

Survey of Lepidoptera of the Wainwright Dunes Ecological Reserve



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Introduction: Wainwright Dunes Ecological Reserve (see map) is located to the southeast of Wainwright in parts of townships 41 and 42, and range 5. It is about 28 km² in size. This area has intrigued me since I was last there with Gary Anweiler on July 13 and 14, 2002. The habitat here consists of stabilized dunes that contain a mixture of aspen groves, prairie and open sand with sedges. I was able to return to this area in 2004 on June 8th, and July 2nd and 3rd. Sherri Dunne and I accessed the ecological reserve from the south side; the same as in 2002, and camped near the reserve entrance. All specimens were taken at and around 52.5960N, -110.6088W (the red dot on the map). The following list of 132 species updates the 88 of the previous list from June of 2002. Specimens were collected under Research and Collection Permit No. RC04EC003.

Species List for the Wainwright Dunes Ecological Reserve
(prepared January 27th, 2005)

Cossidae

1) *Acosus centerensis*

Elachistidae

2) *Ethmia albicostella*

Hesperiidae

3) *Poanes hobomok*

Lycaenidae

4) *Harkenclenus titus*

5) *Satyrium liparops*

Nymphalidae

6) *Nymphalis antiopa*

7) *Vanessa atalanta*

8) *Speyeria calipope*

9) *Speyeria atlantis hollandi*

10) *Speyeria cybele*

11) *Speyeria mormonia eurynome*

12) *Phyciodes batesii*

13) *Liminitis arthemis*

Geometridae

14) *Eumacaria latiferrugata*

15) *Itame occiduaria*

16) *Digrammia denticulata*

17) *Hesperumia sulphuraria*

18) *Euchlaena johnsonaria*

19) *Euchlaena madusaria*

20) *Euchlaena marginaria*

21) *Euchlaena tigrinaria*

22) *Xanthotype sospeta*

23) *Pero morisonaria*

24) *Nacophora quernaria*

25) *Scopula limboundata*

26) *Dysstroma hersiliata*

27) *Eubaphe mendica*

Lasiocampidae

28) *Malacosoma californicum*

Sphingidae

29) *Sphinx vashti*

30) *Sphinx luscitiosa*

31) *Smerinthus jamaicensis*

32) *Smerinthus cerisyi*

33) *Paonias exaecatus*

34) *Paonias myops*

35) *Pachysphinx modesta*

36) *Pachysphinx occidentalis*

37) *Hemaris diffinis*

Notodontidae

38) *Clostera albosigma*

39) *Clostera apicalis*

40) *Nadata gibbosa*

41) *Pheosia rimosa*

42) *Notodonta scitipennis*

43) *Gluphisia septentrionis*

44) *Furcula modesta*

45) *Schizura ipomoeae*

46) *Oligocentria semirufescens*

Arctiidae

47) *Hypoprepia miniata*

- 48) *Haploa lecontei*
- 49) *Holomelina ferruginosa*
- 50) *Pyrrharctia isabella*
- 51) *Spilosoma congrua*
- 52) *Platarctia parthenos*
- 53) *Grammia speciosa*
- 54) *Grammia williamsi*
- 55) *Grammia phyllira*
- 56) *Grammia parthenice*
- 57) *Grammia virgo*
- 58) *Lophocampa maculata*
- 59) *Cisseps fulvicollis*

Lymantriidae

- 60) *Dasychira vagans*

Noctuidae

- 61) *Idia americalis*
- 62) *Idia aemula*
- 63) *Phalaenostola hanhami*
- 64) *Bleptina caradrinalis*
- 65) *Renia flavipunctalis*
- 66) *Zale minerea*
- 67) *Pseudeva purpurigera*
- 68) *Autographa ampla*
- 69) *Plusia putnami*
- 70) *Pseudeustrotia carneola*
- 71) *Tarachidia semiflava*
- 72) *Raphia frater*
- 73) *Acronicta dactylina*
- 74) *Acronicta lepusculina*
- 75) *Acronicta vulpina*
- 76) *Acronicta grisea*
- 77) *Acronicta fragilis*
- 78) *Apamea alia*
- 79) *Apamea commoda*
- 80) *Apamea scoparia*
- 81) *Apamea devastator*
- 82) *Luperina passer*
- 83) *Oligia mactata*
- 84) *Chorodes rufostrigata*
- 85) *Chytonix palliatricula*
- 86) *Hyppa xylinoides*
- 87) *Proxenus miranda*
- 88) *Platyperigea montana*

