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LIST OF THE LEPIDOPTERA OF BLACK STURGEON LAKE, NORTHWESTERN ONTARIO, AND DATES OF ADULT OCCURRENCE

C.J. Sanders¹

ABSTRACT

From May to September each year from 1960 through 1968, a collection of Lepidoptera was made at Black Sturgeon Lake, northwestern Ontario, from specimens captured in a light trap and from specimens netted during the day. A total of 564 species was recorded from 70 families. A list of the species with dates of capture is presented.

From 1960 through 1968, a 15-watt black-light trap was operated each year at a Forestry Canada field station at Black Sturgeon Lake, northwestern Ontario. The trapping program was initiated by R.E. Fye in 1960 and was taken over by C.J. Sanders in 1965. Each year from 1960 through 1968, the light trap was set up when the station was opened in early May and it was operated continually until the station was closed in mid-to late September. In 1969 the research program at the Black Sturgeon Lake field station was curtailed, and operation of the light trap was discontinued.

Black Sturgeon Lake is located about 100 km from the northwestern shore of Lake Superior, 110 km northeast of Thunder Bay at latitude 49°20'N, longitude 88°54'W, at an altitude of 250 m, in the Superior (B9) Boreal Forest Region of Rowe (1972) (Fig. 1). The corresponding Universal Transverse Mercator coordinates are 16 36 546. The physical, environmental and vegetational characteristics of the study site have been described by Lethiecq and Régnière (1988). The site lies in the Black Sturgeon District of the Lake Nipigon Site Region, which is characterized by: "Flat topped basaltic ridges with deeper deposits—(i) granitic and clay forming sand, (ii) silt, and (iii) limy clay, in the depressions." (Hills 1959). The vegetation is boreal mixedwood, composed of fairly uniform stands of balsam fir (*Abies balsamea*), white spruce (*Picea glauca*), black spruce (*P. mariana*), white birch (*Betula papyrifera*), and trembling aspen (*Populus tremuloides*). Understory species include hazel (*Corylus cornuta*), alders (both *Alnus crispa* and *A. rugosa*), and mountain maple (*Acer spicatum*).

Continuous weather records are not available for the Black Sturgeon Lake area, so instead information is presented for Cameron Falls, which is 42 km to the southeast of Black Sturgeon Lake (49°09'N, 88°21'W, 229 m altitude), at the southern end of Lake Nipigon (Anon. 1980). The mean annual air temperature is 1.7°C. The mean low temperature for January is -16.6°C, with the lowest recorded temperature -46.1°C. The mean high for July is 17.0°C, with the highest temperature recorded 38.9°C. The mean annual rainfall is 559.1 mm, and the snowfall 233.6 cm.

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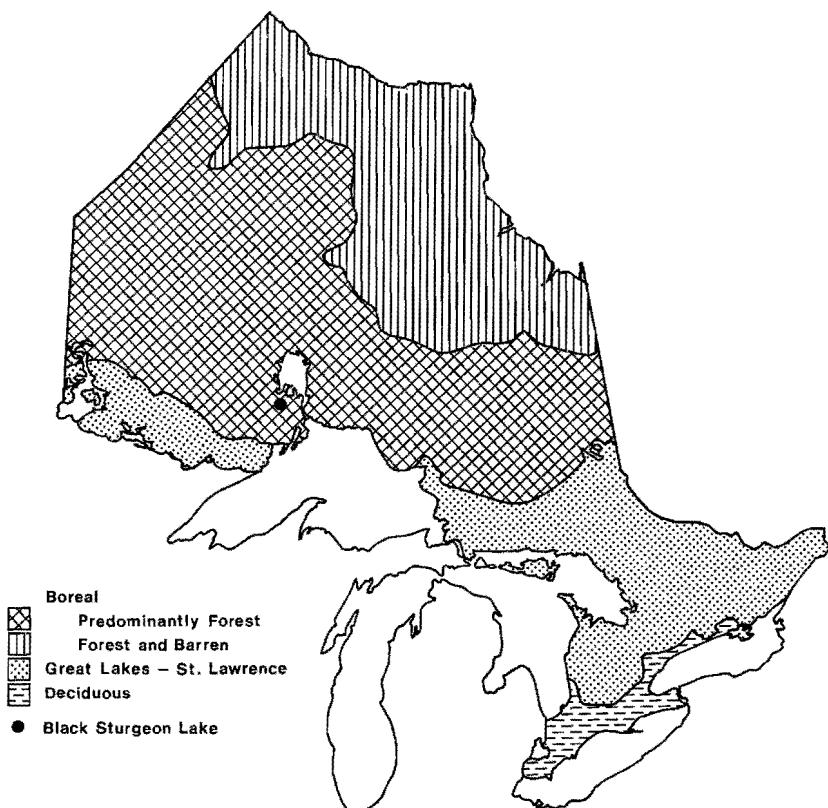


Figure 1. Map of Ontario, showing location of Black Sturgeon Lake and boundaries of Forest Regions (Rowe 1972).

The primary purpose of the light trap was to monitor the numbers of pest species such as spruce budworm (*Choristoneura fumiferana* [Clem.]), jack pine budworm (*C. pinus* pinus Free.) and forest tent caterpillar (*Malacosoma disstria* Hbn.), but the opportunity was taken to assemble a collection representative of the Lepidoptera in the area. The contents of the light trap were examined each morning, and representative specimens of each species were collected. Particular attention was paid to obtaining the first specimens that were captured in the light trap each year. Additional specimens of each species were collected thereafter throughout the flight period, but no attempt was made to collect them in proportion to the numbers that were collected in the trap. The collection is therefore an indication of the period over which the insects were captured, and is not an indication of their abundance. In addition to the light-trap material, specimens of day-flying Lepidoptera were collected by net.

All collected specimens were pinned and spread, and then sent for identification to the Biosystematics Research Centre (Agriculture Canada, Ottawa, Ontario, Canada) or, after a reference collection had been assembled, identifications were made by comparing specimens with the previously identified voucher specimens. Repre-

sentative specimens have been retained in the Canadian National Collection, in the collection of the Forest Insect and Disease Survey (Forestry Canada, Ontario Region, Sault Ste. Marie, Ontario) and in the personal collection of the author. Insects in the following listing are catalogued according to Hodges et al. (1983). Nomenclature has not been updated beyond that of Hodges et al. with the following two exceptions: *Anavitrinelia* (checklist #6590) is incorrectly spelled by Hodges et al. and has been corrected to *Anavitrinella* (e.g., McGuffin 1977). *Cydia youngana* (Kft.) (checklist # 3466) is now considered to be a junior synonym of *C. strobilella* (L.) (Brown and Miller 1983), and has been changed accordingly.

