TAIERI GORGE ROCK FACE LEPIDOPTERA

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The finding of nine species of moth breeding on a rock face in the Taieri Gorge between August and November 1991 prompts me to document this fauna and highlight the conservation value of such sites.

The site is at road end, five kilometres east of the Henley Bridge at the western entrance to the Taieri Gorge, east Otago. A lichen, algae and moss covered, north facing rock face, approximately six metres high was sampled for moth larvae. The Taieri River at this point, although six kilometres from its mouth, is still under the influence of the tide, hence saltmarsh vegetation is located below this study site. The following moths were found. Adult emergence time is indicated, and larval foodplant where known.

Psychidae

Reductoderces sp.nr. *microphanes*(Meyrick)	larvae feeding on algae	Aug-Sept
Reductoderces sp. nr. *aucklandica* Dugdale	larvae feeding on algae	Aug
Rhathamictis sp.	larvae feeding on algae	Nov

Oecophoridae

Tingena lassa (Philpott)	larvae feeding on detritus in cracks and ledges on rock faces	Oct

Crambidae

Scoparia chalicodes Meyrick	Oct

Geometridae

Dichromodes gypsotis Meyrick	larvae feeding on lichens	Oct-Nov
D. sphaeriata(Felder & Rogenhofer)	larvae feeding on lichens	Nov
Helastia cinerearia (Doubleday)	larvae feeding on moss	Oct
Helastia mutabilis Craw	larvae feeding on moss	Nov

Additionally, several native plants growing on ledges on the rockface support native moth species at this site.

Nyctemera annulata (Bois)	larvae on *Senecio quadridentatus*

Calicotis crucifera Meyrick	larvae on *Pyrrosia eleagnifolia*
Scoparia molifera Meyrick	larvae on *Pyrrosia eleagnifolia*
Pterophorus innotatalis Walker	larvae on *Dichondra brevifolia*

Other conspicuous plants present are the grasses *Poa cita* and a *Rytidosperma* species and the exotic *Sedum acre.*

The large ubiquitous case moth *Liothula omnivora* was found pupating under overhangs, presumably the larval foodplant is the kanuka growing above these rock faces.

Both *Dichromodes* species are here at their south-eastern distributional limit. *H. mutabilis* is a local species in eastern Otago and its larval foodplant is here recorded for the first time, the moss *Racomitrion.*

Rock faces of substantial size, are a well known refuge for such palatable herbs as *Gingidia montana* and *Ischnocarpus novae-zelandiae* and their attendant moth faunae and are therefore of considerable importance for conservation of our native biota. Of additional, and perhaps primary importance, is their ubiquitous covering of lower plants and its assemblage of moth species dependent on them.

The moth fauna of this single rock face at Taieri Gorge is indicative of the importance of this habitat type in many parts of New Zealand. Much of the rock face moth fauna is confined to certain discrete areas within New Zealand. Conservation of our rock face flora and fauna must be achieved in all parts of New Zealand at all altitudes to adequately protect the full diversity of native moth species (and other invertebrates) confined to such habitats.

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