



Fundy Model Forest

~Partners in Sustainability~

Report Title: Moth Diversity in an Old-Growth Forest: Summary of the Wolfe Lake Site, Fundy National Park, 1994

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***The Fundy Model Forest...
...Partners in Sustainability***

“The Fundy Model Forest (FMF) is a partnership of 38 organizations that are promoting sustainable forest management practices in the Acadian Forest region.”

Atlantic Society of Fish and Wildlife Biologists
Canadian Institute of Forestry
Canadian Forest Service
City of Moncton
Conservation Council of New Brunswick
Fisheries and Oceans Canada
Indian and Northern Affairs Canada
Eel Ground First Nation
Elgin Eco Association
Elmhurst Outdoors
Environment Canada
Fawcett Lumber Company
Fundy Environmental Action Group
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New Brunswick Federation of Woodlot Owners
NB Premier's Round Table on the Environment & Economy
New Brunswick School District 2
New Brunswick School District 6
Nova Forest Alliance
Petitcodiac Sportsman's Club
Red Bank First Nation
Remsoft Inc.
Southern New Brunswick Wood Cooperative Limited
Sussex and District Chamber of Commerce
Sussex Fish and Game Association
Town of Sussex
Université de Moncton
University of NB, Fredericton - Faculty of Forestry
University of NB - Saint John Campus
Village of Petitcodiac
Washademoak Environmentalists



MOTH DIVERSITY IN AN OLD-GROWTH FOREST
- SUMMARY OF THE WOLFE LAKE SITE,
FUNDY NATIONAL PARK, 1994

by

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Introduction

Measures of diversity are frequently seen as indicators of the well being of ecosystems and can be used to gauge the effects of environmental disturbance through any number of factors. Species diversity consists of two components, i) the variety of species or species richness, and ii) the relative abundance of species. The major applications of diversity measurements are in nature conservation and environmental monitoring. In both cases, high diversity is held to be synonymous with ecological quality. Impacted ecosystems often show a shift in the pattern of species abundance (rare species often disappear), a change in dominance (one species often becomes relatively very abundant), and a change in species richness (usually a reduction).

This summary lists the 15,851 individual moths in 401 species in 14 families that were taken in the mixed-wood old-growth forest on the western edge of Wolfe Lake, Fundy National Park. As such it is the first step in characterizing the species diversity of such a forest that is to serve as baseline data from which to evaluate the impact of human activities on forest ecosystems in the region. It also serves as baseline data for assessing future (natural) changes in a relatively unperturbed forest ecosystem, and expands our knowledge of animal community structure in an old-growth forest in the Acadian forest region of Canada.

This summary consists of five parts.

PART I

A graphical representation of the seasonal flight periods of the 401 species, prioritized by the first occurrence of each species and based on the weekly catches of individual moths. The data show a progression of species appearances from early May until the end of September.

PART II

Uses the same database as PART I but arranges the species names alphabetically thus allowing for quick retrieval of seasonal flight periods and relative abundance data for any species.

PART III

Uses the same basic format as above, but arranges the data based on the phylogenetic relationships of the species. Most species are in the families Geometridae and Noctuidae.

PART IV

Arranges the data based on the relative abundances of the species from the most common to the rarest. This 'species abundance frequency distribution' is one measure of community structure that forms the basis, along with species richness, for comparing

biodiversity between forest sites.

PART V

This section consists of a series of 4 charts that summarize the data.

Chart 1. Shows the number of individual moths caught per week; peak catch was between June 26 and July 9 (weeks 26 and 27).

Chart 2. Shows the number of species caught per week; peak numbers of species occurred between June 26 and July 16 (weeks 26, 27, and 28).

Chart 3. Shows the numbers of previously unrecorded ('new species') captured each week. The numbers reached a peak between June 12-18 (week 24) but were also high between June 26-July 9 (weeks 26 and 27). Note that 'new species' appeared during every week of the season.

Chart 4. Shows the species accumulation curve on a daily basis. There was a rapid increase in 'new species' between June 12 (day 163) and July 14 (day 195).

Acknowledgements

We thank Jim Edsall (Moncton), Dr. Douglas Ferguson (Washington, D.C.), and Dr. Reggie Webster (Fredericton) for identification of some of the species, and Sheila Lee Berube for converting the raw data into the graphical formats.

DE-CODING SHEET FOR GRAPHICAL FORMATS

■ Maximum catch, if greater than 9 moths

Note: traps not operating on weeks 36, 37, and 38

Week	Date Range
19	May 8-14
20	May 15-21
21	May 22-28
22	May 29-June 4
23	June 5-11
24	June 12-18
25	June 19-25
26	June 26-July 2
27	July 3- 9
28	July 10-16
29	July 17-23
30	July 24-30
31	July 31-Aug. 6
32	Aug. 7-13
33	Aug. 14-20
34	Aug. 21-27
35	Aug. 28-Sept. 3
39	Sept. 25-Oct. 1

PART I

CAT#	SPECIES NAME	WEEK																				SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
9874	Xylena curvimacula																					16
9888	Lithophane innominata																					9
9902	Lithophane baileyi																					6
9922	Lithophane pexata																					19
9889	Lithophane petulca																					5
9893	Lithophane hemina																					3
10495	Orthosia hibisci																					2
10011	Brachionycta borealis																					2
7543	Eupithecia annulata																					23
10996	Metalepsis salicarium																					12
10520	Morrisonia evicta																					28
7329	Anticlea vasilata																					39
10487	Orthosia rubescens																					103
7639	Cladara atroliturala																					148
7637	Cladara limitaria																					153
10490	Orthosia revicta																					160
10008	Feralia comstocki																					391
10501	Crocigrapha normani																					

Maximum catch, if greater than 9 moths

Note: traps not operating on weeks 36, 37, and 38

Week	Date Range
19	May 8-14
20	May 15-21
21	May 22-28
22	May 29-June 4
23	June 5-11
24	June 12-18
25	June 19-25
26	June 26-July 2
27	July 3- 9
28	July 10-16
29	July 17-23
30	July 24-30
31	July 31-Aug. 6
32	Aug. 7-13
33	Aug. 14-20
34	Aug. 21-27
35	Aug. 28-Sept. 3
39	Sept. 25-Oct. 1

PART I

PART I

FLIGHT PERIODS FOR SPECIES WHOSE FIRST OCCURRENCE WAS WEEK 22 - May 29-June 4

PART I

CAT#	SPECIES NAME	WEEK																																SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39												
10994	Cerastis tenebrifera																																1	
7635	Acasis viridata																																1	
8713	Zale lunifera																																1	
8694	Zale aeruginosa																																3	
6966	Eutrapela clemataria																																13	
6822	Metarranthis duaria																																18	
6428	Orthofidonia tinctaria																																5	
7822	Smerinthus cerisyi																																9	
6818	Selenia kentaria																																5	
10298	Lacanobia radix																																5	
7489	Eupithecia lariciata																																14	
6807	Tacparia deterzata																																17	
7821	Smerinthus jamaicensis																																49	
6840	Plagodis serinaria																																81	
8970	Baileya ophthalmica																																43	
9177	Panthea acronyctoides																																63	
6838	Probole amicaria																																128	
6620	Melanolophia canadaria																																49	
6885	Besma quercivoria																																47	
10521.1	Morrisonia latex																																44	
10292	Melanchra adjuncta																																55	
9261	Acronicta impressa																																16	
10438	Pseudaletia unipuncta																																35	

CAT#	SPECIES NAME	WEEK																	SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
6347	Semiothisa pinistrobata																		4
6429	Orthofidonia exornata																		6
6430	Orthofidonia flavivenata																		1
6582	Anacamptodes vellivolata																		1
6640	Biston betularia cognataria																		17
6667	Lomographa vestaliata																		4
6734	Euchlaena marginaria																		2
6812	Homochlodes fritillaria																		18
6836	Anagoga occiduaria																		13
7213	Ecliptopera silaceata albolineata																		15
7307	Mesoleuca ruficiliata																		5
7330	Anticlea multiferata																		3
7474	Eupithecia miserulata																		13
7492	Eupithecia casloata																		12
7574	Eupithecia albicapitata																		2
7640	Lobophora nivigerata																		4
7812	Sphinx drupiferarum																		1
7825	Paonias myops																		16
7901	Clostera apicalis																		15
7922	Pheosia rimosa																		16
7926	Notodonta scitipennis																		2
8134	Spilosoma congrua																		9
8137	Spilosoma virginica																		17
8156	Phragmatobia fuliginosa rubricosa																		4
8717	Zale horrida																		9
8969	Baileya doubledayi																		16
9050	Lithacodia concinnimacula																		5
9065	Leuconycta diptheroides																		7
9189	Charadra deridens																		3
9257	Acronicta impleta																		13
9259	Acronicta noctivaga																		15
9364	Apamea finitima																		2
10303	Lacanobia tacoma																		1
10563	Protorthodes oviduca																		13
9582	Nedra ramosula																		2
7229	Hydriomena perfracta																		2
7810	Sphinx gordius																		50
8158	Phragmatobia assimilians																		12
6844	Plagodis alcolaria																		78
6235	Habrosyne scripta																		289
6964	Tetracis cachexiata																		74
7235	Hydriomena divisaria																		43
7449	Eupithecia palpata																		117
7487	Eupithecia subfuscata																		362
7520	Eupithecia satyrata dodata																		23
7715	Dryocampa rubicunda																		14

