

A Nine-Year Study of the Lepidoptera of The Wilderness Center, Stark County, Ohio

ROY W. RINGS¹, RICHARD M. RITTER², ROBERT W. HAWES³, AND ERIC H. METZLER⁴, Department of Entomology, Ohio Agricultural Research and Development Center, The Ohio State University, Wooster, OH 44691.

ABSTRACT. A survey of the Lepidoptera occurring at a large nature center in Stark County, Ohio was conducted from 1977 to 1985. Sampling was done using the following techniques: ultraviolet light traps, mercury vapor lamp plus ultraviolet light and collecting sheet, bait traps, sugaring, and netting. A total of 511 species and forms were identified and tabulated. Representative specimens were deposited in the collection of the Wilderness Center. Where adequately documented, the current status of each species was described.

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INTRODUCTION

The Lepidoptera of Ohio are not at all as well known as those in several of the neighboring states. Statewide lists have been published by Forbes (1923, 1948, 1954, 1960) for New York, Moore (1955) for Michigan, and Tietz (1951) for Pennsylvania.

Local checklists, including butterflies, skippers, and moths, have been published by Bales (1909), Dury (1876), Henninger (1910), and Pilate (1832). Many other papers have been published on the Lepidoptera of Ohio, but these have been confined to the butterflies, or butterflies and skippers.

The Wilderness Center, Inc. is a 273-ha (675 acres), non-profit institution supported primarily by memberships and foundations. The Center was established in 1964 as a nature education, wildlife conservation, natural history research, and community service facility.

The objectives of this study were twofold: 1) to assemble a synoptic collection of the more common insects naturally occurring at the Wilderness Center, and 2) to record and publish checklists of the different taxonomic groups of insect species discovered at the Wilderness Center.

A partial result of this study, begun in 1977 and continued to 1985, is this annotated checklist of the butterflies, skippers, and moths found at the Wilderness Center. Its publication establishes a data base upon which to build a more comprehensive body of knowledge. It also provides a status report on many of the species as of June, 1985. Subsequent studies may show that the status of some species at the Wilderness Center has changed to endangered, threatened, or of special interest. (Terminology follows that of Ohio Department of Natural Resources, Division of Wildlife: endangered = in danger of being extirpated; threatened = likely to become endangered if no action is taken; special interest = rare, peripheral, status unknown, and of particular interest to the public.)

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²Department of Plant Pathology, Ohio Agricultural Research and Development Center, The Ohio State University, Wooster, OH 44691.

³The Wilderness Center, Inc., Wilmot, OH 44689.

⁴Ohio Department of Natural Resources, Fountain Square, Columbus, OH 43224.

MATERIALS AND METHODS

The Wilderness Center is located in Sections 20 and 29 of Sugar Creek Township, Stark County, Ohio. The entrance to the Center is approximately 2 km (1.25 miles) northeast of the city of Wilmot. There are 17.7 km (11 miles) of walking trails leading from, or near, the Interpretive Building which provide access to a diversified, vegetative cover. Approximately 40.5 ha (100 acres) of the Center has never been cleared of forest. The non-cultivated, forested areas are of three types: oak (*Quercus* sp.) and hickory (*Carya* sp.), beech (*Fagus grandifolia*) and sugar maple (*Acer saccharum*), and sycamore (*Platanus occidentalis*), elm (*Ulmus rubra*), and willow (*Salix* sp.).

During the past 21 years a number of management programs have increased the variety of plant life that could serve as hosts for insects at the Center. The most important of these was the establishment of a prairie plant collection on 4.0 ha (10 acres) of old-field habitat. Because some of these species are fairly aggressive, the area is now occupied primarily by prairie or meadow plants. A pond and a 3.2-ha (8-acre) lake have been established and stocked with cattails (*Typha* sp.) and sweet-scented water lily (*Nymphaea* sp.) from nearby aquatic areas. A third factor that has influenced the amount and variety of plant species is a management plan that prevents normal forest succession on approximately 2.0 ha (5 acres) of the Center. This has been accomplished by cutting the larger trees so as to maintain the thicket stage. A fourth practice is an intermittent transplanting program of multiflora rose (*Rosa multiflora*), hardwood, and conifer seedlings.

Collecting activities were conducted at the Center from 1977 to 1985, when maximum daily temperatures were above 15.6 °C. Lepidoptera were collected by netting (N), by the use of an ultra-violet lamp (18W, 12V DC) and white sheet (BL) and by "sugaring" (S). The sugar bait consisted of crushed apples, peaches, grapes, bananas, pears, yeast, and brown sugar. This mixture was allowed to ferment for several weeks before use and was applied to trees along the nature trails at the Center. Moths coming to feed on the sugar bait were collected by means of a flashlight and killing jar.

During 1984 and 1985, moths were collected with an Ellisco General Purpose "Black Light" Trap (110V AC) (BLT) and a mercury vapor lamp (160W, 120V) and sheet (BL). In 1984, the light trap was operated every Wednesday and Thursday night (May–October). The trap was operated in 1985 only on nights when favorable weather was forecast; collections averaged two nights each week from early March to the end of June, 1985.

Nocturnal moths were collected by "sugaring" at least once during each week of favorable weather from July, 1984 to May, 1986. The sugar bait was also employed in screened, baited traps which attracted and retained moths in various areas of the Center.

Five collection sites were chosen for light attraction studies. The first, and most permanent, was the location of the black light trap. Since there was a source of electrical power at the Interpretive Building, the Ellisco Blacklight Trap was hung in a small maple tree near the Center. This proved to be an excellent location for a diversity of host plant species. Site 1 was bordered on the west and north by an extensive oak and hickory woodland; on the south by fields containing native grasses, blackberry (*Rubus* sp.) and raspberry (*Rubus* sp.); on the southeast by various pines and Norway spruce (*Picea abies*); on the east by various species of prairie grasses; and on the northeast by wetlands containing swamp milkweed (*Asclepias incarnata*) and arrow-head (*Sagittaria* sp.).

The second site used for blacklight and sheet operations was in a picnic area which had bluegrass lawn on three sides. This site was bordered by multiflora rose hedges on the northeast, on the east by elm and black cherry (*Prunus serotina*), and on the south by red maple (*Acer rubrum*), ash (*Fraxinus* sp.), elm and black cherry.

A third site for BL studies was located in a bottomland parking area bordered on the north by oak and hickory woods and on the east by elm, maple, and sycamore. Sugaring operations were employed primarily in the oak-hickory woods west of the Interpretive Center and along the Sugar Creek Trail.

Species and forms are listed according to the most recent *Check List of the Lepidoptera of America North of Mexico* by Hodges et al. (1983). The numbers preceding the species are those checklist numbers. When more than one collection date is listed, the first date is the earliest record of collection and the second is the latest in a calendar year. Following the date of collection is the method of collection abbreviated as follows: BL, blacklight and sheet; BT, screened trap baited with fermenting bait; BLT, blacklight trap; S, sugaring; and N, netted.

The status of a given species is indicated as abundant (>10 specimens collected), common (5–10 specimens), uncommon (2–4 specimens), and rare (only 1 specimen). Since the purpose of the collection was to list the different species that were found, little quantitative data were accumulated. Therefore, the status of most species remains undetermined. Similar collections by Rings and Metzler (unpublished data) in state wildlife preserves and state parks also aid in determining the status of this site as far as endangerment of these species is concerned.

When feasible, two specimens, preferably a male and female of each species collected, were deposited in the Synoptic Insect Collection in the Interpretive Building at the Wilderness Center, Wilmot, Ohio. Additional specimens, when available, were deposited in the Reference Collection of the Ohio Agricultural Research and Development Center, The Ohio State University, Madison Hill, Wooster, Ohio.

RESULTS AND DISCUSSION

A total of 511 species and forms of Lepidoptera, representing 28 families, were collected and identified in the course of the study (Table 1). None of the species collected is known to be threatened, endangered, or of special interest at the Wilderness Center.

