

This season has been exceptionally rough for hoiho, and field staff have worked exceptionally hard through a long tough season and very trying circumstances to deliver the best possible outcomes.

The season got off to a bad start with overall nest numbers on mainland New Zealand (Otago and the Catlins) down to 225, in comparison to 255 breeding pairs last year.

Breeding success also was low with only 0.67 chicks per nest surviving in Otago, and 0.84 chicks per nest in the Catlins (at Trust sites).

While this makes for depressing reading, without any intervention there would have been almost total breeding failure. From 31 nests in the Catlins only a single chick fledged naturally. With assistance we managed to fledge an additional 26. Otago fared slightly better with 10 chicks fledging in the wild from 18 nests.

Two starvation events marred the season, resulting in poor body condition for many birds and leaving them susceptible to disease and other impacts. The first starvation event followed heavy rains in mid-November, when

chicks were particularly vulnerable just after hatching. Floodwaters inundated four hoiho nests. Intense rains resulted in poor foraging conditions with murky seas extending offshore to 12 n.mi (22 km).

In some cases chicks were left without food for several days, when either both parents were home at the nest (when one parent should be out at sea), or one parent was out foraging for multiple days on end. This season parents started post-guard early, leaving chicks alone and vulnerable at the nest at four weeks old – see the photo above. Post-guard normally occurs at six to seven weeks.

Surviving chicks began to put on weight in December, and their condition improved over the Christmas period. Unfortunately, the coastal waters were once again unable to sustain the birds, with a second starvation event resulting in chicks losing weight again from mid-January onwards.

Field staff monitored birds far more closely than usual this year to improve their chances of survival. All chicks that were below 65% of the average weight for their age and deemed to have little chance of surviving were

uplifted. The good folks at the rehabilitation centres were able to supplementary feed these chicks until they were healthy enough to be released.

Concurrent disease issues early on in the breeding season also plagued some chicks. Two particularly severe cases of diphtheritic stomatitis (causing ulcerative lesions and plaques in the mouth) observed at Tavora resulted in the plaques compromising the chicks' ability to breathe and swallow. There were four fewer severe cases at Otapahi.

The season did not improve in January and February, when six adults and one chick from sites spanning from North Otago to the southern Catlins died from "unexplained mortality". While the cause remains unknown, the clinical signs found during post-mortem are always consistent – mass red blood cell destruction particularly in the spleen, lungs and liver. Death is very quick and birds often have extremely laboured breathing, which is very distressing to see.

The uplift of large numbers of chicks requiring rehabilitation meant that penguin transporters, staff and other volunteers

Penguins



The aftermath of flooding at Otapahi Reserve

were very busy. Between February and April, rehabilitated chicks were returned to the Catlins to prepare them ahead of their first trip to sea. Through six separate soft-release processes, Trust staff and trained volunteers fed and released more than 40 chicks from specially built enclosures in the Catlins.

After emerging as a major threat last year, avian malaria was present again this season. At least 14 hoiho (9 chicks and 5 adults) have died from avian malaria so far and more are awaiting post-mortem results. Mosquitoes carrying the blood parasite can

infect birds in the wild or in non-mosquito proofed enclosures in rehab. Because of the high risk of avian malaria infection this season, all penguins at Penguin Place were treated prophylactically with antimalarial tablets and all birds presenting with a positive blood smear were treated at Penguin Rescue. This added a significant amount of stress, time and cost to the already swamped rehabilitation facilities who did a fantastic job of managing the struggling birds throughout the season.

Moulting birds did not escape the trials and tribulations of this season, and the majority



YEPT field team members Ben Goldsworthy (Ranger) and Trudi Webster (Conservation Science Advisor) keep smiling despite the wet.

of birds failed to reach a good enough weight to sustain them through the 3-4 week moult. Again, the sea was unable to provide sufficient food. All birds, no matter their breeding status, struggled to gain sufficient weight, and this season breeders were particularly late to moult. Once again birds were uplifted for supplementary feeding and most would not have survived without intervention.

A record breaking season, for all the wrong reasons, resulted in over 400 birds requiring help and intervention in 2018/19.