In several cases, entries at the subspecific level are accompanied by entries at the corresponding specific level. In these instances, specimens under the species label have not been identified to the subspecies level, and may therefore contain representatives of one or more subspecies, including the accompanying subspecies that is listed.

ANNOTATED LIST OF LEPIDOPTERA

HEPIALIDAE

- 19 *Sthenopis purpurascens* (Pack.) 15-30 Jul
- 20 *Sthenopis quadriguttatus* (Grt.) 15 Jul
- 29 *Hepialus novigannus* B. & Benj. 20 Aug-20 Sep

TINEIDAE

- 261 *Nemapogon acapnopennella* (Clem.) 25 Jun-5 Jul
- 264 *Nemapogon defecella* (Zell.) 15 Aug
- 421 *Monopis spilotella* Tengström 5 Jun-30 Jun

LYONETIIDAE

- 560 *Bucculatrix canadensisella* Cham. 20 Jun

GRACILLARIIDAE

- 587 *Caloptilia alnivorella* (Cham.) 15-30 May, 30 Jul-5 Aug, 20 Sep
- 601 *Caloptilia coronella* (Clem.) 10-30 May
- 609 *Caloptilia invariabilis* (Braun) 10 May
- 655 *Parectopa pennsylvaniella* (Engel) 25 Jun

OECOPHORIDAE

- 911 *Bibarrambla allenella* (Wlsm.) 30 Jun
- 913 *Semioscopis merricella* Dyar 20 May-5 Jun
- 914 *Semioscopis inornata* Wlsm. 25 Aug
- 916 *Semioscopis aurorella* Dyar 20 May

BLASTOBASIDAE

- 1144 *Gerdana caritella* Bsk. 30 Jul-25 Aug

MOMPHIDAE

- 1458 *Mompha unifasciella* (Cham.) 30 Jun

COSMOPTERIGIDAE

- 1515 *Limnaecia phragmitella* Staint. 20 Jul-10 Aug

GELECHIIDAE

- 1792 *Coleotechnites atrupictella* (Dietz) 15-25 Jul
- 1826 *Coleotechnites piceaella* (Kft.) 15 Jun-20 Aug
- 1869 *Pseudotelphusa belangerella* (Cham.) 5-15 Jun
- 1923 *Bryotropha clandestina* (Meyr.) 10-25 Jul
- 1985 *Grorimoschema gallaeasterella* (Kellicott) 25 Jul-15 Aug
- 2069 *Chionodes continuaella* (Zell.) 30 Jun-10 Jul, 5-15 Aug
- 2090 *Chionodes lugubrella* (F.) 15 Jun-5 Jul
- 2093 *Chionodes mediosuscella* (Clem.) 30 May-20 Jun
- 2198 *Aroga trialbamaculella* (Cham.) 15-20 Jun
- 2267 *Brachmia fernaldella* (Bsk.) 10-30 Jun
- 2277 *Dichomeris georgiella* (Wlk.) 20 May-10 Jun
- 2302 *Trichotaphe setosella* Clem. 5-10 Aug

ALUCITIDAE

- 2313 *Alucita hexadactyla* L. 20-30 May, 5-20 Aug

PLUTELLIDAE

- 2366 *Plutella xylostella* (L.) 15-20 May
- 2376 *Ypsolopha dentiferella* (Wlsm.) 25 Jul-25 Aug
- 2380 *Ypsolopha falciferella* (Wlsm.) 20 Jul-5 Aug, 10 Sep