A hypothetical list of additional species that should occur at the Center was prepared from collections made by the authors in the neighboring Carroll, Columbiana, Portage, Tuscarawas and Wayne counties in 1985 and 1986. This list contains 164 species, but is not included because of space limitations.

Dury (1878) included 475 species of Lepidoptera that were observed in the vicinity of Cincinnati, Ohio. In 1882, Pilate published a list of 463 lepidopteran species collected in and around Dayton, Ohio. Henninger (1910) compiled a similar list from two collections that he obtained from Seneca County, Ohio. It totaled 463 species, whereas Bales (1909) included only 241 species and forms in his faunal list for Pickaway County, Ohio. Although these authors listed more forms and subspecies of Lepidoptera than we have, we conclude that from 450 to 500 species commonly occur in a given, favorable locality in Ohio and that probably 600 to 700 species may be taken in a locality, characterized by host diversity, if collecting is intensified over a period of many years.

An attempt was made to associate the various species of Lepidoptera collected with their natural, host plants. This was unsuccessful for two reasons: 1) the complete host range for most lepidopterans is unknown, and 2) most of the species are strong fliers and may be captured at great distances from their host plants.

TABLE 1

Checklist and status of Lepidoptera collected at The Wilderness Center, Stark County, Wilmot, Ohio, 1979–1985. Abbreviations in table: BL, blacklight and sheet; BT, bait trap; BLT, blacklight trap; S, sugaring; N, netted.

FAMILY OECOPHORIDAE-Oecophorid moths	
882	<i>Agonopterix robinella</i> (Pack.) 10 Aug 1979 BL
951	<i>Machimia tentoriferella</i> Clem. 14 Sep 1982 BL
1011	<i>Antaeotricha schlaegeri</i> (Zell.) 18 May 1979 BL Common
FAMILY COLEOPHORIDAE-Casebearer moths	
1387	<i>Coleophora spissicornis</i> (Haw.) 6 Jun 1980–19 Jun 1981 BL Uncommon
FAMILY YPONOMEUTIDAE-Ermine moths	
2401	<i>Atteva punctella</i> (Cram.) 11 May 1979 BL Common
2420	<i>Yponomeuta multipunctella</i> Clem. 19 Jun 1984 BLT
FAMILY SESIIDAE-Clear-winged moths	
2554	<i>Synanthedon acerni</i> (Clem.) 25 Jun 1984–25 Jul 1984 BLT Common
FAMILY COSSIDAE-Carpenter Moths	
2693	<i>Prionoxystus robiniae</i> (Peck.) 19 Jun 1984 BLT Rare
FAMILY TORTRICIDAE-Leaf-roller moths	
3116	<i>Eucosma dorsisignatana</i> (Clem.) 25 Sep 1981 BL
3594	<i>Pandemis limitana</i> (Rob.) 30 Aug 1984 BLT
3597	<i>Argyrotaenia velutinana</i> (Wlk.) 21 Aug 1981 BL
3621	<i>Argyrotaenia quadrfasciata</i> (Fern.) 1 Jun 1985 BL
3633	<i>Choristoneura parallela</i> (Rob.) 19 Jun 1984 BLT
3648	<i>Archips argyrospila</i> (Wlk.) 6 Jun 1980 BL Common
3686	<i>Clepsis melaleucana</i> (Wlk.) 19 Jun 1984 BLT Uncommon.
3695	<i>Sparganothis sulfureana</i> (Clem.) 21 Aug 1979 BL Common
FAMILY HESPERIIDAE-Skippers	
3870	<i>Epargyreus clarus</i> (Cram.) 2 Jun 1981–19 Jul 1977 N
3909	<i>Thorybes bathyllus</i> (JE Smith) 2 Jun 1982 N
3910	<i>Thorybes pylades</i> (Scudder) 4 Jun 1980 N Common
3947	<i>Erynnis juvenalis</i> (F.) 3 May 1981 N Common
4004	<i>Ancyloxypha numitor</i> (F.) 30 Jul 1980 N Uncommon
4012	<i>Thymelicus lineola</i> (Ochs.) 13 Jun 1982–22 Jun 1984 N Uncommon
4041	<i>Polites themistocles</i> (Latr.) 2 Jun 1982 N
4047	<i>Wallengrenia egeremet</i> (Scudder) 14 Jul 1980 N
4048	<i>Pompeius verna</i> (Edw.) 24 Jul 1980 N Uncommon
4059	<i>Poanes bobomok</i> (Harr.) 2 Jun 1982–12 Jun 1981 N Common
4060	<i>Poanes zabulon</i> (Bdv. & Lec.) 2 Jun 1982–14 Aug 1981 N Common
4078	<i>Euphyes ruricola</i> (Bdv.) 30 Jul 1985 N
FAMILY PAPILIONIDAE-Swallowtail butterflies	
4159	<i>Papilio polyxenes</i> F. 10 Jun 1984 N Common
4176	<i>Papilio glaucus</i> L. 12 Jun 1981–7 Aug 1979 N Common
4181	<i>Papilio troilus</i> L. 4 Jun 1979–7 Aug 1979 N Common
FAMILY PIERIDAE-The white and sulfur butterflies	
4196	<i>Artogeia virginensis</i> (Edw.) 3 May 1981 N
4197	<i>Artogeia rapae</i> (L.) 10 Jul 1977–24 Jul 1980 N Abundant
4209	<i>Colias philodice</i> Godt. 14 Aug 1981–25 Aug 1977 N Abundant
4210	<i>Colias eurytheme</i> Bdv. 18 Sep 1983 N Uncommon
FAMILY LYCAENIDAE-Gossamer-winged butterflies	
4251	<i>Lycaena phlaeas</i> (L.) 4 Jun 1980–6 Sep 1977 N Common
4256	<i>Hylolycaena hyllus</i> (Cram.) 6 Sep 1977 N Uncommon
4281	<i>Satyrium caryaevorum</i> (McD.) 3 Jul 1981 N
4285	<i>Satyrium liparops</i> (Lec.) 30 Jul 1985 N
4363	<i>Celastrina ladon</i> (Cram.) 27 Apr 1983–13 Jun 1982 N Common
FAMILY NYMPHALIDAE-Brush-footed butterflies	
4420	<i>Polygona interrogatoris</i> (F.) 9 Aug 1985–5 Sep 1984 N, BT Common
4421	<i>Polygona comma</i> (Harr.) 4 Jul 1980–28 Sep 1984 N, BT Common
4432	<i>Nymphalis antiopa</i> (L.) 27 Apr 1983 N Uncommon
4433	<i>Aglais milberti</i> (Godt.) 30 Jul 1985 N
4434	<i>Vanessa virginensis</i> (Drury) 18 Sep 1983 N
4435	<i>Vanessa cardui</i> (L.) 4 Jun 1985 N Common
4437	<i>Vanessa atalanta</i> (L.) 1 Jun 1981–5 Sep 1984 N, BT Common

TABLE 1 (continued)

