ERADICATION OF RABBITS ON GREEN ISLETS WILDLIFE SANCTUARY

After a complete survey of North and South Island in the Green Islets Group south of Jurien Bay, Warden Ross Gardiner was of the opinion that vegetation would be completely destroyed by rabbits after their next breeding season. Warden Gardiner was convinced that the most damaging effect would be on the Wedge Tailed Shearwater (*Puffinus pacificus*) population which nests in burrows on the islands.

On 14 May 1974, the eradication programme commenced, Warden Gardiner in the company of Mr E. R. Simms and Mr E. Burgoyne, from the Agriculture Department Vermin Control Branch and Inspector J. G. Williams of the Department of Fisheries and Wildlife, proceeded to the Green Islets

Out of the four islands in this group, only two were affected—North Island—area approximately 1·6 ha, and South Island—approximately 3·4 ha.

The islands were first inspected so that an estimate of the rabbit population could be made and suitable areas noted for the placing of feed trails.

In areas of bad infestation, furrows were made with a hoe to receive a pre-feeding trail of carrot pieces approximately 1½ cm x 1½ cm. Baiting was done during the late afternoon with care being taken not to impregnate the carrot pieces with foreign odours or taste. The first night was mainly occupied in assessing areas for trails, making trails and pre-feeding.

Agricultural Protection Board officers making pre-feeding trails.

On arriving at the islands the next morning, it was observed that all bait had been eaten. A long and thorough observation of trails was then undertaken to ascertain (by means of tracks) whether birds had fed on the bait. Tracks were discovered in areas close to the shore lines of both islands. These trails were then omitted and repositioned near the centre of the islands.

On the second night, double the amount of bait (approx. 8 pieces of carrot per foot) resulted again in normal pre-feeding.

It was observed on the third morning, that all the bait had been eaten and only rabbit tracks were to be found.

After a discussion with Mr Simms and Mr Burgoyne, it was decided that poison should be laid that evening. Two points influenced this decision:—

(1) Rabbits were eating all the bait.
(2) Although the weather had been holding out, the possibility of rain was great.

If rain had fallen it would have diluted the poison, making the dose non-lethal.

On the third night, carrot again was used in three mixes of 1080 or Sodium Fluoroacetate. One mix was used on North Island and two on South Island at approximately 15 pieces of carrot per foot. Based on poison used with oats, it was determined that approximately 12 pieces of carrot would be lethal. The bait was laid late in the afternoon so as to prevent birds and reptiles from taking it.

On the morning of 17th May, it was observed on North Island that over half the bait had been taken and seven dead rabbits were subsequently collected. Working on the assumption that 5 per cent of the total number of rabbits died above ground, this then gave the approximate population figure on North Island at 140. This population on an area of 1·6 ha is classed as severe.

South Island had exactly the same results with seven dead rabbits collected. Because this island is twice the size of North Island and the vegetation a lot thicker, it would not have been possible to collect all the carcasses. The A.P.B. Officers estimated that North Island would have been carrying a far greater population than South Island.

Back on the mainland, all female and several male rabbit carcasses were dissected. All adult females were pregnant, most having 3 kittens (one having four) at a very early embryonic development. Stomach content showed a huge intake of poisoned carrot, other content being small green seedlings of native coastal flora and bark from mature plants. Male rabbits contained an even greater percentage of poisoned carrot.

After the examination, the remains of all the animals were destroyed.

One of the interesting points of the feeding habits of these rabbits was that the woody bark of shrubs had been eaten, therefore ring barking the plants and causing

Dead vegetation caused by ringbarking.

them to die. A follow-up inspection of the Green Islets was made on the 18 June, 1974, and no tracks were found, indicating a possible 100 per cent kill.

After only one month it was surprising to note the great abundance of new vegetation that had appeared. The islands had a green appearance once more, with the regrowth of natural flora. The large bare patches that once indicated nearby warrens were now covered with new vegetation.

Bird life appeared to be on the increase, with several wedge-tailed shearwater burrows being occupied.