- 3661 *Archips cerasivorana* (Fitch) 30 Jul-10
Aug
- 3664 *Archips striana* (Fern.) 25 Jun-20 Jul
- 3665 *Archips alberta* (McD.) 10-30 Aug
- 3672 *Syndemis afflictana* (Wlk.) 20-25 Jun
- 3682 *Clepsis persicana* (Fitch) 5-20 Jul
- 3686 *Clepsis melaleucana* (Wlk.) 30 Jun
- 3688 *Ptycholoma peritana* (Clem.) 20-25 Jul
- 3689 *Ptycholoma virescana* (Clem.) 20-25 Jun
- 3697 *Sparganothis lycopodiana* (Kft.) 15 Aug
- 3706 *Sparganothis xanthoides* (Wlk.) 10-20 Jul
- 3720 *Sparganothis reticulatana* (Clem.) 30 Jul-10
Aug, 20 Sep
- 3740 *Platynota idaeusalis* (Wlk.) 25 Jul
- COCHYLIDAE**
- 3787 *Carolella vitellinana* (Zell.) 25-30 Jun
- 3802 *Hysterosia riscana* Kft. 15-20 Jul
- HESPERIIDAE**
- 3910 *Thorybes pylades* (Scudder) 10 Jul
- 3945 *Erynnis icelus* (Scudder & Burgess) 20 Jun
- 4041 *Polites themistocles* (Latr.) 20 Jul
- 4105 *Amblyscirtes vialis* (Edw.) 20 Jun
- PAPILIONIDAE**
- 4176 *Papilio glaucus* L. 30 May-20 Jun
- PIERIDAE**
- 4195d. *Artogeia napi oleracea* (Harr.) 15 Jun, 30
Jul-5 Aug
- 4197 *Artogeia rapae* (L.) 10 Jul
- 4210 *Colias eurytheme* Bdv. 30 Jun, 20 Aug
- 4220 *Colias interior* Scudder 15 Jul
- LYCAENIDAE**
- 4362 *Everes amyntula* (Bdv.) 15-20 Jun
- 4372 *Glaucopsyche lygdamus* (Doubleday) 15
Jun
- NYMPHALIDAE**
- 4423 *Polygonia faunus* (Edw.) 5-25 Aug
- 4429 *Polygonia progne* (Cram.) 5 Aug, 25 Aug,
20 Sep
- 4430a. *Nymphalis vau-album j-album* (Bdv. &
Leconte) 5 Aug, 5-15 Sep
- 4432 *Nymphalis antiopa* (L.) 30 Jun, 5 Sep
- 4433 *Aglais milberti* (Godd.) 5 Aug
- 4435 *Vanessa cardui* (L.) 25 May-5 Jun
- 4459 *Speyeria atlantis* (Edw.) 20-30 Jul
- 4464f. *Clossiana selene atrocostalis* (Huard) 30
Jun, 30 Jul-5 Aug
- 4465a. *Clossiana bellona toddi* (Holl.) 20 Jun
- 4481 *Phycitodes tharos* (Drury) 30 Jul-30 Jul
- 4490 *Charidryas nycteis* (Doubleday) 25 Jun
- 4522 *Basilarchia artemis* (Drury) 30 Jun-15 Jul
- SATYRIDAE**
- 4568 *Enodia portlandia* (F.) 15-20 Jul
- LIMACODIDAE**
- 4652 *Tortricidia testacea* Pack. 30 Jun-25 Jul
- PYRALIDAE**
- 4703b. *Gesneria centuriella caecalis* (Wlk.) 10-15
Jul
- 4716 *Scoparia biplagialis* Wlk. 30 Jun, 20 Jul-5
Aug
- 4737 *Eudonia lugubralis* (Wlk.) 15-20 Jun, 5
Jul
- 4748 *Munroessa icciusalis* (Wlk.) 15-30 Jul
- 4759 *Parapoynx maculalis* (Clem.) 10-20 Jul, 10
Aug
- 4760 *Parapoynx obscuralis* (Grt.) 20-25 Jul
- 4897 *Evergestis pallidata* (Hufn.) 10-25 Jul
- 4935 *Saucrobotys fumoferalis* (Hulst) 20-30
Jun
- 4936 *Saucrobotys futilalis* (Led.) 10-20 Jul
- 4950 *Fumibotys fumalis* (Gn.) 20-25 Jul, 25
Aug-10 Sep
- 4953a. *Phlyctaenia coronata tertialis* (Gn.) 15-25
Jun
- 4956a. *Nealgedonia extricalis dional* (Wlk.)
20-25 Jun
- 4957 *Mutuaria mysippusalis* (Wlk.) 25-30 Jun
- 5060a. *Pyrausta subsequalis borealis* Pack. 10
Jun
- 5079 *Udea rubigalis* (Gn.) 30 May, 15 Jun, 30
Jun
- 5156 *Nomophila nearctica* Mun. 10 Jun-20 Jul,
20 Sep
- 5159 *Desmia funeralis* (Hbn.) 30 Jun-10 Jul
- 5262 *Framinghamia helvalis* (Wlk.) 25 Aug
- 5275 *Herpetogramma pertextalis* (Led.) 10-25
Aug
- 5339 *Crambus pascuellus* (L.) 30 Jun-5 Jul, 20
Jul, 20 Aug
- 5341a. *Crambus alienellus labradoriensis*
Christoph 10 Jul
- 5343a. *Crambus perellellus innotatellus* Wlk. 15
Jul-5 Aug
- 5344 *Crambus unistriatellus* Pack. 25 Jul-10
Aug
- 5357 *Crambus leachellus* (Zinck.) 10 Aug-5 Sep
- 5362 *Crambus agitatellus* Clem. 20 Jul
- 5379 *Crambus luteolellus* Clem. 15-30 Jun

- 5380 *Crambus zeelius* Fern. 20 Jul
 5391 *Chrysoteuchia topiaria* (Zell.) 30 Jun-20 Jul
 5403 *Agriphila vulgivagella* (Clem.) 10-20 Aug
 5408 *Catoptria latiradiella* (Wlk.) 25 Jul-15 Aug
 5413 *Pediasia trisecta* (Wlk.) 10-20 Aug
 5517 *Aglossa caprealis* (Hbn.) 15-30 Jul
 5529 *Herculia thymetusalis* (Wlk.) 30 Jun-15 Jul
 5655 *Acrobasis tricolorella* Grt. 15-30 Jun
 5688 *Acrobasis betulella* Hulst 30 Jun-10 Aug
 5716 *Myelopsis coniella* (Rag.) 10 Aug
 5718 *Myelopsis subtetricella* (Rag.) 5-20 Jun
 5721 *Apomyelois bistriatella* (Hulst) 15 Aug, 10 Sep
 5745 *Glyptocera consobrinella* (Zell.) 25 Jun
 5798 *Nephopterix carneella* (Hulst) 20-30 Jun
 5812 *Telethusia ovalis* (Pack.) 15 Aug
 5843 *Doryctria reniculeloides* Mutuura & Mun.
 10 Jun, 10-15 Jul, 15 Aug
 5999 *Eulogia ochrifrontella* (Zell.) 30 Jun-10 Jul, 15 Aug
 6053 *Peoria approximella* (Wlk.) 5 Jul
- PTEROPHORIDAE**
- 6102 *Trichoptilus lobidactylus* (Fitch) 20-25 Jul
 6157 *Adaina montana* (Wlsm.) 20 Aug
 6213 *Oidaematophorus lacteodactylus* (Cham.) 10 Jun
- THYATIRIDAE**
- 6235 *Habrosyne scripta* (Gosse) 20-30 Jun, 20 Jul
 6237 *Pseudothyatira cymatophoroides* (Gn.) 20-25 Jun, 5-30 Jul
 6240 *Euthyatira pudens* (Gn.) 20 May-5 Jun
- DREPANIDAE**
- 6251 *Drepana arcuata* Wlk. 5 Jun-10 Jul
 6252 *Drepana bilineata* (Pack.) 20-25 May, 10-15 Aug
 6255 *Oreta rosea* (Wlk.) 10 Jul-10 Aug
- GEOMETRIDAE**
- 6256 *Archiearis infans* (Mösch.) 20 May
 6279 *Itame occiduaria* (Pack.) 25 Jul
 6286 *Itame brunneata* (Thunb.) 10-15 Jul
 6304 *Itame bitinctata* (Wlk.) 15 Jul-20 Aug
 6330 *Semiothisa ulsterata* (Pears.) 30 Jun-20 Jul
 6352 *Semiothisa granitata* (Gn.) 30 Jun
 6373 *Semiothisa denticulata* Grt. 25 Jun
 6394 *Semiothisa hebetata* (Hulst) 10 Jul
 6428 *Orthofidonia tintaria* (Wlk.) 5-10 May, 15 Jun
 6570 *Aethalura intertexta* (Wlk.) 10-15 Jun
 6583 *Anacampodes ephyraria* (Wlk.) 15-20 Aug
 6588 *Iridopsis larvaria* (Gn.) 25 Jun
 6590 *Anavitrinella pampinaria* (Gn.) 30 Jun
 6597 *Ectropis crepuscularia* (D. & S.) 25 May-5 Jun
 6621 *Melanolophia signataria* (Wlk.) 5 Jun
 6640a *Biston betularia cognataria* (Gn.) 10-25 Aug
 6666 *Lomographa semiclarata* (Wlk.) 20-25 May
 6668 *Lomographa glomeraria* (Grt.) 20-30 May
 6678 *Caberia variolaria* Gn. 25 Jun-20 Jul
 6726 *Euchlaena obtusaria* (Hbn.) 30 Jun-5 Jul
 6731 *Euchlaena madusaria* (Wlk.) 5-20 Jul
 6734 *Euchlaena marginaria* (Minot) 30 May-15 Jun
 6740 *Xanthotype urticaria* Swett 30 Jun
 6743 *Xanthotype sospeta* (Drury) 30 Jun-20 Jul
 6754 *Pero hubneraria* (Gn.) 5-30 Jun
 6796 *Campaea perlata* (Gn.) 10-25 Jul
 6797 *Ennomos magnaria* Gn. 10-25 Aug
 6807 *Tacparia detersata* (Gn.) 25-30 May
 6818 *Selenia kentaria* (G. & R.) 20 May-10 Jun
 6819 *Metanema inatomaria* Gn. 30 May, 15 Jun-5 Jul
 6820 *Metanema determinata* Wlk. 15 Jun-20 Jul
 6822 *Metarranthis duaria* (Gn.) 25 May-5 Jun
 6836 *Anagoga occiduaria* (Wlk.) 25 May-20 Jun
 6838 *Probole amicaria* (H.-S.) 25 Jun-15 Jul
 6841 *Plagodis kuetzingi* (Grt.) 30 Jun
 6842 *Plagodis phlogosaria* (Gn.) 30 May-15 Jun
 6863 *Caripeta divisata* Wlk. 20 Jun-10 Jul
 6885 *Besma quercivoraria* (Gn.) 20 Jun
 6888 *Lambdina fiscellaria* (Gn.) 30 Aug-25 Sep
 6906 *Nepytiia canosaria* (Wlk.) 25 Aug-20 Sep
 6912 *Sicya macularia* (Harr.) 10-30 Aug
 6964 *Tetracis cachexiata* Gn. 25-30 Jun
 6982 *Prochoerodes transversata* (Drury) 10 Aug-20 Sep
 7009 *Nematocampa limbata* (Haw.) 10-15 Aug
 7048 *Nemoria mimosaria* (Gn.) 20 Jun
 7058 *Synchlora aerata* (F.) 5-25 Jul
 7139 *Cyclophora pendulinaria* (Gn.) 15-30 Jun, 20 Jul
 7159 *Scopula limbounidata* (Haw.) 15 Jul
 7162 *Scopula ancellata* (Hulst) 25 Jul
 7164 *Scopula junctaria* (Wlk.) 10 Jul
 7182 *Dysstroma citrata* (L.) 15-25 Aug, 15 Sep
 7187a *Dysstroma truncata traversata* (Kellieott) 5 Jul