REGION	SITE	NESTS 2018-19	(2017-18)	EGGS	CHICKS HATCHED	CHICKS FLEDGED	CHICKS PER NEST
North Otago	Tavora	2	(2)	4	4	l rehab	0.5
Otago Peninsula	Okia	4	(4)	7	6	2 wild	0.5
	Otapahi	8	(10)	16	16	9 (6 wild,3 rehab)	1.13
	Omihi	0	(2)	-	-	-	-
	Otekiho	0	(0)	-	-	-	-
	Allans Beach	0	(0)	-	-	-	-
	Kaikai	0	(0)	-	-	-	-
	Fuchsia Gully	4	(3)	8	7	3 (2 wild, I rehab)	0.75
	Dicks Bush	0	(0)	-	-	-	-
Catlins	Long Point/Irahuka	16	(17)	31	25	II (I wild, I0 rehab)	0.69
	Cosgrove Creek	10	(8)	20	I 9	II rehab	1.1
	Helena Falls	3	(2)	6	6	4 rehab	1.33
	Harts Rock	0	(1)	-	-	-	-
	Purakaunui	2	(1)	4	3	I rehab	0.5
Stewart Island/ Rakiura: Anglem Coast	Rollers	5	(5)	10	_	2	0.4
	Golden	6	(6)	12	-	8	1.3
	The Neck	I (Not searched)	2	-	1	I
Stewart Island/ Rakiura: Bravo Islands	Tommy Island	7	(4)	14	-	5	0.71
	Crayfish Island	3	(2)	6	-	0	-
	Goat Island	2	(I)	4	-	4	2.0
	Groper Island	4	(6)	8	-	3	0.75
	Refuge Island	0	(0)	-	-	_	-
Stewart Island/ Rakiura: Whenua Hou/ Codfish Island	Penguin Bay	2	(0)	4	-	0	-
	Sealers Bay	4	(6)	7	-	0	-
	Roderiques	0	(0)	-	-	-	-
	Northwest Bay	6	(5)	12	-	3	0.5
	Alphonse	I	(5)	2	-	I	1



Hoiho Strategic Review

Further to the November 2018 issue of *Hoiho*, the Hoiho Governance Group and Hoiho Technical Group have been busy advancing the strategic direction for hoiho recovery, the draft of which will be presented at the Annual Yellow-eyed Penguin Symposium in August.

In particular, the Hoiho Technical Group have contemplated all issues impacting hoiho in the marine and terrestrial environments. An extensive list of recommendations from Stage I of the hoiho review (2014), the YEPT literature review (Webster 2018), a penguin textbook (Seddon et al 2013), hoiho population review (Ellenberg & Mattern 2012) and Conservation Services Programme contract on hoiho diet (Mattern & Ellenberg 2018) were used to support the work.

The current state, the objectives or vision for the future state, and the actions required to get there were considered at length for each threat or issue. Actions have been prioritised and include ones that are not currently carried out. The process has woven matauranga Maori throughout. One complication facing the Group when considering each issue is the lack of knowledge about the southern (sub-Antarctic islands) population, and the differences for conservation management of this versus the northern (mainland NZ) population.

The original concept of producing a combined *Threat Management and Recovery Plan mandated under the Conservation and Fisheries Acts* has been updated. This is primarily to ensure the breadth and variety of audiences seeking this information are accommodated. The three-tiered process is outlined below:

Te Kawa o te Hoiho (the Strategy) will outline the vision and 20-year goal, telling the story of the current state of hoiho, and will support good decision-making. The target audience are Ministers, philanthropists, Ngāi Tahu whānui, chief executives and the New Zealand public.

The Action Plan is a living document, actions are aligned to the 5-year goals and will be reviewed regularly by the Technical Group. The target audience are managers from

government and organisations, site managers, individual rūnaka and researchers, and will link to other work such as the Conservation Services Programme.

Tikanga (the protocols) will provide the flaxroot guidance, determining how actions should be undertaken to ensure hoiho are safe and well. The target audience are site managers, NGOs, whanau, fishers, field staff, and other members of the penguin

community. Examples include the already written protocols on disease management.

It is envisaged that the Action Plan and Tikanga will be live online documents, and that only Te Kawa o Hoiho will be published for distribution.

Opportunities for members of the penguin community to comment on these documents will be outlined at the August Annual YEP Symposuim.



