

Monitoring programmes for Little Spotted Kiwis, Reptiles and Wētāpunga - Year ended June 2024

During the year ending June 2024, 11 overnight weekend trips and 3 day trips were completed. Each overnight trip allowed each volunteer at least 12 hours of work on Motuihe, so these trips were packed with a range of tasks: the main survey tasks plus training, recording data, night-time spotlighting of wētāpunga or reptiles, weeding and track-clearing plus maintenance of monitoring gear. Thirty eight volunteers helped complete the year's trips with 50% of them being new to the programmes and 23 of them involved in more than 3 trips.

Achievements

Reptile and Wētāpunga monitoring programme: 3 overnight weekend trips

Oct 2023 - 20 volunteers completed the maintenance of both the Duvaucel/Pacific and the Raukawa Gecko grids. They cleared vegetation around the refuges, replaced degraded onduline sheeting and foam covers and flagged some of the 107 stations in preparation for the December Gecko Survey.

Dec 2023 –16 volunteers completed the 2 full days of the annual Gecko Survey of 107 stations.

April 2024 - 11 new volunteers and trainers completed training for the 2024 gecko survey and completed spotlighting training for wētāpunga and tuatara.

The data tables and photos below are a brief summary of our reassuring detections of all three gecko species which were translocated to Motuihe in 2013 and 2014.

Duvaucel/Pacific Grid:

Tracking rates in tunnels -

Year	2023	2022
Duvaucel geckos	39%	19%
Pacific geckos	8%	0%

Total numbers of geckos seen in ACO's + CFC's

Year	2023	2022
Duvaucel geckos	26	10
Pacific geckos	7	2



Raukawa Grid:

Raukawa geckos continue to thrive. They are detected in increasing numbers by both monitoring tools.

Year	2023	2022
Tracking rate	58%	22%
Total numbers seen in ACO's	196	163



Kiwi and Camera Grid monitoring programme

Kiwi call count survey: 4 overnight weekend trips

April – June 2024 For each of 4 trips, 14 volunteers completed 2 hours of counting kiwi calls at 7 sites over the island. Total listening hours 56. Other Tasks completed on the Kiwi Listening trips included; Spot-lighting surveys for kiwis, wētāpunga and other invertebrates, plus training of new kiwi crew, weeding (20 bags of moth plant pods removed) and clearance work on tieke track.

Our results: (overview for recent 4 years)

Survey Year	Night 1	Night 2	Night 3	Night 4	Total
2021	15 May	12 June	3 July	31 July	
Total calls	36	22	16	17	91
Total Hours listened	14	14	14	12	54
Calls/Hour					1.7
2022	7 May	4 June	25 June	2 July	
Total Calls	24	30	17	39	110
Total Hours listened	14	12	12	12	50
Calls/Hour					2.2
2023	27 May	cancelled	15 July	22 July	
Total Calls	33		20	25	78
Total Hours listened	12		12	14	38
Calls/Hour					2.1
2024	27 April	11 May	8 June	6 July	
Total Calls	9	27	16	23	75
Total Hours listened	12	14	14	14	54
Calls/Hour	**Outlier (Bright moon)				1.4 W/o outlier 1.6

Our 2024 listening survey has shown a dip in our very gradually increasing Calls/hour results for recent years. This can partly be explained by Julie's error in booking our first listening night too close to a full moon. On 27 April, it was a beautiful night for listening but too bright with moonlight and eerily quiet on the motu, apart from Ruru calls. However, we are still not sure of how damaging the cyclone and atmospheric rivers of 2023 may have been to our kiwi population. A founder female kiwi was found dead at the bottom of VL bush gully in May 2023 and to date our cameras have not picked up any females in this gully where 2 important breeding pairs normally reside.

Trail camera grid: 4 over-night weekend trips

Sept and Dec 2023, Feb and June 2024.

8-10 volunteers completed maintenance of 12 trail cameras that are located over the whole island to monitor some of the largest natural burrows. The cameras were cleaned (dried if necessary), batteries replaced and cards swapped. Initial analysis of the video clips was started each evening.

Key findings from video scans for year ending June 2024

- There has been no human interference at any of the camera sites
- No pest sightings at any of sites
- First sighting of Banded rail on the island at headland camera
- Two further sightings of banded rail at Tieke Extension camera
- No sightings of female founder LSK at any of the VL gully cameras
- Male founder LSK finally seen back in bottom camera of VL gully
- Spotless crane appearing at sites all over island
- Penguins have taken over burrows at headland, mid Orchard Bush, Calypso bay and Tieke Extn
- Kiwis at many sites are competing for access to burrow with their offspring, penguins, duvaucel geckos and tuatara.