

No. 3: 2019 26th. August 2019

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Dear Members.

In this issue: AGM; Membership renewal; Fairy tern news; News items; Court actions;

Fish Study; Rangers' reports.

First, welcome to new members: Robyn Cameron of Kaikoura, Emily Ross of Wellington, Sharon Lewis and Casey Gair of Raukawa, Hawkes Bay, Stephen Lungley of Wellington, Peter Armstrong of Warkworth, James Hook of Mangawhai, Alison Hunt of Waipu.

Annual General Meeting

Date: Sunday, 22nd September, 2019 at 2 p.m.

Venue: Senior Citizens' Hall, Fagan Place, Mangawhai Heads (behind the Wood St shops).

Please consider joining the committee – there is plenty to do.

After the formal business of presenting reports and electing the committee, our guest speaker will be:

Georgina Garon

We are delighted to have Georgina as guest speaker. She has recently been appointed to the Northern Conservation Board and she will tell us about its activities.

After the meeting there will be light refreshments and a chance to catch up with fellow "terners'. Please join us.

All welcome

Membership Renewals Due

We're more than halfway through the year already, which means it's time to renew your membership. **Please see** the form at the end of this newsletter. The Trust is reliant on our members for its ongoing existence and we are very grateful for your interest and support. **Please note that if you have joined the Trust since 1 April this year, you don't need to renew until next year.**

Fairy Tern News

The sexing for last year's chicks has been done:

C69054 is a female. BM-pGB (Pakiri chick) C69055 is not determined. YM-YR (Waipu chick)

Preparations for the 2019-20 season are well underway with Rangers for the four main breeding sites already appointed. A new Ranger for Waipu has been appointed this year: Deane Williams, while Mangawhai will have two Rangers. It's very pleasing to welcome back Keven Drew for his third season at Mangawhai. He will be joined by Finn McCool from Napier, who is an experienced trapper and has done work with bitterns. At Pakiri long serving Ranger, Eliane Lagnaz will be there again. At Papakanui last year's Ranger, John Nielsen returns, to joined by another Ranger yet to be appointed.

Other preparations have included the laying of pindone to control rabbits, weeding and shell enhancement. Trapping has continued through the winter at all sites.



21st September (the day before our AGM) at Waipu Surf Club. Volunteers will be brought up to date with NZFT site conditions, the work of the Recovery Group and there will be discussion of dogs on beaches. The afternoon will concentrate on practical skills. Contact Ayla Wiles for details:

Pre-season meeting and volunteer training day will be held on Saturday,

Shell enhancement at Waipu - before and after shell delivery by helicopter

awiles@doc.govt.nz Ph. 0274120960

Photos: Ayla Wiles

Extracts from DOC Rangers' reports for the 2018-19 season can be found at the end of this newsletter.



News Items

Christmas Carols at Bennetts Chocolate Factory, this December (date to be confirmed) – a fairy tern fundraiser, organised by our wonderfully generous patron, Mary Bennett. The Mangawhai museum choir led by Christine Bygrave will perform at what is sure to be a glorious event. Be there if you can!

Congratulations to Georgina Garon (nee O'Connor), a Trust committee member, who not only got married this year, but was also appointed as the local community representative on the Northern Conservation Board.

Magazine stories: Watch out for a NZ fairy tern story in the October issue of *North and South*. *New Zealand Geographic* will also feature a fairy tern story, probably after the breeding season. Sioux Plowman has been escorting their photographer to sites on the Kaipara where fairy tern can be found in the winter.

Dr Roger Grace: We were sorry to hear that Dr Roger Grace died recently. One of New Zealand's environmental heroes, he was a good friend to our Trust, supporting us in our fight to protect fairy tern foraging areas. A Dr Roger Grace Memorial Fund has been established which will be administered by the Mountains to Sea Conservation Trust. To donate or find out more, visit *emr.org.nz*.