PART I

CAT#	SPECIES NAME	WEEK																			SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
6253	Eudeilinia herminiata																				3
6763	Nacophora quernaria																				2
7293	Rheumaptera hastata																				1
7048	Nemoria mimosaria																				14
7368	Xanthorhoe labradorensis																				2
8338	Phalaenophana pyramusalis																				6
8397	Palthis angularis																				4
7828	Pachysphinx modesta																				1
7895	Clostera albosigma																				3
7958	Dasylophia thyatiroides																				6
7995	Heterocampa biundata																				19
7425	Venusia cambrica																				12
7494	Eupithecia sheppardata																				4
7528	Eupithecia assimilata																				5
8455	Lomanaltes eductalis																				17
9206	Acronicta leporina vulpina																				15
8909	Autographa rubida																				1
9286	Harrisimemna trisignata																				7
9066	Leuconycta lepidula																				1
10197	Cucullia florea																				2
10199	Cucullia omissa																				1
7529	Eupithecia absinthiata																				2
9578.1	Hyppa "xylinoidea"																				1
7420	Hydrelia condensata																				21
7526	Eupithecia russeliata																				26
9200	Acronicta americana																				71
9203	Acronicta dactylina																				74
9545	Euplexia benesimilis																				28
9681	Elaphria festivoides																				101
10891	Ochropleura plecta																				39
7650	Callizzia amorata																				105
6588	Iridopsis larvaria																				33
6330	Semiothisa ulsterata																				82
6237	Pseudothyatira cymatophoroides																				76
7320	Perizoma alchemillata																				41
8007	Schizura unicornis																				58

FLIGHT PERIODS FOR SPECIES WHOSE FIRST OCCURRENCE WAS WEEK 26 - June 26-July 2

[illegible]

CAT#	SPECIES NAME	WEEK																		SUM													
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36		37	38	39										
9251	Acronicta retardata																																26
10405	Lacinipolia lorea																																13
11001	Anaplectoides pressus																																75
9578.2	Hyppa "ancocisconensis"																																51
6725	Euchlaena muzaria																																43
6598	Protoboarmia porcelaria																																34
7540	Eupithecia perfusca																																38
8005	Schizura ipomoeae																																116
11008	Eueretagrotis perattenta																																44
11010	Heptagrotis phyllophora																																53

CAT#	SPECIES	WEEK																					SUM
	NAME	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
18	Sthenopsis argenteomaculatus																					2	
4654	Tortricidia flexuosa																					3	
4659	Packardia geminata																					1	
6343	Semiothisa sexmaculata																					1	
6349	Semiothisa banksianae																					2	
6590	Anavitrinella pampinaria																					1	
9193	Raphia frater																					4	
6677	Cabera erythemaria																					10	
6678	Cabera variola																					2	
6743	Xanthotype sospeta																					10	
6819	Metanema inatomaria																					7	
7164	Scopula junctaria																					2	
7189	Dysstroma hersiliata																					7	
7194	Dysstroma brunneata																					6	
7312	Spargania magnoliata																					8	
7370	Xanthorhoe abrasaria congregata																					4	
7371	Xanthorhoe iduata																					4	
7416	Orthonama centrostrigaria																					1	
7423	Hydrelia albifera																					2	
7625	Chloroclystis rectangulata																					3	
7886	Darapsa pholus																					2	
7990	Heterocampa umbrata																					2	
8098	Clemensia albata																					6	
8304	Dasychira plagiata																					11	
8356	Chytolita petrealis																					12	
8370	Bleptina caradrinalis																					6	
8442	Bomolocha baltimoralis																					3	
8443	Bomolocha bijugalis																					3	
8939	Syngrapha alias																					16	
9047	Lithacodia muscosula																					11	
9053	Lithacodia carneola																					2	
9326	Apamea verbascoides																					4	
9341	Apamea vultuosa																					2	
9638	Amphipyra pyramidoides																					11	

CAT#	SPECIES NAME	WEEK																					SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
10370	Lacinipolia lustralis																						3
10449	Leucania insueta																						4
10926	Spaelotis clandestina																						5
10288	Polia detracta																						34
6654	Hypagyrtis unipunctata																						61
6796	Campaea perlata																						41
7187	Dysstroma truncata traversata																						92
7698	Malacosoma disstria																						328
8322	Idia americalis																						49
10919	Diarsia jucunda																						89
11000	Anaplectoides prasina																						62
31	Korscheltellus gracilis																						63
6656	Hypagyrtis piniata																						115
7159	Scopula limboundata																						34
11009	Eueretogrotis attenta																						48

CAT#	SPECIES NAME	WEEK																					SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
6867	Caripeta angustiorata																						1
7132	Pleuroprucha insularia																						1
7701	Malacosoma americanum																						6
7787	Ceratomia undulosa																						1
7939	Furcula occidentalis																						2
7998	Heterocampa manteo																						4
8017	Oligocentria lignicolor																						5
8111	Haploa lecontei																						5
8114	Holomelina laeta treatii																						8
8197	Apantesis virgo																						2
8319	Leucoma salicis																						1
8326	Idia rotundalis																						5
8362	Phalaenostola metonalis																						12
8942	Syngrapha rectangula																						1
8950	Plusia putnami																						3
9333	Apamea lignicolora																						2
9348	Apamea amputatrix																						1
9359	Apamea commoda																						2
9367.1	Agroperina cogitata																						1
9653	Caradrina morpheus																						13
10446	Leucania multilinea																						14
10929	Eurois occulta																						15
10942	Xestia c-nigrum adela																						2
10589.1	Orthodes goodelli																						30
8341	Zanclognatha theralis																						39
10275	Polia nimbosa																						84
10276	Polia imbrifera																						130
8323.1	Idia n.sp.nr. aemula																						66
8349	Zanclognatha protumnusalis																						

CAT#	SPECIES NAME	WEEK																																SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39												
22	Sthenopsis auratus																																2	
6287	Itame anataria																																7	
6304	Itame bitactata																																11	
6965	Eugonobapta nivosaria																																10	
7414	Orthonama obstipata																																2	
8123	Holomelina ferruginosa																																2	
8186	Apantesis williamsii																																3	
8203	Halysidota tessellaris																																1	
8896	Diachrysia aereoides																																3	
8897	Diachrysia balluca																																1	
9437	Chortodes inquinata																																3	
10293	Melanchra picta																																1	
10928	Graphiphora augur haruspica																																3	
11164	Schinia florida																																1	
7316	Perizoma basaliata																																62	
6273	Itame pustularia																																161	
7206	Eulithis explanata																																61	
11012	Cryptocala acadensis																																20	

CAT#	SPECIES	WEEK																												SUM
	NAME	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39								
6303	Itame subcessaria																													1
7394	Epirrhoe alternata																													1
7941	Furcula modesta																													1
8404	Rivula propinqualis																													2
8536	Calyptra canadensis																													1
8929	Syngrapha viridisigma																													13
8953	Plusia venusta																													1
10055	Apharetra dentata																													4
10065	Homohadena infixa																													3
10304	Trichordestra legitima																													1
10431	Faronta diffusa																													1
10917	Diarsia rubifera																													23
11029	Abagrotis alternata																													3
6912	Sicya macularia																													23
7009	Nematocampa resistaria																													92
10930	Eurois astricta																													87
10962	Xestia perquiritata																													78
9547	Phlogophora periculosa																													46
10943	Xestia normaniana																													73
10944	Xestia smithii																													56
7182	Dysstroma citrata																													72

FLIGHT PERIODS FOR SPECIES WHOSE FIRST OCCURRENCE WAS WEEK 31 - July 31 - Aug. 6

PART I

[illegible]

SPECIES		WEEK																																SUM
CAT#	NAME	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39												
8941	Syngrapha cryptica																																1	
8867	Catocala blandula																																1	
10968	Anomogyna badicollis																																15	
6888	Lambdina fiscellaria																																301	
9878	Lithomoia germana																																19	

CAT#	SPECIES NAME	WEEK																			SUM	
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
8316	Orgyia leucostigma plagiata																					7
9989	Sutyna privata																					2
10970	Anomogyna youngii																					1

CAT#	SPECIES NAMES	WEEK																			SUM	
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
7673	Tolyte laricis																					6
8857	Catocala ultronia																					5
9952	Eucirroedia pampina																					3
9961	Anathix ralla																					1
10123	Oncocnemis piffardi																					1
10524	Nephelodes minians																					1
10756	Euxoa campestris																					1
6797	Ennomos magnaria																					56

