count 17
- 8133 *Spilosoma latipennis* Stretch
May 30, 1991–July 3, 1992 Count 12
- 8134 *Spilosoma congrua* Wlk.
May 12, 1988–July 17, 1992 Count 157
- 8137 *Spilosoma virginica* (F.)
May 30, 1991–Aug. 21, 1989 Count 38
- 8156 *Phragmatobia fuliginosa* (L.)
July 5, 1991 Count 1
- 8169+ *Apantesis phalerata* (Harr.)
May 28, 1992–Aug. 31, 1990 Count 37
- 8197 *Apantesis virgo* (L.)
July 5, 1991–July 24, 1989 Count 7
- 8203+ *Halysidota tessellaris* (J.E. Smith)
June 6, 1991–Aug. 7, 1992 Count 375
- 8211 *Lophocampa caryae* Harr.
May 30, 1991–June 22, 1988 Count 19
- 8230 *Cyrcia tenera* Hbn.
June 19–July 17, 1989 Count 13
- 8231 *Cyrcia oregonensis* (Stretch)
May 30, 1991–July 29, 1988 Count 4
- 8238 *Euchaetes egle* (Drury)
June 6, 1991–July 15, 1988 Count 6
- 8267 *Ciseps fulvicollis* (Hbn.)
June 15, 1988–Sep. 9, 1989 Count 52
- Family LYMANTRIIDAE**
- 8296 *Dasychira basiflava* (Pack.)
June 22, 1988–Aug. 7, 1992 Count 5
- 8302 *Dasychira obliquata* (G. & R.)
July 10, 1989 Count 1
- 8304 *Dasychira plagiata* (Wlk.)
June 20, 1991–July 10, 1992 Count 3
- 8314 *Orgyia definita* Pack.
June 20, 1991–Sep. 21, 1990 Count 5

- 8316 *Orgyia leucostigma* (J.E. Smith)
June 27–Aug. 2, 1991 Count 3
- 8318 *Lymantria dispar* (L.)
July 5, 1991–Aug. 27, 1992 Count 102
- Family NOCTUIDAE**
- 8322 *Idia americalis* (Gn.)
June 5–Oct. 10, 1992 Count 103
- 8323+ *Idia aemula* Hbn.
May 30, 1991–Oct. 23, 1992 Count 301
- 8326 *Idia rotundalis* (Wlk.)
June 27, 1991–Sep. 4, 1992 Count 187
- 8327 *Idia forbesi* (French)
July 5, 1991–Aug. 27, 1992 Count 152
- 8329 *Idia diminutoides* (B. & McD.)
July 5, 1991–Aug. 27, 1992 Count 137
- 8330 *Idia scobialis* (Grt.)
July 17–July 31, 1989 Count 6
- 8331 *Idia laurenti* (Sm.)
July 13–Aug. 16, 1990 Count 2
- 8334 *Idia lubricalis* (Gey.)
June 20, 1991–Aug. 27, 1992 Count 26
- 8338 *Phalaenophana pyramusalis* (Wlk.)
June 1–Sep. 10, 1988 Count 13
- 8340 *Zanclognatha lituralis* (Hbn.)
June 26, 1992–Aug. 14, 1989 Count 33
- 8345 *Zanclognatha laevigata* (Grt.)
June 20, 1991–Aug. 27, 1992 Count 50
- 8347 *Zanclognatha obscuripennis* (Grt.)
June 29, 1990 Count 1
- 8348 *Zanclognatha pedipalpis* (Gn.)
June 12–Sep. 2, 1989 Count 19
- 8349 *Zanclognatha protumnusalis* (Wlk.)
July 5, 1991–Sep. 9, 1989 Count 5
- 8351 *Zanclognatha cruralis* (Gn.)
June 15, 1988–July 24, 1989 Count 14
- 8352+ *Zanclognatha jacchusalis* (Wlk.)
June 20, 1991–Sep. 30, 1988 Count 181
- 8355 *Chytolita morbidalis* (Gn.)
