Kosciuszko National Park Bush Blitz Lepidoptera

30 Jan – 4 Feb 2023 Submitted: 30 June 2023 Andrew Mitchell

Nomenclature and taxonomy used in this report is consistent with: The Australian Faunal Directory (AFD)

http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/afd/home

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List of contributors

List of contributors to this report.				
Name	Institution/affiliation	Qualifications/area of expertise	Level/form of contribution	
Andrew Mitchell	Australian Museum	Lepidoptera	Survey participant, wrote report	

1. Introduction

Kosciuszko National Park

2. Methods

2.1 Site selection

The target species are only known from sites above 1500m elevation. The vast majority of existing specimens of the target species were collected at these sites in KNP. As I aimed to recollect specimens of these species these were the obvious sites to sample.

2.2 Survey techniques

Standard black light bucket traps and direct collecting from a light sheet using a Lepi-LED light powered by a powerbank (such as those used to recharge a mobile phone).

2.2.1 Methods used at standard survey sites

The standard survey sites were not sampled as I needed to focus only on sites at 1500 m or more elevation and the need to stay out overnight to collect moths (and the fact that I was a team of one) precluded my sampling at more remote sites accessible only by helicopter.

2.3 Identifying the collections

Pinned specimens were compared with specimens in the Australian Museum (some of which are on loan from ANIC for a taxonomic revision of the group).

3. Results and Discussion

Appendix 1 lists all Lepidoptera recorded during the Bush Blitz. Collections made during this Bush Blitz resulted in 123 specimens being added to the Australian Museum collection.

3.1 Un-named or not formalised taxa

Provide a short description/discussion.

Table 1. Putatively un-named or not formalised taxa			
Taxon	Comment		
Dasygaster sp. ANIC 2	An undescribed species under study at the AM.		

3.2 Putative new species (new to science)

In this report, 'putative new species' means an unnamed species that, as far as can be ascertained, was identified as a new species as a direct result of this Bush Blitz.

None recorded.

3.3 Exotic and pest species

None recorded.

3.4 Threatened species

None recorded.

3.5 Range extensions

None recorded.

3.6 Genetic information

Genetic sampling is currently in progress.

4. Information on species lists

The number of specimens and number of species collected was much fewer than expected.

5. Information for land managers

N/A

6. Other significant findings

N/A

7. Conclusions

The number of specimens and number of species collected was much fewer than expected. Unfortunately the weather was to blame – There were strong winds and cold temperatures including snow on two nights, and it was also full moon during the trip. These are the worst possible conditions for Lepidoptera. Attempts were made to collect moths at a few additional sites not listed but my traps collected nothing – not a single moth.

Not that the timing of the trip could have been better – conditions should have been much better at that time of the year, it was just the luck of the draw.

Acknowledgements

I wish to thank the BushBlitz management team for making everything run as smoothly as it did.

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/pest
Anthelidae	sp.1	N	N	N	N
Anthelidae	sp.2	N	N	N	N
Crambidae	sp.1	N	N	N	N
Crambidae	sp.2	N	N	N	N
Erebidae	Pantydia sp.	N	N	N	N
Erebidae	Pantydia sparsa	N	N	N	N
Erebidae	Spilosoma curvata	N	N	N	N
Erebidae	sp.1	N	N	N	N
Erebidae	sp.2	N	N	N	N
Erebidae	sp.3	N	N	N	N
Geometridae	?Capusa	N	N	N	N
Geometridae	Arhodia lasiocamparia	N	N	N	N
Geometridae	Capusa stenophara	N	N	N	N
Geometridae	Chrysolarentia leucozona	N	N	N	N
Geometridae	Circopetes obtusata	N	N	N	N
Geometridae	Fisera dictyodes	N	N	N	N
Geometridae	Hypobapta diffudens	N	N	N	N
Geometridae	Mnesampela privata	N	N	N	N
Geometridae	Nicteria macrosoma	N	N	N	N
Geometridae	Oenochroma sp. 1	N	N	N	N
Geometridae	Oenochroma sp. 1?	N	N	N	N
Geometridae	Plesanemma fucata	N	N	N	N
Geometridae	sp.1	N	N	N	N
Geometridae	sp.2	N	N	N	N
Geometridae	sp.3	N	N	N	N
Geometridae	sp.4	N	N	N	N
Geometridae	sp.5	N	N	N	N
Geometridae	sp.6	N	N	N	N

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/pest
Geometridae	sp.7	N	N	N	N
Geometridae	sp.8	N	N	N	N
Geometridae	sp.9	N	N	N	N
Hepialidae	Abantiades ?magnifica	N	N	Ν	N
Noctuidae	Adeia leucmelas	N	N	N	N
Noctuidae	Agrotis infusa	N	N	N	N
Noctuidae	Australothis rubrescens	N	N	N	N
Noctuidae	Chrysodeixis sp.	N	N	N	N
Noctuidae	Cirphis sp.	N	N	Ν	N
Noctuidae	Cosmodes elegans	N	N	N	N
Noctuidae	Dasygaster sp. ANIC 2	N	N	Ν	N
Noctuidae	Dasygaster epipolia	N	N	Ν	N
Noctuidae	Dasygaster oressigenes	N	N	N	N
Noctuidae	Dasygaster padockina	N	N	N	N
Noctuidae	Diarsia intermixta	N	N	N	N
Noctuidae	Ectopatria horologa	N	N	N	N
Noctuidae	Helicoverpa ?assulta	N	N	N	N
Noctuidae	Helicoverpa punctigera	N	N	N	N
Noctuidae	Helicoverpa sp.	N	N	N	N
Noctuidae	Heliocheilus sp.	N	N	N	N
Noctuidae	Mythimna convecta/separata	N	N	N	N
Noctuidae	Neumichtis archephanes	N	N	N	N
Noctuidae	Persectania ewingii	N	N	N	N
Noctuidae	Proteuxoa sanguinipuncta	N	N	N	N
Noctuidae	Proteuxoa sp.1	N	N	N	N
Noctuidae	Proteuxoa sp.2	N	N	N	N
Notodontidae	Hyleora capucina	N	N	N	N
Oecophoridae		N	N	N	N
Pyralidae	Nomophila corticalis	N	N	N	N
Saturniidae	Opodiphthera eucalypti	N	N	Ν	N

Family	Species	Putative new species		Threatened (State Act)	Exotic/pest
Sphingidae	Hippotion scrofa	Ν	Ν	Ν	Ν