




DOC Management Agreement report – July 2021

Trapping Overview.

We now have the following traps installed and operating:

Location	Type of trap	
	DOC 200s	A24s
Tawhitinui Island	15	43
Awaiti Island	6	2
Tarakaipai Island	7	
Mainland (Odlins Reserve)		7



Trapping Report - Tawhitinui, Awaiti and the Headland

The A24s continue to prove their worth and their 6 monthly service intervals has made the job of servicing the islands far easier.

August 2020 – 6 monthly refresh - A24s checked and refreshed (counter records, gas and lure replaced)

October 2020 19x of the 31x A24s on Tawhitinui were checked to see how the strike numbers were going, considering the expected increase in rat numbers because of the mega mast year. For the A24s we checked tThe total number of strikes from August 29th to Oct 26th was 119.

Feb 2021 – 6 monthly refresh - A24s checked and refreshed (counter records, gas and lure replaced). The total number of strikes from August 29th to February 8th was 145. So from Oct 2020 to Feb 2021 only 26 more strikes for those traps.

8 additional A24s were installed being numbers 49, 50, 51, 52, 53, 54, 55, 56.

A24 comments - Four traps had run out of gas, not a result of maximum activations, and one counter had a hole in it (gnawed through) and was not working, but has been replaced. The traps which had run out of gas are not the

same ones that ran out of gas last time. It may be time to start replacing the O ring seals.

The DoC 200s were rebaited and some of the penguin boxes repositioned.

6x boxes with 2x Victor traps set with peanut butter in each, were placed, three at the NE end and three at the other end of Tawhitinui. This was in response to Derek Brown's suggestion to test if the rats are getting bait shy. Not one of the 12 traps were set off after the first week, and by April the peanut butter had gone mouldy. May be worth trying again with a different lure.

Cameras were placed at traps #30 and #49 with a prototype V1 lure in trap # 30. This lure seemed to be very attractive to wekas, and one weka was videoed jumping and flapping up to the trap eventually setting it off. The weka ran off. The trap was already 1metre off the ground, so it was raised a further 15cms.

27th Feb a working bee was held on Tawhitinui, track clearing, putting out Vespex (wasp bait), Cleaning and resetting DoC 200s, and checking some of the A24s. The trail markers were refreshed. A pair of Penguins were seen in Whare.

April 2021 – 3 additional A24s were installed 57, 58 & 59, bringing the total number of A24s on Tawhitinui to 43. These additional traps were placed in areas where there were gaps in the network. Trap 56 was placed on the top of the peninsula nearby to trap 41 which had consistently higher strike numbers than any other trap. See attached map of A24 positions. Total strike numbers recorded for Tawhitinui A24s was 169. DoC 200s was 10

A traverse trail was created from trap 46 to the new positions for 57 and 58. About an hour to cut one way and five minutes to walk back. This trail was used when setting up the new traps and will make it easy at refresh time as 57 and 58 are a good 100m down from the ridge. Traps 57, 58, 59 and 42 are all lured with the Prototype V3 so it will be interesting to see the results. If the results are positive it may be a good option to use this lure in more A24s where the rats are being very cautious.

April the 7th the A24s on the Mainland were checked and refreshed (recording only 9 strikes, with one trap out of gas).

April 8th Tawhitinui a team collected Vespex containers, and installed a bird nesting box. Also found for the first time, a weta in one of the motels, which was exciting. The 2x A24s on Awaiti were refreshed with 9 strikes.

April 9th The trail marking job from the SW end was completed traps 57, 58 and 59 were set up. It was a beautiful day and we were pleasantly surprised by

the amount of birdsong from Bellbirds and Warblers and occasional Tui, and fantails wherever you went. Also saw a Morepork and was able to get a photo. More birdsong than in Penzance Bay. The absence of wasps was noted (Vespex doing its job).

A24 comment - Recent information suggests that we should be changing the lure on the A24s at 4 months instead of 6. We need to decide if we are going to be changing all of them at the same time or divide the Tawhitinui traps into two groups changed at 4 months, 2 months apart.