Court actions

1. The New Zealand Fairy Tern Charitable Trust (actively supported by the Te Arai Beach Preservation Society and Save Te Arai) has initiated an application to the Environment Court seeking an enforcement order against Auckland Council to remove the dam structure across Te Arai Stream, the rock walls and to restore the stream bed to its condition prior to September, 2013.

The link below will take you to the documents that have been filed to this point. We invite you to access them. https://drive.google.com/drive/folders/1V3zhKX6OsUoR5O47HyTPddO0pwkB-AGr?usp=sharing

The link below is to the *Newsroom* article which provides a good summary: https://www.newsroom.co.nz/2019/08/12/747285/advocates-for-rare-bird-take-dam-fight-to-court

Our thanks to Ewan Price who co-ordinated the application and to **Terry McDell** a local solicitor, both of whom charged no fee and also to the law firm **Price Baker Berridge** who are doing the legal work at a very favourable rate.

2. **Northern Regional Council** proposed plan for Northland: The Trust is a party to the appeals re this plan, concentrating on the policies and rules that affect endangered species in coastal areas. Mediation meetings start early next month and look likely to continue until December.

Fish study

Ian Southey's fish study in Mangawhai Harbour has continued through the winter months. The most recent session on August 11th saw a good turnout of helpers and some interesting catches:

Goby 961 Flounder 13 (at least one was a black flounder) Kahawai 5 Black Pipefish 3

New helpers are always welcome. The next fishing session is Saturday, September 14th. at 11.30 a.m. Meet at the bottom of North Avenue, Mangawhai Heads.

Rangers' reports 2018-19 season

Key to the colour bands used in these reports: B=blue, K=black, M=metal, pG=pale green, R=red, W=white, Y=yellow

Waipu – Ranger Ayla Wiles

This season at Waipu there was only one breeding, but infertile pair of NZFT, and one single male (pG)M-pG. (pG)M-pG is a 3-year-old male born in Mangawhai. There appear to be no previous records for him breeding but it is hoped he is a fertile male that will get a mate next year.

The breeding pair, known as the "Red pair" – M-pGR (F) and R-RM (M -infertile) - had two nests over the season. Four eggs were laid, two in each of the nests and they were all confirmed to be infertile. Both nests were in the North Crater, one of the safest nest sites at Waipu.



On 23/12/18 a single egg was transferred from nest M414 at Mangawhai. The reason for this was to split the risk, leaving one egg at Mangawhai and having one at Waipu meant if something went wrong at either site we would still have the other as an insurance. On 01/01/19 the egg hatched, the chick was then banded YM-YR at 18 days old. YM-YR went on to fledge in late January.

This pair are excellent foster parents and have successfully fledged three chicks before. This combined with a safe nest location and plenty of food in the Waipu estuary means they were able to raise a healthy and strong chick this season.

Nest 415. The egg on the left is from Mangawhai. On the right is a Waipu dummy egg *Photo: Ayla Wiles*

Predator control: During each breeding season rangers carry out predator control in a halo around the key NZFT breeding areas. Target species include; feral cats, stoats, weasels, ferrets, hedgehogs, possums and rats. Volunteer group, Waipu *About Tern* undertook predator control in the winter of 2018. In June/July a Pindone operation was carried out to control rabbits within the refuge; this was the first year in a five-year long operation.

Compliance: Most compliance issues this season were dog related. On five occasions the ranger spoke to dog owners who had walked their dogs past the no dog sign and into the wildlife refuge, this was down on last year when there were 8 incidents. A new issue this year was an influx of push bikes on the beach around Christmas/New Year. The lack of signage specifically around this issue meant many people were unaware. It was particularly difficult to monitor as well because the ranger was on foot and would often miss them. A new sign for the beach front is recommended that has all the restricted activities, a map and it should be on the boundary.

Some future recommendations include:

- Increasing the shell patches in safe nesting areas.
- Doing regular Pindone operations to keep rabbit numbers, and therefore predator numbers low.
- Adding a DOC 'Waipu wildlife refuge' sign on the beachfront at the boundary listing the restrictions. This will make compliance easier when the ranger can point out a sign that clearly states the rules.
- Fencing at Johnson Point and the North tip should remain in place all year to protect the more fragile shell patches.
- Trapping needs to continue year-round; ensure Waipu About Tern are assisted to do so.
- Investigations need to take place into the impacts of development on the border of the refuge.
- Continue the use of trail cameras at all nest locations.