May 30, 1991–July 10, 1992 Count 78
- 8357.1 *Macrochilo hypocritalis* Fgn.
June 22, 1988–June 29, 1990 Count 2
- 8358 *Macrochilo litophora* (Grt.)
June 15, 1988–July 24, 1989 Count 20
- 8360 *Macrochilo orCIFeralis* (Wlk.)
June 15, 1988 Count 1
- 8362 *Phalaenostola metonalis* (Wlk.)
May 30, 1991–Sep. 4, 1992 Count 10
- 8363 *Phalaenostola eumehsalis* (Wlk.)
June 20, 1991–July 31, 1989 Count 11
- 8364 *Phalaenostola laurentioides* Grt.
July 22, 1988–July 24, 1989 Count 2
- 8368 *Tetanolita floridana* (Sm.)
July 3, 1992–July 31, 1989 Count 2
- 8370 *Bleptina caradrinalis* Gn.
June 20, 1991–July 31, 1989 Count 29
- 8378 *Renia salusalis* (Wlk.)
June 27, 1991–July 17, 1989 Count 15
- 8379 *Renia factiosalis* (Wlk.)
July 12, 1991–Aug. 21, 1992 Count 35
- 8381 *Renia discoloralis* Gn.
July 19, 1991–Aug. 27, 1992 Count 46
- 8386 *Renia adspergillus* (Bosc)
June 26, 1992–Aug. 9, 1990 Count 27
- 8387 *Renia sobrialis* (Wlk.)
July 13, 1990–July 24, 1989 Count 10
- 8393 *Lascoreia ambigualis* Wlk.
June 12, 1992–Aug. 21, 1989 Count 7
- 8397 *Palthis angulalis* (Hbn.)
May 30–Sep. 6, 1991 Count 30
- 8398 *Palthis asopialis* (Gn.)
May 30–Sep. 6, 1991 Count 9
- 8404 *Rivula propinquialis* Gn.
June 15–Sep. 24, 1988 Count 16
- 8412 *Melanomma auricinctaria* Grt.
May 30–Aug. 2, 1991 Count 4
- 8421 *Hypenodes fractilinea* (Sm.)
May 30, 1991–Aug. 3, 1990 Count 15
- 8426 *Dyspyralis illocata* Warr.
July 5, 1991–Aug. 19, 1988 Count 15
- 8427 *Dyspyralis pueticcosta* (Sm.)
July 5, 1991–Aug. 7, 1989 Count 10
- 8428 *Dyspyralis nigella* (Stkr.)
July 19, 1991–Aug. 7, 1989 Count 8
- 8441 *Bomolocha manalis* (Wlk.)
June 19, 1989–Sep. 30, 1988 Count 11
- 8442 *Bomolocha baltimoralis* (Gn.)
May 12, 1988–Sep. 9, 1989 Count 81
- 8443 *Bomolocha bijugalis* (Wlk.)
May 21, 1989 Count 1
- 8444 *Bomolocha palparia* (Wlk.)
July 29, 1988 Count 1
- 8445 *Bomolocha abalienalis* (Wlk.)
June 15, 1988–Aug. 2, 1991 Count 4
- 8446 *Bomolocha deceptalis* (Wlk.)
May 30, 1991–Sep. 9, 1989 Count 29
- 8447 *Bomolocha madefactalis* (Gn.)
June 19, 1989–Aug. 30, 1991 Count 15
- 8448 *Bomolocha sordidula* (Grt.)
June 26, 1989–Aug. 2, 1991 Count 7
- 8465 *Plathypena scabra* (F.)
June 15, 1988–Nov. 21, 1992 Count 47
- 8479 *Spargaloma sexpunctata* Grt.
June 1–July 15, 1988 Count 10
- 8490 *Panprapta decoralis* Hbn.
June 12, 1989–July 12, 1991 Count 2
- 8491 *Ledaea perditalis* (Wlk.)
