Photo: Parker Jones

MIRO
2021/22 Annual Report

Mainland Island Restoration Operation (MIRO) Inc

Annual Report

For the year ended
31 March 2022

Contents

Chair's Report

Our Pest Control Work in the Northern Forest with Greater Wellington

Possums

We caught 181 possums in the Northern Forest in the 2021/22 year, so slightly fewer than last year. The annual catch has now stayed below 200 for the past 5 years (catch figures are shown at the end of this report). During the year OSPRI undertook a chew card survey in the forest, getting an equivalent RTC Index of 4.3%. While this is below our target of 5%, it is not sufficiently low for Bovine TB to die out, so OSPRI then undertook ground control in the forest and out at the Lakes. At the time of writing, a 1080 drop is scheduled for the forest to cover parts not included in the ground control.

We are proceeding with our plan to phase out the use of the Possum Master traps over the next 5 years due to an unacceptable rate of inhumane catches. Over the past year we have tested 12 Flipping Timmy traps in the forest and they have performed well. Their catch rate seems good, they are easy to service and they will be more durable in that they are built with stainless steel components, so these will be our preferred trap from now on.

Mustelids and Better Monitoring

The mustelid catch has continued to decline after the mast year peak of 43, with 18 being caught last year, so we are close to pre-mast levels, which is reassuring. Given that mustelids and feral cats are a big threat to our birds, we have started monitoring selected sites using three ZIP Motolures. These are automatic lure (mayonnaise) feeders that we watch with trail cameras and move around every few months. The idea is to be able to detect all pests, including those who are trap-shy. The Motolures are sited on traplines, with the associated trappers changing camera cards and batteries every month and reporting what is recorded. To date we have occupied 7 sites and, of those sites in the 2021/22 year, 5 have had rats, 3 had possums, 2 had deer, 2 had pigs,1 had a hedgehog and 1 had a stoat (later caught nearby, but we have since seen another stoat). The deer and pig sightings are a disappointment given that the sites are not really set up to record them. The rate of possum sightings seems very high (43%), 2 stoats in all that time might be OK given they are wide-ranging, and no feral cats is also good news. We are not currently able to control rats throughout most of the forest, so having 5 of 7 sites with rats is not unexpected.

Other Catch

We trapped 586 rats in the forest last year, so while fewer than the mast year peak of 739, it is still higher than any other year. This could in part be due to having more traps deployed. In the past, we have poisoned rats at most forest trap sites using Contrac Blox in the hockey stick feeders, primarily to protect the possum lures. This has not been particularly effective, so about a year ago we started a trial deployment 70 T-Rex rat traps mounted in run-through tunnels mounted in trees on some trap lines. Feedback from trappers has been quite positive, because it makes trap servicing easier through not having to deal with the poison blocks. Analysis shows that the T-Rex traps catch at a similar rate to the DOC200s, although the latter also catch hedgehogs and mustelids. We had hoped to undertake an analysis of how effective this approach is in protecting the possum lures compared to poison, but the reliability of our ‘set no bait’ reporting may limit this.

Greater Wellington continue to control rats in the Mainland Island (about 20% of the Northern Forest) with intensive poisoning. Over the past year the tracking rate has been in the 5–10% range, while in the untreated areas it averaged roughly 40%, so the poison control continues to be fairly effective.

During the year, 77 hedgehogs were caught in the Northern Forest, compared with 51 the year before. These numbers are consistently higher than earlier years, so hopefully reflect improved trap performance, rather than an increased population. Greater Wellington's monitoring shows a fairly constant tracking rate of 12% (in warm seasons) outside the Mainland Island for the 2020 to 2021 period.

Our feral cat trap network caught just one cat during the year. Thanks to a very generous donation from Jan Heine, we were able to replace the modified Timms traps with 24 Steve Allen 2 (SA2) feral cats traps during the year. Given their good performance along the Coast Road, we hope that the new traps will be more effective in catching feral cats if they are present in the forest. All these traps are set well back from the urban areas.

New Technologies

We continue to trial new traps when they become available. We have continued with our testing of the AT220 self-resetting DOC200 traps with trail cameras, but the results are pretty mixed. They are a great idea, and we think their reliability has improved with time and design tweaks. However, rats don't seem to like going into them and rat carcasses can block the sensor, resulting in a kill rate of only about 2 per month. Possums also tend to be quite shy of them (but they are probably shy of all traps). Getting the ramp at the correct height helps, it seems. However, we have had reports of high kill rates from places with a high possum density compared to the forest. Given that our forest is fairly accessible, we think that traditional kill traps are currently a better option.

We have also embarked on trialling the D-Rat trap manufactured by Envirotools in Petone. This trap is well-made, is said to be rust proof and is very easy to set, clear and re-bait. The problem with the T-Rex traps mentioned above is that they do have some inhumane kills and they will also get rusty fairly quickly, so a more robust trap, such as the D-Rat may be a better option.

We aim to thoroughly check all of our trap sites every two years. This is quite a big undertaking, involving the inspection of all the traps with some on-site repair if possible. This time round we adjusted the DOC200 sensitivities to be at the lower end of the 60—80 g range to improve our chances of catching weasels (DOC recommend at 50–100 g range, the higher trigger weights being needed for double-set traps to avoid sympathetic triggering).

During the past year Greater Wellington's Key Native Ecosystem (KNE) Plan for the Northern Forest came into effect. A new initiative in the plan, developed by MIRO and Greater Wellington, was the trial of low-cost radio-linked rat traps to extend the Mainland Island. Thanks to the efforts of Oliver Seiler, and support from Jo Greenman, we are now close to being able to install a Radio Gateway on East Ridge to give us LoRaWan radio coverage in Gollans Valley. We will initially deploy 25 traps in a closely-spaced network adjacent to the Mainland Island. If it operates successfully, we will scale this up to become the first step in the extension of the Mainland Island.