Lisa King & Penguin Place staff member Megan Abbott with a load of hoiho being returned to the Catlins

The Penguin Place connection

As the 2018/19 hoiho breeding season draws to a close, there have been many moments when the management of hoiho has seemed like a never-ending battle against multiple threats.

It became apparent early on that the coastal seas that hoiho depend upon were unable to sustain them. From December dozens of starving or underweight chicks and adults were uplifted and taken for rehabilitation onwards, that would have otherwise almost certainly died.

The Penguin Place connection is the key in this rehabilitation effort. Led by owner Lisa King, Penguin Place and its rehabilitation facility has operated for many years but in 2018/19 exceeded all records with over 100 hoiho (at the peak) being cared for at the same time.

Their dedication and commitment has been the key in a huge effort to save both

chicks and, crucially, the breeding adults. Numerous phone calls from the field checking whether we could deliver birds were invariably received positively; even if this meant a drop off well after hours.

Feeding and care for the yellow-eyed penguins occupied Lisa and her team for hours each day and several tonnes of fish were consumed by hungry penguins over the season.

It is hoped that this season's rehabilitation efforts will have significantly improved the prospects for holho breeding in 2019/20.

The Trust also acknowledges the rehabilitation efforts of Penguin Rescue in North Otago and the Dunedin Wildlife Hospital, who have also had a challenging year. Without this tremendous effort from all involved, there would be even greater concern about hoiho survival.



Ben and Sarah rehydrating a hoiho before release



The Department of Conservation's Community Fund grant (2018-2020) is to support our ranger, Ben Goldsworthy, to lead the weed control programme at Okia Reserve.

However, due to the dire state of hoiho populations on Trust reserves and other habitats, the Department granted a variation to the Agreement allowing Ben to work with hoiho throughout the season.

This season proved to be unprecedented in terms of a full transition to an intensive management model. Traditionally, the Trust followed a monitoring model involving three checks during the breeding season (nest search in October, chick check in December and fledging check in February). In recent years, the Trust has moved towards more hands-on management.

Ben has worked almost exclusively with hoiho all season, adjusting his working hours to include late afternoon and evening work to maximise the opportunities for finding underweight or injured penguins as they return from sea. He has assisted the Department with their monitoring programme, assisted the Catlins Summer Ranger, and visited landowners where hoiho are known to breed.

The Trust is grateful to the Department for this variation enabling effort to be placed where it was vital.



Home sweet home – VIP transporter cages lined up ready for an adult holho release.

Transporters are pure gold

While it seems unlikely that a 2002 action movie ("The Transporter", starring Jason Statham) has anything in common with the movement of endangered yellow-eyed penguins, a group of Trust volunteers known as the "Penguin Transporters" have become a significant part of the conservation effort in the 2018/19 season.

A pool of around ten Yellow-eyed Penguin Trust volunteers gave their valuable time to transport injured or underweight hoiho, primarily from the Catlins to Dunedin, for rehabilitation at Penguin Place or treatment at the Dunedin Wildlife Hospital before they were returned to the wild.

Clocking up 5384km in the Trust Foton over 29 trips amounting to 144 volunteer hours, they transported 45 birds from Trust and Department of Conservation reserves ensuring timely treatment. A requirement of the role was flexibility, with call outs happening at any time, including public holidays.

Needless to say, the work of the transporters has been invaluable in freeing up both Trust and DOC staff to focus on monitoring and managing hoiho in their habitats.



Long Point field base process bogged down in red tape

In the last edition of *Hoiho* we said we hoped this edition would include photos of the completed field base at Long Point/Irahuka. Unfortunately, the consent process has got in the way and the base is still not yet erected on site.

We have received Resource Consent from Clutha District Council, but still await the Building Consent from Dunedin City Council. The two different councils are involved as CDC consents everything external to the containers, and the DCC consents the container refurbishment as that work is being undertaken by a Dunedin-based company.

The delays have caused immense frustration given the extremely poor breeding season when a field base from which to operate out of would have helped immensely with logistics for staff and volunteers.

Hopefully by the next edition of *Hoiho* we have more positive news.



Catlins Summer Ranger Sarah Irvine



Hoiho release — what a fantastic sight

Catlins Summer Ranger

The Department of Conservation funded a 'Catlins Summer Ranger' position, specifically to monitor hoiho in that area. Employed by the Trust in this role, Sarah Irvine started in January on an 18-week contract.

