

Media release

22 September 2021

https://www.doc.govt.nz/news/media-releases/2021-media-releases/new-finds-of-marlborough-moth-feared-extinct/#:~:text=The%20Kiwaia%20'Cloudy%20Bay'%20moth,known%20to%20be%20at%20Rarangi.

New finds of Marlborough moth feared extinct

Fortunes are looking up for a tiny, jumping moth found only in Marlborough that had been feared extinct but has now been discovered in four new locations.

The *Kiwaia* 'Cloudy Bay' moth, also known as a mat daisy jumper, is flightless and mainly jumps to get around. It lives in one species of *Raoulia* mat daisy among gravel on the eastern Marlborough foreshore and had previously been only known to be at Rarangi.

Department of Conservation Biodiversity Ranger Simon Litchwark says there was concern the moth had become extinct after none were found in three years of monitoring in its Rarangi habitat.

"On a hunch there may be other populations we didn't know about, we carried out searches for the *Kiwaia* moth in its *Raoulia* habitat further south, between Cape Campbell and the Kekerengu River mouth, earlier this year. We were excited to find the moth in four, fairly small locations.

"Unfortunately, none were found again in searches in Cloudy Bay and this *Kiwaia* moth species appears to have gone from the area. We believe this is due to considerable die-off of its host *Rauolia* mat daisies, likely caused by drought and rabbit damage. Potential predation of its caterpillars by non-native paper wasps may also be a cause of its rapid decline.

"Since Asian paper wasps invaded Blenheim in the 1990s, there appears to be a decline in common butterfly species, including monarch and white cabbage butterflies. Both Asian and European paper wasps are now prevalent at Rarangi.

"The remaining host *Raoulia* mat patches at Rarangi are in poor condition with very little new growth so are unlikely to be able to maintain a stable *Kiwaia* moth population.

"Fortunately, the *Raoulia* is growing well in other parts of the coast, including new areas uplifted in the 2016 Kaikōura earthquake."

The four newly discovered *Kiwaia* moth sites are on private and public land. DOC staff, in discussion with landowners, are looking at potential measures to protect and manage the moths and their nationally rare habitats.

The searches for the *Kiwaia* moth and research were carried out with some funding from an additional \$181.6 million in Budget 2018 for conservation initiatives over four years.

The research work included trialling control of paper wasps at Rarangi before *Kiwaia* moths, if present, would emerge in late summer. Two DOC rangers found and destroyed 70 paper wasp nests over three days on a 400-metre section of beachfront, showing how abundant paper wasps are in the area.

Paper wasps are also a possible cause of decline in the numbers of native butterflies and other moths being seen at Rarangi, including the charismatic copper butterfly. DOC staff are considering options for controlling paper wasps to protect other threatened native moth species there.

–Ends–	
--------	--

Background information

- The Kiwaia moth was discovered in April 1999 during an invertebrate survey by entomologist John Dugdale.
- The moth is so tiny only 3-5 mm long that in the air it looks a bit like a grass seed. It is its highly characteristic jumping action that makes the moth conspicuous to the human eye. The moth has long legs which it uses for jumping around 6-8 cm in the air. It will jump from one to seven or eight times when disturbed and sometimes runs a short distance on the sand or gravel either before or after jumping.