Deer

The past year has seen very good progress towards better deer control in the forest. First, the adoption of night vision technologies by the professional cullers contracted by Greater Wellington saw the annual cull almost double to 19 deer. Secondly, Greater Wellington, assisted by Hutt City found enough budget to commission a DNA deer scat analysis of the forest and an area just to the north. This involved the collection of fresh scat on lines spaced 100–175m apart across the whole forest and some adjoining land. In all, 151 samples were gathered, 124 returned DNA results, resulting in 53 individual deer being identified. The methodology is meant to be fairly accurate, so we don't expect significant numbers of deer were missed. Greater Wellington are now developing a culling plan for reducing these numbers to a more acceptable level so that the foliage can recover from the browsing damage that we have seen over significant areas in recent times.

Bird Monitoring

Five-minute bird counts were conducted in spring (October 2021) at 40 sites across the Northern Forest. A total of 17 species were recorded, 14 native and 3 exotic. Predominant species included the riroriro/grey warbler, tauhou/silvereye, tui, pīwakawaka/fantail and blackbird. A number of regionally rare birds feature in the counts as usual—miromiro/tomtit, tītitipounamu/rifleman, pōpokotea/whitehead, kārearea/falcon and korimako/bellbird, among others.

The migratory pīpīwharauroa/shining cuckoo and koekoeā/long-tailed cuckoo both feature in the counts but there is only a single recording of the latter. Kākāriki (likely red-crowned) have been recorded again in 2021 after being absent last year. Kārearea again nested in the vicinity of York Bay and there have been regular sightings of them on the periphery of the Northern Forest from the Bus Barns to Gracefield.
This year we had 10 DOC acoustic recorders available for our annual kiwi search, so were able to double the number of sites occupied to 20. Taking advice from Susan Ellis of the Remutaka Conservation Trust, we deployed the recorders on and east of East Ridge, as well as along Gollans Stream and up the ridge to the north of The Forks. As usual, moreporks were detected at every site, but no kiwi.

We again re-occupied sites to record the strength of the dawn chorus at 20 of our 5-minute bird count sites in the forest (Butterfly Creek and Gollans Valley) and also at our usual 5 urban sites, although no data analysis has been undertaken as yet.

Our Work at Parangarahu Lakes with Taranaki Whānui ki Te Upoko o Te Ika and Greater Wellington

Pest Control

Over the past year, MIRO volunteers continued servicing the 178 DOC200, SA2, Timms and Possum Master traps at the Parangarahu Lakes and Pencarrow Road on a monthly basis. The possum traps were originally positioned to protect the young trees at our revegetation sites, but the network has now been extended to control the ingress of possums from surrounding areas. The increase in catch over the past four years reflects the increase in traps. The extensive DOC200 network aims to keep mustelids and hedgehogs under control in order to protect ground-nesting seabirds, especially the Banded Dotterel.

The total catch for the year (previous year in brackets) was 54 (76) possums, 13 (16) mustelids, 37 (56) rats and 67 (49) hedgehogs. Plots of Lakes catch are included at the end of this report. The most notable feature in the catch data is the sudden drop in the rat catch over the past two years. Unlike in the forest, Greater Wellington does not undertake rodent monitoring at the Lakes, so we do not know whether this reflects a drop in rat numbers or some other cause, although the catch rate is comparable to that before 2016. For last year we did use an alternative bait, as the Erayz dried rabbit was not available due to Covid, however Erayz was used in the 2020/21 year when the catch was similarly low. The DOC200's were all checked and adjusted prior to the 2019/20 year, after which we had our highest rat catch ever and we have not seen a similar drop in the forest, where the trap checks are identical. This was a mast year and although we don't trap in beech forest at the Lakes, there may have been some invasion from nearby forested areas. So, given no other tenable explanation at this stage, we presume the sudden catch decrease is most likely due to a drop in the rat population.

The mustelid catch has also shown a decrease over the past two years, although you can see from the figure that it tends to be quite variable. If rats were the primary mustelid food source at the Lakes, we would expect their catch rate to correlated with the rat catch, with a few months lag (as they are slower to breed). However, unlike in the forest, rabbits are also a potential food source for mustelids, so this is difficult to interpret.

In contrast to rats and mustelids, the hedgehog catch rate at the Lakes has been consistently high for the past 6 years. For last year, this catch rate (per trap) was double that for the forest, perhaps related to a more favourable environment, especially food supply. The feral cat catch for the year was 8 and half of these were in our 8 new Steve Allen (SA2) traps along the Coast Road. It has been markedly higher for two years now, with the SA2s also contributing during the previous year.

Hem of Remutaka, is a three-year Jobs for Nature conservation project which operates between Eastbourne and Turakirae. In the past year they have assisted us with dotterel fencing, Lakes planting as well as checking traps and clearing traplines at the Lakes. They have also assisted at our Gracefield tree nursery. We are very appreciative of their assistance which has enabled more to be achieved at the Lakes.

Revegetation

Another 2,000 trees from the MIRO Nursery were planted at the Parangarahu Lakes last winter, 1,963 pioneers and 60 secondary trees. 1,000 of the pioneers went into the latest plot, #15, alongside #14 on Cameron Ridge and earlier plots were infilled with another 1,000 pioneers. The 60 secondary trees were planted in selected sites where protective canopy has already been established.

Recently, Greater Wellington has experimented with relocatable fencing around the plots that can be easily moved to extend the plot as required. There have also been experimental plantings outside the fenced plots using individual plant protectors as stock control improves.