Being a local Owaka resident means Sarah is close to many of the hoiho habitats she monitors regularly. Her work involves late afternoon and evening work to ensure she is around at a time when the birds are returning to land after a day foraging at sea.

Having Sarah based in the Catlins has been extremely valuable for monitoring, identifying sick or injured or underweight birds and helping with the soft release of so many chicks from the Catlins.

The Trust would love to see this role turned into a permanent all-year round position, but like all employment contracts, it is completely dependent on securing funding. We're working on that!

Sarah: "Ten cages are lined up on the beach. I'm one of a team of people who stand back as the cage doors are opened and ten freshly-moulted, healthy hoiho hurry out making a beeline for the surf. Watching them waddle into the water and duck and dive through the waves as they disappear out to sea is right up there on the 'This is a great day at the office' scale!

I am privileged to have worked this season with a great team of people in hoiho conservation in the Catlins. Late night chick feeds at the soft release pens, crawling through scrub in search of skinny moulters, waiting for hoiho to arrive home in the evening for health checks, and hauling injured penguins out of remote and tricky locations has dominated my summer and autumn.

We have helped with feeding, searches, penguin spotting, recovery, and transporting birds from Owaka to Dunedin Wildlife Hospital and Penguin Place.

It has been great to contribute towards helping Catlins hoiho through this very challenging season, meet a lot of amazing people along the way, and watch as these penguins come home healthy with a fighting chance for next season. Thank you."



Releasing a hoiho are (from left) Brett Henshaw, Dave McFarlane (Field Manager YEPT) and Miles Hurrell.

Visitors from Fonterra

Miles Hurrell (Fonterra CEO) and Brett Henshaw (Fonterra Brands General Manager) took time out from customer visits with Steve Anderson, CEO Foodstuffs South Island to visit the Trust. This was great timing as we celebrate our 30-year partnership with the Mainland Brand, owned by Fonterra.

The early morning trip was an opportunity to take them to the Trust's Otapahi Reserve to show them the work undertaken. Here they had the opportunity to release two adults on the headland above a penguinlanding site.

These birds had been in rehab at Penguin Place due to being underweight, so it was great to see them healthy and racing off into their natural environment.

COMING UP

Arbor Day planting

Wednesday 5 June 2019
It is that time of year when the Trust begins planting in hoiho habitats. Please join us: Tavora Reserve, Goodwood Road, East Otago. Meet at carpark at 10am. Remember to bring warm and wet weather clothing, and wear sturdy footwear. Bring your own lunch and drinks. You may also like to bring your own spade and gardening gloves.

There will be a further planting day at Tavora, so watch out for this announcement on Facebook and our website.

10th International Penguin Conference 2019

24-28 August 2019 Keep up-to-date as planning for this conference proceeds. Visit www.penguin-conference.com

Rare Okaihe trip

Our Conservation Science advisor Trudi Webster was lucky enough to catch a helicopter to Green Island/Okaihe with Department of Conservation rangers in February, as part of the hoiho monitoring programme. Green Island is a small nature reserve about 2km off the coast of Dunedin between Blackhead and Brighton.

As well as being a breeding site for hoiho, Green Island is also home to little penguins, Otago shags and the quirky looking royal spoonbills (affectionately known as spoonies). The rare Cook's scurvy grass, which is threatened with extinction, is also found on the small rocky island.

Despite the fact that the team visited Green Island late in the breeding season, four fledglings from different nest sites were still present. Unfortunately, as on the mainland, chicks were subject to starvation and one needed to be uplifted for supplementary feeding. Two live adults were seen, and one was taken to the Wildlife Hospital with injuries to its right leg.

A freshly dead adult was sent to Massey University for post-mortem, which later revealed that it had succumbed to avian malaria.



Did you know that you can now support the Yellow-eyed Penguin Trust when going on a holiday or business trip?

We have partnered with Ezibed, who are on a mission to give back to local communities and charities. For each night's accommodation booked online, Ezibed will make a donation to a local community project or charity of your choice. The best part is — there is no extra cost to you.

So next time you plan a trip away, head over to **ezibed.com** to book your perfect place to stay and don't forget to select the Yellow-eyed Penguin Trust before checkout.