Mangawhai - Ranger Keven Drew

The season started with a hiss and a roar when Fairy Terns started laying on Oct 9, and by Oct 15 there were 4 nests down (apparently the earliest the Fairy terns have ever laid), however, that all faded into the ether with all but one nest failing in fairly quick succession. It became quite apparent that the birds were struggling with a food supply, both to allow the females to come into condition for egg laying and to be as attentive to their nests as they should have been. The Fairy Terns seemed to be very focused on utilising the SSV site where at times chaos ruled with up to 11 Fairy Terns battling for territories. A large proportion of Fairy Terns appeared to be going to sea to feed as opposed to the Mangawhai Estuary, where they were bringing back whitebait, piper and other sea fishes I do not recognise.

There are many factors that may affect Fairy Tern breeding ranging from habitat disturbance or loss, food availability, the correct sized fish, mammalian and avian predators, the disparity in sex ratios of viable breeding age birds, possibly genetic bottlenecking, climatic, weather events or any combination of any of the above.



Fairy tern courting at Mangawhai

Fairy Tern breeding season summary

Birds seen: 24 Breeding pairs: 4 Nests: 6 Re-nests: 2 Eggs: 9-10 Known fertile eggs: 3-4

Known infertile eggs: 1 Abandoned nests: 0 Chicks hatched: 2 Chicks fledged: 0

Breeding pairs: BK-M (M) and KB-M (F) Nest no 406 9/10/18; Nest no.414 8/12/18 (1 egg to Waipu)

R-pGM(M) and KpG-M(F) Nest no. 407 11/10/18; Nest no. 412 16/11/18

M-Nil(M) and M-pGK(F) Nest no. 408 14/10/18. Female to Pakiri.

pG-RM(M) and RM-K (F) Nest no. 409 15/10/18.

Discussion: The season was difficult because of multiple strong wind events, and predation which was likely due to the presence of a breeding Red-billed gull colony nearby. Also, this season most established pairs changed their breeding partners, i.e. wife or husband swapping.

The Fairy terns struggled to find enough food for egg production and adult nest attendance. Some birds went to sea to try to find food, while others worked the lower tide feeding territories within the harbour. The upper midharbour was very dirty, and probably mangrove removal that has loosened silt/sediment enough to allow wind and water action to colour the water (Tony Beauchamp pers. comm.), affecting the visibility for birds fishing.

Some recommendations:

- Weeds and plants should be dealt with in the pre-breeding season
- Hides need to be purpose built and practical.
- Control of Gulls out on the Mangawhai Spit and Te Arai Stream.
- Carry out strategic water testing at sites in the upper harbour and key drains flowing into the estuary.
- Perhaps try some form of supplementary feeding.
- Perhaps discuss wind mitigation at the recovery group meeting.

Predator control: Traps were set along the western side of the Mangawhai Sand Spit running roughly north to south along the bund. Further traps were also set when cat predation was reported north above the North Bund Fairy Tern site. These traps were checked daily when in operation. They were closed on my days off because it is a legal requirement to check them daily.

The trapping I did was complemented by the much larger trapping effort done by Reg Whale of the Fairy Tern Charitable Trust and Rob Mouldy/Channing the Tara-iti Residents Associations trapper. These trappers cover a huge area to the south which buffers the spit to the south.

Compliance: The general population and holiday-makers at Mangawhai behaved very well this year, and few visitors were approached about compliance issues, apart from two instances of dogs on the Refuge and two of horses.

Aircraft traffic probably increased this year. At least 10 different helicopters were seen, and there were between 2 and 10 flights a day. Flight activity was greater near Christmas. The flight paths were sometimes low and over the SSV, Dredge and Nth Bund breeding grounds. There was also considerable plane activity. This included a float plane which flew high but was still noisy and at least 5 different fixed-wing aircraft including a twin seater microlight.