- 7196 *Eulithis diversilineata* (Hbn.) 20-25 Aug
 7201 *Eulithis testata* (L.) 25 Aug-10 Sep
 7203 *Eulithis molliculata* (Wlk.) 5-15 Aug
 7206 *Eulithis explanata* (Wlk.) 20 Jul-15 Aug
 7213a. *Ecliptopera silacea albolineata* (Pack.) 15 Jun-30 Jul
 7216 *Plemyria georgii* Hulst 20 Aug, 20 Sep
 7239 *Hydriomena pluvialis* (Gn.) 30 Jun
 7254 *Hydriomena ruberata* (Freyer) 30 May-15 Jun
 7257 *Hydriomena furcata* (Thunb.) 5 Sep
 7285 *Triphosa haesitata* (Gn.) 10-25 May
 7285a. *Triphosa haesitata affirmari* (Wlk.) 20-30 May, 5-25 Sep
 7291 *Hydia undulata* (L.) 30 Jul
 7293 *Rheumaptera hastata* (L.) 5-20 Jun
 7294 *Rheumaptera subhastata* (Nolcken) 10-25 Jun
 7307 *Mesoleuca ruficillata* (Gn.) 30 Jun
 7312 *Spargania magnoliata* Gn. 30 Jun, 25 Jul
 7313 *Spargania luctuata* (D. & S.) 30 Jun
 7313a. *Spargania luctuata obducta* (Mösch.) 30 Jun-15 Aug
 7316 *Perizoma basaliata* (Wlk.) 10-15 Aug
 7329 *Anticlea vasiliana* Gn. 15 May-5 Jun
 7330 *Anticlea multiflora* (Wlk.) 20-25 Jun
 7368 *Xanthorhoe labradorensis* (Pack.) 10 Jul
 7384 *Xanthorhoe munitata* (Hbn.) 30 Aug
 7388 *Xanthorhoe ferrugata* (Cl.) 5-30 Jun
 7390 *Xanthorhoe lacustrata* (Gn.) 15 Jun
 7394 *Epirrhoe alternata* (Müller) 5 Jul, 25 Jul
 7414 *Orthonama obstipata* (F.) 20 May
 7416 *Orthonama centrostrigaria* (Woll.) 25 Jun
 7422 *Hydrelia inornata* (Hulst) 10 Jul
 7425 *Venusia cambrica* (Curt.) 20-30 Jul, 30 Aug
 7428 *Venusia comptaria* (Wlk.) 30 May-5 Jun
 7445 *Horisme intestinata* (Gn.) 15-25 Jun
 7459 *Eupithecia columbiata* (Dyar) 20-25 May
 7476 *Eupithecia misturata* (Hulst) 5 Jun
 7481 *Eupithecia coloradensis* (Hulst) 20-25 Jun
 7522 *Eupithecia nimbicolor* (Hulst) 25 Jun
 7526 *Eupithecia russeliata* Swett 10-15 Jun
 7529 *Eupithecia coagulata* Gn. 20 May-25 Jun, 10-20 Aug
 7543 *Eupithecia annulata* (Hulst) 25-30 May
 7575 *Eupithecia mutata* Pears. 20 Jun
 7594 *Eupithecia anticaria* Wlk. 30 Jun
 7605 *Eupithecia ravocostata* Pack. 25-30 May
 7635 *Acasis viridata* (Pack.) 30 May-5 Jun
 7637 *Cladara limitaria* (Wlk.) 15 May-5 Jun
 7639 *Cladara atroliturata* (Wlk.) 20 May-5 Jun
- EPIPLEMIDAE**
 7650 *Callizzia amorata* Pack. 30 Jun-20 Jul
- LASIOCAMPIDAE**
 7673 *Tolype laricis* (Fitch) 25 Aug-10 Sep
 7687 *Phylodesma americana* (Harr.) 15 May-5 Jul
 7698 *Malacosoma disstria* Hbn. 5 Aug
 7702c. *Malacosoma californicum pluvialis* (Dyar) 30 Jul
- SATURNIIDAE**
 7757 *Antheraea polyphemus* (Cram.) 20-25 Jun
 7758 *Actias luna* (L.) 20 Jun-10 Jul
- SPHINGIDAE**
 7787 *Ceratomia undulosa* (Wlk.) 30 Jun-30 Jul
 7809 *Sphinx kalmiae* J. E. Smith 15 Aug
 7810 *Sphinx gordius* Cram. 20-30 Jun
 7811 *Sphinx luscitiosa* Clem. 30 Jun
 7817 *Lapara bombycoides* Wlk. 10-15 Jul
 7821 *Smerinthus jamaicensis* (Drury) 5 Jun, 20 Jun-5 Jul, 15-20 Jul
 7822 *Smerinthus cerysi* Kby. 5-20 Jun, 5 Jul
 7824 *Paonias excaecatus* (J. E. Smith) 10-25 Jun
 7827 *Laothoe juglandis* (J. E. Smith) 30 May-5 Jul
 7828 *Pachysphinx modesta* (Harr.) 25-30 Jun, 5 Sep
 7854 *Hemaris gracilis* (G. & R.) 15-25 Jun
 7855 *Hemaris diffinis* (Bdv.) 25 Jun
 7893 *Hyles gallii* (Rottemburg) 5-15 Jul, 5 Aug
- NOTODONTIDAE**
 7895 *Closteria albosigma* Fitch 25 May-15 Jun, 15 Jul, 5 Aug
 7915 *Nadata gibbosa* (J. E. Smith) 10 Jun-10 Jul, 20 Jul
 7921 *Peridea ferruginea* (Pack.) 15 Jun-30 Jul
 7922 *Pheosia rimosa* Pack. 15 Jul, 10 Aug
 7924 *Odontonia elegans* (Stkr.) 20 Jun-10 Jul, 25 Aug
 7926 *Notodonta scitipennis* Wlk. 10-15 Jul
 7928 *Notodonta simplaria* Graef 30 May-30 Jun, 15 Jul, 10 Aug
 7934 *Glaphyria lintneri* (Grt.) 20 May-15 Jun
 7939 *Furcula occidentalis* (Lint.) 5-10 Jun, 5 Jul
 7941 *Furcula modesta* (Hudson) 30 May-20 Jul
 7990 *Heterocampa umbrata* Wlk. 25 Jun-15 Jul
 7990a. *Heterocampa umbrata pulverea* (G. & R.) 20 Jun-10 Jul