Location of Traps

DOC 200 traps



A24 traps on Awaiti Island



A24 traps on the mainland

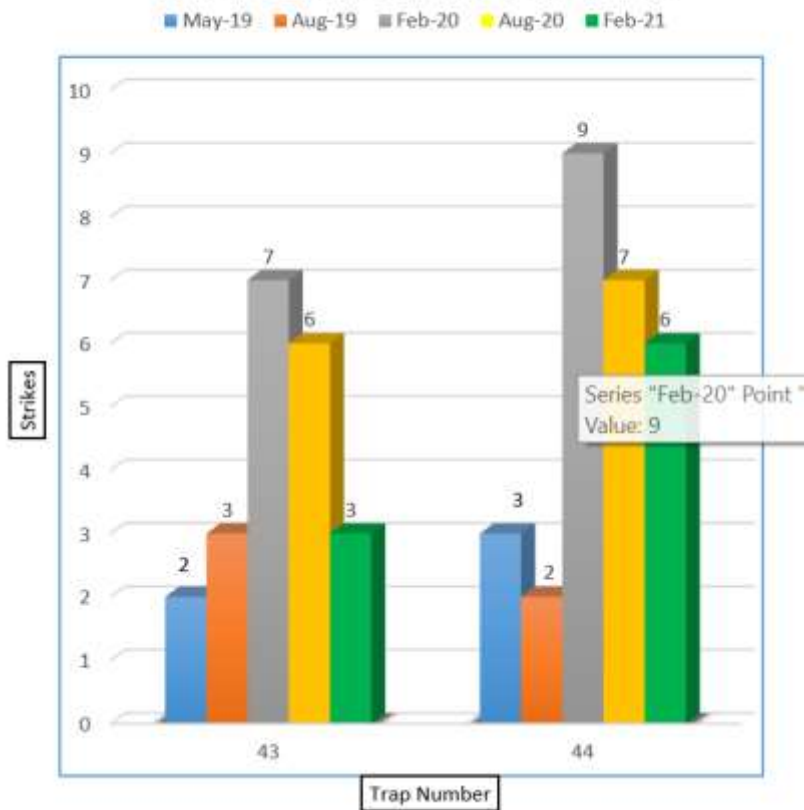


A24 traps on Tawhitinui Islands

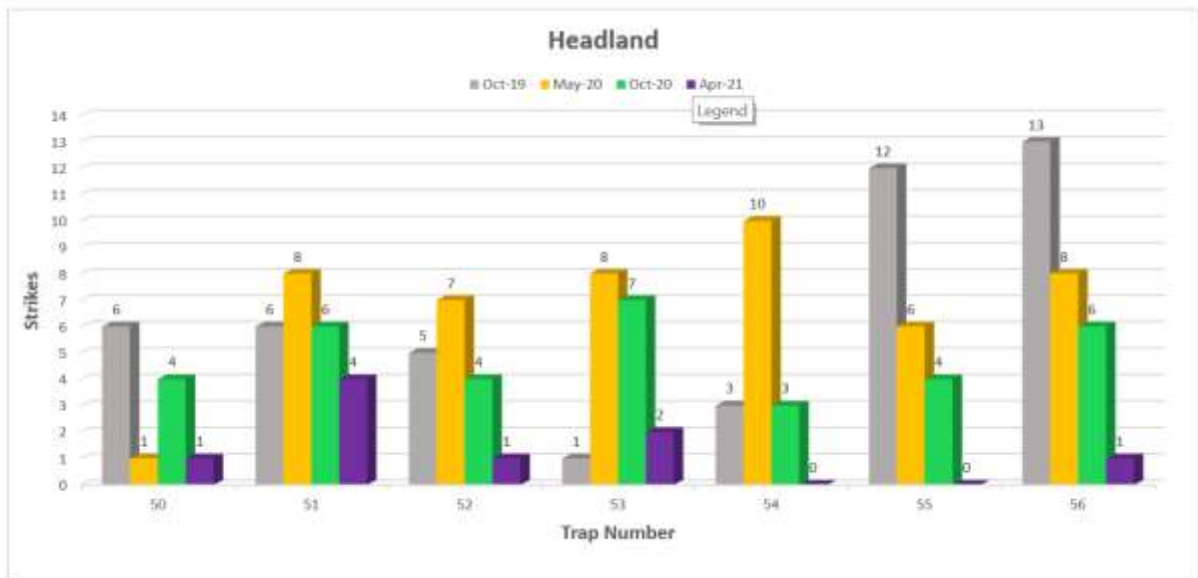


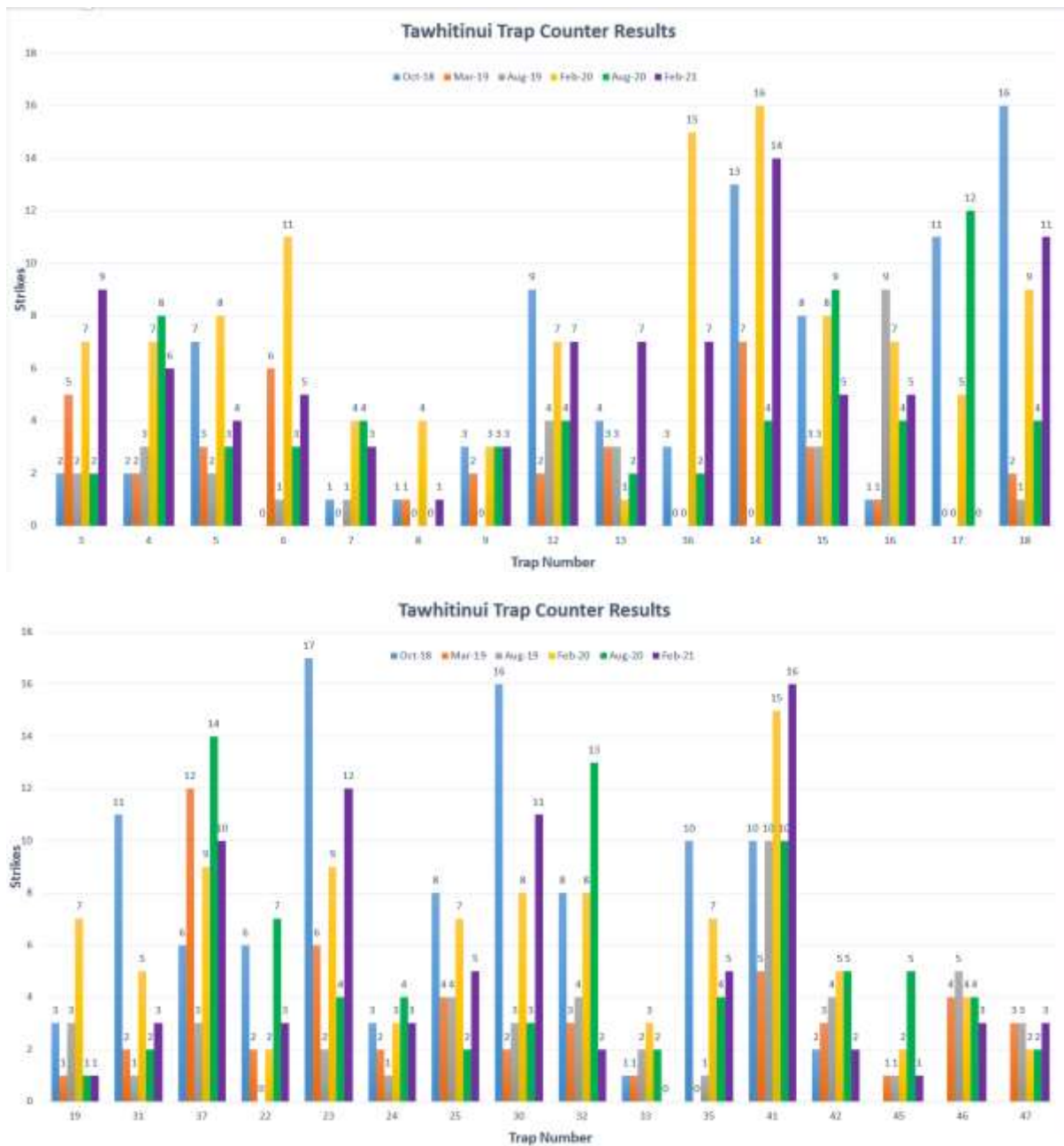
Results of Trapping

Trap Counter Results For Awaiti



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Tracks & Structures. We have built no tracks (other than the aforementioned trap lines) and we have installed no structures.

