

FOREST RINGLET PROJECT REPORT

On November 17 Hugh Smith and I travelled to the Rereatukahia Marae to attend their *hui-a-hapu* and speak to the meeting outlining the importance of the forest ringlet as a means of preventing the possible demise of an endemic species. At a subsequent following meeting the Marae Committee approved the project and issued their consent.

As three forest ringlet larvae had previously been sighted in [REDACTED], upon receiving the DOC permit a visit was made into the area to where the larvae were seen. Unfortunately only one could be located, a 4th instar larva, which was transferred on to a potted gahnia sedge and placed into a sanitised castle at my facility at home, where it could be regularly monitored. It settled in quickly and began feeding regularly. However, after 6 weeks a discolouration was detected at the rear end of the larva and examination under a lens showed a breathing siphon from a tachinid fly protruding through the skin.

Eventually the tachinid fly maggot exited the larva and dropped to the ground, where it later pupated. This of course resulted in the death of the forest ringlet larva. Upon eclosing, the tachinid fly was secured and frozen and sent to Dr Rudi Schnitzler in Auckland for identification.

Further regular searches in the area failed to find any more larvae. During January a search in [REDACTED] to look for forest ringlet adults on the wing failed to reveal anything. A trip was made to [REDACTED] after a butterfly was reported, but once again no sightings.

On February 5 Hugh and I made another trip [REDACTED], this coinciding with sightings from the previous season, and after close scrutiny of the sedges, several eggs were located. Eventually eight eggs were discovered and brought back to the facility. Four eggs matured and three larvae emerged successfully. Another failed to emerge and appeared stuck, so it was assisted to eclose by carefully removing the partly-chewed cap of the egg. While it successfully emerged and climbed up the blade of the sedge it did not survive.

The remaining four eggs unfortunately did not eclose, possibly due to humidity issues, at a time when we were having temperatures of 30 degrees and over. The remaining three larvae appear to be progressing well.

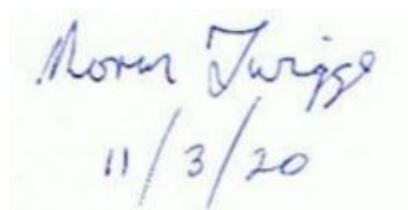
The failed eggs, dead larvae and material have all been preserved in solution to be available for DNA testing, as is material from the Whakapapa Project that took place nine years ago.

Breeding monarchs, red admirals, yellow admirals, Honshu white admirals, blue moons, lesser wanderers and painted ladies over the years have given me a great deal of breeding experience, but the forest ringlet is like none of the preceding with its physiology, limited available of any of the four stages of life, and its long period of development.

Further searches will be carried out in a few weeks when the larvae become big enough to show fresh feeding damage on the sedges.

It is anticipated that progress will be slow but methodical.

With thanks to a grant from Lotto New Zealand through their Environment and Heritage Fund.



Norm Twigg
11/3/20