- 8005 *Schizura ipomoeae* Doubleday 5-20 Jul
8007 *Schizura unicornis* (J. E. Smith) 15 Jul-5 Aug
8011 *Schizura leptinoides* (Grt.) 20 Jun-25 Aug
- ARCTIIDAE
- 8045.1 *Crambidia pallida* Pack. 25 Aug
8051 *Crambidia casta* (Pack.) 20 Aug-10 Sep
8090 *Hypoprepia fucosa* Hbn. 10 Aug
8098 *Clemensia albata* Pack. 10-25 Aug
8111 *Haploa lecontei* (Guér.-Méneville) 30 Jun-20 Jul
8114a. *Holomelina laeta treatii* (Grt.) 25 Jun-15 Jul
8123 *Holomelina ferruginosa* (Wlk.) 25 Jun-20 Jul, 5 Aug
8127 *Parasemia plantaginis* (L.) 25 Jun-10 Jul
8134 *Spilosoma congrua* Wlk. 5-20 Jun
8136 *Spilosoma dubia* (Wlk.) 20 Jun
8137 *pilosoma virginica* (F.) 20-30 Jun
8158 *Phragmatobia assimilans* Wlk. 25 May-10 Jun
8162 *Platactria parthenos* (Harr.) 20 Jun-5 Jul
8166 *Arctia caja* (L.) 15-30 Aug
8175 *Apantesis virguncula* (W. Kirby) 25-30 Jul
8176 *Apantesis anna* (Grt.) 25 Jul
8186 *Apantesis williamsii* (Dodge) 5-15 Jul
8187 *Apantesis celia* (Saund.) 20 Jul
8196 *Apantesis parthenice* (W. Kirby) 15 Jul-20 Aug
8197 *Apantesis virgo* (L.) 15 Jul
8214 *Lophocampa maculata* Harr. 20-30 Jun
8262 *Ctenucha virginica* (Esp.) 10 Jul-5 Aug
8267 *Cisseps fulvicollis* (Hbn.) 10-20 Jul
- NOCTUIDAE
- 8322 *Idia americalis* (Gn.) 25 Jul, 10 Aug
8334 *Idia lubricalis* (Gey.) 25 Jul-10 Aug
8338 *Phalaenophana pyramusalis* (Wlk.) 10 Jun
8341 *Zanclognatha theralis* (Wlk.) 5-20 Jul
8349 *Zanclognatha protumnusalis* (Wlk.) 5 Jul
8352 *Zanclognatha jacchusalis* (Wlk.) 15 Jul
8356 *Chytolita petrealis* Grt. 20-30 Jun
8362 *Phalaenostola metonalis* (Wlk.) 5-25 Jul
8370 *Bleptina caradrinalis* Gn. 10 Jul, 20 Aug
8397 *Palthis angulalis* (Hbn.) 15-25 Jun
8413 *Mycterophora inexplicata* (Wlk.) 10-20 Jul
8443 *Bomolocha bijugalis* (Wlk.) 25 Jul
8444 *Bomolocha palparia* (Wlk.) 5 Jul
8455 *Lomanthes eductalis* (Wlk.) 25 Jul
8461 *Hypena humuli* Harr. 20 Aug
8479 *Spargaloma sexpunctata* Grt. 30 Jun-10 Jul, 5 Aug
8490 *Pangrapta decoralis* Hbn. 30 Jun
- 8500 *Metalectra quadrisignata* (Wlk.) 30 Jun-10 Jul, 25 Jul
8554 *Alabama argillacea* (Hbn.) 5 Sep
8694 *Zale aeruginosa* (Gn.) 25 May-15 Jun
8697 *Zale minerea* (Gn.) 5-15 Jun
8697a. *Zale minerea norda* (Sm.) 25 Jun-5 Jul
8703 *Zale duplicata* (Bethune) 10-15 Jun
8716 *Zale unilineata* (Grt.) 25 May-5 Jun
8731 *Euclidia cuspidea* (Hbn.) 10 Jun-5 Jul
8738 *Caenurgina crassiuscula* (Haw.) 25 Jun, 30 Jul, 15 Aug
8803 *Catocala relicta* Wlk. 20 Aug-5 Sep
8805 *Catocala unijuga* Wlk. 5-20 Aug
8817 *Catocala briseis* Edw. 20 Aug-20 Sep
8821 *Catocala semirelicta* Grt. 20 Aug
8833 *Catocala concumbens* Wlk. 30 Aug-10 Sep
8846 *Catocala sordida* Grt. 5 Aug
8857 *Catocala ultronia* (Hbn.) 20 Aug-15 Sep
8867 *Catocala blandula* Hulst 30 Jul-25 Aug
8896 *Diachrysia aeroides* (Grt.) 20 Jul-10 Aug
8897 *Diachrysia balluca* Gey. 25 Jul-15 Aug
8899 *Pseudeva purpurigera* (Wlk.) 30 Jul-10 Aug, 25 Aug
8904 *Chrysanthympha formosa* (Grt.) 5 Jul-15 Aug
8908 *Autographa precationis* (Gn.) 15 Jun, 15-20 Jul, 25 Aug, 20 Sep
8909 *Autographa rubida* Ottol. 15 Jun-5 Jul
8911 *Autographa bimaculata* (Steph.) 25 Jul-25 Aug
8912 *Autographa mappa* (G. & R.) 30 Jun-5 Aug
8913 *Autographa pseudogamma* (Grt.) 5-15 Jul
8916 *Autographa flagellum* (Wlk.) 25-30 Jul, 5 Sep
8923 *Autographa ampla* (Wlk.) 15 Jul-15 Aug
8924 *Anagrapha falcifera* (Kby.) 25 May, 15-30 Jun, 25 Aug-10 Sep
8926 *Syngrapha octoscripta* (Grt.) 10 Jul, 5-25 Aug
8927 *Syngrapha epigaea* (Grt.) 15-25 Aug
8928 *Syngrapha selecta* (Wlk.) 15 Jul-20 Aug
8939 *Syngrapha alias* (Ottol.) 25 Jun, 10 Aug
8942 *Syngrapha rectangula* (W. Kirby) 5 Jul, 25 Jul, 15-25 Aug
8945 *Syngrapha montana* (Pack.) 30 Jun
8946a. *Syngrapha microgamma nearctica* Fgn. 30 Jun
8950 *Plusia putnami* Grt. 30 Jun-10 Sep
8953 *Plusia venusta* Wlk. 30 Jul-5 Aug
8969 *Baileya doubledayi* (Gn.) 30 Jun
8970 *Baileya ophthalmica* (Gn.) 5 Jun
8974 *Characoma nilotica* (Rogenhofer) 25 Jun, 30 Jul
9046 *Lithacodia bellicula* Hbn. 10 Jul
9048 *Lithacodia albidula* (Gn.) 20-25 Jun