Health & Safety. There have been no reported accidents. Wasps have the potential to cause injury but the continued use of Vespex has dropped the wasp numbers around our traps. DOC best practice Guidelines have been followed for all work carried out on the Islands. There are no new hazards that we are aware of. Our H&S committee completed a review of our H&S plan and CoVID19 recommendations were added in. The updated H&S plan was sanctioned by the Trustees. We all agree that the H&S plan is fit for purpose and still very applicable for use. Each of our volunteers are given a copy of it. Now that our trap lines are established and we are primarily using the A24s (on a 6-month checking cycle) we see the potential for accidents to lessen.

Species and Pest monitoring. In November 2016 Derek Brown carried out 6 days of survey work on the Islands and produced a report detailing the species he observed. We recently communicated with Derek and it was agreed that any survey to see if the biota has changed

should wait until we have a more consistent reduction of A24 trap counter numbers on Tawhitanui Island.

Weed Control. We have removed a small number of pine trees that were growing at the North Western end of Tawhitinui Island.

Wasp Control. The use of Vespex over the last 3 summers has been highly successful in greatly reducing the wasp populations. The permission to use Vespex is covered in the DOC-2971257 "Tennyson Inlet – Wasp CONTROL OPERATION". DOC best practice Guidelines have been followed

Habitat enhancement. We have some good video footage showing penguins living in (and raising chicks in) our Penguin boxes. We continue to monitor the Weta living in our Weta motels and lizards living in our Lizard refugia motels and intend to install more of these in the near future

Species translocation. We have done no translocation of any species.

Signage. - We have now installed the "No Dog" signs on the landing points of the islands plus the Penzance, Elaine & Duncan Bay launching ramps.

TIIT budget - See attached Appendix One

Promotions – See attached Appendix Two which is our December 2020 Newsletter and Appendix Three is an article published in the NZ Seafood Mag in Feb 2019 and reproduced in the Fishing Paper May 2021

Stock Take of gear on hand

19 x A24s	60 X Box of chew cards
65 X gas cylinders	50 X Tunnel foot- print pads
4 X Stoat lures	16 X Tracking tunnels (made by Graeme)
60 X Rat lures (different flavours)	12 X Victor rat traps

Summary –The A24s are proving their worth and their 6 monthly service intervals has made the job of servicing the islands far easier. As highlighted in our 2019 and 2020 DoC reports we still have no A24s on Tarakaipai Island which is frustrating because we know there are stoats present on this island (because we have trapped them in the past). We believe it is DoCs role to formalise an agreement with Ngati Kuia around the placement and location of A24s on to the Tarakaipai Island ridge line. These indicator traps will allow us to better ascertain predator numbers and types on this island.

We are keen to meet with DOC to discuss this report.

Yours Faithfully



Jeremy Cooper

Chairman of the Tennyson Inlet Island Trust

Appendix One

Draft TIIT BUDGET as at June 2021	
<u>Eradication of pests</u>	
Replenishment packs for the A24 (Co2 / lure bait etc) @ \$40 X 52 traps	\$ 2080
Purchase of bait for the DOC 200 traps (28 traps)	\$ 100
Wasp bait (Vespex)	\$ 300
Purchase of A24 traps (another 5 each year)	\$ 1,000
<u>Hardware</u>	
Purchase of 2 X 2 way radios (allow servicing crew to talk with boat)	\$ 400
<u>Enhancement of islands</u>	
Collection of seed, Propagation native plants (bird feeds)	\$ 1,000
Penguin boxes / lizard houses, weta motels & water catchment etc	\$ 500
<u>Building Knowledge</u>	
Tunnel counters, chew cards and consumables	\$ 300
<u>Other</u>	
Advocacy & Promotion	\$ 500
Newsletter - production and email	\$ 500
Website maintenance	\$ 200
Total	\$ 6,880



Supporters Newsletter - December 2020

Welcome to our newsletter for 2020. It has certainly been a year to remember and one in which our native species around the globe will surely have been grateful for some quiet time during the human lockdowns!

We always welcome new volunteers so please contact us if you are keen to help.

Chairman's Report

What a year 2020 has turned out to be. Who would have guessed this time last year that we were about to experience what the world has been through? The scary bit is COVID-19 is only just hitting its straps, so 2021 is likely to be a roller coaster as well.