500 surplus trees from the MIRO Nursery have been shared with other local conservation groups: Friends of Baring Head, Friends of Wāiwhetu Stream and the Eastbourne Dunes Group. Thanks are due to all those who assisted with the plantings, sometimes in challenging conditions: Taranaki Whānui ki Te Upoko o Te Ika, Conservation Volunteers and MIRO volunteers.

Another positive development at the Lakes has been the improvement in the boundary fences thanks to Greater Wellington's efforts, led by Jo Greenman. For the first time we are very close to being stock free, which will mean that regenerating plants will only need to survive rabbit browsing, instead of also having to survive that of sheep and cattle.

Protecting Banded Dotterels

During the 2021/22 breeding season, 40 tūturiwhatu/banded dotterel nests were monitored along the Eastbourne–Wainuiomata coastline, the largest number of nests that have been monitored in a single season since this work began in 2011. Average hatching success among the three sites that were monitored (Eastbourne foreshore, Parangarahu Lakes and Baring Head/Ōrua-pouanui) was 41.6%, exceeding the annual management target of 40% hatching success set out in the Eastbourne–Wainuiomata coastline Tūturiwhatu/Banded Dotterel Management Strategy. A minimum of 14 chicks fledged from the three sites during the 2021/22 breeding season, representing an average fledging rate of 0.63 fledglings per breeding pair. This fledging rate exceeds the annual management target of 0.5 fledglings per pair set out in the management strategy.

We found 12 nests at Baring Head/Ōrua-pouanui which produced 8 fledglings and we found 11 nests at Parangahau Lakes which produced 4 fledglings. At Eastbourne 19 nests were found, but only 2 fledglings survived. The only management difference between the areas is we do not target cats at the Eastbourne nesting area as it is within 50 metres of domestic homes. Domestic cats have been filmed predating dotterel eggs. MIRO is trying to solve the domestic cat issue through delivery of a hand-out and social media posts encouraging cat owners to keep them inside at night during the nesting season.

On a happier note, there has been a big jump in the hatching success rate for the Parangarahu Lakes since MIRO took over the Tūturiwhatu monitoring work in 2016, which makes it really clear that MIRO's efforts have led to a substantial increase in hatching success. Also, our intrepid PAP has made the trip to New Caledonia for the third year in succession (see cover picture).

This project would not be possible without the combined efforts of the many members of MIRO, Birds New Zealand and Taranaki Whānui ki Te Upoko o Te Ika who assisted with the tūturiwhatu/banded dotterel management and monitoring efforts. A special thank you is due to Richard Gray (Birds New Zealand) for undertaking the capture and banding work, and to Jo Greenman and Rob Masters (Greater Wellington) for providing logistical, technical and financial support. We are also grateful to Geoff de Lisle, Dallas Bishop and Paul Shortis (Birds New Zealand) and David Ugolini (Société Calédonienne d'Ornithologie) for collecting a large proportion of the re-sightings of flagged dotterels away from the three sites.

We would also like to thank the Eastbourne Scouts and Eastbourne Venturer Scouts for helping with the signage and fencing at the Eastbourne foreshore. Thank you also to the MIRO and Friends of Baring Head trappers as well as Darren Lees (Greater Wellington) who have worked hard to keep predator numbers down to low levels during the 2021/22 season. Thank you to Pasi Hyvonen of GIS in Conservation who developed and gives ongoing support to the Dotterel Field Map and Dotterel Viewer application. Lastly, we would like to say thank you to the volunteers who every week spent many hours conducting site monitoring visits including Geoff de Lisle, Dallas Bishop, Joan Rusholme, Hetty Vink, Eric Berger, Mary and Bob Watson, Jennifer Vinton, Geoff Chambers and Graeme Lyon, without whose individual efforts this project would not be able to proceed.

ERAT—Our Urban and Foreshore Trapping Initiative with the Hutt City Council

Three tracking tunnel monitors involving 160 tracking cards were undertaken across the urban area and foreshore in September and December 2021. In March 2022, Mahina Bay was included in the monitoring, which brought us up to 170 cards. This is thanks to Clare Kernot taking on the Area Leader role and Sam Allen helping her with setting up the monitoring.

The March result had rats tracking at 5.5%, so just over our target of 5%, mainly caused by a few coastal hotspots, with the earlier monitors around the 5% level. Following the pattern of previous years, hedgehog tracking rates remained stubbornly high, being at 17% in March, mainly across the urban areas rather than on the coastline. Some live capture work is being done by a few volunteers, but we will need more of this to get the numbers lower.

The ERAT rat catch for last year was 608, so a little up on the previous year's total of 524, which is encouraging in that a reasonable proportion of people must still be actively trapping. The hedgehog catch jumped a lot to 51 compared to the previous year's 30. Mustelid and possum catches also increased to 8 and 22, respectively. The uptick in possum numbers for the last year does not come as a surprise as we have had quite a few enquiries from residents about catching possums. We are encouraging residents with properties adjacent to the forest to get possum traps. Similarly, we have had a few reports of stoats and weasels around the urban area. A distinguishing feature of the ERAT urban trap network is the high number of DOC200s deployed compared to other regions. This should control the mustelid population effectively if the traps are well-maintained (especially kept clean) and baited with dried rabbit, rather than peanut butter. We will continue to supply Erayz to residents from time-to-time.

ERAT continues to function satisfactorily through the efforts of the Area Leaders along with MIRO support. However, we still do not have Area Leaders for Days Bay South, Rona Bay and Eastbourne Central, but will continue to try to recruit people to take on these roles. Two ERAT newsletters were distributed during the year.

Other Activities

MIRO's main effort in terms of publicity over the past year were through our continued 2-monthly contributions to the Eastbourne Herald. Articles published in the past year were: Horned Poppies, 2020/21 Northern Forest and Parangarahu Lakes pest control results, Dotterels—Here we go Again, Kahikatea, Rifleman, Dotterel Season. We also revived the MIRO Newsletter, getting an issue out in December, with another one about to be produced at the time of writing.