- 9053 *Lithacodia carneola* (Gn.) 30 Jun-15 Jul
 9059 *Capis curvata* Grt. 10-20 Jul
 9090 *Tarachidia candefacta* (Hbn.) 15 Sep
 9177 *Panthea acronyctoides* (Wlk.) 20 Jun-5 Jul
 9183 *Panthea pallescens* McD. 30 Jun, 25-30 Jul
 9183a. *Panthea pallescens centralis* McD. 15 Jul
 9185 *Cocloasia propinquilinea* (Grt.) 30 May-15 Jun, 5 Jul
 9189 *Charadra deridens* (Gn.) 20 Jun, 15-20 Jul
 9193 *Raphia frater* Grt. 15-20 Jun
 9203 *Acronicta dactylina* Grt. 20-30 Jun, 5 Sep
 9205 *Acronicta lepusculina* Gn. 20 Jun
 9207 *Acronicta innotata* Gn. 5-25 Jun, 10-20 Jul, 10-20 Aug
 9212 *Acronicta grisea* Wlk. 20 Jun-10 Jul
 9226 *Acronicta superans* Gn. 25-30 Jun
 9229 *Acronicta hasta* Gn. 25 Jun
 9241 *Acronicta fragilis* (Gn.) 20-25 Jun, 10-15 Jul, 15 Aug
 9257 *Acronicta impleta* Wlk. 20 Jun
 9259 *Acronicta noctivaga* Grt. 10-20 Jun
 9286 *Harrisimemna trisignata* (Wlk.) 30 Jun-5 Jul
 9326 *Apamea verbascoides* (Gn.) 20 Jul-5 Sep
 9344 *Apamea plutonia* (Grt.) 25 Jul-5 Aug
 9351 *Apamea alia* (Gn.) 25 Jun, 15 Jul
 9359 *Apamea commoda* (Wlk.) 5-30 Jul
 9360 *Apamea impulsa* (Gn.) 15 Jul
 9365 *Agroperina lateritia* (Hufn.) 30 Jun-10 Jul
 9367 *Agroperina dubitans* (Wlk.) 20 Jul, 20 Aug
 9367a. *Agroperina dubitans cogitata* (Sm.) 10-15 Jul, 30 Jul, 25 Aug
 9374 *Protagrotis niveivenosa* (Grt.) 5-10 Aug
 9382 *Crymodes devastator* (Brace) 10 Aug-5 Sep
 9391 *Luperina passer* (Gn.) 10 Aug
 9415 *Oligia bridghami* (G. & R.) 25 Aug
 9419 *Oligia mactata* (Gn.) 20 Jul, 20 Aug-15 Sep
 9420 *Oligia illocata* (Wlk.) 20-30 Jul, 25 Aug
 9431 *Parastichtis discivaria* (Wlk.) 15 Aug-5 Sep
 9437 *Hypocoena inquinata* (Gn.) 25 Aug
 9439 *Hypocoena basistriga* (McD.) 5-20 Sep
 9449 *Archanara oblonga* (Grt.) 5-10 Sep
 9450 *Archanara subflava* (Grt.) 5 Sep
 9453 *Helotropha reniformis* (Grt.) 5-20 Sep
 9454 *Amphipoea velata* (Wlk.) 20 Aug
 9457 *Amphipoea americana* (Speyer) 5 Aug-10 Sep
 9472 *Papaipema harrisii* (Grt.) 20 Aug-20 Sep
 9474 *Papaipema sauzalitae* (Grt.) 30 Aug-5 Sep
 9480 *Papaipema pterisii* Bird 20 Sep
 9509 *Papaipema unimoda* (Sm.) 5-25 Sep
 9520 *Achatodes zea* (Harr.) 30 Jul, 25 Aug
 9523 *Bellura gortynoides* f. *diffusa* (Grt.) 25 Jun
 9525 *Bellura obliqua* (Wlk.) 20 Jun-20 Jul
 9545 *Euplexia benesimilis* McD. 25-30 Jun
 9546 *Phlogophora iris* Gn. 20-30 Jun
 9547 *Phlogophora periculosa* Gn. 30 Jul-25 Aug
 9549 *Enargia decolor* (Wlk.) 15 Aug-20 Sep
 9555 *Ipimorpha pleonectusa* Grt. 15 Aug-20 Sep
 9556 *Chitonix palliatricula* (Gn.) 20 Jun-15 Jul, 15-25 Aug
 9560 *Dypterygia rozmani* Berio 10-20 Jul
 9564 *Andropolla contacta* (Wlk.) 15-30 Aug
 9578 *Hypa xylinoides* (Gn.) 20 Jun-20 Jul, 5 Sep
 9633 *Callopistria cordata* (Ljungh) 25 Jun-20 Jul
 9637 *Magusa orbifera* (Wlk.) 10 Sep
 9647 *Proxenus miranda* (Grt.) 20-30 Jun
 9649 *Proxenus mendosa* McD. 20 Jul
 9657 *Platyperigea multifera* (Wlk.) 10 Aug-10 Sep
 9666 *Spodoptera frugiperda* (J. E. Smith) 10-20 Sep
 9681 *Elaphria festivoides* (Gn.) 5 Jun-10 Jul
 9873 *Xylena nupera* (Lint.) 5 May
 9874 *Xylena curvimacula* (Morr.) 20 May-5 Jun, 20 Sep
 9876 *Xylena cineritia* (Grt.) 10-25 May, 30 Aug-20 Sep
 9878a. *Lithomoia solidaginis germana* (Morr.) 20 Aug-25 Sep
 9884 *Litholomia napaea* (Morr.) 10-25 May, 10-25 Sep
 9889 *Lithophane petulca* Grt. 20-25 May, 20 Sep
 9891 *Lithophane amanda* (Sm.) 5 Jun
 9902 *Lithophane baileyi* Grt. 15-25 Sep
 9913 *Lithophane georgii* Grt. 10 May
 9916 *Lithophane unimoda* (Lint.) 15 May-5 Jun, 25 Sep
 9917 *Lithophane sagina* Morr. 10 May-10 Jun, 25 Sep
 9922 *Lithophane pexata* Grt. 10-20 May, 10-25 Sep
 9928 *Lithophane thaxteri* Grt. 10-20 May, 20 Sep
 9935 *Eupsilia tristigmata* (Grt.) 10 May, 20 Sep
 9939 *Eupsilia devia* (Grt.) 15-20 May
 9952 *Eucirroedia pampina* (Gn.) 15 Aug-15 Sep
 9961 *Anathix ralla* (G. & R.) 5 Sep
 9962 *Anathix puta* (G. & R.) 15 Aug, 5-20 Sep