Supporting the Yellow-eyed-Penguin Trust has never been easier, and you get to enjoy a good night's sleep at some of New Zealand's best and most affordable accommodation providers.



Planning for the 10th International Penguin Conference is well underway with the local planning committee meeting regularly to confirm various aspects of the conference.

It is exciting for the penguin community of NZ to know this event is returning to Dunedin where the first international conference was held 31 years ago. Back then issues affecting penguin survival were thought to be terrestrial-based such as habitat destruction and mammalian predation. Fast forward to today, and we now believe the biggest issues are marine-based and probably climate change related.

The International Scientific Committee has assessed the 195 abstracts received and decided which of these will be offered one of the 60+ presentation slots. The balance will be invited to present their work as a poster.

The abstracts chosen will cover a variety of issues and research topics. The main conference themes for which each has a keynote address are:

- The role of indigenous people perspectives of different cultures.
- Climate change
- Fisheries interactions and seabird by-catch
- Diseases and the management of them
- Global penguin threats
- Penguins as marine sentinels.

The local planning committee has representatives from the Trust, Blue Penguins Pukekura, DOC, University of Otago and the Oamaru Blue Penguin Colony.

The conference starts with an Icebreaker on the evening of Friday 23 August, and the conference itself goes from Saturday 24 to Wednesday 28 August. Add-ons include field trips with the Trust, and Oamaru Blue Penguin Colony, and a conference dinner at Larnach Castle. It is hoped this conference will attract up to 250 delegates.

For more information visit www.penguin-conference.com



Mainland feels the love at awards

As usual, the team at Mainland have been busy making sure the cheese is aged to perfection, before sending it to the stores for you all to enjoy.

It was fantastic to receive some more recognition recently for all that patience we take to age the cheeses for a better taste. Back in March, Mainland cheeses won eight medals at the New Zealand Cheese Awards – two golds and two silvers for our world-famous aged cheddars, a silver for our Egmont cheese (which is a great melting cheese so perfect for baking or for a quick cheese roll) and a silver each for

our Double Cream Brie, Double Cream Camembert and our delicious Haloumi.

Mainland Tasty and Vintage were the gold award winners yet again, so we are hoping that they may be in the running for a Champions Cheese Award which is to be announced at the upcoming gala event for the Cheese Awards in late May.

We were also delighted to have been voted New Zealand's most trusted cheese brand in the recent *Readers Digest* Most Trusted Brands Survey. We also ranked at number 13 in the overall most trusted brand list, so thanks for trusting and loving our cheese.



Pure gold! YEPT congratulates Mainland on their success at the NZ Cheese Awards.



Join the Club

Donate the cost of just one cup of coffee (\$5) per week and help YEPT gain a level of financial independence!

We encourage you to join the Hoiho Coffee Club, or ask a family member or friend to join, and help the Trust continue to protect our endangered hoiho.

See the form posted with this newsletter.



Luke Gardener (pictured left) and Josh Brinkman getting into the spirit of driving from the UK to Mongolia. And yes, the car was stopped for this pic, i.e. no penguins were injured in the taking of the photo.

Help Mainland raise \$75,000 to save hoiho Buy Mainland Hero logo on the labels

and you are helping to save the

endangered yellow-eyed penguin.

The Penguin Express

Two kiwis, dressed as penguins, driving 20,000kms across 20 countries, in a comically small car, for charity?

Luke Gardener and friend Josh Brinkman met as students at the University of Otago and became great mates doing all kinds of adventures together.

Luke was one of the Trust's Emerging Leader Trustees, a programme set up to appoint young people to the Trust Board while giving the young leader some experience with governance.

Their latest adventure is driving from the United Kingdom to Mongolia through

Central Asia in a tiny car as part of the 2019 Mongol Rally. What could go wrong? Breakdowns, running out of fuel, corrupt officials, theft, being taken hostage, car accidents, bites from rabid animals, or getting lost... to name a few possibilities!

To make the trip a bit more interesting Josh and Luke will be dressed as penguins while travelling to raise money for two great charities, The Yellow-eyed Penguin Trust and Cool Earth,

We wish them well and will enjoy following them on this journey. Follow them on Facebook "The Penguin Express" or Instagram "Penguin Express".