Having reinstated the annual MIRO BBQ in the previous year, we were foiled by Covid earlier this year, deciding that it was too high-risk given the vulnerability of some of our members. Hopefully we will be able to get this underway in the coming year.

Health & Safety

There were no notifiable events during the year. When New Zealand moved into Covid Level 3 in August 2021, Greater Wellington deemed that trapping was critical volunteer work, so could continue under the Covid protocols that we had developed for the earlier lockdown period. There were two constraints: a) that work was only undertaken by experienced volunteers (so no new trappers) and b) work had to be close to the volunteer's home, which excluded people from outside of Eastbourne, the Bays and Wainuiomata. This meant that the trap servicing was largely uninterrupted, unlike in the previous year.

Recognising Those Who are Helping us Achieve our Goals

As always, there are many people and organisations we need to thank for their contribution to MIRO's successes over the past year, but first we would like to thank our many volunteers and other helpers who have again got through a lot of work with trap servicing, tree propagation, tree planting and clearing, bird counting, predator monitoring, dotterel protection, website maintenance, and other less visible tasks.

We again enjoyed excellent support from our partner, Greater Wellington, during the year, especially through the efforts of Jo Greenman and Rob Masters, be it at Committee meetings or in getting things done in the field.

Riba Greally at Hutt City Council continued to provide financial and in-kind support for the ERAT Project as well as being active as a volunteer in our dotterel monitoring work. Unfortunately, she has now left HCC to join Wingspan in Rotorua. We wish her well in her new career.

We continue to receive donations from individuals in support of MIRO, the most significant one in the past year being $4,000 from Jan Heine (who sadly passed away in December 2021) for the purchase of new cat and possum traps for the Northern Forest. Jan was a foundation member of MIRO, made an enormous contribution over many years, and had only stopped servicing her trapline on the west side of Gollans Valley in May 2020!

Our last Annual Report mentioned a donation of $1,000 from Nigel Oxley and Fiona Christeller, who have now decided to make regular donations exceeding that amount. On top of that, Productivity People, at the suggestion of one of their local employees, decided to make an annual grant to MIRO of $500. Regular donations like these are greatly appreciated in that they really help us with being able to plan future investment in new or expanded activities.

We continue to be very grateful to GNS Science for the continued use of their land to house the tree nursery at their Gracefield site, to George Tuffin, for his review of our accounts, and to the Days Bay Menzshed for continuing to manage poisons, trap repairs and other supplies.

As always, many thanks are due to Spiral Web Solutions for continuing to provide and sponsor all of our web services.

The MIRO Committee

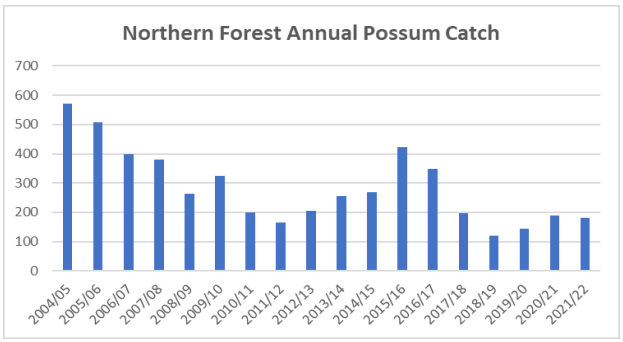
During the year, Robin Connor stepped down from the Committee due to health reasons. Robin served as Secretary for over three years and also helped a lot with organising photographs. Many thanks are due to Robin for his help; he and his wife Rachel continue to service a Lakes trapline. We were fortunate in having Pamela Hyde and Oliver Seiler join the committee at the AGM. Oliver is leading our radio-linked trap initiative and has also helped out with our email list software and setting up a MIRO Google account for our electronic files. Pamela Hyde has been helping at the tree nursery as well as editing newsletters and Facebook posts. Remaining committee members comprised Ian White (Treasurer), Gail Abel, Sally Bain, and Parker Jones.

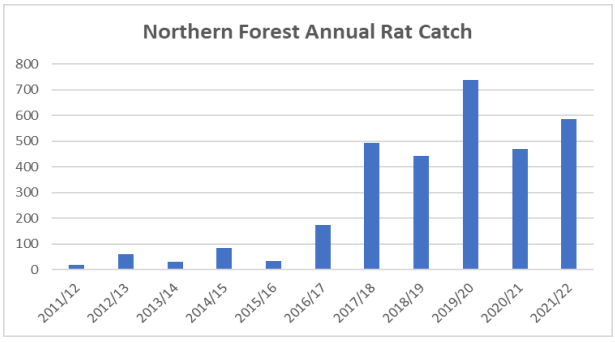
As always, I am very thankful for the effort put in by our committee members. Over the past year we met eight times (twice via Zoom), with an average attendance of over 80%, which is an excellent effort. Our East Harbour Regional Park Ranger, Jo Greenman, was able to attend all but one meeting, which is greatly appreciated given her other commitments. Frank Vickers was usually present as our (unofficial) Eastbourne Community Board representative. Greater Wellington's Rob Masters found it hard to get to our evening meetings due to family commitments, so he, Jo and I now meet via Zoom on a day very close to the MIRO meeting.