July 17, 1992 Count 2
- 8499 *Metalecra discalis* (Grt.)
July 29, 1988 Count 1
- 8514 *Scolecocampa liburnia* (Gey.)
June 20, 1991–July 31, 1989 Count 30
- 8534 *Plusiodonta compressipalpis* Gn.
July 8, 1988–July 13, 1990 Count 3
- 8536 *Calyptra canadensis* (Bethune)
June 22–July 8, 1988 Count 3

8555	<i>Scoliopteryx libatrix</i> (L.) July 4, 1989	Count 1	8858	<i>Catocala crataegi</i> Saund. July 15, 1988–July 31, 1989	Count 3
8587	<i>Panopoda rufimargo</i> (Hbn.) June 20, 1991–Aug. 14, 1989	Count 67	8863	<i>Catocala mira</i> Grt. July 12, 1991–Aug. 9, 1990	Count 11
8588	<i>Panopoda carneicosta</i> Gn. June 20, 1991–Aug. 7, 1992	Count 10	8864	<i>Catocala grynea</i> (Cram.) July 8, 1988–Sep. 9, 1989	Count 27
8641	<i>Drasteria grandirena</i> (Haw.) July 4–July 10, 1989	Count 2	8867	<i>Catocala blandula</i> Hulst July 8, 1988–July 24, 1992	Count 2
8689	<i>Zale lunata</i> (Drury) July 8, 1988–Nov. 3, 1992	Count 2	8874	<i>Catocala minuta</i> Edw. Aug. 2, 1991	Count 1
8695	<i>Zale undularis</i> (Drury) June 26, 1989–July 8, 1988	Count 2	8878	<i>Catocala amica</i> (Hbn.) July 12, 1991–Aug. 7, 1992	Count 2
8697	<i>Zale minerea</i> (Gn.) May 12, 1988–June 29, 1990	Count 12	8878.1	<i>Catocala lineella</i> Grt. July 12, 1991–Aug. 24, 1990	Count 11
8700	<i>Zale squamularis</i> (Drury) May 12, 1988	Count 1	8887	<i>Trichophsia ni</i> (Hbn.) July 8, 1988	Count 1
8704+	<i>Zale helata</i> (Sm.) June 15–June 22, 1988	Count 2	8898	<i>Allagrapha aerea</i> (Hbn.) June 6, 1991–Aug. 24, 1990	Count 4
8716	<i>Zale unilineata</i> (Grt.) May 18–June 15, 1988	Count 6	8905	<i>Eosphoropteryx thyatyroides</i> (Gn.) July 31, 1989	Count 1
8717	<i>Zale horrida</i> Hbn. June 1, 1988–July 19, 1991	Count 5	8908	<i>Autographa precattonis</i> (Gn.) May 18, 1988–Sep. 25, 1992	Count 9
8719	<i>Euparthenos nubilis</i> (Hbn.) June 19, 1989–Aug. 19, 1988	Count 24	8923	<i>Anagrapha ampla</i> (Wlk.) July 3, 1992	Count 1
8721	<i>Allotria elonympha</i> (Hbn.) June 12, 1989–Aug. 5, 1988	Count 16	8924	<i>Anagrapha falcifera</i> (Kby.) May 28, 1989–Sep. 10, 1988	Count 15
8727	<i>Paratelia bistriaris</i> Hbn. June 6, 1991–Sep. 9, 1989	Count 28	8955	<i>Marathyssa inficta</i> (Wlk.) June 15, 1990–July 31, 1989	Count 8
8738+	<i>Caenurgina crassiuscula</i> (Haw.) May 4–Sep. 10, 1988	Count 18	8956	<i>Marathyssa basalis</i> Wlk. May 12, 1988	Count 1
8771	<i>Catocala piatrix</i> Grt. Sep. 7, 1990	Count 1	8957	<i>Paectes oculatrix</i> (Gn.) June 15–July 15, 1988	Count 13