- 9965 *Xanthia togata* (Esp.) 30 Aug-10 Sep
 9967 *Hillia iris* (Zett.) 5-15 Sep
 9974 *Fishia entheia* Grt. 10-25 Sep
 9976 *Platypolia anceps* (Steph.) 5-20 Sep
 9980 *Xylotype acadie* B. & Benj. 30 Aug-25 Sep
 9990 *Sutyna profunda* (Sm.) 25 Aug-20 Sep
 9998 *Brachyomia algens* (Grt.) 10 Sep
 10005 *Feralia jocosa* (Gn.) 15 May-10 Jun
 10007 *Feralia major* Sm. 15-20 May, 5 Jun
 10008 *Feralia comstocki* (Grt.) 25 May-10 Jun
 10011 *Brachionycha borealis* (Sm.) 5 May-30 Jun
 10059 *Homohadena badistriga* (Grt.) 30 Jul-30 Aug
 10065 *Homohadena infixa* (Wlk.) 10 Jul-20 Aug
 10123 *Oncocnemis piffardi* (Wlk.) 10 Sep
 10198 *Cucullia postera* Gn. 15 Jul
 10223 *Discestra trifolii* (Hufn.) 10 Sep
 10265 *Sideridis rosea* (Harv.) 10-20 Jun
 10275 *Polia nimboosa* (Gn.) 20 Jul-10 Aug
 10276 *Polia imbrifera* (Gn.) 20 Jul-5 Aug
 10280 *Polia purpurissata* (Grt.) 15 Jul-20 Aug
 10288 *Polia detracia* (Wlk.) 10 Jul
 10288a. *Polia detracta neoterica* (Sm.) 15-25 Jul
 10290 *Polia obscura* (Sm.) 15-25 Jun
 10292 *Melanchra adjuncta* (Gn.) 10-25 Jun, 10-25 Jul
 10294 *Melanchra pulverulenta* (Sm.) 15-30 Jun
 10295 *Melanchra assimilis* (Morr.) 30 Jun-15 Jul
 10296 *Lacanobia nevadae* (Grt.) 10 Jun-5 Jul, 15 Aug
 10298 *Lacanobia radix* (Wlk.) 5-15 Jun
 10300 *Lacanobia grandis* (Gn.) 5 Aug
 10301 *Lacanobia lutra* (Gn.) 10-25 Jun
 10303 *Lacanobia tacoma* (Strkr.) 10-25 Jun
 10310 *Papestra quadrata* (Sm.) 30 May-5 Jun
 10312 *Papestra cristifera* (Wlk.) 5-30 Jun
 10370 *Lacinipolia lustralis* (Grt.) 20 Jun-10 Jul
 10372 *Lacinipolia anguina* (Grt.) 5-15 Jun
 10397 *Lacinipolia renigera* (Steph.) 25 Jul-30 Aug
 10405 *Lacinipolia lorea* (Gn.) 30 Jun-10 Jul
 10436 *Aletia oxygala* (Grt.) 20 Jul, 10-25 Aug
 10438 *Pseudaleitia unipuncta* (Haw.) 10 Jun
 10446 *Leucania multilinea* Wlk. 10-20 Aug
 10447 *Leucania commoides* Gn. 5-30 Jun
 10449 *Leucania insueta* Gn. 15 Jun
 10471 *Stretchia plusiaeformis* Hy. Edw. 15-20 May
 10471a. *Stretchia p. coloradicola* Strand. 5-20 May
 10490 *Orthosia revicta* (Morr.) 10-25 May
 10513 *Egira dolosa* (Grt.) 25 May-10 Jun
- 10563 *Proorthodes ovidua* (Gn.) 10-25 Jun
 10578 *Pseudorthodes vecors* (Gn.) 30 Jun-5 Jul
 10587 *Orthodes cynica* Gn. 10 Jun, 15 Jul
 10644 *Agrotis mollis* Wlk. 25 Jul
 10651 *Agrotis venerabilis* Wlk. 20 Aug-15 Sep
 10659 *Agrotis volubilis* Harv. 25 Jun
 10660 *Agrotis obliqua* (Sm.) 15 Jul
 10663 *Agrotis epsilon* (Hufn.) 5-25 Sep
 10670 *Feltia jaculifera* (Gn.) 30 Aug-15 Sep
 10676 *Feltia herilis* (Grt.) 25 Jul-10 Sep
 10702 *Euxoa divergens* (Wlk.) 30 Jun-30 Jul
 10715 *Euxoa scandens* (Riley) 25-30 Jul, 10-15 Sep
 10738 *Euxoa mimallonis* (Grt.) 5 Aug-5 Sep
 10755 *Euxoa declarata* (Wlk.) 5-25 Aug
 10801 *Euxoa ochrogaster* (Gn.) 5-15 Aug
 10891 *Ochropleura plecta* (L.) 5-15 Jul, 25 Aug
 10915 *Peridroma saucia* (Hbn.) 15 May-20 Jun, 5-25 Sep
 10917 *Diarsia rubifera* (Grt.) 30 Jul-20 Aug
 10918 *Diarsia dislocata* (Sm.) 30 Jul-15 Aug
 10919 *Diarsia jucunda* (Wlk.) 15 Jul-10 Sep
 10928 *Graphiphora haruspica* (Grt.) 30 Jul-25 Aug
 10929 *Eurois occulta* (L.) 5 Jul, 10-25 Aug
 10930 *Eurois astricta* Morr. 20 Jul-25 Aug
 10942 *Xestia adela* Franc. 5 Aug-10 Sep
 10943 *Xestia normaniana* (Grt.) 20 Jul-20 Aug
 10944 *Xestia smithii* (Snell.) 20 Jul, 10-20 Aug
 10947 *Xestia oblata* (Morr.) 5 Jul-10 Aug
 10951 *Xestia tenuicula* (Morr.) 5 Aug
 10954 *Xestia collaris* (G. & R.) 25 Aug
 10957 *Anomogyna atrata* (Morr.) 25-30 Jun
 10962 *Anomogyna perquiritata* (Morr.) 10-30 Aug
 10967 *Anomogyna elimata* (Gn.) 10 Aug-10 Sep
 10969 *Anomogyna dilucida* (Morr.) 5 Aug
 10988a. *Eugrapha subrosea opacifrons* (Grt.) 20 Aug
 10992 *Paradiarsia littoralis* (Pack.) 5-15 Jul
 10996 *Metalepsis salicarum* (Wlk.) 15-25 May
 10997 *Metalepsis fishii* (Grt.) 30 Jun
 10999 *Aplectoides condita* (Gn.) 20-25 Jun, 20 Jul
 11000 *Anaplectoides prasina* (D. & S.) 30 Jun-5 Jul, 15 Jul, 15 Aug-15 Sep
 11001 *Anaplectoides pressus* (Grt.) 5 Jul-10 Sep
 11003 *Chersotis juncta* (Grt.) 25 Jul-15 Aug
 11004 *Protolampra rufipectus* (Morr.) 5-25 Aug
 11008 *Eueretagrotis perattenta* (Grt.) 5 Jul