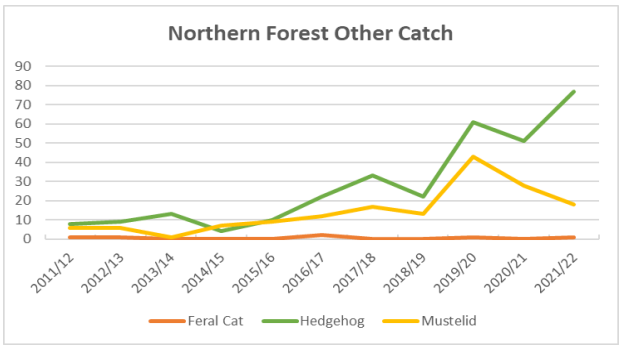
Terry Webb, MIRO Chair
July, 2022

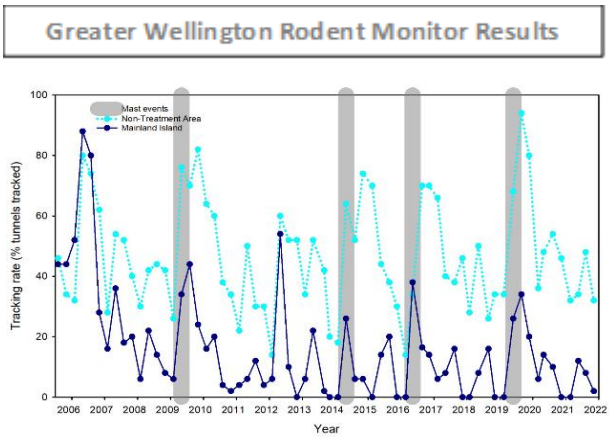
Supplementary Material

Northern Forest Catch

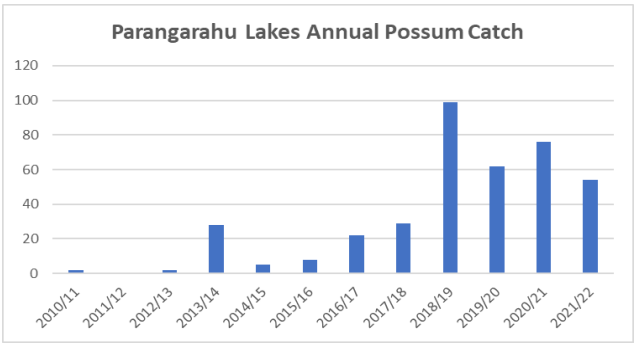


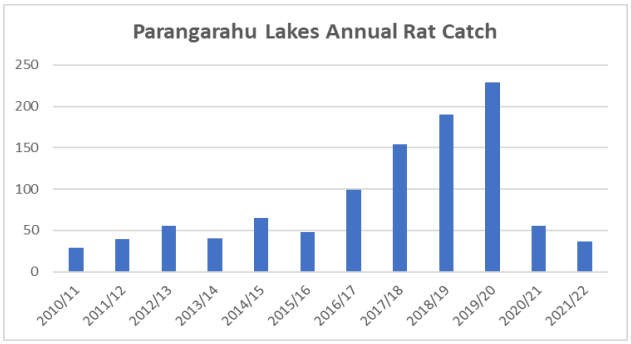


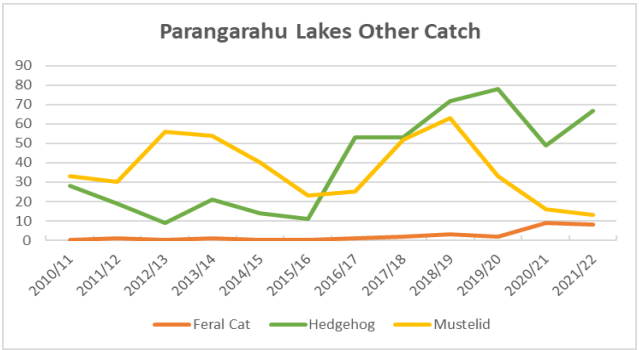




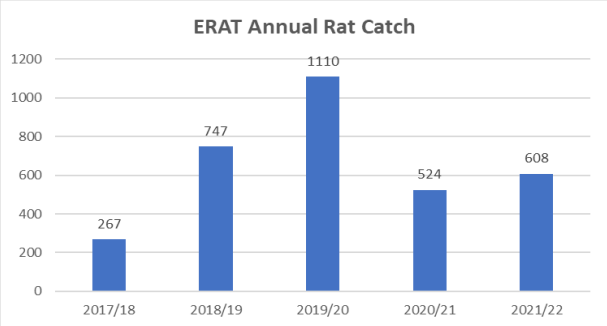
Parangarahu Lakes Catch

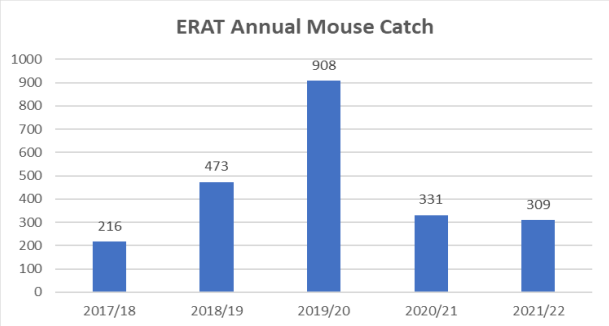


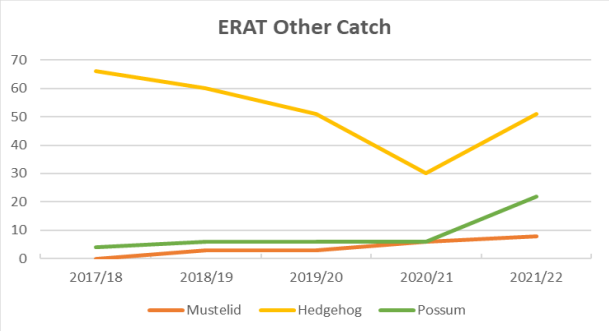




ERAT Catch


ERAT Annual Rat Catch
1200
1000
800
600
400
200
0
267
747
1110
524
608
2017/18
2018/19
2019/20
2020/21
2021/22