- 89) *Stiria rugifrons*
- 90) *Homohadena stabilis*
- 91) *Homohadena infixa*
- 92) *Oncocnemis riparia*
- 93) *Cucullia luna*
- 94) *Discestra trifolii*
- 95) *Sideridis maryx*
- 96) *Mamestra configurata*
- 97) *Polia nimbosa*
- 98) *Orthodes goodelli*
- 99) *Hadena circumvadis*
- 100) *Hada sutrina*
- 101) *Lacanobia renigera*
- 102) *Lacanobia subjuncta*
- 103) *Lacanobia atlantica*
- 104) *Lacinipolia vicina*
- 105) *Lacinipolia lorea*
- 106) *Lacinipolia lustralis*
- 107) *Lacinipolia vicina*
- 108) *Faronta diffusa*
- 109) *Feltia jaculifera*
- 110) *Aletia oxygala*
- 111) *Leucania multilinea*
- 112) *Leucania commoides*
- 113) *Leucania insueta*
- 114) *Protorthodes oviduca*
- 115) *Agrotis obliqua*
- 116) *Euxoa adumbrata*
- 117) *Euxoa divergens*
- 118) *Euxoa scandens*
- 119) *Euxoa tristicula*
- 120) *Euxoa pleuritica*
- 121) *Euxoa declarata*
- 122) *Euxoa basalis*
- 123) *Euxoa tessellata*
- 124) *Euxoa munis*
- 125) *Euxoa manitobana*
- 126) *Euxoa flavicollis*
- 127) *Euagrotis tepperi*
- 128) *Spaelotis clandestina*
- 129) *Graphiphora augur*
- 130) *Paradiarsia littoralis*
- 131) *Abagrotis placida*
- 132) *Heliothis ononis*

Notes: Butterflies and skippers were not collected as intensely as were the moths and therefore their species numbers were quite low. Collecting mainly focused on moths that were sampled at night using both UV light traps and the traditional MV sheet. Some day collecting was done using hand nets but unfortunately the weather on both trips was particularly cool and wet. A few species collected during the survey were worthy of mention as either range extensions, new records or as rare and unusual finds in Alberta.

The following is a list of these specimens with notes on their significance.

Significant Species:

Ethmia albicostella – This record is rare, a substantial range extension for the province and is only the third location known for Alberta. This species was last collected nearly forty years ago in Cardston and Kananaskis.



Source of image: Gerald Fauske
(<http://www.ndsu.edu/ndsu/ndmoths/home.htm>)

Nacophora quernaria – Collected on July 13, 2002 and still remains as the only record for Alberta. The specimen is currently housed at the University of Alberta’s E. H. Strickland Entomology Museum.



Source of image: Gerald Fauske
(<http://www.ndsu.edu/ndsu/ndmoths/home.htm>)

Sphinx luscitiosa – This uncommon sphinx is found across Canada in the aspen parkland region.



Source of image: Strickland Museum,
University of Alberta.
(<http://www.entomology.ualberta.ca>)

Schizura ipomoeae – This is a rare find in Alberta and only the second record for the province. Dr. Charley Bird previously collected this species in Big Knife Provincial Park on July 9, 2002.



Source of image: Strickland Museum,
University of Alberta.
(<http://www.entomology.ualberta.ca>)

Grammia phyllira – Known from two locations in Alberta, the Wainwright Dunes (July 2002) and at the dunes south of Edgerton. As the locations suggest, it is found in either dune or prairie habitats and is a rare find in Alberta.



Source of image: Strickland Museum,
University of Alberta.
(<http://www.entomology.ualberta.ca>)

Stiria rugifrons – This species is a rare find in Alberta and is known from four locations including the Wainwright Dunes. It was last collected here on July 13, 2002.



Source of image: Strickland Museum,
University of Alberta.
(<http://www.entomology.ualberta.ca>)

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Figure 1. Wainwright Dunes Ecological Reserve. The green line depicts the reserve boundary and the red dot is the location at or near where specimens were collected. The red dot is in the southeast quarter of section 11, township 42, range 5, west of the 4th meridian.