11009 <i>Eueretagrotis attenta</i> (Grt.) 30 Jun-20 Aug	11043 <i>Rhynchagrotis cupida</i> (Grt.) 15 Sep
11010 <i>Heptagrotis phyllophora</i> (Grt.) 25 Jul	11064 <i>Pyrrhia exprimens</i> (Wlk.) 25 Jun-5 Jul
11012 <i>Cryptocala acadiensis</i> (Bethune) 10 Jul-15 Aug	11068 <i>Heliothis zea</i> (Boddie) 15-20 Sep

DISCUSSION

Black Sturgeon Lake is in a relatively remote area, where only limited collecting has been carried out in the past. In his review of the state of knowledge on the Lepidoptera in Canada, Munroe (1979) lists a number of locations from which faunal samples are needed. Among these he names "the Lakehead district of Ontario, and the whole region from there to the Lake of the Woods, along the U.S. border." Black Sturgeon Lake is situated at the eastern end of this area, and this listing is therefore a contribution to meeting this lack of knowledge.

In all, 564 species of Lepidoptera plus 8 subspecies were collected at Black Sturgeon Lake during the years 1960-1968, representing 36 families, 5 butterflies, 1 skipper and 30 moths. This compares with 4692 species from 70 families listed by Munroe (1979) for the whole of Canada. It is probable that the listing for Black Sturgeon Lake is incomplete. The collections were made by staff trained in forest entomology, but with no taxonomic expertise, who may have overlooked rarer species, especially if they were inconspicuous or resembled other, more numerous, species. However, it is unlikely that many species were overlooked. The stated objective was to make a representative collection, and so the collectors were continually on the look out for new species. The listing may then be considered fairly reliable, but absence from the listing cannot be taken as conclusive evidence that the species is absent from the area.

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