Killing rats and stoats in Abel Tasman National Park

Enthusiastic volunteers working for the Abel Tasman Birdsong Trust have been trapping stoats and rats along the coastline north of Marahau in Abel Tasman National Park. The trap line contains 70 stoat traps and was first operated in March 2009. Traps are cleared at two-weekly intervals and the work continues up to the present day. So far, 316 rats and 48 stoats have been caught and killed during 29 trapping sessions. Recently, the trapping programme has been expanded to include the trapping of possums along part of the stoat and rat trap line and some additional stoat traps acquired to provide additional protection for a small local group of rare banded rail.

The primary purpose of the trap line is to keep stoats at such low numbers along the coastline such that the likelihood of them swimming across to and recolonising Adele and Fisherman's Islands, recently cleared of them, is very low. The fact that no stoats have apparently got there as yet, even though the distance involved is well within stoat swimming range indicates that the trapping programme is meeting its primary objective. Any rats captured are seen as a bonus.

The number of stoats trapped has varied from 0–4 and the number of rats trapped from 1–29 over all trapping sessions (see Figure). The catch does not, however, show any strong seasonal bias or any steady decline in the numbers of either species.



While the number of stoats caught may seem modest, it must be remembered that stoats usually occur at quite low densities and have large home ranges of 200–300 hectares. Thus, even at such densities, their great mobility makes it likely that most local stoats will encounter our traps sooner or later and ensure that the modest catch rates recorded (relative to that of rats) has a significant effect on any resident populations.

Surprisingly, there is no obvious relationship between the number of rats and stoats that have been trapped. That is to say, there is no evidence from the data collected so far that rat numbers are held in check by stoats or that stoat numbers are driven by rat numbers. Such relationships have been

revealed in other trapping programmes of these species, but our data is too sparse, as yet, to show such relationships.

While the existing data does not show any real decline along the coastline of Abel Tasman National Park either in the numbers of stoats or rats, the case for continuing the trapping programme is as valid at present as it was when the programme started.