A range finder would certainly help with trying to get aircraft heights. We managed to avoid a problem by knowing that the Mangawhai Gala day was running and solving last year's issues.

DOC should consider working more closely with NRC over boating compliance. It should also consider warranting DOC staff for Dog, Horse, Cycle, Drone and Vehicle, etc. breaches.

Pakiri - Ranger Eliane Lagnaz

2018/19 was the 16th consecutive year in which New Zealand fairy tern (NZFT) held territory for breeding and the 14th season in which they successfully nested. Only the 2015/16 and 2016/17 seasons had not led to breeding. Males had held the territory but were not successful in holding females to the site.

The nest site was on the northern side of the river, as in previous years, within in an area fenced off in early September 2018 when the New Zealand dotterels and Variable Oystercatchers (NZD and VOC) had started to nest.

Breeding season:

The male (K-RM) was on site when observation work started on 19th October 2018. On 4th November he was observed to briefly scrape while still without a female. The female (M-pGK) arrived on 9th November from Mangawhai where she had been paired with M-Nil, an infertile male with whom she had been partnered in the past. One egg was confirmed on 21st November. No further egg was laid. Once the nest location was known, a three-tiered sandbag barrier with adjacent ditches was erected and maintained. The egg was candled on 4th December and found to be fertile. Three chick shelters were put in at the same time.

A second egg was transferred into this nest on 9th December from Mangawhai. The original Pakiri egg hatched on the due date, 15th December, but the second egg did not hatch and was removed from the nest.



The Pakiri chick with parent

On 3rd January the chick was banded BM-pGB. On the 7th January, the chick was observed flying and by 13th was flying well, doing twists and turns and gaining height. 17th Jan it was practising diving with parents and by

21st doing proper dives and picking up something from the water. After this, regular observations ceased; the family were still at the site on 25th Jan, but were not present on 8th Feb when there were strong easterlies.

Predator Control: There were problems with Red billed gulls (RBG) raiding dotterel nests near the fairy tern nest and chick. Several interventions were required to chase them off. As in previous years, predator control was carried out at Pakiri, Poutawa and Clapshaw's. Once the RBG problem became evident and watches were extended Poutawa and Clapshaw's were not visited until the end of the ranger's stay on site when a last visit was paid. Winter trapping was carried out at Pakiri and Poutawa from 1February to 31 October with traps checked every six weeks.

Compliance: On the northern side of the river where most of the NZFT, NZD and VOC breeding occurs, people were asked to put their dogs on a leash as soon as they crossed the river There was only one major incident where owners abused the ranger. Horses from the local stables regularly pass through the area without causing any problems to the breeding birds. They walk slowly and keep to the designated tracks. Only a few vehicles made it all the way down from Te Arai forestry to Pakiri. The access to the beach should be closed off but early in the season the gate was broken. This access should be discussed with Auckland Council. There were seven occasions where a drone was seen or heard. Owners recalled their drones on request and did not launch them again. It is difficult to gauge the effectiveness of the signs prohibiting the use of drones.

Papakanui: Rangers Ashleigh Morrow and John Neilsen

Two full time rangers were present at Papakanui, John Neilsen (Friday – Tuesday, 10 September 2018 - 31 March 2019) and Ashleigh Morrow (Wednesday – Sunday, 3 October 2018 - 11 January 2019). Helen Smith provided support to the rangers throughout the season.

This season we observed five NZFT that regularly breed at Papakanui, comprising two pairs and one single male. The "West-end" pair M-BK (male) and RM-BW (female) laid their first and only clutch of the season on the 15 November 2018, located on the west side of Papakanui spit. Due to the threat of high tides and swells, this clutch was transferred to Auckland Zoo. One of the eggs died at the zoo, while the second egg was later transferred to Mangawhai nest M214. On the 14 December 2018, this egg was removed as it did not hatch.