Thank goodness our trustees have kept extending the network of Good Nature A24 traps across the islands, because the 6 monthly service intervals meant that even during lockdown these traps kept up the good work in eliminating rats. We have had enough funds to purchase another years' supply of lures and gas for these traps, so we are set for 2021.

We have been in touch with Good Nature and will be trialling some different lure flavours as rats need to "find" different food occasionally to keep them inquisitive. The only rat lure Good Nature currently sell is chocolate flavoured but we now have a rabbit brew and a hazelnut brew to test so we'll soon see what attracts them!

TIIT has also purchased 12 cheap Victory rat traps so we can set up some tracking tunnels to better monitor where on the island we have higher concentrations of rats.

Extreme thanks go to our "Friend of TIIT" who contribute an annual membership subscription. The form is at the back of this newsletter so please complete and fill in (\$30 for individual membership or \$50 for a family membership).

These funds allow TIIT to continue the good work.

Chairman's Report continued...

Ongoing R&D by other trapping entities around NZ has shown that the optimal number of A24s is likely to be somewhere around 25 metres apart. This is an incredibly intense regime that, in a rugged island setting such as we are dealing with, may not be fully achievable. However, we believe that we should slowly increase the number of A24s to move closer towards this target. We are taking it one step at a time and trialling a higher concentration of traps in an isolated area so that we can see if the numbers of strikes reduce.

We again wrote to the TIIT corporate sponsors who very generously made a donation a couple of years ago. All have re-donated so we would like to thank Sanfords, Kono, McDonalds Richmond and Talley's for their much appreciated donation.



Have a safe and Happy Christmas!

Work Bee 2021—MARK YOUR DIARY

With more A24s to install, servicing of the existing traps plus the new tracking tunnels we are aiming to hold another open day / working bee on February 20th 2021. Please put this date in your diaries as the working bee we held earlier this year was highly successful with many jobs ticked off our never-ending list. Please email expressions of interest to attend the 2021 work bee and we will let you know more details closer to the time, complete the form at the back of the newsletter or email tennysoninletislandstrust@gmail.com

Thanks to our local company supporters



We extend heartfelt thanks to the following sponsors who have supported us again in 2020:

Kono, Sanford, Talley's, McDonald's Richmond

And our thanks go to the **Field Family in Elaine Bay** who are contributing a proportion of each bach holiday rental towards our work.

Trapping Update

On the islands we have a network of Goodnature A24 automatic rat traps and a number of DOC200 traps. Every 6 months the A24 traps require replacement of the Automatic Lure Pump or ALP, and a replacement gas canister, while the DOC200's are checked as often as possible. It takes 2 people about 5 hours to cover the traps on Tawhitinui, plus more time to check and reset the DOC200's, carry out basic track maintenance and note things of interest, like penguins in the nesting boxes and a new burrow near trap 22.

August 2020

On August 10th, four volunteers headed out to Tawhitinui island to check the counter strikes and replace the gas and lure for the 31 x A24 automatic traps positioned over the island, they also checked and replaced the lure where needed in the 17 x DoC 200 traps. All of these traps are logged onto a GPS so a map is created enabling them to print a map of the trap positions.

All but two of the A24s were operating properly. Two appeared to have prematurely run out of gas. Those trap numbers are recorded, the traps are then reset and checked again later to make sure that they are operating properly.

Total strike numbers recorded:

- Tawhitinui A24s = 146 and DoC 200s = 4.
- Awaiti A24s = 13

This combined total of 163 strikes was a significant reduction on the February total of 234.



A rat on its way to take a drink from the water source
Captured on the OzTrail camera March 2020

Penguin boxes across the island were also checked; one box contained an egg, while another had a pair of adult Little Blue penguins in it, which later in October was housing two young healthy penguins - delightful to see. Our OzTrail camera's captured some interesting footage of the interaction between adult Little Blues, and adults and young Little Blues.

And at long last we have got footage of a weka picking up a dead rat from underneath an A24 trap. During our checks on the A24 traps we have never seen a dead rat because we know the weka's collect them on their daily rounds.

Additional trapping is being planned for early in the new year.

Check out our website: www.TIIT.co.nz.



Homes for Penguins.....