4450	<i>Speyeria cybele</i> (F.) 12 Jun 1981–25 Aug 1977 N Common	6339	<i>Semiothisa transitaria</i> (Wlk.) 21 May 1984 BLT
4481	<i>Phyciodes tharos</i> (Drury) 4 Jun 1980–25 Aug 1972 N Abundant	6347	<i>Semiothisa pinistrobata</i> Ferg. 4 Aug 1984 BLT
4522b	<i>Basilarchia arthemis astyanax</i> (F.) 3 May 1979 N Uncommon	6386	<i>Semiothisa ocellinata</i> (Gn.) 14 Jun–25 Jul 1984 BLT
4523	<i>Basilarchia archippus</i> (Cram.) 1 Jun 1985 N	6405	<i>Semiothisa mophisaria</i> (Gn.) No date
FAMILY SATYRIDAE-Wood nymph butterflies		6431	<i>Hesperumia sulphuraria</i> Pack. 25 Jul 1984 BLT, S
4568	<i>Enodia portlandia</i> (F.) 17 Aug 1977 N Uncommon (This species was recently split and northern Ohio specimens are probably 4568.1 <i>Enodia anthedon</i> A. H. Clark)	6588	<i>Iridopsis larvaria</i> (Gn.) 18 May 1977–9 Aug 1984 BLT Common
4568.1	<i>Enodia anthedon</i> A. H. Clark (See 4568)	6590	<i>Anavitrinella pampinaria</i> (Gn.) 17 May 1985–10 Aug 1984 BL, BLT Common
4578	<i>Megisto cymela</i> (Cram.) 4 Jun 1980 N Common	6597	<i>Ectropus crepuscularia</i> (D. & S.) 11 May 1979 BL
4587b	<i>Cercyonis pegala alope</i> (F.) 4 Jul 1980–19 Jul 1980 N Common	6599	<i>Epimecis hortaria</i> (F.) 18 May–15 Aug 1984 BL, BLT Common
FAMILY DANAIDAE-Monarch butterflies		6620	<i>Melanolophia canadaria</i> (Gn.) 14 Apr 1985–9 Jun 1984 BL, BLT Common
4614	<i>Danaus plexippus</i> (L.) 17 Aug 1981 N Common	6621	<i>Melanolophia signataria</i> (Wlk.) 20 Apr 1985 BL
FAMILY LIMACODIDAE-Slug caterpillar moths		6638	<i>Eufidonia notataria</i> (Wlk.) 1 Jun 1985 BLT Rare
4652	<i>Tortricidia testacea</i> Pack. 26 May 1984–6 Jun 1980 BLT Common	6640	<i>Biston betularia</i> f. <i>swettaria</i> (B. & McD.) 10 May 1985–9 Jun 1984 BL, BLT Common
4658	<i>Packardia albipunctata</i> (Pack.) 31 May 1985 BLT	6640a	<i>Biston betularia cognataria</i> (Gn.) 21 May–12 Jun 1984 BLT Common
4659	<i>Packardia geminata</i> (Pack.) 1 Jun 1985 BLT	6654	<i>Hypagyrtis unipunctata</i> (Haw.) 17 May 1985–11 Aug 1979 BL Common
4665	<i>Lithacodes fasciola</i> (H.-S.) 27 Jun 1985 BLT	6655	<i>Hypagyrtis esther</i> (Barnes) 14 Jun 1984–18 Aug 1984 BLT Common
4667	<i>Apoda y-inversum</i> (Pack.) 17 Jun 1984 BLT Common	6658	<i>Phigalia titea</i> (Cram.) 12 Apr 1985 BLT Common
4671	<i>Prolimacodes badia</i> (Hbn.) No date BLT	6662	<i>Palaecrita vernata</i> (Peck) 10 Mar 1985 S Common
4681	<i>Isa textula</i> (H.-S.) 12 Jul 1983 N	6665	<i>Erannis tiliaria</i> (Harr.) 6 Oct 1984 BLT Common
4685	<i>Adoneta spinuloides</i> (H.-S.) 12 Jul 1983 BLT	6666	<i>Lomographa semiclarata</i> (Wlk.) 27 Apr 1985–3 May 1981 BL
4697	<i>Euclea delphinii</i> (Bdv.) 14 Jun 1984 BLT Common	6667	<i>Lomographa vestaliata</i> (Gn.) 18 May 1981 BL
4698	<i>Parasa chloris</i> (H.-S.) 12 Jul 1984 BLT	6668	<i>Lomographa glomeraria</i> (Grt.) 16 Apr 1985–18 May 1979 BL Common
FAMILY PYRALIDAE-Pyralid moths		6724	<i>Euchlaena serrata</i> (Drury) 19 Jun 1981 BL
4751	<i>Munroessa gyralis</i> (Hulst.) 31 Aug 1985 BL	6726	<i>Euchlaena obtusaria</i> (Hbn.) 10 Jun–24 Aug 1984 BLT Common
4949	<i>Ostrinia nubilalis</i> (Hbn.) 27 May 1985–10 Aug 1979 BL, BLT Common	6728	<i>Euchlaena effecta</i> (Wlk.) 15 Jun 1985 BL Rare
4958	<i>Anania funebris</i> (Strom) 4 Jun 1980 BL	6729	<i>Euchlaena johnsonaria</i> (Fitch) 12 Jun 1984 BLT
5040	<i>Pyrausta bicoloralis</i> (Gn.) 31 May 1985 BLT	6732	<i>Euchlaena deplanaria</i> (Wlk.) No date
5073	<i>Pyrausta niveiciliaris</i> (Grt.) 17 Jun 1980 BL	6735	<i>Euchlaena pectinaria</i> (D. & S.) 30 May–15 Aug 1984 BLT Common
5159	<i>Desmia funeralis</i> (Hbn.) 18 May 1979–9 Aug 1984 BL, BLT Common	6737	<i>Euchlaena tigrinaria</i> (Gn.) 24 May 1985 BLT Uncommon
5182	<i>Blepharomastix ranalis</i> (Gn.) 19 Jun 1981 BL	6739	<i>Euchlaena irroraria</i> (B. & McD.) 9 Jun–6 Sep 1984 BLT Common
5222	<i>Palpita arsaltealis</i> (Wlk.) 12 Jun 1984 BLT	6740	<i>Xanthotype urticaria</i> Swett 9 Aug 1984 BL
5228	<i>Polygrammodes flavidalis</i> (Gn.) 14 Aug 1984 BLT	6743	<i>Xanthotype sospeta</i> (Drury) 12 Jun 1984–21 Aug 1981 BL, BLT Common
5241	<i>Pantographa limata</i> (G. & R.) 19 Jun–3 Aug 1984 BL, BLT Common	6753	<i>Pero honestaria</i> (Wlk.) 10 Jun–17 Jul 1984 BLT Common
5275	<i>Herpetogramma pertextilis</i> (Led.) 31 Aug 1979	6755	<i>Pero morrisonaria</i> (Hy. Edw.) 26 May 1985 BLT Rare
5403	<i>Agripbila vulgivaigella</i> (Clem.) 14 Sep 1982	6763	<i>Nacophora quernaria</i> (J. E. Smith) 11 May 1985–10 Jun 1984 BLT Common
5518	<i>Aglossa cuprina</i> Zell. 17 Jun 1984 BLT	6796	<i>Campaea perlata</i> (Gn.) 31 May 1985–6 Jun 1982 BL, BLT Abundant
5524	<i>Hysopygia costalis</i> (F.) 14 Sep 1982 BL Common	6797	<i>Ennomos magnaria</i> (Gn.) 27 Aug–6 Sep 1984 BLT
5533	<i>Herculia olinalis</i> (Gn.) 14 Jun 1985 BLT Common	6818	<i>Selenia kentaria</i> (G. & R.) 20 Apr 1985–30 May 1984 BLT
5606	<i>Tetralopha asperiatella</i> (Clem.) 17 Jun 1984 BLT	6822	<i>Metarranthis duaria</i> (Gn.) 19 Jun 1981 BL
5745	<i>Glyptocera consobrinella</i> (Zell.) 14 Jun 1984 BLT	6823	<i>Metarranthis angularia</i> B. & McD. 9 Jun–18 Jul 1984 BLT Common
5797	<i>Nephoterix virgatella</i> (Clem.) 17 Jun 1984 BLT	6826	<i>Metarranthis hypocharia</i> (H.-S.) 10 Jun 1984 BLT Common
FAMILY THYRIDIDAE-Window-winged moths		6835	<i>Cepphis armataria</i> (H. & S.) 19 Jun–31 Aug 1979 BL
6076	<i>Thyris maculata</i> Harr. 14 Aug 1985 BL Rare	6836	<i>Anagoga occiduaria</i> (Wlk.) 27 Apr 1985 BLT
FAMILY THYATIRIDAE-Thyatirid moths		6837	<i>Probole alienaria</i> (H.-S.) 4 Aug 1984 BLT
6235	<i>Habrosyne scripta</i> (Gosse) 25 Jul–9 Aug 1984 BLT, S Common	6838	<i>Probole amicarica</i> (H.-S.) 20 Apr 1985–14 Jun 1984 BLT Common
6237	<i>Pseudothyatira cymatophoroides</i> (Gn.) 10 Jun–8 Sep 1984 BLT, S Common	6840	<i>Plagodis serinaria</i> (H.-S.) 10 May 1985–9 Jun 1984 BLT Common
6240	<i>Euthyatira pudens</i> (Gn.) 18 Apr 1984–20 Apr 1985 BLT Common	6841	<i>Plagodis kuetzingi</i> (Grt.) 22 Apr 1985–18 May 1979 BLT, BL Common
FAMILY DREPANIDAE-Hooktip moths		6843	<i>Plagodis fervidaria</i> (H.-S.) 10 May 1985–18 May 1979 BL Common
6255	<i>Oreta rosea</i> (Wlk.) 23 Aug–4 Sep 1984 BLT Common	6844	<i>Plagodis alcoolaria</i> (Gn.) 23 Apr 1985–19 Jun 1984 BLT Common
6255	<i>Oreta rosea</i> f. <i>irrorata</i> (Pack.) 14 Aug 1984 BLT Common		
FAMILY GEOMETRIDAE-Geometrid and looper moths			
6261	<i>Heliomata cycladata</i> G. & R. 31 May 1985–9 Jun 1984 BLT Common		
6273	<i>Itame pustularia</i> (Gn.) 19 Jun 1984 BLT		
6286	<i>Itame brunneata</i> (Thunb.) 31 Aug 1979 BL Uncommon		
6288	<i>Itame quadrilinearia</i> (Pack.) No date		
6326	<i>Semiothisa aemulataria</i> (Wlk.) 23 Apr 1985–11 Aug 1984 BLT Common		
6332	<i>Semiothisa punctolineata</i> (Pack.) 17 Jun 1984 BLT		
6335	<i>Semiothisa aequiferaria</i> (Wlk.) 14 Jun 1984 BLT		