8778	<i>Catocala habilis</i> Grt. Aug. 23, 1991–Oct. 10, 1992	Count 16	8969	<i>Baileya donbledayi</i> (Gn.) July 8, 1988	Count 1
8779	<i>Catocala serena</i> Edw. Aug. 3–Aug. 24, 1990	Count 6	8970	<i>Baileya ophthalmica</i> (Gn.) May 28, 1989–July 24, 1992	Count 26
8781	<i>Catocala judith</i> Stkr. July 24–Aug. 21, 1989	Count 5	8971	<i>Baileya dormitans</i> (Gn.) May 12, 1988–July 12, 1991	Count 74
8785	<i>Catocala residua</i> Grt. Aug. 7, 1989–Oct. 10, 1992	Count 12	8972	<i>Baileya levitans</i> (Sm.) May 4, 1988–Aug. 14, 1989	Count 77
8788	<i>Catocala resecta</i> Grt. Aug. 5, 1988–Sep. 14, 1990	Count 14	8973	<i>Baileya australis</i> (Grt.) June 12, 1989–Sep. 10, 1988	Count 12
8795	<i>Catocala palaogama</i> Gn. July 12, 1991–Sep. 14, 1990	Count 15	8983	<i>Meganola minuscula</i> (Zell.) May 4, 1988–Aug. 7, 1989	Count 26
8797	<i>Catocala subnata</i> Grt. Aug. 27, 1992–Sep. 6, 1991	Count 2	8983.1	<i>Meganola phylla</i> (Dyar) May 28, 1992–Aug. 19, 1988	Count 5
8798	<i>Catocala neogama</i> (J.E. Smith) Sep. 14–Sep. 21, 1990	Count 2	8983.2	<i>Meganola spodia</i> Franc. June 8, 1990	Count 1
8801	<i>Catocala ilia</i> (Cram.) July 8–Sep. 10, 1988	Count 5	8990	<i>Nola cilicoides</i> (Grt.) June 6, 1991	Count 1
8802	<i>Catocala cerogama</i> Gn. Aug. 14, 1989–Sep. 30, 1988	Count 8	8992	<i>Nola triquetrana</i> (Fitch) May 12, 1988	Count 1
8832	<i>Catocala cara</i> Gn. Oct. 10, 1992	Count 1	9037	<i>Hyperstrotia pervertens</i> (B. & McD.) June 6, 1991–July 29, 1988	Count 139
8846	<i>Catocala sordida</i> Grt. July 22, 1988–Sep. 4, 1992	Count 5	9038	<i>Hyperstrotia villificans</i> (B. & McD.) July 8, 1988	Count 2
8857	<i>Catocala ultronita</i> (Hbn.) July 12, 1991–Sep. 14, 1990	Count 30	9040	<i>Hyperstrotia secta</i> (Grt.) July 5, 1991–July 15, 1988	Count 14

- 9044 *Thioptera nigrofimbria* (Gn.)
July 19, 1991 Count 1
- 9047 *Lithacodia muscosula* (Gn.)
May 30–Aug. 16, 1991 Count 72
- 9048 *Lithacodia albidula* (Gn.)
June 20, 1991–Sep. 4, 1992 Count 14
- 9051 *Lithacodia musta* (G. & R.)
June 15–Aug. 5, 1988 Count 3
- 9053 *Pseudeustroia carneola* (Gn.)
May 30, 1991–Sep. 30, 1988 Count 135
- 9055.1 *Maliathia synochiitis* (G. & R.)
May 30, 1991–Sep. 24, 1988 Count 48
- 9057 *Homophoberia apicosa* (Haw.)
June 20, 1991–Aug. 21, 1989 Count 6
- 9062 *Cerma ceriutha* (Tr.)
June 6, 1991–July 29, 1988 Count 18
- 9065 *Leuconycta diphetoides* (Gn.)
June 6, 1991–Aug. 14, 1989 Count 20
- 9066 *Leuconycta lepidula* (Grt.)