ERAT Annual Mouse Catch
1000
900
800
700
600
500
400
300
200
100
0
216
473
908
331
309
2017/18
2018/19
2019/20
2020/21
2021/22


ERAT Other Catch
70
60
50
40
30
20
10
0
2017/18
2018/19
2019/20
2020/21
2021/22
Mustelid
Hedgehog
Possum

Minutes of the 2021 MIRO AGM

MINUTES OF THE 2021 MIRO ANNUAL GENERAL MEETING
FRIDAY 8 AUGUST, 2021
EAST HARBOUR WOMEN'S CLUB

PRESENT
Terry Webb (Chair), Ian White (Treasurer), Gail Abel (Minutes), Parker Jones, Sally Bain, Pamela Hyde, Oliver Seiler, Jo Greenman and about 35 others.

APOLOGIES
Robin Connor, Jan Heine, Murray and Liz Keightley, Warren Bolger, Sue Rundle, Dave Heatley, Rick Wells, Lesley Haines, Par Sarginson, Roger Brown, Lisa and Peter Northcote, Colleen Cumming, Ann Garry, Lee Rauhina-August and Richard Gray.

MINUTES OF THE 2020 AGM
Accepted : Parker Jones/Ian White

CHAIR'S ANNUAL REPORT
Terry reviewed the year noting in particular:

Work in the Northern Forest with Greater Wellington

- MIRO received a scare during the year that a kiwi had been caught in a Timms trap. A check revealed it was in fact a possum. We have taken the precaution, however, of only mounting Timms traps on trees and also the A24 traps have been raised so they are kiwi safe.
- Reporting of inhumane kills in traps (Possum Masters) revealed a rate of 5%. While this is below the NAWAC rate of 7%, MIRO plan to phase out the use of possum master traps over the next 5 years. Trialling of possible replacements is underway.
- Other traps being trialled include the AT220 and the Trex run-through for rats.
- Five minute bird counts continued in spring. Analysis by Landcare Research of meta data across a range of restoration projects has revealed that bird numbers, especially endemic species, showed positive trends from control of predators. The counts will be continued.
- Acoustic recorders continue to be deployed at various sites and will be used during the roar this year.
- Possum catches increased only slightly and rat catches dropped following the end of the last beech mast. Hedgehog catches have increased but we are unsure why.
- Following a chew card monitor, OSPRI are currently conducting another poisoning operation on possums in the Northern Forest.

Work at Parangarahu Lakes with Taranaki Whānui and Greater Wellington

- MIRO completed the planting of the 14th vegetation plot on Cameron Ridge.
- Possum catches were up and down and twice as high (per trap) as in the Northern Forest in spite of shooting at the Lakes.
- Rat (especially) and mustelid catches dropped but GW is still making a lot of mustelid catches on the foreshore.
- A campaign to address predation on banded dotterel chicks by cats was undertaken. As a result there has been increased success on nests at the Eastbourne foreshore. Social media and the press were used to engage the community.
- MIRO's dotterel banding permit has been extended a further 5 years and includes Baring Head.

ERAT—Urban and Foreshore Trapping with HCC

- The rat monitor done three times a year has proved successful. Good design has ensured its success.
- Sally is stepping down as leader of ERAT and a replacement is being sought. We are grateful to Sally for the effort she has put in to the project.
- It is important that urban trapping continues and a ring around the Northern Forest is established

LOOKING FORWARD

- New revegetation plot (#14) at the Lakes plus infill planting and introduction of secondary species. Planning for a higher planting rate using a different approach to fenced plots (GW).
- Dotterel monitoring to be extended to Baring Head. Pushing HCC for cat by-law change, especially micro-chipping.
- Continue dawn chorus recordings and kiwi searches with 10 acoustic recorders (45+ sites) plus 5-minute bird counts.
- Maintain the ERAT urban trapping effort, including regular monitoring. Possible Shared Path funding may be available to support ERAT efforts.
- Roll out pilot 25 trap rat control network using low-cost traps and radio links as a small extension to the Mainland Island.

Thanks to MIRO Supporters:

Greater Wellington Regional Council, Lower Hutt City Council, Spiral, GiC, GNS Science, Taranaki Whānui, Hutt Mana Charitable Trust, Eastbourne & Bays Menzshed, Abbott Insurance, Conservation Volunteers, Reserve Bank NZ and George Tuffin.

TREASURER'S REPORT

Ian White presented the Annual Accounts. MIRO is in a good financial state with $8,700 in the bank. Most of this destined for expenditure on various projects. MIRO receives good support both financially and in kind from Greater Wellington. Previously a lot of money was going through the accounts for MfE grant expenditure for ERAT but this has now finished.

The Annual Report and Financial Report were accepted.

ELECTION OF COMMITTEE

All nominations for the 2021/22 Committee were elected unanimously. The Committee is:

Terry Webb	Chair
Robin Connor	Secretary
Ian White	Treasurer

Gail Abel, Sally Bain, Pamela Hyde, Parker Jones, Oliver Seiler

OTHER BUSINESS

Parker Jones was awarded a Life Membership to MIRO for outstanding service to the Committee. Parker has spent a good number of years on the Committee including a stint as Secretary. He has worked on pest trap lines, first in the Northern Forest and currently the Lakes Block. He took a leading role in the second NI robin translocation from Kāpiti to EHRP. Parker is now the lead on the protection of Dotterels on the Eastbourne Foreshore, at the Parangarahu Lakes and at Baring Head.

SPEAKER

At the end of the meeting Parker introduced the speaker, Nikki McArthur. Nikki is an independent ornithologist who works on a range of bird monitoring and research projects throughout NZ. His talk was 'A decade of tūturiwhatu conservation along the Eastbourne-Wainuiomata Coastline: what have we learned and where are we going.'