TABLE 1 (continued)

6884	<i>Besma endropiaria</i> (G. & R.) 1 Jun 1985 BLT Rare	7775	<i>Manduca sexta</i> (L.) 8 Jun 1982-27 Aug 1985 BL Uncommon
6885	<i>Besma quercivoraria</i> (Gn.) 26 May 1985 BLT Rare	7783	<i>Manduca jasminearum</i> (Guer.) 4 Aug 1984
6892	<i>Lambdina pellucidaria</i> (G. & R.) 17 May 1985 BLT Rare	7786	<i>Ceratomia amyntor</i> (Geyer) 18 Jun 1981-25 Jul 1984 BLT
6912	<i>Sicya macularia</i> (Harr.) 22 Jun 1984 BLT	7787	<i>Ceratomia undulosa</i> (Wlk.) 10 Jun-5 Aug 1984 BLT Common
6941	<i>Eusarca confusaria</i> Hbn. 18 Jun 1982-18 Jul 1984 BLT Common	7821	<i>Smerinthus jamaicensis</i> (Drury) 4 Aug 1984 BLT
6963	<i>Tetracis crocallata</i> Gn. 18 May 1979-17 Jun 1984 BL Common	7824	<i>Paonias excaecatus</i> (J. E. Smith) 4 Aug 1984-10 Aug 1980 BL Common
6964	<i>Tetracis cachexiata</i> Gn. 18 May 1979-10 Jun 1984 BL, BLT Common	7825	<i>Paonias myops</i> (J. E. Smith) 19 Jun 1981 BL Common
6966	<i>Eutrappela clemataria</i> (J E Smith) 18 May 1979 BL	7853	<i>Hemaris thysbe</i> (F.) 26 Jul 1983-7 Aug 1979 N
6982	<i>Prochoerodes transversata</i> (Drury) 6 Jul 1979-17 Aug 1984 BLT Common	7855	<i>Hemaris diffinis</i> (Bdv.) 7 Aug 1979 N
6987	<i>Antipione thisoaria</i> (Gn.) 23 Apr 1985-25 Jul 1984 BLT	7859	<i>Eumorphba pandorus</i> (Hbn.) 18 Aug 1984 BLT
7009	<i>Nematocampa limbata</i> (Haw.) 19 Jun-16 Aug 1984 BLT	7871	<i>Deidamia inscripta</i> (Harr.) 10 Jun 1984 BLT
7046	<i>Nemoria bistriaria</i> Hbn. 27 Apr 1955 BLT Rare	7885	<i>Darapsa myron</i> (Cram.) 11 May-14 Jun 1984 BLT Common
7046	<i>Nemoria bistriaria</i> f. <i>rubromarginaria</i> (Pack.) 23 Apr 1985 BL Common	7886	<i>Darapsa pholus</i> (Cram.) 11 May 1985-14 Jun 1984 BLT Common
7048	<i>Nemoria mimosaria</i> (Gn.) 11 May 1985-16 Aug 1984 BLT Uncommon	7894	<i>Hyles lineata</i> (F.) 4 Sep 1984 BLT
7053	<i>Dichorda iridaria</i> (Gn.) 17 May 1985-16 Aug 1984 BLT	FAMILY NOTODONTIDAE-Prominent moths	
7058	<i>Synchlora aerata</i> (F.) 14 Sep 1983 BL	7895	<i>Clostera albosigma</i> Fitch 22 Aug 1984 BLT
7108	<i>Idaea furciferata</i> (Pack.) 18 May 1979 BL	7896	<i>Clostera inclusa</i> (Hbn.) 11 May 1985-9 Aug 1984 BL
7132	<i>Pleuroprucha insulsaria</i> (Gn.) 19 Jun 1981 BL	7901	<i>Clostera apicalis</i> (Hbn.) 26 May 1985 BLT
7146	<i>Haematopsis grataria</i> (F.) 28 Jun 1984 BLT	7902	<i>Datana ministra</i> (Drury) 12 Jun-18 Jul 1984 BLT Common
7147	<i>Calothysanis amatuararia</i> (Wlk.) 9 Jun 1984 BLT	7903	<i>Datana angusii</i> G. & R. 14 Jun 1984 BLT
7159	<i>Scopula limboundata</i> (Haw.) 1 Jun 1985-25 Jun 1984 BLT Common	7906	<i>Datana contracta</i> Wlk. 19 Jun 1984 BLT
7196	<i>Eulithis diversilineata</i> (Hbn.) 12 Jul 1983-31 Aug 1980 BL Common	7907	<i>Datana integerrima</i> G. & R. 10 May 1985-19 Jun 1981 BL, BLT Common
7214	<i>Ecliptopera atricolorata</i> (G. & R.) 29 Jul 1984 BLT	7915	<i>Nadata gibbosa</i> (J. E. Smith) 10 May 1985-17 Jun 1984 BLT Common
7239	<i>Hydriomena pluvata</i> (Gn.) 18 May 1979 BL	7917	<i>Hyperaeschra georgica</i> (H.-S.) 22 Jun-18 Jul 1984 BLT
7290	<i>Coryphista meadii</i> (Pack.) 19 Jun 1984 BLT Rare	7919	<i>Peridea basitriens</i> (Wlk.) 11 May 1985-22 Aug 1984 BLT Common
7292	<i>Hydria prunivorata</i> (Fgn.) 26 May-4 Aug 1984 BL, BLT Common	7920	<i>Peridea angulosa</i> (J E Smith) 11 May 1985-30 Aug 1984 BLT
7307	<i>Mesoleuca ruficillata</i> (Gn.) 11 May 1985 BL	7921	<i>Peridea ferruginea</i> (Pack.) 10 May 1985 BLT
7390	<i>Xanthorhoe lacustrata</i> (Gn.) 19 Jun-21 Aug 1981 BL	7922	<i>Pheosia rimosa</i> Pack. 10 May 1985 BLT Uncommon
7394	<i>Epirrhoe alternata</i> (Mull.) 16 Aug 1984 BLT	7929	<i>Nerice bidentata</i> Wlk. 10 May 1985-9 Aug 1984 BLT Common
7399	<i>Euphyia unangulata</i> (Haw.) 26 May 1985-31 Aug 1984 BLT Common	7930	<i>Ellida caniplaga</i> (Wlk.) 16 Apr-11 May 1985 BLT Common
7414	<i>Orthonama obstipata</i> (F.) 10 Aug 1979 BL	7931	<i>Gluphisia septentrionis</i> Wlk. 10 May 1985-19 Jun 1984 BLT
7416	<i>Orthonama centrostrigaria</i> (Woll.) 19 Jun 1981-14 Aug 1984 BL, BLT Common	7936	<i>Furcula borealis</i> (Guer.-Mene.) 29 Apr 1985-10 Jun 1984 BLT
7422	<i>Hydrelia inornata</i> (Hulst.) 16 Aug 1984 BLT	7937	<i>Furcula cinerea</i> (Wlk.) 26 May 1985 BLT
7430	<i>Trichodezia albivittata</i> (Gn.) 30 Jul 1985 BL	7939	<i>Furcula occidentalis</i> (Lint.) 18 May 1979 BL
7433	<i>Epirrita autumnata</i> (Bkh.) 6 Oct 1984 BLT	7951	<i>Symmerista albifrons</i> (J. E. Smith) 26 May 1985 BLT
7440	<i>Eubaphe mendica</i> (Wlk.) 11 May 1985-19 Jun 1984 BLT Common	7953	<i>Symmerista leucitys</i> Franc. 10 Jun 1984 BLT
7445	<i>Horisme intestinata</i> (Gn.) 18 Jul 1984 BLT	7958	<i>Dasylophia thyatiroides</i> (Wlk.) 11 May 1985-17 Jun 1984 BLT
7645	<i>Heterophleps refusaria</i> (Wlk.) 12 Jun 1981 BL	7974	<i>Misogada unicolor</i> (Pack.) 21 May 1985-17 Jun 1984 BLT
7647	<i>Heterophleps triguttaria</i> (H.-S.) 11 May 1985 BL	7975	<i>Macruracampa marthesia</i> (Cram.) 29 Jul-27 Aug 1984 BLT
FAMILY MIMALLONIDAE-Sack-bearer moths		7983	<i>Heterocampa obliqua</i> Pack. 25 May 1985 BLT
7660	<i>Lacosoma chiridota</i> Grt. 4 Jun 1984 BLT	7990	<i>Heterocampa umbrata</i> Wlk. 10 May 1985 BLT
FAMILY APATELODIDAE-Apatelodid moths		7994	<i>Heterocampa guttivitta</i> (Wlk.) 11 May 1985-10 Jun 1984 BLT
7663	<i>Apatelodes torrefacta</i> (J E Smith) 1 Jun 1984 BLT Common	7995	<i>Heterocampa biundata</i> Wlk. 17 Jun 1984 BLT
7665	<i>Oleclostera angelica</i> (Grt.) 22 Jun-18 Jul 1984 BL, BLT Common	7998	<i>Lochmaeus manteo</i> Dbdy. 25 Jul 1984 BLT
FAMILY LASIOCAMPIDAE-Lappet moths and tent caterpillar moths		7999	<i>Lochmaeus bilineata</i> (Pack.) 18 May 1979-16 Aug 1984 BL
7670	<i>Tolyte velleda</i> (Stoll) 20 Sep 1981-28 Jun 1984 BL, BLT Common	8005	<i>Schizura ipomoeae</i> Dbdy. 19 Jun 1985
7698	<i>Malacosoma distria</i> Hbn. 28 Jun 1985 BLT Common	8007	<i>Schizura unicornis</i> (J. E. Smith) 11 May 1985-19 Jun 1984 BLT
7701	<i>Malacosoma americanum</i> (F.) 19 Jun 1981-28 Jun 1984 BL Common	8011	<i>Schizura leptinoides</i> (Grt.) 11 May 1985-12 Aug 1984 BLT
FAMILY SATURNIIDAE-Giant silkworm moths		8017	<i>Oligocentra lignicolor</i> (Wlk.) 17 Jun-16 Aug 1984 BLT
7704	<i>Eacles imperialis</i> (Drury) 19 Jun-25 Jul 1984 BLT Common	FAMILY ARCTIIDAE-Tiger moths	
7715	<i>Dryocampa rubicunda</i> (F.) 26 May 1985-12 Jul 1984 BL, BLT Common	8072	<i>Cisthene packardii</i> (Grt.) 30 Aug 1984 BLT
7746	<i>Automeris io</i> (F.) 26 May 1985-28 Jun 1984 BLT Common	8106	<i>Utetheisa bella</i> (L.) 11 May 1985 BLT
7757	<i>Antheraea polyphemus</i> (Cram.) 18 Jul 1985	8111	<i>Haploa lecontei</i> f. <i>dyari</i> Merrick 28 Jun 1984 BLT Rare
7758	<i>Actias luna</i> (L.) 12 Jun-18 Jul 1984 BL, BLT Common	8129	<i>Pyrarbarctia isabella</i> (J E Smith) 8 Jun 1980-8 Jun 1982 BLT Common
7764	<i>Callosamia promethea</i> (Drury) 18 Jul 1979-4 Aug 1984 BL, BLT Common	8131	<i>Estigmene acrea</i> (Drury) 9 Jun 1984 BLT Uncommon