Inspired by the success our first Penguin boxes, one of our members built and donated another seven. These were aptly named to encourage 'first home buyers', *Room with a View*, *Penguin Paradise*, *Eco Friendly*, *Home Sweet Home*, *Blues Bungalow* ... you get the idea!! Warm homes for the penguins doesn't just mean a cosy place to bring babies into the world, it also gives them a protected place when they come ashore to shed their feathers and grow a new waterproof coat. The moult period lasts about two weeks and can happen any time between November and March; penguins are especially vulnerable at this time as they cannot swim.

Adult birds come ashore between May and June to prepare nests for breeding so as soon as our COVID-19 Alert Levels went down, an enthusiastic team of volunteers loaded up two boats and set off to install new homes on the islands for the returning penguins.

Penguins may waddle up to 1.5 km from the sea, and climb 300 metres in order to find the perfect nest site, so installation of the boxes was quite challenging—especially when one has a 6kg box strapped to their back and the only way up is by hauling on a rope!

The volunteers efforts were well rewarded however when a camera placed on Trap A24 -7 and on the penguin nesting box *Whare* were seen to have a penguin sitting on an egg. In *Eco Friendly*, two adult penguins were seen, and since then on 23rd October two young penguins of adolescent size were seen.

More homes are needed if anyone would like to build and donate to the trust they would be very welcome, no Resource Consents required. Please contact any of the our committee members if you are keen to assist.



OZTrail camera screengrab of little blue penguin activity on Tawhitinui



Image courtesy of DoC

Bird Cam!

TAWHITINUI ISLAND BIRD SPOTTING

Following the work our volunteers did last year opening up the creek and water source, we have spotted several native bird species on our camera footage. They seem pretty happy to be able to drink freshwater on Tawhitinui ensuring a suitable environment for breeding and further growth of the resident populations. This year we captured footage of the fantail (piwakaka), bellbird (kopere), silver eye (kanohi hiriwa) and weka (hoatu). *Rattus rattus* also made an appearance!



OZTrail camera screengrab of bird activity on Tawhitinui in 2020



Tennyson Inlet Islands Trust

MEMBERSHIP & DONATION FORM 2020/21

It is estimated that rats and stoats kill 25 million birds in NZ each year. The purpose of this Charitable Trust is to eradicate the pests from the three islands (Tarakaipa, Tawhitinui & Awaiti) that make up the Tennyson Inlet Island group within the Pelorus Sound.

We need your help..... While we have purchased most of the traps we require these still need servicing with gas & bait and we have ongoing development of habitat for penguins, weta and lizards.

By becoming a Friend of TIIT or by making a donation your contribution will greatly assist us in achieving our goal.

Yearly "Friend of TIIT" Individual Membership	\$ 30
Family Membership	\$ 50
Donation—you choose the amount	\$??
Volunteer to assist with field work (monitoring & servicing of traps etc.)	

We are going to BRING BACK THE BIRDS to the Tennyson Inlet Islands.

If you have ticked any of the options above please fill out your details below. With any bank deposit made you will receive a receipt that specifies our charitable status.

NAME	<p>Forms can be posted / emailed to our Trust Treasurer: Tennyson Inlet Island Trust, P.O. Box 2422, Stoke, 7041</p> <p>Contacts: Secretary: Lesley Davies — davies@kinect.co.nz Chairman: Jeremy Cooper — cooper@xtra.co.nz</p> <p>Charitable Status registration # CC52790</p> <p>Bank account details 03 1355 0865294 00</p>
ADDRESS	
PHONE	
EMAIL	

Check out our website: www.TIIT.co.nz.

NEWS

Fishing companies fund Sounds rat battle

Lesley Hamilton

The islands of Tawhitinui, Awaitei and Tarakaipa lie within the scenic Tennyson Inlet in the Marlborough Sounds and some of our major fishing companies are funding a project to eradicate rats and restore the dawn chorus.

Talley's, Sanford, New Zealand King Salmon and Kono are among a number of sponsors helping the Tennyson Inlet Island Trust (TIIT) to eradicate rats on the islands and adjacent mainland headlands.

Paua Industry Council chief executive, sometime resident and trust member, Jeremy Cooper, said the very head of Pelorus Sound was still mostly native bush with only a very small pocket of farming, no major rivers so very little sedimentation, a very small area of pines, and no mussel farms. However, bird life has plummeted.