Mainland Island Restoration Operation (MIRO) Inc

Entity Information
For the year ended
31 March 2022

Legal Name:	**Mainland Island Restoration Operation (MIRO) Inc**
Other Name:	**MIRO**
Type of Entity:	**Incorporated Society and Registered Charity**
Registration Number:	**CC41613**

MIRO's Purpose or Mission:
To protect and restore the native ecosystems within East Harbour Regional Park (EHRP), Wellington, by: the protection and restoration of native flora and fauna; the control and, ultimately, elimination of plant and animal pests; the reintroduction of native flora and fauna; achieving our vision through active involvement in education and advocacy and doing anything else necessary or helpful to achieve the above.

MIRO Structure:
MIRO is managed by a committee of at least three, and up to ten members, including a Chairperson, Secretary and Treasurer, all being elected at an Annual General Meeting by paid-up members of MIRO. There are no employees. MIRO works in partnership with Greater Wellington Regional Council to achieve its vision.

Main Sources of MIRO's Cash and Resources:
Donations and grants
Member subscriptions

Main Methods Used by MIRO to Raise Funds:
Applications for grants and other support from:
- Central and local government
- Various other trusts and potential non-governmental funders
- Individual donors

MIRO's Reliance on Volunteers and Donated Goods or Services:
MIRO has a very high reliance on the support of volunteers, particularly in the areas of:
- Trapping and pest control
- Growing native trees in our Gracefield nursery and planting out native plants at the Parangarahu Lakes
- Trap building and maintenance
- Dotterel protection
- Publicity
- Governance and administration

Contact details:

Postal Address:	**PO Box 41038** **Eastbourne**
Email/Website:	**info@miro.org.nz** **www.miro.org.nz**
	https://www.facebook.com/mainlandislandrestorationoperation

Mainland Island Restoration Operation (MIRO) Inc

Statement of Service Performance

For the year ended
31 March 2022

Description of the Entity's Outcomes:

Working in partnership with Greater Wellington Regional Council (GW), MIRO's aim is to protect and restore the native flora and fauna in the Northern Forest and Parangarahu Lakes areas of East Harbour Regional Park (EHRP) by greatly reducing pest animal numbers (especially possums, rats, mustelids and hedgehogs) through continuing to improve and maintain an extensive trapping network. We are also working with GW and local Iwi to reintroduce locally-sourced native trees at the Parangarahu Lakes by planting out trees from the MIRO nursery in 15 fenced plots. A new activity (the ERAT Project) undertaken by MIRO over the past five years, with the support of HCC and an MfE consevation grant, has been the roll-out of an intensive trapping network (targeting mustelids, hedgehogs and rats) across the urban area of Eastbourne and the Bays, and also extending to the foreshore. This network is now complete has resulted in a Mountains-to-Sea solution to the threats posed by possums and mustelids, which will result in a healthier forest and a better chance for ground-nesting bird species. MIRO also undertakes other activities in line with our mission, such as protecting nesting banded dotterels on the Eastbourne foreshore, at the Parangarahu Lakes and at Baring Head.

Entity's Outputs:	This Year	Last Year
Traps in use	1,538	1,474
Possums killed	257	270
Possum Residual Trap Catch Index (RTC Index)	4.3%	N/a
Trees planted at Parangarahu Lakes	2,379	1,861
Number of members and volunteers[1]	136	154

Additional Output Measures:

Other trap catch (with ERAT) included 195 hedgehogs, 1,231 rats and 39 mustelids. A further 113 trees were supplied to other local projects.

Additional Information:

[1] The number of members and volunteers does not include residents who are trapping as part of the ERAT project (probably an additional 460 or so people).

Mainland Island Restoration Operation (MIRO) Inc

Statement of Financial Performance

For the year ended 31 March 2022

	Note	This Year	Last Year
Revenue		**$**	**$**
Donations, fundraising and other similar revenue	1	6,637	7,155
Fees, subscriptions and other revenue from members	1	4,761	2,475
Revenue from providing goods or services	1	1,100	425
Interest, dividends and other investment revenue	1	6	2
Total Revenue		**12,504**	**10,057**
Expenses			
Costs related to providing goods or services	2	11,194	3,986
Other expenses	2	287	4,840
Total Expenses		**11,481**	**8,826**
Surplus/(Deficit) for the Year		**1,023**	**1,231**

Statement of Financial Position

As at 31 March 2022

	Note	This Year	Last Year
Assets		**$**	**$**
Current Assets			
Bank accounts and cash	3	5,390	8,751
Debtors and prepayments	3	5,851	805
Inventory	3	-	557
Total Current Assets		**11,241**	**10,113**
Total Assets		**11,241**	**10,113**
Liabilities			
Current Liabilities			
Creditors and accrued expenses	3	677	572
Total Current Liabilities		**677**	**572**
Total Liabilities		**677**	**572**
Total Assets less Total Liabilities (Net Assets)		**10,564**	**9,541**
Equity			
Opening Balance		9,541	8,310
Surplus / (Deficit) for the Year		1,023	1,231
Total Equity		**10,564**	**9,541**