TABLE 1 (continued)

8134	<i>Spilosoma congrua</i> Wlk. 18 May 1979 BL	8745	<i>Mocis texana</i> (Morr.) 14 Jun–11 Aug 1984 BLT
8137	<i>Spilosoma virginica</i> (F.) 14 Apr 1985 BLT	8764	<i>Argyrostromis anilis</i> (Drury) 14 Jun–10 Aug 1984 BLT
8140	<i>Hyphantria cunea</i> (Drury) 18 May 1979–9 Jun 1984 BLT Common	8771	<i>Catocala piatrix</i> Grt. 30 Aug–8 Sep 1984 BLT, S
8146	<i>Epantheria scribonia</i> (Stoll) 26 May 1985–19 Jun 1984 BLT Common	8778	<i>Catocala habilis</i> Grt. 3 Sep 1984 S
8156	<i>Phragmatobia fuliginosa</i> (L.) 31 Aug 1979 BL	8784	<i>Catocala obscura</i> Strk. 27 Aug 1984 S
8169	<i>Apantesis phalerata</i> (Harr.) 12 Jun 1984–31 Aug 1981 BL, BLT Common	8788	<i>Catocala resecta</i> Grt. 7 Aug–20 Sep 1984 S Common
8171	<i>Apantesis nais</i> (Drury) 23 Jun 1984 BL	8791	<i>Catocala insolabilis</i> Gn. 30 Aug 1984 S
8176	<i>Apantesis anna</i> (Grt.) 12 Jun 1984 BLT Uncommon	8792	<i>Catocala vidua</i> (J E Smith) 18 Aug 1984 S
8197	<i>Apantesis virgo</i> (L.) 14 Jun 1984 BLT Uncommon	8795	<i>Catocala palaeogama</i> Gn. 5 Aug 1984 S
8199	<i>Apantesis arge</i> (Drury) 3 Aug 1985 BLT Rare	8796	<i>Catocala nebulosa</i> Edw. 30 Aug 1984 S
8203	<i>Halysidota tessellaris</i> (J E Smith) 6 Jun 1980–12 Jul 1983 BL Abundant	8797	<i>Catocala subnata</i> Grt. 27 Aug–20 Sep 1984 S
8211	<i>Lophocampa caryae</i> (Harr.) 10 May 1985–22 Jun 1984 BLT Common	8798	<i>Catocala neogama</i> (J E Smith) 9 Aug–4 Sep 1984 S Common
8230	<i>Cyrcia tenera</i> Hbn. 26 May 1985–23 Jun 1984 BLT Common	8801	<i>Catocala ilia</i> (Cram.) 13 Jul 1982–8 Sep 1984 BLT, S Common
8238	<i>Euchaetes egle</i> (Drury) 22 Jun 1984–23 Jun 1982 BL, BLT Common	8802	<i>Catocala cerogama</i> Gn. 1 Aug 1982 S Rare
8262	<i>Ctenucha virginica</i> (Esp.) 26 May 1985–14 Jun 1982 BL, BLT Common	8803	<i>Catocala relictata</i> f. <i>elda</i> Behr. 4 Sep 1984 BL Rare
8267	<i>Cisseps fulvicollis</i> (Hbn.) 25 Aug 1977–8 Sep 1980 BL Abundant	8832	<i>Catocala cara</i> Gn. 14 Aug–20 Sep 1984 BLT, S Common
FAMILY LYMANTRIIDAE—Tussock moths		8834	<i>Catocala amatrinx</i> (Hbn.) 30 Aug–12 Oct 1984 S Common
8302	<i>Dasychira obliquata</i> (G. & R.) 9 Aug 1984 BLT	8857	<i>Catocala ultronia</i> (Hbn.) 24 Jul–8 Sep 1984 BLT, S Common
8313	<i>Orgyia detrita</i> Guer. 18 Jul 1984 BLT	8858	<i>Catocala crataegi</i> Saund. 18 Jul–3 Aug 1984 S
FAMILY NOCTUIDAE—Owler moths		8864	<i>Catocala grynea</i> (Cram.) 25 Jul–9 Aug 1984 BLT, S
8322	<i>Idia americalis</i> (Gn.) 17 Jun–18 Aug 1984 BLT, S Common	8867	<i>Catocala blandula</i> Hulst 18 Jul 1984 BLT
8323	<i>Idia aemula</i> (Hbn.) 10 Aug 1979 BL Common	8881	<i>Abrostola urentis</i> Gn. 17 Jun 1984 BLT
8333	<i>Idia denticularis</i> (Harv.) 21 Aug 1979 BL Uncommon	8887	<i>Trichoplusia ni</i> (Hbn.) 18 Aug 1984 BLT
8334	<i>Idia lubricalis</i> (Gey.) 1 Aug 1908 BL Common	8897	<i>Diacrysis balluca</i> Gey. 29 Jul–5 Aug 1984 BLT
8338	<i>Phalaenophana pyramusalis</i> (Wlk.) 1 Aug 1980 BL	8898	<i>Allagrapha aerea</i> (Hbn.) 9 Jun 1984–14 Aug 1982 BLT
8352	<i>Zanclonathia jacobusalis</i> (Wlk.) 8 Sep 1984 BLT	8907	<i>Autographa biloba</i> (Steph.) 16 Apr–10 May 1985 BLT
8355	<i>Chytolita morbidalis</i> (Gn.) 17 Jun 1984 BLT	8908	<i>Autographa precationis</i> (Gn.) 17 Jun–30 Aug 1984 BLT Common
8393	<i>Lascoria ambigulalis</i> Wlk. 18 May 1979 BLT Uncommon	8924	<i>Anagrapha falcifera</i> (Kby.) 10 Jun 1984 BLT Common
8397	<i>Palthis angulalis</i> (Hbn.) 8 Jun 1982 BL	8952	<i>Plusia contexta</i> Grt. 13 Sep 1984 BLT
8398	<i>Palthis asoptalis</i> (Gn.) 19 Jun 1981 BL	8955	<i>Marathyssa inficita</i> (Wlk.) 17 Jun 1984 BLT
8404	<i>Rivula propinquialis</i> (Gn.) 19 May 1979 BL	8957	<i>Paectes oculatrix</i> (Gn.) 14 Jun–18 Jul 1984 BLT
