

Lepidoptera of Danseys Pass, Otago

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Abstract

This paper records the presence of 212 Lepidoptera taxa collected at Danseys Pass between November 1977 and February 1980.

Keywords: Lepidoptera; Otago; Danseys Pass; checklist; New Zealand.

INTRODUCTION

Danseys Pass (44°57'S, 170°22'E) is a mountain pass (935 m) connecting North Otago with Central Otago at the northern end of the Kakanui Mountains. To the north, St Marys Range begins with a cluster of peaks including Mt Domet, the Cone, and Mt Kyeburn, and reaches its greatest height of 2027 m at Mt Kohurau. To the southeast stretches the Kakanui containing much more rounded peaks, the highest of which is Mt Pisgah (1659 m). The vegetation of the area is mainly brown tussock with few shrubs or trees. However, a rich herb community is present on steep rock faces and in most hollows. Below the pass remnants of native shrubs are found in wet gullies, and matagouri and tussock dominate the flat land.

I visited the pass area 37 times between November 1977 and February 1980 with the aims of compiling a checklist of Lepidoptera from this previously little-studied area, and to rear as many species as possible.

RESULTS

I found a total of 212 taxa, several of which were new to science. The taxa and their collection data are presented in the checklist. Adults are present from about mid-October to early June above 900 m. The moths are easy to study as the rainfall in the area is low and winds are light.

I found day-flying moths to be particularly common immediately beside the pass up to an altitude of 1200 m; several were new species. Nocturnal species were also well represented.

Among the new geometrids found was a small black and white species of *Pasiphila*; I have since found this species on the Rock and Pillar Range, Takitimus, and Remarkables. The slender white and brown larvae feed on *Gentiana*, *Hebe*, *Celmisia*, and *Senecio* flowers during the summer, and the following October or November the adults emerge. A dull, reddish-brown species of *Asaphodes* was found by Robin Craw and myself; the larva feeds on *Cyathodes*. A beautiful grey species of *Dasyuris* was found which flies swiftly over high mountain crests, and alights on warm rocks to display its orange hindwings.

A new genus and species of hepialid was the most exciting discovery made. The orange and brown male was found by day at 1100 m on a snow totara, and the dull grey female was found dead in a swamp. The adults emerge in April. The species is still known only from the unique male and female specimens.

A new tortricid was found with a flight period from March to May. It is a dimorphic species, and females are semiapterous. It probably breeds in damp areas, as both the females found were on moss in wet locations.

I hope that the checklist demonstrates the wealth of species present in a seemingly barren area, and perhaps this will stimulate more interest in the area.

Checklist of Lepidoptera recorded from Danseys Pass

Monotrysia

NEPTICULIDAE

Nepticula oriastra Meyrick, larva in *Celmisia prorepens*

MNESARCHAEOIDEA:

MNESARCHAEIDAE

Mnesarchaea paracosma Meyrick, Dec-Jan, 950 m, common.

HEPIALOIDAE: HEPIALIDAE

Aoraia aurimaculata (Philpott); Mar-Apr, 950-1300 m. *A. aurimaculata* series includes *Aoraia* n.sp. (Dumbleton), Mar, 950-1300 m.

Dioxycanus fuscus (Philpott), Dec, 1100 m

Wiseana cervinata (Walker), Sep-Dec, <600 m

Wiseana umbraculata (Guenee), Oct-Jan, to 950 m

Oxycaninae, new genus and species, Apr, 950-1300 m

Ditrysia Endoporia

TORTRICOIDEA: TORTRICIDAE

"*Capua*" *semiferana* (Walker), Jan-Dec, <600 m

Ctenopseustis obliquana (Walker), Jan-Dec, <500 m

Epichorista aspistana (Meyrick), Jan, 1100 m

Epichorista hemionana (Meyrick), Mar, <1100 m

Epichorista lindsayi (Philpott), Feb, 1100 m

"*Epichorista*" *loxias* (Meyrick), Feb, <1100 m

Epiphyas postvittana (Walker), Jan-Dec, <500 m

"*Eurythecta*" *leucothrinca* (Meyrick), Apr-Jun, 950 m

Gelophaula sp., nr *Rock and Pillar* species, Jan-Feb, 1100-1300 m, in *Celmisia brevifolia* rosettes.

Gelophaula palliata (Philpott), Nov-Feb, 950-1000 m, in *Celmisia prorepens* rosettes.