CAT#	SPECIES NAME	WEEK																			SUM	
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
6898	Cingilia catenaria																					1
7433	Epirrita autumnata																					34
8833	Catocala concumbens																					4
9420	Oligia illocata																					24
9427	Meropleon diversicolor																					4
9480	Papaipema pterisil																					3
9490	Papaipema nepheleptena																					1
9509	Papaipema unimoda																					5
9935	Eupsilia tristigmata																					4
9957	Sunira bicolorago																					5
9965	Xanthia togata																					1
9967	Hillia iris																					1
9976	Platypolia anceps																					8
10942.1	Xestia dolosa																					1
																						1

PART II

SPECIES FLIGHT PERIODS, ARRANGED ALPHABETICALLY BY GENUS

PART II

Cat#	SPECIES	WEEK																					SUM
	NAME	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
8442	Bomolocha baltimoralis																						3
8443	Bomolocha bijugalis																						3
8444	Bomolocha palparia																						7
10011	Brachionycta borealis																						2
6677	Cabera erythemaria																						10
6678	Cabera variola																						2
8738	Caenurgia crassiuscula																						1
7650	Callizzia amorata																						105
9633	Calopistria cordata																						17
8536	Calyptra canadensis																						1
6796	Campaea perlata																						41
9059	Capis curvata																						1
9653	Caradrina morpheus																						1
6867	Caripeta angustiorata																						1
6863	Caripeta divisata																						290
6864	Caripeta piniata																						1
8867	Catocala blandula																						1
8776	Catocala coelebs																						2
8833	Catocala concubens																						4
8846	Catocala sordida																						3
8857	Catocala ultronia																						5
10994	Cerastis tenebrifera																						1
7787	Ceratomia undulosa																						1
9189	Charadra deridens																						3
7625	Chloroclystis rectangulata																						3
9437	Chortodes inquinata																						3
8356	Chytolita petrealis																						12
9556	Chytonix palliatricula																						16
6898	Cingilia catenaria																						1
8267	Cisseps fulvicollis																						1
7639	Cladara atroliturata																						103
7637	Cladara limitaria																						148
8098	Clemensia albata																						6
7895	Clostera albosigma																						3
7901	Clostera apicalis																						15
9184	Colocasia flavicornis																						30
10501	Crocigrapta normani																						391
11012	Cryptocala acadiensis																						20
10197	Cucullia florea																						2
10199	Cucullia omissa																						1
7139	Cyclophora pendulinaria																						298
7886	Darapsa pholus																						2
8304	Dasychira plagiata																						11
7958	Dasylophia thyatiroides																						6
8896	Diachrysia aereoides																						3
8897	Diachrysia balluca																						1
10922	Diarsia freemani																						6
10919	Diarsia jucunda																						89
10917	Diarsia rubifera																						23
6251	Drepana arcuata																						81
6252	Drepana bilineata																						136
7715	Dryocampa rubicunda																						14
7194	Dysstroma brunneata																						6
7182	Dysstroma citrata																						72
7189	Dysstroma hersiliata																						7
7187	Dysstroma truncata traversata																						92
7188	Dysstroma walkerata																						10

Cat#	SPECIES NAME	WEEK																				SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
7213	Ecliptopera silaceata albolineata																					15
6597	Ectropis crepuscularia																					43
9681	Elaphria festivoides																					101
9678	Elaphria versicolor																					301
6797	Ennomos magnaria																					56
6798	Ennomos subsignaria																					7
7394	Epirrhoe alternata																					1
7433	Epirrita autumnata																					34
9396	Eremobina claudens																					5
6734	Euchlaena marginaria																					2
6725	Euchlaena muzaria																					43
9952	Eucirroedia pampina																					3
6253	Eudeilinia herminia																					3
11008	Eueretogrotis perattenta																					44
11009	Eueretogrotis attenta																					48
6637	Eufidonia convergaria																					1
6965	Eugonobapta nivosaria																					10
7206	Eulithis explanata																					61
7208	Eulithis serrataria																					3
7529	Eupithecia absinthiata																					2
7574	Eupithecia albicapitata																					2
7543	Eupithecia annulata																					2
7594	Eupithecia anticaria																					8
7528	Eupithecia assimilata																					5
7492	Eupithecia casloata																					12
7459	Eupithecia columbiata																					34
7489	Eupithecia lariciata																					14
7474	Eupithecia miserulata																					13
7575	Eupithecia mutata																					4
7449	Eupithecia palpata																					117
7540	Eupithecia perfusca																					38
7605	Eupithecia ravocostaliata																					1
7526	Eupithecia russeliata																					26
7520	Eupithecia satyrata dodata																					23
7494	Eupithecia sheppardata																					4
7487	Eupithecia subfuscata																					362
9545	Euplexia benesimilis																					28
9936	Eupsilia morrisoni																					1
9935	Eupsilia tristigmata																					4
9933	Eupsilia vinulenta																					1
10930	Eurois astricta																					87
10929	Eurois occulta																					14
6966	Eutrapela clemataria																					13
10756	Euxoa campestris																					1
10431	Faronta diffusa																					1
10008	Feralia comstocki																					160
10005	Feralia jocosa																					4
7941	Furcula modesta																					1
7939	Furcula occidentalis																					2
7933	Gluphisia avimacula																					5
7931	Gluphisia septentrionis																					10
10928	Graphiphora augur haruspica																					3
6815	Gueneria similaria																					11
6235	Habrosyne scripta																					289
8203	Halysidota tessellaris																					1
8111	Haploa lecontei																					5
9286	Harrisimemna trisignata																					7

Cat#	SPECIES NAME	WEEK																					SUM						
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39							
10993	Hemipachnobia subporphyrea																												1
11010	Heptagrotis phyllophora																												53
7995	Heterocampa biundata																												19
7994	Heterocampa guttivitta																												19
7990	Heterocampa umbrata																												2
7998	Heterocampa manteo																												4
9967	Hillia iris																												1
8123	Holomelina ferruginosa																												2
8114	Holomelina laeta treatii																												8
6812	Homochlodes fritillaria																												18
6811	Homochlodes lactispargaria																												2
10065	Homohadena infixa																												3
7423	Hydrelia albifera																												2
7420	Hydrelia condensata																												21
7419	Hydrelia lucata																												156
7235	Hydriomena divisaria																												43
7229	Hydriomena perfracta																												2
7236	Hydriomena renunciata																												122
6656	Hypagyrtis piniata																												115
6654	Hypagyrtis unipunctata																												61
8140	Hyphantria cunea																												3
9578.1	Hyppa "xylinoidea"																												1
9578.2	Hyppa "ancocisconensis"																												51
8322	Idia americalis																												49
8323.1	Idia n.sp.nr. aemula																												130
8326	Idia rotundalis																												1
6588	Iridopsis larvaria																												33
6287	Itame anataria																												7
6304	Itame bitactata																												11
6273	Itame pustularia																												161
6303	Itame subcessaria																												1
31	Korscheltellus gracilis																												63
10298	Lacanobia radix																												5
10303	Lacanobia tacoma																												1
10372	Lacinipolia anguina																												3
10405	Lacinipolia lorea																												13
10370	Lacinipolia lustralis																												3
10406	Lacinipolia olivacea																												15
10397	Lacinipolia renigera																												1
6888	Lambdina fiscellaria																												301
10449	Leucania insueta																												4
10446	Leucania multilinea																												13
8319	Leucoma salicis																												2
9065	Leuconycta diphteroides																												7
9066	Leuconycta lepidula																												1
9048	Lithacodia albidula																												38
9046	Lithacodia bellicula																												1
9053	Lithacodia carneola																												2
9050	Lithacodia concinnimacula																												5
9047	Lithacodia muscosula																												11
9878	Lithomoia germana																												19
9902	Lithophane baileyi																												6
9917	Lithophane fagina																												5
9893	Lithophane hemina																												3
9888	Lithophane innominata																												9
9889	Lithophane petulca																												5
9922	Lithophane pexata																												19