Mainland Island Restoration Operation (MIRO) Inc

Statement of Cash Flows

For the year ended 31 March 2022

	This Year $	Last Year $
Cash Flows from Operating Activities		
Cash was received from:		
Donations, fundraising and other similar receipts:		
Grant from Ministry for The Environment (MfE) *	700	7,845
Grant from Greater Wellington Regional Council	647	5,896
Grant from Hutt Mana Charitable Trust	1,053	-
Fees, subscriptions and other receipts from members:		
Subscriptions	65	78
Donations	4,696	2,397
Receipts from providing goods or services	291	442
Interest, dividends and other investment receipts	6	2
Cash was applied to:		
Payments to suppliers	10,819	8,524
Net Cash Flows from Operating Activities	**(3,361)**	**8,136**
Net Increase / (Decrease) in Cash	**(3,361)**	**8,136**
Opening Cash	8,751	615
Closing Cash	**5,390**	**8,751**
This is represented by:		
Kiwibank Call Account	4,922	8,348
Kiwibank Frontrunner Account	468	403
Total Bank Accounts and Cash	**5,390**	**8,751**

** $7,845 of the 2020-21 year's cash received from MfE related to payment for a March 2020 debtor*

Mainland Island Restoration Operation (MIRO) Inc

Statement of Accounting Policies

Basis of Preparation
Mainland Island Restoration Organisation (MIRO) Inc has elected to apply PBE SFR-A (NFP) Public Benefit Entity Simple Format Reporting - Accrual (Not-For-Profit) on the basis that it does not have public accountability and has total annual expenses of equal to or less than $2,000,000. All transactions in the Performance Report are reported using the accrual basis of accounting. The Performance Report is prepared under the assumption that the entity will continue to operate in the foreseeable future.

Goods and Services Tax (GST)
All amounts are recorded exclusive of GST, except for Debtors and Creditors which are stated inclusive of GST.

Income Tax
Mainland Island Restoration Organisation (MIRO) Inc is wholly exempt from New Zealand income tax having fully complied with all statutory conditions for these exemptions.

Bank Accounts and Cash
Bank accounts and cash in the Statement of Cash Flows comprise cash balances and bank balances (including short term deposits) with original maturities of 90 days or less.

Inventory
Inventory purchased by MIRO and held for resale is valued at the lower of cost or net realisable value.

Fixed Assets
Fixed assets with an expected life greater than one year are capitalised and depreciated on a straight line basis over their expected useful life. Assets deployed in the field, such as traps, are are fully expensed in the year of purchase.

Grants
Unused grant funds are shown on the Statement of Financial Position as Unused Donations and Grants with Conditions.

Changes in Accounting Policies
There have been no changes in accounting policies during the financial year. (Last year - nil)

Mainland Island Restoration Operation (MIRO) Inc

Notes to the Performance Report

For the year ended 31 March 2022

Note 1 : Analysis of Revenue	This Year	Last Year
	$	$
Donations and other similar revenue		
Grants from Ministry for the Environment	-	700
Grants from GWRC	5,584	5,896
Grant from Hutt Mana Charitable Trust	1,053	559
Total	**6,637**	**7,155**
Fees, subscriptions and other revenue from members		
Fees and subscriptions from members	65	78
Donations, koha or offerings from members	4,696	2,397
Total	**4,761**	**2,475**
	-	-
Revenue from providing goods or services		
Trap sales revenue	1,100	425
Total	**1,100**	**425**
Interest, dividends and other investment revenue		
Interest	6	2
Total	**6**	**2**

Note 2 : Analysis of Expenses	This Year	Last Year
	$	**$**
Costs related to providing goods or services		
Nursery costs	3,178	575
Trapping costs	7,194	7,007
ERAT program costs	-	700
Cost of traps sold	822	169
Total	**11,194**	**8,451**
Other expenses		
Printing, stationery, postage etc	-	10
Sundry	287	365
Total	**287**	**375**

Notes to the Performance Report (Continued)

Note 3 : Analysis of Current Assets and Liabilities

	This Year	Last Year
Bank accounts and cash	**$**	**$**
Kiwibank Call Account	4,922	403
Kiwibank Frontrunner Account	468	212
Total	**5,390**	**615**
Debtors and prepayments		
MfE March Claim - unpaid at year-end	-	805
March GST Refund Due	322	-
Reimbursement owed by GWRC for sundry items	5,529	-
Total	**5,851**	**805**
Inventory		
Stock of traps available for sale to public	-	557
Total	**-**	**557**
Creditors and accrued expenses		
GST liability	-	572
Other accrued expenses	677	-
Total	**677**	**572**
Unused donations and grants with conditions		
Grant from Hutt Mana Charitable Trust	-	559
Total	**-**	**559**

Note 4 : Other Disclosures

Commitments

There are no commitments as at balance date (Last Year - nil)

Contingent Liabilities and Guarantees

There are no contingent liabilities or guarantees as at balance date. (Last Year - nil)

Related Party Disclosures:

There were no transactions involving related parties during the financial year. (Last Year - Nil)

Events After the Balance Date:

There were no events that have occurred after the balance date that would have a material impact on the Performance Report. (Last Year Nil)

Reviewer's Report

Report to the Members of the MAINLAND ISLAND RESTORATION OPERATION (MIRO) Inc. on the Financial Statements of the entity for the Year Ended 31 March 2022.

I have reviewed the Financial Statements' section of the MIRO Charities Commission Report for the year ended 31 March 2022.

The Committee's Responsibilities
The Committee is responsible for the preparation of the statements, which present fairly the financial position of MIRO as at 31 March 2022 and its financial performance for the year ended on that date.

Reviewer's Responsibilities
I am responsible for expressing an independent opinion on the statements presented by the committee and reporting my opinion to you.

Scope of Review
My review is limited primarily to the inspection of the entity's financial records and thus provides only a moderate level of assurance and less assurance than an audit. My review cannot be relied upon to prevent or detect fraud or error.

My Opinion
I reviewed the information which I considered necessary to provide me with sufficient evidence to give reasonable assurance that the statements fairly represent the financial position of MIRO as at 31 March 2022.

My review was completed on 20 June 2022 and my opinion is expressed as at that date.

George Tuffin
Accountant
EASTBOURNE