The "East-end" pair B-pGM (male) and RM-KR (female), despite displaying breeding behaviour such as copulation and prospecting for nest sites, unfortunately did not have the opportunity to nest. Due to signs of illness being picked up early by rangers, the female was recovered from the site on the 7 November 2018 and taken to Auckland Zoo for treatment at the NZCCM. On the 9 November she was found to have died overnight.

As a result of losing his partner, the "East-end" male B-pGM began an attempt to beguile the "West-end" female RM-BW. The birds were first seen together on the 24 November, four days after the "West End" pairs clutch was removed. His attempts appeared to be successful, as this female was seen with him on multiple occasions and courtship behaviours were observed. The last confirmed sighting of female RM-BW was on the 27 November 2018 with male B-pGM on the Waller Island shell patches. After this date, there was some significant bad weather and she has not been sighted since.

Single male (B)-RM, colloquially referred to as "Bertram", remained single this season, despite numerous attempts at beguiling both females. Early in the season he lost his blue band on the left leg and now reads (B)-RM. Note band letter in brackets i.e. (B) indicates that the bird has lost that coloured band. Hence would be observed as nil-RM, however, is assumed to be (B)-RM during the breeding season due to his behaviour and location.



Trail camera image showing the West end nest 19th November 2018

Discussion: Overall, the NZFT breeding season at Papakanui was poor. Both resident females at the site were lost, or assumed lost, leaving three bachelor males. All appropriate steps were taken to protect the nest and if not for the high tides, we believe that the nest could have been successful. Early in the season both pairs showed strong pair bonds and interest in nesting. The east end pair were particularly keen on the new shell patches made at the beginning of the season on Waller Island. It is recommended that the number and size of shell patches are increased. It was clear that the newest patches made at Waller Island were attractive to the birds as they spent a considerable amount of time on them.

Predator Control: Predator control at Papakanui is carried out on a large scale. A total of 151 DOC250 and Victor leg holds are set out along 51kms of trap line encompassing 1700ha. These traps are checked daily in accordance with animal welfare regulations for live traps. Trapping is done to control predators that could have an impact on shorebirds and NZFT. By reducing the number of predators in the area we hope to increase the population of NZFT and other shorebirds. Target species include feral cats and mustelids (ferrets, stoats, weasels) as they hold the potential to have the greatest impact. During the winter months, Helen Smith maintains a smaller series of trap lines along Lagoon road, Tasman road and Wallers Farm.

Compliance and Advocacy: Despite being off-limits to the public, Papakanui spit still attracts a high number of visitors, particularly in the summer months. Most of these visitors are fisherman, 4WDrivers and campers. Most of the people that we encountered this season did not present us with problems. Most people were polite and assured us that they would not approach roped off nest sites and would keep their dogs under control. DOC Rangers have no power to fine people or even to tell them to leave the area if they are behaving in a negative way in the environment. Although we observed people misusing the area, we felt powerless to stop the activities we observed.

The nature of this West coast beach means that the people frequenting it are usually locals and have been visiting the area for years and they feel entitled to the use of this land however they see fit, regardless of it being Conservation land and home to critically endangered wildlife..

This season the police had a "sting" operation on the beach to catch and fine people driving up the spit. As a recommendation, I would like to see more of these operations taking place over the summer, as after the initial sting, we saw a marked decrease in numbers of vehicles on the beach. Another recommendation would be to provide more options for support to rangers working at this site in the future.

Recommendations for the future include:

- Continuation of trapping into autumn, or better still all year round.;
- Consistency in the trapping methods, GPS locations and keeping an accurate and up to date data sheet was critical to the success of trapping this season. This methodology should be continued in subsequent seasons.
- Weed control to be carried out on shell patches when required during the off season.
- Creation of more shell patches, as large as possible and also some existing patches made bigger.

Thanks to the Department of Conservation for these reports.

These are edited extracts only. If you would like the full reports, please reply to this newsletter and we will email them to you.

Hope to see you at the AGM!

Kind regards, Heather Rogan for the Trust committee.