Cat#	SPECIES NAME	WEEK																				SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
9909	Lithophane tepida																					1
9928	Lithophane thaxteri																					1
9916	Lithophane unimoda																					1
7640	Lobophora nivigerata																					4
8455	Lomanaltes eductalis																					17
6668	Lomographa glomeraria																					59
6667	Lomographa vestaliata																					4
8214	Lophocampa maculata																					41
7701	Malacosoma americanum																					6
7698	Malacosoma disstria																					328
10292	Melanchra adjuncta																					55
10295	Melanchra assimilis																					9
10293	Melanchra picta																					1
10294	Melanchra pulverulenta																					12
6620	Melanolophia canadaria																					49
6621	Melanolophia signataria																					169
9427	Meropleon diversicolor																					4
7307	Mesoleuca ruficiliata																					5
10996	Metalepsis salicarum																					23
6820	Metanema determinata																					20
6819	Metanema inatomaria																					7
6819	Metanema inatomaria																					18
6822	Metarranthis duaria																					1
6826	Metarranthis hypocharia																					12
10520	Morrisonia evicta																					44
10521.1	Morrisonia latex																					2
6763	Nacophora quernaria																					394
7915	Nadata gibbosa																					2
9582	Nedra ramosula																					92
7009	Nematocampa resistaria																					14
7048	Nemoria mimosaria																					1
10524	Nephelodes minians																					2
7926	Notodonta scitipennis																					1
7928	Notodonta simplaria																					39
10891	Ochropleura plecta																					24
9420	Oligia illocata																					5
8017	Oligocentria lignicolor																					9
8012	Oligocentria semirufescens																					1
10123	Oncocnemis piffardi																					7
8316	Orgyia leucostigma plagiata																					329
10587	Orthodes cynica																					2
10589.1	Orthodes goodelli																					6
6429	Orthofidonia exornata																					1
6430	Orthofidonia flavivenata																					5
6428	Orthofidonia tinctaria																					1
7416	Orthonama centrostrigaria																					2
7414	Orthonama obstipata																					2
10495	Orthosia hibisci																					153
10490	Orthosia revicta																					39
10487	Orthosia rubescens																					1
7828	Pachysphinx modesta																					1
4659	Packardia geninata																					4
8397	Paltis angulalis																					63
9177	Panthea acronyctoides																					1253
7824	Paonias excaecatus																					16
7825	Paonias myops																					1
9490	Papaipema nepheleptena																					

Cat#	SPECIES NAME	WEEK																				SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
9480	Papaipema pterisii																					3
9509	Papaipema unimoda																					5
8727	Parallelia bistriaris																					1
7919	Peridea basitriens																					233
7921	Peridea ferruginea																					337
10915	Peridroma saucia																					1
7320	Perizoma alchemillata																					41
7316	Perizoma basaliata																					62
6755	Pero morrisonaria																					175
6804	Petrophora subaequaria																					3
8338	Phalaenophana pyramusalis																					6
8362	Phalaenostola metonalis																					5
7922	Pheosia rimosa																					16
9546	Phlogophora iris																					261
9547	Phlogophora periculosa																					46
8158	Phragmatobia assimilans																					12
8156	Phragmatobia fuliginosa rubricosa																					4
7687	Phylodesma americana																					25
6844	Plagodis alcoolaria																					78
6842	Plagodis phlogosaria																					219
6840	Plagodis serinaria																					81
8162	Platartia parthenos																					145
9976	Platypolia anceps																					8
7132	Pleuroprucha insularia																					1
8950	Plusia putnami																					1
8953	Plusia venusta																					1
10288	Polia detracta																					34
10276	Polia imbrifera																					84
10275	Polia nimbosea																					39
10280	Polia purpurissata																					3
6838	Probole amicaria																					128
6982	Prochoerodes transversata																					18
6598	Protoarmia porcelaria																					34
11004	Protolampra rufipectus																					5
10563	Protorthodes oviduca																					13
9647	Proxenus miranda																					1
10438	Pseudaletia unipuncta																					35
6237	Pseudothyatira cymatophoroides																					76
8129	Pyrrharctia isabella																					4
9193	Raphia frater																					4
7293	Rheumaptera hastata																					1
8404	Rivula propinqualls																					2
11164	Schinia florida																					1
8011	Schizura leptinoides																					29
8006	Schizura badia																					1
8005	Schizura ipomoeae																					116
8007	Schizura unicornis																					58
7164	Scopula junctaria																					2
7159	Scopula limboundata																					34
6817	Selenia alciphearia																					17
6818	Selenia kentaria																					5
6326	Semiothisa aemulataria																					3
6349	Semiothisa banksianae																					2
6347	Semiothisa pinistrobata																					4
6343	Semiothisa sexmaculata																					1
6344	Semiothisa signaria dispuncta																					217
6330	Semiothisa ulsterata																					82

SPECIES FLIGHT PERIODS, ARRANGED ALPHABETICALLY BY GENUS

PART II

WOLFE LAKE - 1994

SPECIES FLIGHT PERIODS, ARRANGED ALPHABETICALLY BY GENUS

Cat#	SPECIES NAME	WEEK																															SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39											
8352	Zanclognatha jacchalis																															1	
8349	Zanclognatha protumnusalis																															66	
8341	Zanclognatha theralis																															30	

Grand Total = 15851

PART III

SPECIES		WEEK																												SUM		
CAT#	NAME	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39										
HEPIALIDAE																																
18	Sthenopsis argenteomaculatus																														2	
22	Sthenopsis auratus																														2	
31	Korscheltellus gracilis																														63	
SESIIDAE																																
2554	Synanthedon acerni																														1	
LIMACODIDAE																																
4652	Tortricidia testacea																														31	
4654	Tortricidia flexuosa																														3	
4659	Packardia geminata																														1	
THYATIRIDAE																																
6235	Habrosyne scripta																														289	
6237	Pseudothyatira cymatophoroides																														76	
DREPANIDAE																																
6251	Drepana arcuata																														81	
6252	Drepana bilineata																														136	
6253	Eudeilinia herminata																														3	
GEOMETRIDAE																																
6273	Itame pustularia																														161	
6287	Itame anataria																														7	
6303	Itame subcessaria																														1	
6304	Itame bitactata																														11	
6326	Semiothisa aemulataria																														3	
6330	Semiothisa ulsterata																														82	
6343	Semiothisa sexmaculata																														1	
6344	Semiothisa signaria dispuncta																														217	
6347	Semiothisa pinistrobata																														4	
6349	Semiothisa banksianae																														2	
6428	Orthofidonia tinctaria																														5	
6429	Orthofidonia exornata																														6	
6430	Orthofidonia flavivenata																														1	
6570	Aethalura intertexta																														68	
6582	Anacamptodes vellivolata																														1	
6588	Iridopsis larvaria																														33	
6590	Anavitrinella pampinaria																														1	
6597	Ectropis crepuscularia																														43	
6598	Protoboarmia porcelaria																														34	
6620	Melanolophia canadaria																														49	
6621	Melanolophia signataria																														169	
6637	Eufidonia convergaria																														1	
6640	Biston betularia cognataria																														17	
6654	Hypagyrtis unipunctata																														61	
6656	Hypagyrtis piniata																														115	
6667	Lomographa vestaliata																														4	
6668	Lomographa glomeraria																														59	
6677	Cabera erythemaria																														10	
6678	Cabera variola																														2	
6725	Euchlaena muzaria																														43	
6734	Euchlaena marginaria																														2	
6740	Xanthotype urticaria																														15	
6743	Xanthotype sospeta																														10	
6755	Pero morrisonaria																														175	
6763	Nacophora quernaria																														2	
6796	Campaea perlata																														41	
6797	Ennomos magnaria																														56	
6798	Ennomos subsignaria																														7	
6804	Petrophora subaequaria																														3	
6807	Tacparia deterata																														17	

CAT#	SPECIES NAME	WEEK																					SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
6811	Homochlodes lactispargaria																						2
6812	Homochlodes fritillaria																						18
6815	Gueneria similaria																						11
6817	Selenia alciphearia																						17
6818	Selenia kentaria																						5
6819	Metanema inatomaria																						7
6820	Metanema determinata																						20
6822	Metarranthis duaria																						18
6826	Metarranthis hypocharia																						1
6836	Anagoga occiduaria																						13
6838	Probole amicaria																						128
6840	Plagodis serinaria																						81
6842	Plagodis phlogosaria																						219
6844	Plagodis alchoolaria																						78
6863	Caripeta divisata																						290
6864	Caripeta piniata																						1
6867	Caripeta angustiorata																						1
6885	Besma quercivoria																						47
6888	Lambdina fiscellaria																						301
6898	Cingilia catenaria																						1
6912	Sicya macularia																						23
6963	Tetracis crocallata																						41
6964	Tetracis cachexiata																						74
6965	Eugonobapta nivosaria																						10
6966	Eutrapela clemataria																						13
6982	Prochoerodes transversata																						18
7009	Nematocampa resistaria																						92
7048	Nemoria mimosaria																						14
7132	Pleuroprucha insularia																						1
7139	Cyclophora pendulinaria																						298
7159	Scopula limboundata																						34
7164	Scopula junctaria																						2
7182	Dysstroma citrata																						72
7187	Dysstroma truncata traversata																						92
7188	Dysstroma walkerata																						10
7189	Dysstroma hersiliata																						7
7194	Dysstroma brunneata																						6
7206	Eulithis explanata																						61
7208	Eulithis serrataria																						3
7213	Ecliptopera silaceata albolineata																						15
7229	Hydriomena perfracta																						2
7235	Hydriomena divisaria																						43
7236	Hydriomena renunciata																						122
7293	Rheumaptera hastata																						1
7307	Mesoteuca ruficiliata																						5
7312	Spargania magnoliata																						8
7316	Perizoma basaliata																						62
7320	Perizoma alchemillata																						41
7329	Anticlea vasiliata																						28
7330	Anticlea multiferata																						3
7368	Xanthorhoe labradorensis																						2
7370	Xanthorhoe abrasaria congregata																						4
7371	Xanthorhoe iduata																						4
7388	Xanthorhoe ferrugata																						2
7390	Xanthorhoe lacustrata																						6
7394	Epirrhoe alternata																						1
7414	Orthonama obstipata																						2