Gelophaula tributaria (Philpott), Jan, 1100 m.

Harmologa oblongana (Walker), Feb, <500 m, on *Muehlenbeckia*

Harmologa sisyrana Meyrick, Feb-Mar, <600 m.

Merophyas n.sp., Feb, 1000 m.

Merophyas leucaniana (Walker), Oct-Apr, <600 m.

Planotortrix excessana (Walker), Jan-Dec, <600 m.

Pyrgotis plagiatana (Walker), Jan-Dec, <600 m.

genus and species indet. (white, striped crambiform tortricid), Mar-Jun, 400-1200 m.

SESIOIDEA: CHOREUTIDAE

Asterivora analoga (Meyrick), Dec, 800 m

Asterivora marmarea (Meyrick), Dec-Feb, 980-1300

m, larva on *Celmisia gracilentia*

Asterivora microlitha (Meyrick), Sep-Oct, 500 m,

larva on *Helichrysum globeratum*

Asterivora symbolaea (Meyrick), Jan-Mar, 950 m,

larva on *Celmisia prorepens*

TINEOIDEA: GRACILLARIIDAE

Caloptilia elaeas (Meyrick), Oct, Apr, Jun, <1150

m, on *Coriaria*.

Caloptilia linearis (Butler), Nov, 500 m.

Caloptilia n.sp., Mar-Apr, 950 m, associated with *Gaultheria*.

PSYCHIDAE

Mallobathra crataea Meyrick, Jan, 950 m.

Orophora unicolor (Butler), larvae and cases, 950-1300 m.

TINEIDAE

Amphixystis hapsimacha Meyrick, Dec, 600 m

Leucoptera spartifoliella on *Cytisus*, 500 m.

YPONOMEUTOIDEA: YPONOMEUTIDAE

Orthenches chlorocoma Meyrick, Jan-Dec, <800 m, on *Carmichaelia*

Orthenches similis Philpott, Dec-Mar, 950 m.

Phylacodes cauta Meyrick, Sep, 950 m.

Plutella antiphona Meyrick Mar-Apr, <500 m.

Plutella xylostella (Linnaeus), Jan-Dec, <500 m.

Protosynaema quaestuosa Philpott, Apr, 950 m.

COPROMORPHOIDEA:

GLYPHIPTERIGIDAE

"*Glyphipterix*" (*Circica*) *achlyoessa* (Meyrick), Oct-Dec, <500 m.

"*Glyphipterix*" (*Circica*) *acrothecta* (Meyrick), Oct-Dec, 600 m.

"*Glyphipterix*" (*Circica*) *bactrias* (Meyrick), Oct-Dec, <800 m.

"*Glyphipterix*" (*Circica*) *cionophora* Meyrick, Feb-Mar, < 600 m

"*Glyphipterix*" (*Circica*) *erastis* Meyrick, Dec-Jan, to 1100 m

"*Glyphipterix*" (*Circica*) *iocheaera* Meyrick, Nov-Dec, < 600 m

"*Glyphipterix*" (*Circica*) *nephoptera* Meyrick, Dec-Mar, < 500 m

"*Glyphipterix*" (*Circica*) *oxymachaera* (Meyrick), Nov-Jan, < 950 m

GELECHIOIDEA: ELACHISTIDAE

Elachista (*Irenicodes*) *thallophora* Meyrick, Oct-Dec, 500-950 m

GELECHIIDAE

Megacraspedus calamogona Meyrick, Jan-Dec, to 1100 m, larvae in *Chionochloa* seed heads

Gelechia sp. nr *aerobatis* Meyrick, Jan, 950 m

OECOPHORIDAE

Cremnogenes ancogramma Meyrick, Nov, 500 m

Cremnogenes politis (Meyrick), Nov-Dec, to 600 m

Euchersadaula lathriopa (Meyrick), Feb, 1200 m, beaten from snow totara

Gymnobathra coarctatella (Walker), Oct-Mar, < 1200 m, larva in cases under *Cyathodes*