8421	<i>Hyphenodes fragililinea</i> (Sm.) 31 Aug 1984 BLT	8968	<i>Eutelia pulcherrima</i> (Grt.) 17 Jun 1984 BLT
8427	<i>Dyspyralis puncticosta</i> (Sm.) 5 Jul 1984 S	8970	<i>Baileya ophthalmica</i> (Gn.) 4 Jun 1984 BLT
8441	<i>Bomolocha manalis</i> (Wlk.) 30 Aug 1984 BLT	8971	<i>Baileya dormitans</i> (Gn.) 10 May–17 Jun 1984 BLT
8442	<i>Bomolocha baltimoralis</i> (Gn.) 10 May 1985–4 Jun 1980 BL Common	8972	<i>Baileya levitans</i> (Sm.) 28 Apr 1985 BL
8444	<i>Bomolocha palparia</i> (Wlk.) 4 May 1985 BLT	8973	<i>Baileya australis</i> (Grt.) 18 May 1979–14 Jun 1984 BL, BLT
8445	<i>Bomolocha abalienalis</i> (Wlk.) 11 May 1985–27 Aug 1984 BLT Common	8983	<i>Meganola minuscula</i> (Zell.) 18 May 1979 BLT
8446	<i>Bomolocha deceptalis</i> (Wlk.) 27 May 1985 BLT	8990	<i>Nola cilicoides</i> (Grt.) 7 May 1985 BLT
8447	<i>Bomolocha madefactalis</i> (Gn.) 11 May 1985–1 Aug 1984 BLT	9047	<i>Lithacodia muscosula</i> (Gn.) 12 Jun 1984 BLT
8465	<i>Plathypena scabra</i> (F.) 30 Aug 1984 BLT Common	9049	<i>Lithacodia synochitis</i> (G. & R.) 18 May 1979–22 Jun 1984 BL, BLT Common
8479	<i>Spargaloma sexpunctata</i> Grt. 31 May 1985 BLT	9053	<i>Lithacodia carneola</i> (Gn.) 11 May 1985–16 Aug 1984 BLT Common
8491	<i>Ledaea perditalis</i> (Wlk.) 9 Aug 1984 S Uncommon	9057	<i>Homophoberia apicosa</i> (Haw.) 25 Jun–30 Aug 1984 BLT Common
8499	<i>Metalectra discalis</i> (Grt.) 4 Aug 1984 BLT	9062	<i>Cerma cerintha</i> (Tr.) 26 May 1985–17 Jun 1984 BLT
8555	<i>Scoliopteryx libatrix</i> (L.) 9 Aug 1984 BLT Uncommon	9065	<i>Leuconycta diptheroides</i> (Gn.) 27 Apr 1985–25 Jul 1984 BL, BLT Common
8587	<i>Panopoda rufimargo</i> (Hbn.) 12 Jul–9 Aug 1984 BLT	9066	<i>Leuconycta lepidula</i> (Grt.) 11 May 1985–9 Aug 1984 BLT
8588	<i>Panopoda carneicosta</i> Gn. 14 Jun–18 Aug 1984 BLT	9090	<i>Tarachidia candefacta</i> (Hbn.) 14 Jun 1984 BLT
8591	<i>Phoberia atomaris</i> Hbn. 16 Apr 1985 BL	9095	<i>Tarachidia erastroioides</i> (Gn.) 12 Jun 1984 BLT
8689	<i>Zale lunata</i> (Drury) 25 Jul–8 Sep 1984 BL, BLT, S Common	9127	<i>Spragueia leo</i> (Gn.) 14 Jun–18 Jul 1984 BLT
8695	<i>Zale undularis</i> (Drury) 12 Jun 1984 BLT	9184	<i>Colocasia flavicornis</i> (Sm.) 9 Aug 1984 BLT
8699	<i>Zale obliqua</i> (Gn.) 23 Apr 1985 BLT	9185	<i>Colocasia propinquilinea</i> (Grt.) 16 Apr 1985 19 Jun 1984 BLT
8713	<i>Zale lunifera</i> (Hbn.) 20 Apr 1985 BLT	9189	<i>Charadra deridens</i> (Gn.) 9 Jun–30 Aug 1984 BLT
8716	<i>Zale unilineata</i> (Grt.) 16 Apr 1985 BLT	9193	<i>Raphia frater</i> Grt. 14 Jun–18 Aug 1984 BL
8717	<i>Zale horrida</i> Hbn. 19 Jun 1981 BL	9200	<i>Acrionicta americana</i> (Harr.) 26 May 1985–18 Jul 1984 BLT Common
8719	<i>Euparthenos nubilis</i> (Hbn.) 14 Jun–3 Aug 1984 BL, BLT, S Common	9221	<i>Acrionicta funeralis</i> G. & R. 11 May 1985–14 Aug 1985 BLT Common
8721	<i>Allotria elonympa</i> (Hbn.) 17 Jun 1984 BLT Common	9227	<i>Acrionicta laetifica</i> Sm. 11 May–27 Aug 1984 BLT
8727	<i>Parallelia bistriaris</i> Hbn. 25 Jul–3 Aug 1984 BLT	9228	<i>Acrionicta furcifera</i> Gn. 18 May 1979 BL
8731	<i>Euclidia cuspidata</i> (Hbn.) 25 Jul 1984 BLT Uncommon	9229	<i>Acrionicta basta</i> Gn. 20 Apr 1985–30 Aug 1984 BLT Common
8738	<i>Caenurgina crassiuscula</i> (Haw.) 10 Jul 1977–4 Sep 1984 BL, BLT Common	9236	<i>Acrionicta morula</i> G. & R. 10 Jun–3 Aug 1984 BLT
8739	<i>Caenurgina erebtea</i> (Cram.) 8 Sep 1984 S Uncommon	9237	<i>Acrionicta interrupta</i> Gn. 1 Apr–5 Aug 1984 BLT
		9238	<i>Acrionicta lobeliae</i> Gn. 9 Jun 1985 BLT
		9243	<i>Acrionicta ovata</i> Grt. 18 Jul 1984 BLT
		9244	<i>Acrionicta modica</i> Wlk. 12 Jun–18 Jul 1984 BLT
		9245	<i>Acrionicta haesitata</i> (Grt.) 31 May 1984–22 Jun 1985 BLT
		9246	<i>Acrionicta clarescens</i> Gn. 11 May–4 Sep 1985 BLT