CAT#	SPECIES NAME	WEEK																					SUM								
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39									
7416	Orthonama centrostrigaria																														1
7419	Hydrelia lucata																														156
7420	Hydrelia condensata																														21
7423	Hydrelia albifera																														2
7425	Venusia cambrica																														12
7428	Venusia comptaria																														11
7430	Trichodezia albovittata																														7
7433	Epirrita autumnata																														34
7449	Eupithecia palpata																														117
7459	Eupithecia columbiata																														34
7474	Eupithecia miserulata																														13
7487	Eupithecia subfuscata																														362
7489	Eupithecia lariciata																														14
7492	Eupithecia casloata																														12
7494	Eupithecia sheppardata																														4
7520	Eupithecia satyrata dodata																														23
7526	Eupithecia russellata																														26
7528	Eupithecia assimilata																														5
7529	Eupithecia absinthiata																														2
7540	Eupithecia perpusca																														38
7543	Eupithecia annulata																														2
7574	Eupithecia albicapitata																														2
7575	Eupithecia mutata																														4
7594	Eupithecia anticaria																														8
7605	Eupithecia ravocostaliata																														1
7625	Chloroclystis rectangulata																														3
7635	Acasis viridata																														1
7637	Cladara limitaria																														148
7639	Cladara atroliturlata																														103
7640	Lobophora nivigerata																														4
EPIPLEMIDAE																															
7650	Callizzia amorata																														105
LASIOCAMPIDAE																															
7673	Tolype laricis																														6
7687	Phyllodesma americana																														25
7698	Malacosoma disstria																														328
7701	Malacosoma americanum																														6
SATURNIIDAE																															
7715	Dryocampa rubicunda																														14
7757	Antheraea polyphemus																														2
SPHINGIDAE																															
7787	Ceratomia undulosa																														1
7810	Sphinx gordius																														50
7812	Sphinx drupiferarum																														1
7821	Smerinthus jamaicensis																														49
7822	Smerinthus cerisyi																														9
7824	Paonias excaecatus																														1253
7825	Paonias myops																														16
7828	Pachysphinx modesta																														1
7886	Darapsa pholus																														2
NOTODONTIDAE																															
7895	Clostera albosigma																														3
7901	Clostera apicalis																														15
7915	Nadata gibbosa																														394
7919	Peridea basitriens																														233
7921	Peridea ferruginea																														337
7922	Pheosia rimosia																														16

CAT#	SPECIES NAME	WEEK																				SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	
7926	Notodonta scitipennis																					2
7928	Notodonta simplaria																					1
7931	Gluphisia septentrionis																					10
7933	Gluphisia avimacula																					5
7939	Furcula occidentalis																					2
7941	Furcula modesta																					1
7953	Symmerista leucitys																					1
7958	Dasylophia thyatiroides																					6
7990	Heterocampa umbrata																					2
7994	Heterocampa guttivitta																					19
7995	Heterocampa biundata																					19
7998	Heterocampa manteo																					4
8005	Schizura ipomoeae																					116
8006	Schizura badia																					1
8007	Schizura unicornis																					58
8011	Schizura leptinoides																					29
8012	Oligocentria semirufescens																					9
8017	Oligocentria lignicolor																					5
ARCTIIDAE																						6
8098	Clemensia albata																					5
8111	Haploa lecontei																					8
8114	Holomelina laeta treatii																					2
8123	Holomelina ferruginosa																					4
8129	Pyrrharctia isabella																					9
8134	Spilosoma congrua																					17
8137	Spilosoma virginica																					3
8140	Hyphantria cunea																					4
8156	Phragmatobia fuliginosa rubricosa																					12
8158	Phragmatobia assimilians																					145
8162	Platartcia parthenos																					3
8186	Apantesis williamsii																					2
8197	Apantesis virgo																					1
8203	Halysidota tessellaris																					41
8214	Lophocampa maculata																					1
8267	Cisseps fulvicollis																					
LYMANTRIIDAE																						11
8304	Dasychira plagiata																					7
8316	Orgyia leucostigma plagiata																					2
8319	Leucoma salicis																					
NOCTUIDAE																						49
8322	Idia americalis																					130
8323.1	Idia n.sp.nr. aemula																					1
8326	Idia rotundalis																					6
8338	Phalaenophana pyramusalis																					30
8341	Zanclognatha theralis																					66
8349	Zanclognatha protumnusalis																					18
8351	Zanclognatha cruralis																					1
8352	Zanclognatha jacchasalis																					12
8356	Chytolita petrealis																					5
8362	Phalaenostola metonalis																					6
8370	Bleptina caradrinalis																					4
8397	Palthis angualis																					2
8404	Rivula propinqualis																					3
8442	Bomolocha baltimoralis																					3
8443	Bomolocha bijugalis																					7
8444	Bomolocha palparia																					17
8455	Lomanaltes eductalis																					

SPECIES FLIGHT PERIODS, ARRANGED PHYLOGENETICALLY

PART III

CAT#	SPECIES NAME	WEEK																				SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
9286	Harrisimemna trisignata																					7
9326	Apamea verbascoides																					4
9333	Apamea lignicolora																					3
9341	Apamea vultuosa																					2
9348	Apamea amputatrix																					2
9359	Apamea commoda																					1
9364	Apamea finitima																					2
9367	Agroperina dubitans																					1
9367.1	Agroperina cogitata																					2
9396	Eremobina claudens																					5
9420	Oligia illocata																					24
9427	Meropleon diversicolor																					4
9437	Chortodes inquinata																					3
9454	Amphipoea velata																					2
9480	Papaipema pterisii																					3
9490	Papaipema nepheleptena																					1
9509	Papaipema unimoda																					5
9545	Euplexia benesimilis																					28
9546	Phlogophora iris																					261
9547	Phlogophora periculosa																					46
9556	Chytonix palliatricula																					16
9564	Andropolia contacta																					2
9578.1	Hyppa "xylinoidea"																					1
9578.2	Hyppa "ancocisconensis"																					51
9582	Nedra ramosula																					2
9633	Callopietria cordata																					17
9638	Amphipyra pyramidoides																					11
9639	Amphipyra tragopogonis																					2
9647	Proxenus miranda																					1
9653	Caradrina morpheus																					1
9678	Elaphria versicolor																					301
9681	Elaphria festivoides																					101
9874	Xylena curvamacula																					16
9875	Xylena thoracica																					1
9876	Xylena cineritia																					2
9878	Lithomoia germana																					19
9888	Lithophane innominata																					9
9889	Lithophane petulca																					5
9893	Lithophane hemina																					3
9902	Lithophane baileyi																					6
9909	Lithophane tepida																					1
9916	Lithophane unimoda																					1
9917	Lithophane fagina																					5
9922	Lithophane pexata																					19
9928	Lithophane thaxteri																					1
9933	Eupsilia vinulenta																					1
9935	Eupsilia tristigmata																					4
9936	Eupsilia morrisoni																					1
9952	Eucirroedia pampina																					3
9957	Sunira bicolorago																					5
9961	Anathix ralla																					1
9965	Xanthia togata																					1
9967	Hillia iris																					8
9976	Platypolia anceps																					2
9989	Sutyna privata																					4
10005	Feralia jocosa																					160
10008	Feralia comstocki																					