"There used to be noisy morning choruses. But because of a rampant rat population DOC did a 1080 drop on 4000 acres about 10 years ago and they did it again two years later. That made a hell of a difference, but we really need to be trapping rats constantly," Cooper said.

"There are other trapping programmes around, doing things like predator-proof fencing which is hugely expensive so the most logical thing for us to do was put our resources into the three islands; Tawhitinui, Awaitei and Tarakaipa. We weren't looking to eradicate every last rat but we were going to do everything we could to manage the population and bring the birds back."

These are Department of Conservation managed islands, gazetted as scenic reserves in 1914. The nearest settlements are the holiday locations of Elaine Bay, Penzance Bay and Duncan Bay.

Cooper had nothing but praise for DOC, which he said had been very helpful, but the trust thought a different approach was needed.

"DOC have standard traps called a DOC 200 and, despite it being a huge effort to set it, it flattens rats. It is really lethal but as soon as it traps a rat the trap no longer functions until someone goes and empties it and resets it," said Cooper.

"What we were finding was nobody wants to get in a boat in the middle of winter to go to these isolated islands, so the traps could be sitting for a couple of months and not getting checked. And the thing with the islands is that rats swim to them so you have a constant stream of them swimming in. So, while the DOC 200 is a good trap it was not

ideal for our situation.

"Late last summer we realised the DOC 200 traps were not doing the job as we had put chew cards out, which are just real estate signs with peanut butter on them, and within two weeks the cards had all but been eaten so we knew we had a massive infestation."

That's where Wellington company Goodnature came in.

"They have built a trap called an A24 which runs on a CO2 cylinder just like the old soda siphons and it will reset the trap 24 times. That was a breakthrough. And then what they did was develop a bait dispenser that releases bait for six months. So, you don't touch these traps for six months," Cooper said.

However, they are not cheap. The trap, with bait and CO2 for a year works out to about \$200.

"We are such a tiny little outfit and we were competing with many others for funding, so we decided to tackle some of the fishing companies, especially the mussel companies that are operating nearby," Cooper said.

"Our budget was for 40 traps per year until we could smother a 50 by 50 square metre grid radius to get the islands sorted. The fishing industry has paid for 33 of this year's 40 traps budget, for which we are very grateful.

"The fishing companies are users of the environment and have an interest in keeping it pristine. Sanford have been particularly good as they have also given us money for wasp control."

Cooper said the problem with dead rats lying about was that come January, February and March when the wasps swarm, you couldn't get in to reset



Jeremy Cooper with an A24 rat trap.



Tennyson Inlet Island Trust are placing A24 traps around Elaine Bay

the traps: Sanford funded VespeX poison, which the wasps take back to their nests.

"Sanford also offered boating help to get anyone who needed to get out to the islands, supplied handaws to deal with wilding pines and organised beach clean-ups."

The first A24's were put out in April last year and two months later their digital counters indicated there had been 166 strikes.

Cooper said while you knew how many rats had been killed you never saw a dead rat because they immediately fell out of the trap.

"The wekas come along and think, 'woohoo, meals on wheels' and drag them away."

The islands were only the start, he said.

"Because there is only 350 metres between the mainland and the islands at low tide we need to trap on the adjoining headlands as well. The rats swim in rafts and can swim a kilometre. We are never going to get all of them, but we are giving the birds a fighting chance. The alternative is entire species becoming extinct in our lifetimes."

The biggest island, Tarakaipa, is 36 hectares, rises to 122 metres and has history with local iwi, Ngati

Kuia and Ngati Apa.

"Te Ruaparaha came through and annihilated those living on Tarakaipa in 1828 and no one has lived there since. There is an urupa, or burial ground, there," Cooper said.

"As part of their treaty settlement the Crown gave Ngati Kuia 1.8 hectares at the very top of the island. We have nine traps around the perimeter and wanted to trap it more extensively but need to wait until Ngati Kuia have completed their internal management plan for the island. Once that is complete we will sit down with them and DOC and work out the best way forward."

Cooper said the project was a long game. Trapping would continue into the future, but already the bird song was returning.

"We are building weka houses and gecko boxes and opening up the creeks where they have been blocked to get flowing water for the birds," he said.

"Any other donations to the cause would be warmly welcomed."

The Tennyson Inlet Islands Trust is a registered charitable trust and any donations can be offset for tax purposes. You can read more at www.tiit.co.nz