TABLE 1 (continued)

9250	<i>Acronicta inclara</i> Sm. 22 Jun 1984 BLT	9952	<i>Eucirroedia pampina</i> (Gn.) 24 Jul-7 Oct 1984 BL
9250b	<i>Acronicta inclara</i> f. <i>incretata</i> Morr. 14 Jun 1984 BLT	9957	<i>Sunira bicolorago</i> (Gn.) 30 Aug-4 Oct 1984 BL, BLT, BT, S
9251	<i>Acronicta retardata</i> (Wlk.) 10 Jun 1984 BLT	9961	<i>Anathix ralla</i> (G. & R.) 20 Sep 1984 BLT
9254	<i>Acronicta afflictata</i> Grt. 17 May 1985-17 Jun 1984 BLT	10012	<i>Eutolype electilis</i> (Morr.) 18 Apr 1985 BLT
9257	<i>Acronicta impleta</i> Wlk. 18 May 1979 BL	10021	<i>Copivaleria grotei</i> (Morr.) 16 Apr 1985 BLT
9264	<i>Acronicta longa</i> Gn. 22 Apr 1985 BL	10200	<i>Cucullia asteroides</i> Gn. 14 Jun 1984 BLT
9272	<i>Acronicta oblongata</i> (J E Smith) 11 May 1985-13 Aug 1984 BLT	10202	<i>Cucullia convexipennis</i> G. & R. 18 Sep 1983 BL
9284	<i>Agriopodes teratophora</i> (H.-S.) 14 Jun 1984 BLT	10288	<i>Polia detracta</i> (Wlk.) 1 Jun 1985-19 Jun 1984 BLT
9285	<i>Polygrammate hebraicum</i> Hbn. 9 Jun 1984 BLT	10291	<i>Polia latex</i> (Gn.) 17 May-14 Jun 1984 BLT
9299	<i>Eudryas unio</i> (Hbn.) 9 Aug 1984 BLT	10292	<i>Melanchnra adjuncta</i> (Gn.) 18 May 1979-22 Aug 1984 BL, BLT
9314	<i>Alypia octomaculata</i> (F.) 11 May 1985 BLT	10293	<i>Melanchnra picta</i> (Harr.) 9 Jun 1984 BLT
9332	<i>Apamea vulgaris</i> (G. & R.) 19 Jun 1984 BLT	10299	<i>Lacanobia subjuncta</i> (G. & R.) 26 May 1985-22 Aug 1984 BL, BLT
9333	<i>Apamea lignicolora</i> (Gn.) 28 Jun 1984 BLT	10300	<i>Lacanobia grandis</i> (Gn.) 1 Jun 1984 BLT
9364	<i>Apamea finitima</i> Gn. 17 Jul 1984 BLT	10301	<i>Lacanobia lutra</i> (Gn.) 15 Jun 1984 BLT
9367	<i>Agroperina dubitans</i> (Wlk.) 14 Aug 1984 BLT	10304	<i>Lacanobia legitima</i> (Grt.) 1 Sep 1984 S
9373	<i>Agroperina helva</i> (Grt.) 16 Aug-4 Sep 1984 BLT	10368	<i>Lacinipolia meditata</i> (Grt.) 30 Aug 1984 BLT
9391	<i>Luperina passer</i> (Gn.) 26 May 1985-17 Jun 1984 BLT	10370	<i>Lacinipolia lustralis</i> (Grt.) 27 Aug 1984 BLT
9419	<i>Oligia mactata</i> (Gn.) 6 Oct 1984 BLT	10397	<i>Lacinipolia renigera</i> (Steph.) 19 Jun-13 Sep 1984 BLT
9427	<i>Meropleon diversicolor</i> (Morr.) 13 Sep 1984 BLT	10405	<i>Lacinipolia lorea</i> (Gn.) 14 Jun 1984 BLT
9456	<i>Amphipoea interoceanica</i> (Sm.) 10 Jul 1977-15 Jul 1984 BLT	10431	<i>Faronta diffusa</i> (Wlk.) 26 May 1985 BLT
9457	<i>Amphipoea americana</i> (Spey.) 25 Jul 1984 BLT	10436	<i>Aletia oxygala</i> (Grt.) 25 May 1985-12 Jun 1984 BLT
9466	<i>Papaipema cataphracta</i> (Grt.) 6 Oct 1984 BLT	10438	<i>Pseudaletia unipuncta</i> (Haw.) 10 Jun-13 Sep 1984 BL, BLT, BT, S
9471	<i>Papaipema arctivorens</i> Hamp. 7 Oct 1984 BLT	10444	<i>Leucania phragmitidicola</i> Gn. 16 Jun 1984 BLT
9473	<i>Papaipema impecuniosa</i> (Grt.) 7 Oct 1982 BL	10446	<i>Leucania multilinea</i> Wlk. 31 Aug 1979 BL
9483	<i>Papaipema inquaesita</i> (G. & R.) 14 Sep 1982 BL	10447	<i>Leucania commoides</i> Gn. 25 Jul-27 Aug 1984 BLT
9492	<i>Papaipema marginidens</i> (Gn.) 5 Sep 1984 BLT	10459	<i>Leucania inermis</i> (Fbs.) 26 May 1985 BLT
9496	<i>Papaipema nebris</i> (Gn.) 13 Sep 1984 BLT	10461	<i>Leucania ursula</i> (Fbs.) 17 May-13 Sep 1984 BLT
9502	<i>Papaipema helva</i> (Strk.) 29 Jul-9 Aug 1984 BLT	10462	<i>Leucania pseudargyria</i> Gn. 25 Jul 1984 BLT
9505	<i>Papaipema cerrusata</i> (Grt.) 13 Sep 1984 BLT	10487	<i>Orthosia rubescens</i> (Wlk.) 4 Apr 1985 BLT
9516	<i>Hydraecia stramentosa</i> Gn. 29 Jul 1984 BLT	10488	<i>Orthosia garmani</i> (Grt.) 18 Apr-11 May 1985 BLT
9520	<i>Achatodes zaeae</i> (Harr.) 5 Aug 1984 BL, BLT, S	10490	<i>Orthosia revicta</i> (Morr.) 14 Apr 1985 BL, S
9523	<i>Bellura gortynoides</i> Wlk. 10 Jun-9 Aug 1984 BLT	10495	<i>Orthosia hibisci</i> (Gn.) 12 Apr 1985 BLT Common
9545	<i>Euplexia benesimilis</i> McD. 27 Apr 1985-17 Aug 1984 BLT	10501	<i>Crocigrapha normani</i> (Grt.) 20 Apr 1985-18 May 1979 BLT
9547	<i>Phlogophora periculosa</i> Gn. 10 Aug 1984 BLT	10502	<i>Himella intractata</i> (Morr.) 16 Apr 1985 BLT
9547	<i>Phlogophora periculosa</i> f. <i>v-brunneum</i> (Grt.) 4 Sep 1984 BLT	10518	<i>Achatta distincta</i> Hbn. 18 Apr 1985-18 May 1979 BLT
9556	<i>Chytonix palliatricula</i> (Gn.) 8 Jun 1982-7 Oct 1984 BLT	10520	<i>Morrisonia evicta</i> (Grt.) 20 Apr 1985 BLT