CAT#	SPECIES NAME	WEEK																					SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
10011	Brachionycta borealis																						2
10055	Apharetra dentata																						4
10065	Homohadena infixa																						3
10123	Oncocnemis piffardi																						1
10197	Cucullia florea																						2
10199	Cucullia omissa																						1
10275	Polia nimbosa																						39
10276	Polia imbrifera																						84
10280	Polia purpurissata																						3
10288	Polia detracta																						34
10292	Melanchra adjuncta																						55
10293	Melanchra picta																						1
10294	Melanchra pulverulenta																						12
10295	Melanchra assimilis																						9
10298	Lacanobia radix																						5
10300	Spiramater grandis																						62
10301	Spiramater lutra																						193
10303	Lacanobia tacoma																						1
10304	Trichordestra legitima																						1
10370	Lacinipolia lustralis																						3
10372	Lacinipolia anguina																						3
10397	Lacinipolia renigera																						1
10405	Lacinipolia lorea																						13
10406	Lacinipolia olivacea																						15
10431	Faronta diffusa																						1
10436	Aletia oxygala																						1
10438	Pseudaletia unipuncta																						35
10446	Leucania multilinea																						13
10449	Leucania insueta																						4
10487	Orthosia rubescens																						39
10490	Orthosia revicta																						153
10495	Orthosia hibisci																						2
10501	Crocigrapha normani																						391
10520	Morrisonia evicta																						12
10521.1	Morrisonia latex																						44
10524	Nephelodes minians																						1
10563	Protorthodes oviduca																						13
10587	Orthodes cynica																						329
10589.1	Orthodes goodelli																						2
10627	Tricholita signata																						4
10663	Agrotis ipsilon																						9
10756	Euxoa campestris																						1
10891	Ochropleura plecta																						39
10915	Peridroma saucia																						1
10917	Diarsia rubifera																						23
10919	Diarsia jucunda																						89
10922	Diarsia freemani																						6
10926	Spaelotis clandestina																						5
10928	Graphiphora augur haruspica																						3
10929	Eurois occulta																						14
10930	Eurois astricta																						87
10942	Xestia c-nigrum adela																						15
10942.1	Xestia dolosa																						1
10943	Xestia normaniana																						73
10944	Xestia smithii																						56
10947	Xestia oblata																						9
10962	Xestia perquiritata																						78

CAT#	SPECIES NAME	WEEK																				SUM	
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		39
10968	Anomogyna badicollis																						15
10970	Anomogyna youngii																						1
10993	Hemipachnobia subporphyrea																						1
10994	Cerastis tenebrifera																						1
10996	Metalepsis salicarum																						23
10999	Aplectoides condita																						292
11000	Anaplectoides prasina																						62
11001	Anaplectoides pressus																						75
11004	Protolampra rufipectus																						5
11008	Eueretagrotis perattenta																						44
11009	Eueretogrotis attenta																						48
11010	Heptagrotis phyllophora																						53
11012	Cryptocala acadensis																						20
11029	Abagrotis alternata																						3
11164	Schinia florida																						1
Grand Total =																						15851	

PART IV

CAT#	SPECIES NAME	WEEK																				SUM	
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		39
7824	Paonias excaecatus																						1253
9241	Acronicta fragilis																						523
9212	Acronicta grisea																						463
7915	Nadata gibbosa																						394
10501	Crocigrapta normani																						391
7487	Eupithecia subfuscata																						362
7921	Peridea ferruginea																						337
10587	Orthodes cynica																						329
7698	Malacosoma disstria																						328
6888	Lambdina fiscellaria																						301
9678	Elaphria versicolor																						301
7139	Cyclophora pendulinaria																						298
10999	Aplectoides condita																						292
6863	Caripeta divisata																						290
6235	Habrosyne scripta																						289
9546	Phlogophora iris																						261
9207	Acronicta innotata																						254
7919	Peridea basitriens																						233
9249	Acronicta increta																						228
6842	Plagodis phlogosaria																						219
6344	Semiothisa signaria dispuncta																						217
10301	Spiramater lutra																						193
6755	Pero morrisonaria																						175
6621	Melanolophia signataria																						169
6273	Itame pustularia																						161
10008	Feralia comstocki																						160
7419	Hydrelia lucata																						156
10490	Orthosia revicta																						153
7637	Cladara limitaria																						148
8162	Platartia parthenos																						145
6252	Drepana bilineata																						136
8323.1	Idia n.sp.nr. aemula																						130
6838	Probole amicarua																						128
8697	Zale minerea																						125
7236	Hydriomena renuntiata																						122
7449	Eupithecia palpata																						117
8005	Schizura ipomoeae																						116
6656	Hypagyrtis piniata																						115
7650	Callizzia amorata																						105
7639	Cladara atroliturala																						103
9681	Elaphria festivoides																						101
7009	Nematocampa resistaria																						92
7187	Dysstroma truncata traversata																						92
10919	Diarsia jucunda																						89
10930	Eurois astricta																						87
10276	Polia imbrifera																						84
6330	Semiothisa ulsterata																						82
6251	Drepana arcuata																						81
6840	Plagodis serinaria																						81
6844	Plagodis alcoolaria																						78
10962	Xestia perquiritata																						78
6237	Pseudothyatira cymatophoroides																						76
11001	Anaplectoides pressus																						75
6964	Tetracis cachexiata																						74
9203	Acronicta dactylina																						74
10943	Xestia normaniana																						73
7182	Dysstroma citrata																						72

CAT#	SPECIES	WEEK																					SUM
	NAME	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
9200	Acronicta americana																						71
6570	Aethalura intertexta																						68
8349	Zanclognatha protumnalis																						66
31	Korscheltellus gracilis																						63
9177	Panthea acronyctoides																						63
7316	Perizoma basaliata																						62
10300	Spiramater grandis																						62
11000	Anaplectoides prasina																						62
6654	Hypagyrtis unipunctata																						61
7206	Eulithis explanata																						61
6668	Lomographa glomeraria																						59
8007	Schizura unicornis																						58
6797	Ennomos magnaria																						58
10944	Xestia smithii																						56
10292	Melanchra adjuncta																						55
11010	Heptagrotis phyllophora																						53
9578.2	Hyppa "ancocisconensis"																						51
7810	Sphinx gordius																						50
6620	Melanolophia canadaria																						49
7821	Smerinthus jamaicensis																						49
8322	Idia americalis																						49
11009	Eueretogrotis attenta																						48
6885	Besma quercivoria																						47
9547	Phlogophora periculosa																						46
10521.1	Morrisonia latex																						44
11008	Eueretagrotis perattenta																						44
6597	Ectropis crepuscularia																						43
6725	Euchlaena muzaria																						43
7235	Hydriomena divisaria																						43
8970	Baileya ophthalmica																						43
6796	Campaea perlata																						41
6963	Tetracis crocallata																						41
7320	Perizoma alchemillata																						41
8214	Lophocampa maculata																						39
10275	Polia nimbose																						39
10487	Orthosia rubescens																						39
10891	Ochropleura plecta																						38
7540	Eupithecia perfusca																						38
9048	Lithacodia albidula																						37
9229	Acronicta hasta																						35
10438	Pseudaetia unipuncta																						34
6598	Protoboarmia porcelaria																						34
7159	Scopula limboundata																						34
7433	Epirrita autumnata																						34
7459	Eupithecia columbiata																						34
10288	Polia detracta																						34
6588	Iridopsis larvaria																						33
4652	Tortricidia testacea																						31
8341	Zanclognatha theralis																						30
9184	Colocasia flavicornis																						30
8011	Schizura leptinoides																						29
7329	Anticlea vasiliata																						28
9545	Euplexia benesimilis																						26
7526	Eupithecia russeliata																						26
9251	Acronicta retardata																						25
7687	Phyllodesma americana																						24
9420	Oligia illocata																						

CAT#	SPECIES NAME	WEEK																				SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
6912	Sicya macularia																					23
7520	Eupithecia satyrata dodata																					23
10917	Diarsia rubifera																					23
10996	Metalepsis salicarum																					23
9226	Acronicta superans																					22
7420	Hydrelia condensata																					21
6820	Metanema determinata																					20
8940	Syngrapha abstrusa																					20
11012	Cryptocala acadensis																					20
7994	Heterocampa guttivitta																					19
7995	Heterocampa biundata																					19
9878	Lithomoia germana																					19
9922	Lithophane pexata																					19
6812	Homochlodes fritillaria																					18
6822	Metarranthus duaria																					18
6982	Prochoerodes transversata																					18
8351	Zanclognatha cruralis																					18
6640	Biston betularia cognataria																					17
6807	Tacpasia detersata																					17
6817	Selenia alciphearia																					17
8137	Spilosoma virginica																					17
8455	Lomanaltes eductalis																					17
9633	Callopietria cordata																					17
7825	Paonias myops																					16
7922	Pheosia rimosia																					16
8939	Syngrapha alias																					16
8969	Baileya doubledayi																					16
9261	Acronicta impressa																					16
9556	Chytonix palliatricula																					16
9874	Xylota curvamacula																					16
6740	Xanthotype urticaria																					15
7213	Ecliptopera silaceata albolineata																					15
7901	Clostera apicalis																					15
9206	Acronicta leporina vulpina																					15
9259	Acronicta noctivaga																					15
9272	Acronicta obliuata																					15
10406	Lacinipolia olivacea																					15
10942	Xestia c-nigrum adela																					15
10968	Anomogyna badicollis																					15
7048	Nemoria mimosaria																					14
7489	Eupithecia lariciata																					14
7715	Dryocampa rubicunda																					14
10929	Eurois occulta																					14
6836	Anagoga occiduaria																					13
6966	Eutrapela clemataria																					13
7474	Eupithecia miserulata																					13
8929	Syngrapha viridisigma																					13
9257	Acronicta impleta																					13
10405	Lacinipolia lorea																					13
10446	Leucania multilinea																					13
10563	Protorthodes oviduca																					12
7425	Venusia cambrica																					12
7492	Eupithecia casloata																					12
8158	Phragmatobia assimilians																					12
8356	Chytolita petrealis																					12
8942	Syngrapha rectangula																					12
10294	Melanchra pulverulenta																					12

