

Removing Rodents from Small Islands

Final Report on a Capacity Development Workshop completed in Tonga

Dates: 28 July – 8 August 2015, 29 August 2015

Sponsor: David Moverley (SPREP)

Trainers: Richard Griffiths and Irene Espinosa (Island Conservation)

Participants: George Taoaba and Roota Tetaake Manako (Ministry of Environment, Lands and Agricultural Development, Kiribati), Sosefo Malau (Service de L'Environnement, Wallis and Futuna), Henry Capelle and Byrelson Jacklick (Department of Agriculture, RMI), Karen Stone (VEPA, Vava'u), Viliami Hakaumotu, Saia Fonokalafi, Senituli Finau, Hoifua 'Aholahi, Samuela Pakileata and Hekelotu Valu (Ministry of Environment, Energy, Climate Change, Disaster Management, Meteorology, Information and Communications, Tonga)

Workshop Summary:

Days 1 and 2 of the workshop course exposed participants to the theory behind rodent eradications (Fig 1). The nature and importance of undertaking a project feasibility assessment was explained and the key questions that need to be answered to determine if a project is feasible were discussed.



The risks, costs and benefits of using anticoagulants to eradicate rodents were explored. The value of preparing a detailed operational plan was emphasized and a provisional operational strategy for removing rats from the islands of Malinoa and Motu Tapu prepared.



The afternoons of both days were used to hone field skills necessary for conducting ground based rodent eradication such as the use of a compass and GPS. Course participants set up a demonstration grid and practiced spreading bait across it.



Day 3 of the workshop was spent on Motu Tapu and Malinoa gathering the information necessary to confirm that rat eradication on the islands was feasible and to finalize an operational plan for the project. The islands were surveyed, the estimated size of the islands validated, the target rat species identified along with potential non-target species, crab numbers indexed and vegetation types mapped.



Day 4 was a big day and encompassed cutting and marking a 25m x 25m grid on Motu Tapu (13 ha) through at time dense Vao in preparation for bait application. Day 5 was used to complete the grid on Motu Tapu and establish a 25m x 25m grid of bait stations on Malinoa (1 ha).



The first application of rodent bait containing *brodifacoum* on Motu Tapu was completed on Day 6 in what was another big day for course participants. A bait application rate of 18.4kg/ha across the island was achieved. Signage warning visitors to the islands of the hazard was also established.



Bait stations on Malinoa were filled on Day 7 and signs warning of the hazards associated with the rodent bait were established.



A debrief and an award ceremony was held on Malinoa following the completion of operations with the Director and other staff from the Ministry present.



Twenty four days later a subset of course participants returned to complete the second application of bait on Motu Tapu and replenish the bait stations on Malinoa. Bait and bait stations were removed from Malinoa two weeks later and both islands are now expected to be rodent free. However, the outcome of the project will be confirmed in 12 months' time by staff from the Ministry of Environment, Energy, Climate Change, Disaster Management, Meteorology, Information and Communications. In the interim Ministry staff will notify the public about the importance of keeping Malinoa and Motu Tapu rat free.



Workshop Outcomes:

The workshop exposed Pacific Government Agency Representatives to the complexities of planning and implementing small scale rodent eradications. In doing so it provided participants with the foundational knowledge from which to initiate and plan rodent eradication projects in their countries. Course participants were also made aware of the resources available within the Pacific for obtaining further advice and training.

Only time will tell whether the training provided by the workshop will be applied to good effect. However, several of the participants appeared highly interested in the subject and were enthusiastic about applying what they had learnt.

In the course of the workshop, rats were removed from two small islands in Tongatapu although this will not be confirmed until 2016.

Recommendations:

1. Course participants should be contacted within 24 months of the workshop to assess what outcomes have been realized as a result of the workshop.
2. Given the complexities inherent in rodent eradications, it is impossible to provide a comprehensive induction to the planning and implementation of rodent eradications in a workshop of such a short duration (7 days). However, given the cost and challenging logistics of running the workshop, it is recommended that future workshops be run over a similar duration. Instead follow up support should be provided to course participants to ensure training is put into practice. Follow up advice and support will be critical to generate good outcomes.
3. The workshop appeared to flow well and course participants enjoyed the mix of classroom and field based learning and it recommended that future workshops be structured in the same way.
4. Future course participants should be vetted prior to invitation to ensure they have an active interest in the subject matter and that their position is the one best placed within their organization to ensure the training is put into practice.

Malo aupito!