June 12, 1989–July 15, 1988 Count 2
- 9090 *Tarachidia candefacta* (Hbn.)
June 15–Aug. 19, 1988 Count 9
- 9095 *Tarachidia erastrioides* (Gn.)
May 30, 1991–Aug. 16, 1990 Count 15
- 9182 *Panthea furcilla* (Pack.)
June 6, 1991–Aug. 16, 1990 Count 17
- 9184 *Colocasia flavicornis* (Sm.)
July 22, 1988 Count 1
- 9185 *Colocasia propinquila* (Grt.)
May 12, 1988–June 26, 1992 Count 39
- 9189 *Charadra derivens* (Gn.)
May 12, 1988–June 29, 1990 Count 3
- 9193 *Raphia frater* Grt.
June 20–Aug. 2, 1991 Count 6
- 9200 *Acronicta americana* (Harr.)
June 27, 1991–July 15, 1988 Count 9
- 9203 *Acronicta dactylina* Grt.
July 24, 1992 Count 1
- 9227 *Acronicta laetifica* Sm.
Aug. 5, 1988–Aug. 16, 1991 Count 2
- 9229 *Acronicta hasta* Gn.
May 30, 1991–Aug. 26, 1988 Count 15
- 9235 *Acronicta spinigera* Gn.
May 30, 1991–July 29, 1988 Count 31
- 9236 *Acronicta morula* G. & R.
June 1–June 22, 1988 Count 3
- 9237 *Acronicta interrupta* Gn.
June 15, 1988 Count 1
- 9238 *Acronicta lobeliae* Gn.
May 12, 1988–July 31, 1989 Count 3
- 9243 *Acronicta ovata* Grt.
June 6, 1991–Aug. 5, 1988 Count 38
- 9244 *Acronicta modica* Wlk.
June 12, 1989–July 15, 1988 Count 19
- 9245+ *Acronicta haesiata* (Grt.)
May 30, 1991–Aug. 5, 1988 Count 234
- 9251 *Acronicta retardata* (Wlk.)
May 30, 1991–July 13, 1990 Count 8
- 9254 *Acronicta afflicta* Grt.
July 12, 1991 Count 1
- 9261 *Acronicta impressa* Wlk.
July 12, 1991–Aug. 7, 1989 Count 2
- 9285 *Polygrammate hebraeicum* Hbn.
May 30, 1991–Aug. 5, 1988 Count 35
- 9301 *Eudryas grata* (F.)
June 20, 1991–Aug. 5, 1988 Count 16
- 9328 *Apamea nigrior* (Sm.)
July 10, 1992 Count 1
- 9329 *Apamea cariosa* (Gn.)
July 19, 1991–Aug. 7, 1992 Count 5
- 9342 *Apamea multicolor* (Dyar)
July 10, 1992 Count 1
- 9348 *Apamea amputatrix* (Fitch)
July 13, 1990–July 31, 1989 Count 2
- 9362a *Apamea remissa indocilis* (Wlk.)
June 1, 1990 Count 3
- 9364 *Apamea sordens* (Hufn.)
June 1, 1990–June 26, 1992 Count 4
- 9367 *Apamea dubitans* (Wlk.)
July 24–Sep. 9, 1989 Count 7
- 9373 *Apamea helva* (Grt.)
Oct. 27, 1988 Count 1
- 9404 *Oligia modica* (Gn.)
Aug. 14, 1989–Sep. 10, 1988 Count 12
- 9406 *Oligia fractilinea* (Grt.)
July 19, 1991–Sep. 9, 1989 Count 15
- 9408 *Oligia exhausta* (Sm.)
July 12, 1991–July 15, 1988 Count 3
- 9419 *Oligia mactata* (Gn.)
Sep. 21, 1990–Oct. 16, 1988 Count 6
- 9427 *Meropleon diversicolor* (Morr.)