FLIGHT PERIODS, SPECIES ABUNDANCE FREQUENCY DISTRIBUTION

PART IV

FLIGHT PERIODS, SPECIES ABUNDANCE FREQUENCY DISTRIBUTION

PART IV

CAT#	SPECIES NAME	WEEK																				SUM												
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		39											
18	<i>Sthenopsis argenteomaculatus</i>																																	2
22	<i>Sthenopsis auratus</i>																																	2
6349	<i>Semiothisa banksianae</i>																																	2
6678	<i>Cabera variola</i>																																	2
6734	<i>Euchlaena marginaria</i>																																	2
6763	<i>Nacophora quernaria</i>																																	2
6811	<i>Homochlodes lactispargaria</i>																																	2
7164	<i>Scopula junctaria</i>																																	2
7229	<i>Hydriomena perfracta</i>																																	2
7368	<i>Xanthorhoe labradorensis</i>																																	2
7388	<i>Xanthorhoe ferrugata</i>																																	2
7414	<i>Orthonama obstipata</i>																																	2
7423	<i>Hydrelia albifera</i>																																	2
7529	<i>Eupithecia absinthiata</i>																																	2
7543	<i>Eupithecia annulata</i>																																	2
7574	<i>Eupithecia albicapitata</i>																																	2
7757	<i>Antheraea polyphemus</i>																																	2
7886	<i>Darapsa pholus</i>																																	2
7926	<i>Notodonta scitipennis</i>																																	2
7939	<i>Furcula occidentalis</i>																																	2
7990	<i>Heterocampa umbrata</i>																																	2
8123	<i>Holomelina ferruginosa</i>																																	2
8197	<i>Apantesis virgo</i>																																	2
8319	<i>Leucoma salicis</i>																																	2
8404	<i>Rivula propinqualis</i>																																	2
8776	<i>Catocala coelebs</i>																																	2
9053	<i>Lithacodia carneola</i>																																	2
9341	<i>Apamea vultuosa</i>																																	2
9348	<i>Apamea amputatrix</i>																																	2
9364	<i>Apamea finitima</i>																																	2
9367.1	<i>Agroperina cogitata</i>																																	2
9454	<i>Amphipoea velata</i>																																	2
9564	<i>Andropolia contacta</i>																																	2
9582	<i>Nedra ramosula</i>																																	2
9639	<i>Amphipyra tragopogonis</i>																																	

CAT#	SPECIES NAME	WEEK																																						SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39																		
7605	Eupithecia ravocostaliata																																	1						
7635	Acasis viridata																																	1						
7787	Ceratomia undulosa																																	1						
7812	Sphinx drupiferarum																																	1						
7828	Pachysphinx modesta																																	1						
7928	Notodonta simplaria																																	1						
7941	Furcula modesta																																	1						
7953	Symmerista leucitys																																	1						
8006	Schizura badia																																	1						
8203	Halysidota tessellaris																																	1						
8267	Cisseps fulvicollis																																	1						
8326	Idia rotundalis																																	1						
8352	Zanclognatha jacchasalis																																	1						
8536	Calyptra canadensis																																	1						
8713	Zale lunifera																																	1						
8727	Parallela bistriaris																																	1						
8738	Caenurgia crassiuscula																																	1						
8867	Catocala blandula																																	1						
8897	Diachrysia balluca																																	1						
8909	Autographa rubida																																	1						
8925	Syngrapha altera																																	1						
8926	Syngrapha octoscripta																																	1						
8941	Syngrapha cryptica																																	1						
8950	Plusia putnami																																	1						
8953	Plusia venusta																																	1						
9046	Lithacodia bellicula																																	1						
9059	Capis curvata																																	1						
9066	Leuconycta lepidula																																	1						
9359	Apamea commoda																																	1						
9367	Agroperina dubitans																																	1						
9490	Papaipema nepheleptena																																	1						
9578.1	Hyppa "xylinoides"																																	1						
9647	Proxenus miranda																																	1						
9653	Caradrina morpheus																																	1						
9875	Xylena thoracica																																	1						
9909	Lithophane tepida																																	1						
9916	Lithophane unimoda																																	1						
9928	Lithophane thaxteri																																	1						
9933	Eupsilia vinulenta																																	1						
9936	Eupsilia morrisoni																																	1						
9961	Anathix ralla																																	1						
9965	Xanthia togata																																	1						
9967	Hillia iris																																	1						
10123	Oncocnemis piffardi																																	1						
10199	Cucullia omissa																																	1						
10293	Melanchra picta																																	1						
10303	Lacanobia tacoma																																	1						
10304	Trichordestra legitima																																	1						
10397	Lacinipolia renigera																																	1						
10431	Faronta diffusa																																	1						
10436	Aletia oxgala																																	1						
10524	Nephelodes minians																																	1						
10756	Euxoa campestris																																	1						
10915	Peridroma saucia																																	1						
10942.1	Xestia dolosa																																	1						
10970	Anomogyna youngii																																	1						
10993	Hemipachnobia subporphyrea																																	1						

WOLFE LAKE - 1994

FLIGHT PERIODS, SPECIES ABUNDANCE FREQUENCY DISTRIBUTION

CAT#	SPECIES NAME	WEEK																																						SUM
		19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39																		
10994	Cerastis tenebrifera																																1							
11164	Schinia florida																																1							
		Grand Total =																																						15851