Gymnobathra habropis Meyrick, Jan, 500 m

Gymnobathra parca (Butler), Nov, 500 m

Oxythecta austrina (Meyrick), Oct-Nov, 1200-1300 m

MOMPHIDAE

Zapyrastra n.sp., on *Haloragis erecta* mining leaves

PAPILIONOIDEA: LYCAENIDAE

Lycæna boldenarum White, < 1300 m on *Muehlenbeckia axillaris*

Lycæna satustius (Fabricius), < 1000 m, on *Muehlenbeckia complexa*

Zizina otis oxleyi (Felder), on clovers

NYMPHALIDAE

Bassaris gonerilla (Fabricius), Oct-May, < 1000 m, on tree nettle

Bassaris itea (Fabricius), < 600 m, on introduced nettle

Cynthia kershawi McCoy, Oct, Jan, 1200-1300 m

PIERIDAE

Pieris (*Artoeia*) *rapae* (Linnaeus)

SATYRIDAE

Argyrophenga antipodum Doubleday, Oct-Apr, < 1300 m

Argyrophenga janitæ Craw, Nov-Feb, 1000-1300 m

Percnodaimon pluto Dec-Feb, < 1200 m

PTEROPHOROIDEA: PTEROPHORIDAE

Platyptilia repletalis (Walker), Feb-Apr, < 950 m

Stenoptilia orites Meyrick, 950-1200m, larvae in *Senecio* flowers

NOCTUOIDEA: ARCTIIDAE

Metacrias strategica (Hudson), Dec, 950 m, on herbs and grasses

Nyctemera annulata (Boisduval), Oct-Mar, < 700 m, on *Senecio*

NOLIDAE

Celama parvitis (Howes), Dec, 600 m, on *Helichrysum glomeratum*

NOCTUIDAE: ACRONICTINAE

Bityla defigurata (Walker), Jan-Dec, to 950 m, on *Muehlenbeckia australis*

Rictonis comma (Walker), Oct-Mar, < 950 m, on grasses and herbs

NOCTUIDAE: AGROTINAE

Agrotis ipsilon anietuma (Walker), Nov-May, < 950 m

NOCTUIDAE: HADENINAE

"*Aletia*" *cuneata* Philpott, Jan-Feb, 1200 m

"*Aletia*" *griseipennis* (Felder), Feb-Apr, 600-1000 m

"*Aletia*" *longstaffi* (Howes), Mar-Apr, 950-1100 m, adults to *Dracophyllum* flowers.

"*Aletia*" *obsecrata* Meyrick, Jan, 1200 m

Graphania agorastis (Meyrick), Dec-Jan, to 950 m

Graphania disjungens (Walker), Dec-Jan, < 950 m

Graphania insignis (Walker), Jan-Dec, < 600 m

Graphania morosa (Butler), Jan-Feb, to 600 m

Graphania nutans (Walker), Jan-Dec, < 600 m

Graphania nullifera (Walker), Dec-Apr, 1000 m, in *Aciphylla*

Graphania omoplaca (Meyrick), Oct-Dec, < 800 m, on introduced Poaceae.

Graphanis plena (Walker), Jan-Dec, < 600 m

Graphania phricas (Meyrick), Oct, Jan, Apr, to 950 m

Graphania rubescens (Butler), Feb, < 700 m, on introduced grasses

Graphania ustistriga (Walker), Aug-Apr, < 600 m

Ichneutica cana Howes, Nov-Jan, 950 m

Ichneutica ceraunias Meyrick, Nov-Jan, 700-1200 m

Ichneutica notata Salmon, Jan, 950 m

Persectania aversa (Walker), Sep-May, < 950 m

Tmetolophota acontistis (Meyrick), Oct, Dec, 950 m

Tmetolophota arotis (Meyrick), Dec-Jan, < 950 m

Tmetolophota atristriga (Walker), Dec-Mar, < 600 m

Tmetolophota propria (Walker), Jan-Apr, < 600 m

Tmetolophota stulta (Philpott), Dec, 950 m

NOCTUIDAE: HYPENINAE

Rhapsa scotosialis Walker, Oct-Apr, < 600 m

GEOMETROIDEA: GEOMETRIDAE:

ENNOMINAE

Gelonia pannularia (Guenee), Jan, to 600 m

Pseudocoremia indistincta (Butler), Dec-Jan, < 600 m, on *Muehlenbeckia*

Pseudocoremia melinata (Felder), Jan, on *Carmichaelia*

Pseudocoremia suavis Butler, Jan-Dec, < 600 m

Sestra flexata (Walker), Oct-Dec, < 500 m

Ischalis fortinata (Guenee), Nov, < 500 m

GEOMETRIDAE: LARENTIINAE

Anachloris subochraria (Doubleday), Jan-Feb, < 500 m

Asaphodes abrogata (Walker), Mar-Apr, < 600 m, on *Plantago*

Asaphodes chlamydota (Meyrick), Oct, < 500 m

Asaphodes clara (Walker), Feb-Mar, 900-1300 m

Asaphodes helias (Meyrick), Jan-Feb, 1100-1300 m

Asaphodes prasinias (Meyrick), Dec, < 600 m

Asaphodes recta (Philpott), Mar-Apr, < 600 m

Asaphodes sp. indet (nr *bryopis*), Jan-Feb, 1000-1300 m, larva on *Cyathodes*

Austrocidaria callichlora (Butler), Jan, to 600 m

Cephalissa siria, Oct, 1300 m

Dasyuris anceps (Butler), Jan-Apr, 950-1300 m, on *Anisotome*

Dasyuris leucobathra Meyrick, Nov, 950 m, larva will eat lettuce

- Dasyuris partheniata* Guenee, Oct, <500 m, on *Aciphylla*
Dasyuris transaurea Howes, Oct-Nov, 950-1300 m
Dasyuris sp. indet, Jan-Feb, 1000-1300 m
Elvia glaucata Walker, Jan, <600 m
Epicyme rubropunctaria (Doubleday), Aug-Apr, <500 m, on *Haloragis*
Epiphryne verriculata (Felder), Nov, May, <500 m
 "Eucymatoge" *dryocyma* Meyrick, Sep, Apr, <500 m
 "Eucymatoge" *gobiata* (Felder), Oct-Apr, <500 m, on *Coprosma*
Helastia cinerearia (Doubleday), Sep-May, <800 m, on lichens
Helastia cymozeucta Nov-Dec, 600 m
Helastia orophyla (Meyrick), Jan-Feb, 1110-1300 m, on herbs
Helastia semifissata (Walker), Feb-Apr, <600 m, on herbs
Helastia semisignata (Walker), Sep-Apr, <950 m, lichens and herbs
Helastia n.sp., Oct-Dec, to 600 m
Helastia n.sp., Oct-Dec, 500 m
 "Hydriomena" *rixata* (Felder), Nov-Feb, <600 m, on *Epilobium*
 "Hydriomena" *triphragma* (Meyrick), Dec-Jan, <600 m
Lythria perornata (Walker), Nov-Feb, 950-1200 m, on *Pimelea*
Lythria sp. indet, Feb, 1100 m
Notoreas anthracias (Meyrick), Jan-Feb, 1100-1300 m, on *Dracophyllum*
Notoreas brephosata (Walker), Nov-Mar, 950-1300 m, on *Epilobium*
Notoreas ferox Dec-Feb, 1000-1200 m
Notoreas hexaleuca Nov-Jan, 950-1100m
Notoreas insignis (Butler), Jan-Mar, 950-1300 m
Notoreas isoleuca Meyrick, Feb-Mar, 950-1100 m, on *Drapetes*
Notoreas mechanitis (Meyrick), Jan-Mar, 1100-1300 m, on *Drapetes*
Notoreas niphocrena (Meyrick), Feb, 1100 m
Notoreas paradelpa (Meyrick), Nov-Jan, 950-1250 m, larva on *Pimelea*
Notoreas zopyra (Meyrick), Nov-Mar, 900-1300 m, on *Epilobium*
Pasiphila bilineolata Dec, to 1000m
Pasiphila nereis Meyrick, Jan-Feb, 950-1200 m, in *Celmisia* flowers
Pasiphila rubella (Philpott), 1200 m, larvae on *Hebe*
Pasiphila n.sp., Oct-Nov, to 1200 m, larvae on flowers of *Celmisia*, *Senecio*, *Hebe*
 "Xanthorrhoe" *oculta* Philpott, Oct-Jan, 600-1100 m, larva will eat Compositae flowers in captivity

GEOMETRIDAE OENOCHROMATINAE

- Dichromodes gypsotis* Meyrick, Oct-Nov, <700 m, on lichens
Dichromodes sphaeriata (Felder), Oct-Feb, <950 m, on lichens
Samana acutata Butler, Jan, <600 m

GEOMETRIDAE: STERRHINAE

Scopula rubraria (Doubleday), Oct-May <600 m, on *Plantain*

PYRALOIDEA: PYRALIDAE:

CRAMBINAE

- Orocrambus aethonellus* (Meyrick), Oct-Jan, <950 m
Orocrambus apicellus (Zeller), Dec, to 600 m
Orocrambus corruptus (Butler), Sep-Jan, <1200 m
Orocrambus creneus (Meyrick), Dec-Jan, 950-1100 m
Orocrambus cyclopicus (Meyrick), Feb-Apr, <600 m
Orocrambus dicrenellus (Meyrick), Dec-Feb, 950-1200 m
Orocrambus enchophorus (Meyrick), Jan-May, <500 m
Orocrambus lewisi Gaskin, Oct-Apr, <500 m, on *Poa colensoi*
Orocrambus machaeristes Meyrick, Jan, 1300 m
Orocrambus melampetrus Purdie, Jan, 1100 m
Orocrambus ramosellus (Doubleday), Nov-May, <500 m
Orocrambus tritonellus (Meyrick), Nov-Jan, 600-1200 m
Orocrambus vittellus (Doubleday), Dec-Mar, <950 m
Orocrambus vulgaris (Butler), Feb-Apr, <600 m
Orocrambus xanthogrammus (Meyrick), Jan, to 950 m
Pareromene elaina (Meyrick), Nov-Mar, <500 m
Pareromene epiphaea (Meyrick), Dec-Jan, 950 m
Pareromene helioctypa (Meyrick), Dec-Feb, 950 m
Pareromene pyrsophanes (Meyrick), Dec, <600 m
 PYRALIDAE: NYMPHULINAE
Musotima nitidalis (Walker), Jan, <500 m
 PYRALIDAE: PYRAUSTINAE
Diasemia grammalis Doubleday, Oct-Mar, <1200 m
Heliothela atra (Butler), Jan, 1000 m
Mecyna adversa Philpott, Mar-Apr, 400-950 m
Mecyna flavidalis (Doubleday), Oct-May, <1100 m
Nesarcha hybrealis (Walker), Nov-May, <500 m
Proteroea comastis Meyrick, Dec, c1100 m
 PYRALIDAE: SCOPARIINAE
Eudonia octophora (Meyrick), Mar-Apr, <950 m
Eudonia sabulosella (Walker), Sep-Dec, <950 m
 "Scoparia" *asaleuta* Meyrick, Nov-Jan, <1000 m
 "Scoparia" *aspidota* (Meyrick), Dec, <600 m
 "Scoparia" *asterisca* (Meyrick), Jan, <500 m
 "Scoparia" *atmogramma* Meyrick, Feb-Apr, <500 m
 "Scoparia" *cataxesta* Meyrick, Nov-Mar, <500 m
 "Scoparia" *chalara* Meyrick, Nov-Dec, 500-950 m
 "Scoparia" *critica* Dec, 1000 m
 "Scoparia" *declavata* Meyrick, Jan, 1200 m
 "Scoparia" *deltophora* Meyrick, Feb-Apr, 950-1050 m
 "Scoparia" *ergatis*, Dec, 1100 m
 "Scoparia" *exilis* Knaggs, Oct-Mar, <1100 m
 "Scoparia" *feredayi* Knaggs, Oct-May, <1100 m
 "Scoparia" *legnota* (Meyrick), Dec-Feb, 950 m
 "Scoparia" *luminatrix* Meyrick, Dec, <950 m
 "Scoparia" *melanaegis* Meyrick, Jan, <950 m
 "Scoparia" *oculata* Philpott, Feb, 1200 m
 "Scoparia" *organaea* Meyrick, Dec-Feb, 950-1100 m

"*Scoparia*" *pallidula*, Dec, 900 m

"*Scoparia*" *parachalca* Meyrick, Nov, 800 m

"*Scoparia*" *petrina* (Meyrick), Dec, 950 m

"*Scoparia*" *philerga* Meyrick, Oct-Apr, 500 m

"*Scoparia*" *pura*, Nov, 1200 m

"*Scoparia*" *rotuella* (Felder), Apr, <500 m

"*Scoparia*" *sideraspis* (Meyrick), Jan-Feb,
1100-1200 m

"*Scoparia*" *steropaea* Meyrick, Nov-Feb, <1000 m

"*Scoparia*" *trivirgata* (Felder), Nov-Jan, <1200 m

"*Scoparia*" sp., cf. *dryphactis* Meyrick, Apr-Jun,
950 m

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