

Into the night:

Discovering the secret

life of moths on Te Taumata

o Hakitekura



Alpine treasure
owllet moth.
Credit: WWT

If you've ever wondered what the Whakatipu is up to while the rest of us are asleep, here's a clue: it flutters.

Once a month, on the darkest nights of the new moon, a small crew of volunteers rides the first gondola up Te Taumata o Hakitekura / Ben Lomond - headlamps on, thermos in hand -

to check what's been visiting their moth traps overnight.

Inside a small tent perched high on the mountain, the real magic begins. One by one, each moth

is gently coaxed into view and photographed before being released back into the night it came from. Some mornings there are a handful. Other mornings? Three hundred tiny mysteries waiting to be revealed.

This is the Te Taumata o Hakitekura / Ben Lomond Indigenous Moths Project, a collaboration led by Whakatipu Wildlife Trust (WWT) with Southern Lakes Sanctuary conservation scientist Samuel Purdie. And while it might not look like conservation in the traditional sense, that's exactly why it works - it invites everyday people into a world we rarely stop to notice.

Since December, the team has been heading up the mountain every month, using non lethal light traps to monitor moth communities across sub alpine slopes and introduced

conifer forest. Every moth is photographed, released, and uploaded to a dedicated iNaturalist project, where experts help identify them. So far, the project has logged 1,931 observations across 185 species.

Alongside this, the project is already uncovering some remarkable new records. Surveys to date have detected four At-Risk species, along with three species never before recorded in the Queenstown Lakes District and 45 species newly recorded for the Ben Lomond area on iNaturalist.

And the stakes are real. Many of Aotearoa's endemic moths are At Risk or Threatened, and Ben Lomond is proving to be an important refuge. Four threatened species have already been recorded in the past, including *Pyrausta comastis* - a moth not seen in the region since the 1980s until a surprise rediscovery in 2021.

It's the people who give this project its momentum. Volunteers, students, and curious locals all play a role in collecting observations and building a shared understanding of the moth species that call Te Taumata o Hakitekura Ben Lomond home.

“What has fascinated me, as a newbie to moth appreciation, is how beautiful and diverse our moths are when you have the opportunity to pay attention and really look at them... My absolute favourites so far are the Alpine Treasure Owlet and Greater Alpine Grey.”

Anna (WWT)

This is climate and biodiversity action at its most joyful - community powered science, deepening our understanding of the ecosystems that hold our district together. And in a warming world, where resilience depends on a good understanding of our local species and how they're changing, projects like this help us see the bigger picture one tiny wingbeat at a time.

If you'd like to follow the discoveries (or fall down a very wholesome rabbit hole), you can explore the project's observations here:

www.inaturalist.nz/projects/moths-of-ben-lomond-te-taumata-o-hakitekura

This work is made possible thanks to the generous support of the WWF–New Zealand Conservation Fund and The Tindall Foundation, with additional in-kind support from Skyline Queenstown, whose gondola access takes the team up the mountain to discover what winged treasures emerged in the night.

Credit: Sam Purdie



A moth trap.
Credit: Sam Purdie



Want in on the action? Register your interest for the spring monitoring season by emailing hello@whakatipuwildlifetrust.org.nz