9560	<i>Dypterygia rozmani</i> Berio 17 Jun-18 Jul 1985 BLT	10521	<i>Morrisonia confusa</i> (Hbn.) 23 Apr-11 May 1985 BL, BLT
9578	<i>Hyppa xylinoides</i> (Gn.) 11 May 1985-9 Aug 1984 BLT	10524	<i>Nephelodes minians</i> (Gn.) 6 Sep 1982 BL, BLT, S
9582	<i>Nedra vamosula</i> (Gn.) 19 Jun 1984-12 Jul 1983 BLT	10578	<i>Pseudorthodes vecors</i> (Gn.) 10 May-17 Jun 1984 BLT
9626	<i>Trachea delicata</i> (Grt.) 9 Jun-18 Jul 1984 BLT	10585	<i>Orthodes crenulata</i> (Butler) 15 May 1979-31 Aug 1984 BL, BLT
9638	<i>Amphipyra pyramidoides</i> Gn. 25 Jul-9 Aug 1984 BL, BLT, S	10587	<i>Orthodes cynica</i> Gn. 14 Jun-18 Jul 1984 BLT
9639	<i>Amphipyra tragopoginis</i> (Cl.) 29 Jul-9 Aug 1984 BLT, S	10627	<i>Tricholita signata</i> (Wlk.) 10 Aug 1979 BL
9650	<i>Anorthodes tarda</i> (Gn.) 17 May 1985-22 Aug 1984 BLT	10648	<i>Agrotis gladiaria</i> Morr. 20 Sep 1984 BLT
9661	<i>Crambodes talidiformis</i> Gn. 14 Jun 1984	10651	<i>Agrotis venerabilis</i> Wlk. 20 Sep 1984 BLT
9662	<i>Balsa malana</i> (Fitch) 10 Jun 1984 BLT	10663	<i>Agrotis ipsilon</i> (Hufn.) 22 Jun-20 Sep 1984 BL, BLT, BT, S Common
9664	<i>Balsa labecula</i> (Grt.) 17 May 1985 BLT	10670	<i>Feltia jaculifera</i> (Gn.) 20 Sep 1984 BL
9666	<i>Spodoptera frugiperda</i> (J. E. Smith) 9 Aug-20 Sep 1984 BL, BLT, S	10674	<i>Feltia subgothica</i> (Haw.) 18 Aug-4 Sep 1984 BLT Common
9669	<i>Spodoptera ornithogalli</i> (Gn.) 9 Aug-13 Sep 1984 BL, BLT, S	10675	<i>Feltia tricolora</i> (Lint.) 9 Aug 1984 BLT
9681	<i>Elaphria festivoidea</i> (Gn.) 11 May 1985-19 Jun 1984 BLT	10676	<i>Feltia herilis</i> (Grt.) 18 Aug 1979 BL, BLT Common
9684	<i>Elaphria grata</i> Hbn. 18 May 1979 BL	10680	<i>Feltia gemiculata</i> G. & R. 1 Sep 1982 BL, S
9688	<i>Galgula partita</i> Gn. 19 Jun 1984-21 Aug 1981 BLT	10803	<i>Euxoa velleripennis</i> (Grt.) 4 Sep 1984 BLT Common
9689	<i>Perigea xanthioides</i> Gn. 16 Jun-21 Aug 1981 BL, BLT	10812	<i>Euxoa bostoniensis</i> (Grt.) 7 Oct 1984 BLT Rare
9690	<i>Platysenta videns</i> (Gn.) 17 May 1985 BLT	10870	<i>Loxagrotis acclivis</i> (Morr.) 16 Aug 1984 BLT
9696	<i>Platysenta vecors</i> (Gn.) 26 May 1985-9 Aug 1984 BL	10891	<i>Ochropleura plecta</i> (L.) 27 Apr 1985-10 Aug 1979 BL, BLT Common
9720	<i>Ogdoconta cinereola</i> (Gn.) 26 May-19 Aug 1984 BLT	10903	<i>Euagrotis illapsa</i> (Wlk.) 22 Aug-4 Sep 1984 BLT
9725	<i>Stiriodes obtusa</i> (H.-S.) 4 Aug 1984 BLT	10915	<i>Peridroma saucia</i> (Hbn.) 9 Aug-19 Sep 1984 BL, BLT, S Common
9754	<i>Plagiomimicus pityochromus</i> Grt. 9 Aug 1984 BLT	10942	<i>Xestia adela</i> Franc. 12 May 1985-2 Sep 1984 BL, BLT Common
9781	<i>Basilodes pepita</i> Gn. 9 Aug 1984 BLT	10942.1	<i>Xestia dolosa</i> Franc. 18 May 1979-2 Sep 1984 BL, BLT, S Common
9874	<i>Xylena curvamacula</i> (Morr.) 28 Mar 1985 BT	10943	<i>Xestia normaniana</i> (Grt.) 4 Sep 1984 BLT
9887	<i>Lithophane bethunei</i> (G. & R.) 19 Oct 1984 BT, S	10944	<i>Xestia smithii</i> (Snell.) 27 Aug-20 Sep 1984 BLT Common
9910	<i>Lithophane antennata</i> (Wlk.) 10 Mar 1985 S	10950	<i>Xestia bicarnea</i> (Gn.) 29 Jul 1984-14 Sep 1982 BL
9914	<i>Lithophane laticinerea</i> Grt. 10 Mar 1985-6 Oct 1984 S	10955	<i>Xestia badinodis</i> (Grt.) 19 Sep 1980 BL
9915	<i>Lithophane grotei</i> Riley 24 Feb-10 Mar 1985 S	10994	<i>Cerastis tenebrifera</i> (Wlk.) 28 Mar-14 Apr 1984 BLT
9916	<i>Lithophane unimoda</i> (Lint.) 10 Mar 1985 S	11006	<i>Protolampra brunneicollis</i> (Grt.) 17 Jun-30 Aug 1984 BL, BLT Common
9933	<i>Eupsilia vinulenta</i> (Grt.) 24 Feb 1985 S		
9933.1	<i>Eupsilia sidus</i> (Gn.) 28 Mar-5 Apr 1985 S		
9935	<i>Eupsilia tristigmata</i> (Grt.) 24 Feb-10 Mar 1984 S		
9936	<i>Eupsilia morrisoni</i> (Grt.) 24 Feb 1985 S		
9943	<i>Metaxaglaea inulta</i> (Grt.) 4 Sep-27 Oct 1984 BT, BLT, S		
9946	<i>Epiglaea decliva</i> (Grt.) 4 Sep-4 Oct 1984 BLT, S		

TABLE 1 (continued)

11007	<i>Ecartagrotis sigmoides</i> (Gn.)	25 Jul 1984	BLT
11029	<i>Abagrotis alternata</i> (Grt.)	3 Aug 1984	BL, BLT, S Common
11063	<i>Pyrrhia umbra</i> (Hufn.)	26 May 1985-19 Jun 1984	BLT
11068	<i>Helimbia zea</i> (Boddie)	4 Sep 1984	BLT, S Common
11128	<i>Schinia arcigera</i> (Gn.)	30 Aug-2 Sep 1984	BLT
11135	<i>Schinia rivulosa</i> (Gn.)	9 Aug 1984	BLT Rare

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