Sep. 7, 1990 Count 1
- 9452 *Macronoctua onusta* Grt.
Sep. 21, 1990–Sep. 30, 1988 Count 3
- 9454 *Amphipoea velata* (Wlk.)
July 5, 1991–July 24, 1989 Count 15
- 9457+ *Amphipoea americana* (Speyer)
July 15, 1988–July 31, 1992 Count 2
- 9466 *Papaipema cataphracta* (Grt.)
Sep. 30, 1988 Count 1
- 9473 *Papaipema impecuniosa* (Grt.)
Sep. 30, 1988–Oct. 10, 1992 Count 5
- 9483 *Papaipema inquaesita* (G. & R.)
Aug. 19, 1988–Oct. 10, 1992 Count 6
- 9485 *Papaipema baptisiae* (Bird)
Sep. 10–Sep. 24, 1988 Count 5
- 9505 *Papaipema cerussata* (Grt.)
Sep. 30, 1988 Count 1
- 9509 *Papaipema unimoda* (Sm.)
Sep. 9, 1989 Count 1
- 9520 *Achatodes zeae* (Harr.)
July 15, 1988 Count 1
- 9526 *Bellura densa* (Wlk.)
June 1, 1988 Count 1
- 9545 *Euplexia benesimilis* McD.
May 30, 1991–Aug. 26, 1988 Count 24

9546	<i>Phlogophora iris</i> Gn. June 22, 1988	Count 1	9892	<i>Lithophane disposita</i> Morr. Nov. 4, 1988	Count 1
9547	<i>Phlogophora periculosa</i> Gn. Aug. 19, 1988–Sep. 13, 1991	Count 26	9893	<i>Lithophane hemina</i> Grt. Mar. 23, 1988–Sep. 9, 1989	Count 3
9555	<i>Ipinorpha pleonectusa</i> Grt. July 12, 1991–Sep. 9, 1989	Count 7	9910	<i>Lithophane antennata</i> (Wlk.) Sep. 9, 1989	Count 1
9556	<i>Chytonix palliatricula</i> (Gn.) June 1, 1988–Aug. 7, 1989	Count 66	9929	<i>Pyreferra hesperidago</i> (Gn.) May 2, 1988–May 21, 1989	Count 4
9578	<i>Hyppa xylinoides</i> (Gn.) May 12, 1988–Sep. 2, 1989	Count 15	9933+	<i>Eupsilia vinulenta</i> (Grt.) Nov. 3, 1992–Nov. 4, 1988	Count 2
9582	<i>Nedra ramosula</i> (Gn.) June 13–July 12, 1991	Count 2	9936	<i>Eupsilia morrisoni</i> (Grt.) Nov. 4, 1988	Count 6
9618	<i>Phosphila turbulenta</i> Hbn. July 12, 1991	Count 1	9946	<i>Epiglaea decliva</i> (Grt.) Nov. 21, 1992	Count 2
9619	<i>Phosphila miseioides</i> (Gn.) July 12–July 19, 1991	Count 2	9957	<i>Stinira bicolorago</i> (Gn.) Sep. 9, 1989–Nov. 21, 1992	Count 82
9631	<i>Calloptistria mollissima</i> (Gn.) June 15, 1988–Aug. 9, 1990	Count 7	9961	<i>Anathix ralla</i> (G. & R.) Aug. 7, 1989–Sep. 30, 1988	Count 30
9638	<i>Amphipyra pyramidoides</i> Gn. July 31, 1989–Nov. 21, 1992	Count 161	10005	<i>Feralia jocosa</i> (Gn.) Mar. 23, 1988	Count 2
9639	<i>Amphipyra tragopoginis</i> (Cl.) Aug. 31, 1990	Count 1	10014	<i>Psaphida rolandi</i> (Grt.) Mar. 23, 1988	Count 1
9647	<i>Athetis miranda</i> (Grt.) June 6, 1991–Aug. 19, 1988	Count 8	10021	<i>Copivaleria grotei</i> (Morr.) May 4, 1988	Count 1