A note from the Chair



After weeks of fine, dry weather in the Catlins it has started to rain.

I mention this because the change in weather has put in peril the placing of the four containers that will constitute our field base at Long Point/Irahuka. Now the wet winter weather has arrived it will be months before we can to get two truck-and-container units on-site and unloaded.

This delay has implications for how we plan and implement our work programme for next season. As I mentioned in our previous newsletter, this project has taught us many things and it will be worthwhile if we get an opportunity to present this experience as a case study in project management.

Speaking of opportunities-to-present; our multi-partner Hoiho Governance Project is working so well Part 2 will be presented at the August 2019 Annual Yellow-eyed Penguin Symposium.

Over the years, this gathering of the penguin community has gone from strength-to-strength and brings everyone up to date on what has happened in the preceding season and what is planned/likely to happen in the forthcoming one. Sue Murray from YEPT and Bruce McKinlay from DOC play key roles in organizing this event. Also, Sue is on the organizing committee for the 10th International Penguin Conference to be held in Dunedin later in August.

No sooner will these major commitments be met than the new breeding season will demand our attention. This year there is no let-up between seasons for staff who have worked tirelessly to save as many birds as possible in the hope that they will return to successfully breed next season.

Eric J. Shelton Yellow-eyed Penguin Trust Board Chair

Our thanks

Thank you to our regular supporters:

Supporters Group Nursery supporters AdArt Brand Promotion Blackhead Quarries

Coffee Club supporters Department of Conservation DOC Community Fund

Downie Stewart

DCC (Task Force Green team) Foote Haulage (Woodlands) Forest & Bird South Otago Branch

Mainland Brand

NZ Deer Stalkers Association (Dunedin Branch)

Otago Peninsula Biodiversity Group

Otago Regional Council

Richard Roberts

The Malcam Charitable Trust

Thank you for funding from:

A P Reed Estate City Forests

Clutha District Council Distinction Dunedin Hotel

Dunedin Airport

EcoWai and partners to the programme

Grumitt Sisters Charitable Trust Holiday Parks Association NZ Noble Caledonia Charitable Trust

Otago Pellet Fires Palmerston Lions Club Penguin Fund of Japan Sargood Bequest Scenic Hotel Dunedin City Southern Institute of Technology Te Uru Rākau/Forestry NZ Top 10 Holiday Parks group

Woodland Eggs

WWF NZ Habitat Protection Fund

Special thanks this issue to:

Andy and Melissa Moore Catlins Area School DOC - Owaka Doug Broekstra

Dunedin Wildlife Hospital

Graham Thurlow Guy Blakely Jack Woods Jeff Cleugh Jane Young Max Affleck

Megan Abbott **Mel Young**

Michael Stevenson

Penguin Place

Penguin Rescue

Roy Johnstone

Sylvia Otley

Stu and Jen Affleck

Tim Mepham

Vanitha Elangovan

Will Rayment

Penguin Transporter volunteers:

Alan and Dianna Coster Bryony Alden David Smith

Don Early

leff Cleugh

Jo Little

Kay and Harold Raw Murray Smeaton

Tony Stewart

Thank you to Volunteers who helped our Catlins Summer Ranger:

Abby Clarke Anna Burrell Annie Jackson Clutha Vets

Connie Waddingham

David Exton Keira Edwards

Jim Young Maya Lipitz Olivia Hickman

Samantha Howarth Steve Butler

Trevor Hewson

Thank you to all the Volunteers who assisted with this years' soft release of hoiho chicks. There were too many names to list here.

Thank you to:

All the Landowners who have contributed to our habitat protection work

Thank you to all Volunteers:

We are tremendously grateful to all the other volunteers, including the regular Nursery workers and the Habitat Volunteer Team for their valuable contributions to our work. Special thanks to the team at AdArt Brand Promotion for the design of this newsletter

The production of this Hoiho newsletter by AdArt Brand Promotion ticks all the green boxes

Penguins. Plants. People. Passion.

Te Tautiaki Hoiho

Level I, John Wickliffe House 265 Princes Street, Dunedin New Zealand 9016

Phone +64 3 479-0011

enquiries@yeptrust.org.nz www.yellow-eyedpenguin.org.nz