PART V

CHART 4

WOLFE LAKE - 1994 CUMULATIVE NUMBER OF SPECIES VS. DAY OF YEAR

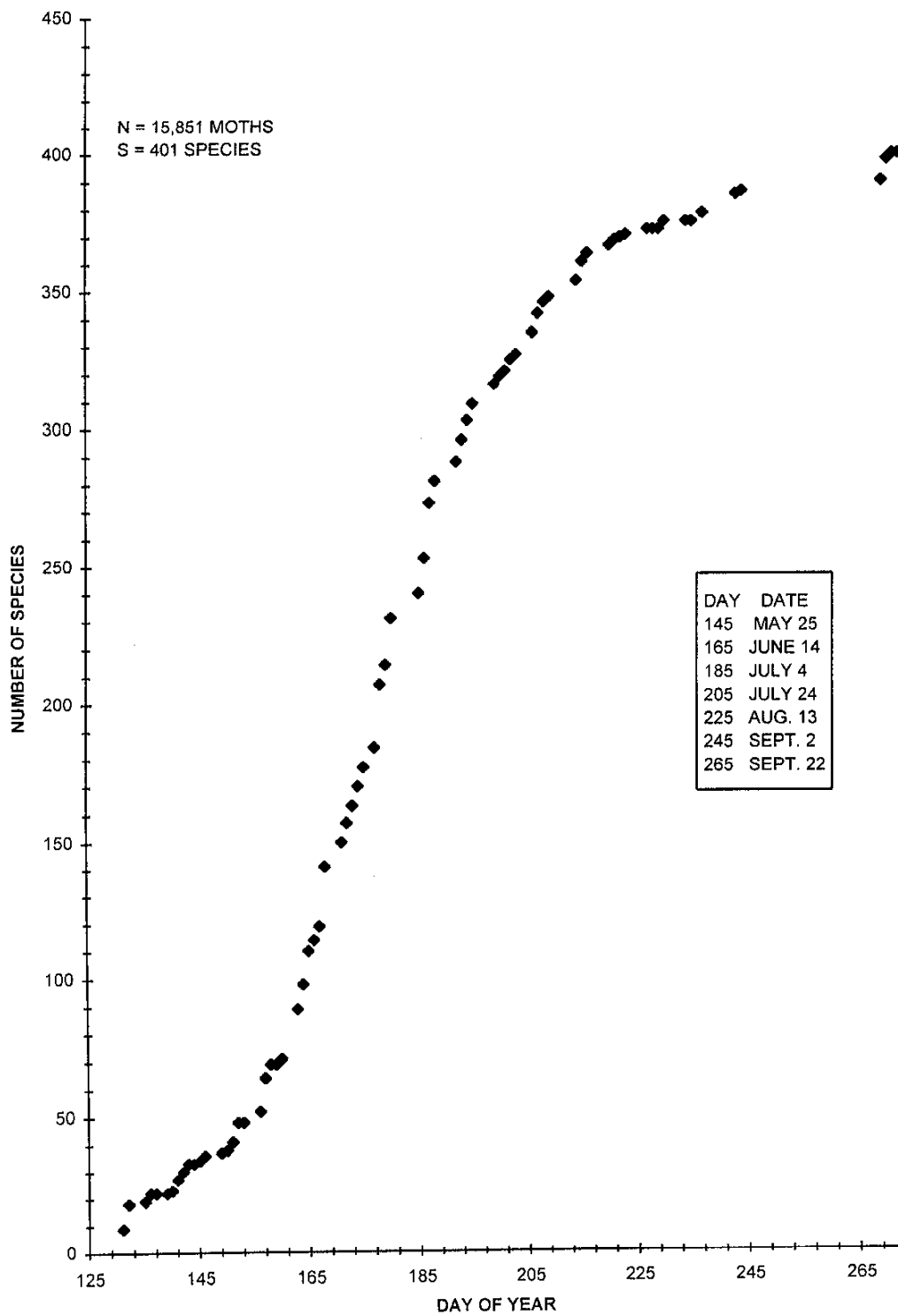


CHART 1

WOLFE LAKE - 1994 NUMBER OF INDIVIDUAL MOTHS PER WEEK

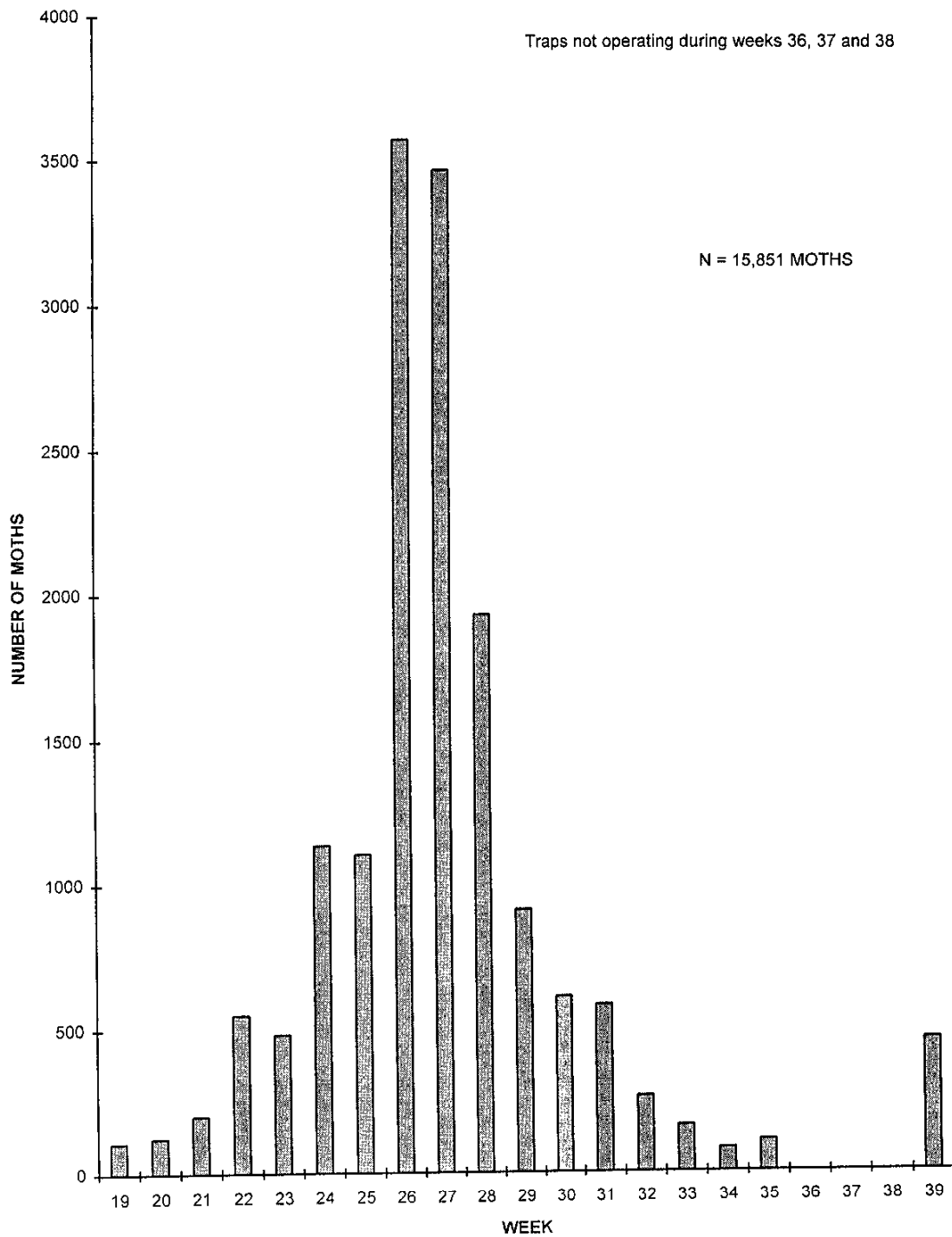


CHART 2

WOLFE LAKE - 1994 NUMBER OF SPECIES PER WEEK

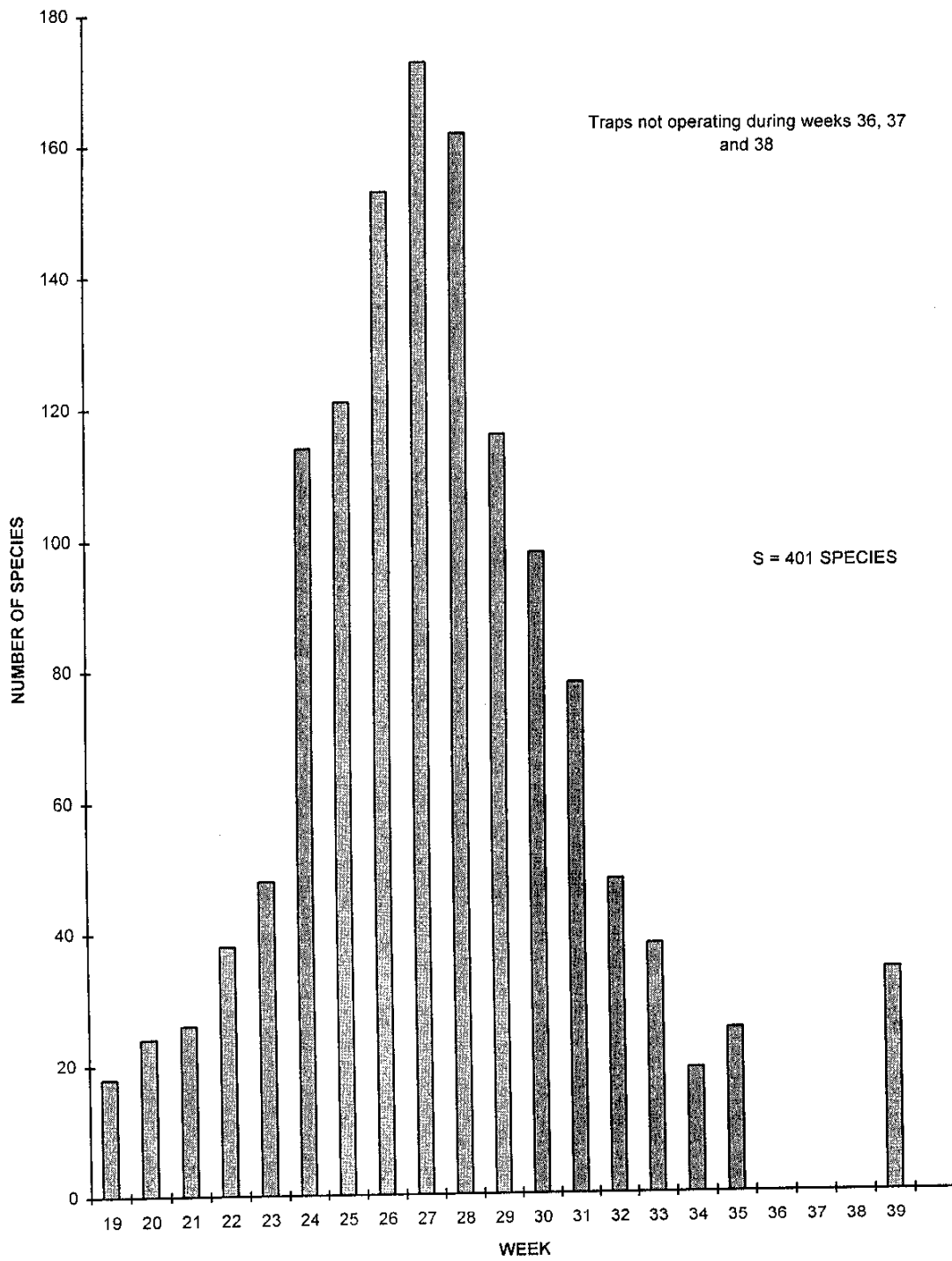


CHART 3

WOLFE LAKE - 1994 NEW SPECIES, BY WEEK