9650	<i>Anorthodes tarda</i> (Gn.) June 5, 1992–Sep. 10, 1988	Count 12	10059	<i>Homohadena badistriga</i> (Grt.) July 10, 1989	Count 1
9662	<i>Balsa malana</i> (Fitch) June 19, 1989–Aug. 24, 1990	Count 7	10067	<i>Adita chionanthi</i> (J.E. Smith) Aug. 31, 1990	Count 1
9663	<i>Balsa tristrigella</i> (Wlk.) May 30, 1991–July 15, 1988	Count 49	10200	<i>Cucullia asteroides</i> Gn. May 28, 1989	Count 1
9664	<i>Balsa labecula</i> (Grt.) May 30, 1991–Aug. 21, 1989	Count 15	10276	<i>Polia imbrifera</i> (Gn.) June 15–July 8, 1988	Count 2
9666	<i>Spodoptera frugiperda</i> (J.E. Smith) Sep. 13, 1991	Count 1	10288+	<i>Polia detracta</i> (Wlk.) May 30–Aug. 30, 1991	Count 201
9669	<i>Spodoptera ornithogalli</i> (Gn.) Aug. 21, 1989–Oct. 16, 1988	Count 3	10292	<i>Melanchnra adjuncta</i> (Gn.) June 5–Sep. 4, 1992	Count 3
9678	<i>Elaphria versicolor</i> (Grt.) June 20, 1991–July 15, 1988	Count 9	10299	<i>Lacanobia subjecta</i> (G. & R.) June 15–July 8, 1988	Count 2
9681	<i>Elaphria festivooides</i> (Gn.) May 30, 1991–July 3, 1992	Count 8	10397	<i>Lacinipolia renigera</i> (Steph.) June 1–Oct. 16, 1988	Count 69
9688	<i>Galgula partita</i> Gn. June 1, 1988–Aug. 31, 1990	Count 20	10405	<i>Lacinipolia lorea</i> (Gn.) June 6, 1991–July 10, 1992	Count 31
9689	<i>Perigea xanthioides</i> Gn. June 15, 1988–Aug. 14, 1989	Count 6	10431	<i>Faronta diffusa</i> (Wlk.) July 19, 1991–Aug. 21, 1989	Count 2
9690	<i>Condica videns</i> (Gn.) June 27, 1991–Aug. 14, 1989	Count 2	10436	<i>Aletia oxygala</i> (Grt.) May 30, 1991–Sep. 10, 1988	Count 14
9696	<i>Condica vecors</i> (Gn.) June 15, 1990–Aug. 5, 1988	Count 8	10438	<i>Pseudaletia unipuncta</i> (Haw.) May 4, 1988–Sep. 13, 1991	Count 70
9720	<i>Ogdoconta cinereola</i> (Gn.) May 30, 1991–Aug. 21, 1989	Count 25	10440	<i>Leucania litata</i> Gn. July 3, 1992	Count 1
9815	<i>Cosmia calami</i> (Harv.) July 5, 1991–July 27, 1990	Count 23	10444+	<i>Leucania phragmatidicola</i> Gn. June 6, 1991–Sep. 2, 1989	Count 9
9818	<i>Amolita fessa</i> Grt. June 20, 1991–July 15, 1988	Count 7	10446+	<i>Leucania multilinea</i> Wlk. May 30, 1991–Aug. 24, 1990	Count 14
9874	<i>Xylena curvimacula</i> (Morr.) Mar. 23, 1988	Count 1	10447	<i>Leucania commoides</i> Gn. July 3, 1992–Aug. 2, 1991	Count 6
9888	<i>Lithophane innominata</i> (Sm.) Mar. 23–May 12, 1988	Count 8	10461+	<i>Leucania ursula</i> (Fbs.) May 30, 1991–Sep. 9, 1989	Count 99

10495+	<i>Orthosia hibisci</i> (Gn.) Mar. 23, 1988–May 21, 1989	Count 24	10891	<i>Ochropleura plecta</i> (L.) May 30, 1991–Sep. 25, 1992	Count 111
10501	<i>Crocigrapha normani</i> (Grt.) May 4, 1988–May 28, 1989	Count 7	10903+	<i>Euagrotis illapsa</i> (Wlk.) June 22, 1988–Sep. 9, 1989	Count 5
10518	<i>Achatia distincta</i> Hbn. May 12, 1988	Count 1	10915	<i>Peridroma saucia</i> (Hbn.) June 22–Nov. 4, 1988	Count 4
10521	<i>Morrisonia confusa</i> (Hbn.) May 12, 1988–June 12, 1989	Count 38	10926	<i>Spaelotis clandestina</i> (Harr.) June 26, 1989	Count 1
10521.1	<i>Morrisonia latex</i> (Gn.) June 1–July 15, 1988	Count 20	10929	<i>Eurois occulta</i> (L.) July 29, 1988	Count 1
10524	<i>Nephelodes minians</i> Gn. Aug. 26–Sep. 30, 1988	Count 48	10942.1+	<i>Xestia dolosa</i> Franc. May 30, 1991–Oct. 23, 1992	Count 348
10532	<i>Homorthodes furfurata</i> (Grt.) June 1, 1988–July 24, 1989	Count 39	10943	<i>Xestia normaniana</i> (Grt.) Aug. 14, 1989–Sep. 14, 1990	Count 102
10563	<i>Protorthodes oviduca</i> (Gn.) June 15, 1988	Count 1	10944	<i>Xestia smithii</i> (Snell.) Aug. 21, 1989–Aug. 25, 1992	Count 36
10578	<i>Pseudorthodes vecors</i> (Gn.) May 30, 1991–Sep. 9, 1989	Count 55	10950+	<i>Xestia bicarnea</i> (Gn.) Aug. 16, 1990–Sep. 13, 1991	Count 85
10585	<i>Orthodes crenulata</i> (Butler) July 3–Sep. 4, 1992	Count 3	10955	<i>Xestia badinodis</i> (Grt.) Sep. 13, 1991–Sep. 24, 1988	Count 3
10587	<i>Orthodes cynica</i> Gn. May 12, 1988–July 17, 1989	Count 208	10994	<i>Cerastis tenebrifera</i> (Wlk.) May 4, 1988–May 21, 1989	Count 5
10627	<i>Tricholita signata</i> (Wlk.) Aug. 5–Sep. 30, 1988	Count 10	11006	<i>Protolampra brunneicollis</i> (Grt.) June 22, 1990–Sep. 9, 1989	Count 10
10663	<i>Agrotis ipsilon</i> (Hufn.) May 12, 1988–Aug. 25, 1992	Count 76	11010	<i>Heptagrotis phyllophora</i> (Grt.) July 8, 1988–July 17, 1992	Count 2
10674+	<i>Feltia subgothica</i> (Haw.) Aug. 14, 1989–Sep. 6, 1991	Count 10	11029+	<i>Abagrotis alternata</i> (Grt.) June 27, 1991–Oct. 10, 1992	Count 58
10676	<i>Feltia herilis</i> (Grt.) July 22, 1988–Sep. 13, 1991	Count 26	11063	<i>Pyrrhia</i> (near <i>umbra</i>) Sep. 9, 1989	Count 1
10698.2	<i>Trichosilia geniculata</i> (G. & R.) Aug. 19, 1988–Sep. 9, 1989	Count 2	11068	<i>Helicoverpa zea</i> (Boddie) Sep. 9, 1989	Count 2
10793	<i>Euxoa scholastica</i> McD. July 10, 1989	Count 1	11135	<i>Schinia rivulosa</i> (Gn.) July 29, 1988	Count 1
10812	<i>Euxoa bostoniensis</i> (Grt.) Mar. 23, 1988	Count 1			