



Hoiho

www.yellow-eyedpenguin.org.nz ISSN 1179-2981





Papanui waka found on Trust reserve

Shar Briden, Technical Advisor Historic and Cultural, Department of Conservation

Last year a partial hull of a totara waka was re-discovered on the foreshore bounding the south of the Okia Flat Reserve, Papanui Inlet, Otago Peninsula.

The Reserve is managed by the Yellow-eyed Penguin Trust (YEPT) and Dunedin City Council (DCC). Jim Fyfe (DOC) and Kuini (Carole) Scott and myself were among a group monitoring the foreshore (4th October 2014) when they came across a length of exposed timber resembling a 19th Century fence post. The timber was exposed two centimetres above the sand over a 1.2 metre length and appeared well weathered. We three knew it was something out of the ordinary. A person had been seen driving over the waka with a four-wheel ATV sparking urgency for recovery.

It was a surprise to everyone to find the partial waka measured 6.17 metres long once excavation exposed it. There was no stern section or prow present suggesting the waka may have been constructed in three separate pieces then lashed together to form the base of the hull. Radiocarbon dates obtained from plaited fibre (cordage or rope) found both inside and outside the waka hull indicate a date of use around 450 years ago (Dilys Johns).The fibre may be dressed cabbage tree leaves.

A group of dedicated archaeologists and volunteers have been monitoring the foreshore over the past eight years. The group set up in 2009 includes Dr Matthew Schmidt (Heritage NZ), Phil Latham (Otago University), Dr Jill Hamel, Hoani Langsbury and Rachel Wesley (Te Runanga o Otakou), Juliette Parsons (a volunteer who has tirelessly monitored the foreshore since 2007), a representative from YEPT and DCC, Gordon Graham and Leith Thomson respectively, and myself.

The waka is currently housed at Te Runanga o Otakou on Otago Peninsula.

Penquins. Plants. People. Passion.

When is a penguin not a penguin?

By Jane Young Answer:When it is a canary

Did you know that it wasn't until 1987 that the last 200 canaries used as early warning systems in Britain's coal mines were finally made redundant? Electronic gadgets now play an important part in all sorts of environmental monitoring, including that of coal mines, but when it comes to overall ecosystem health, there's no substitute for looking at what's happening to populations of real, living organisms.

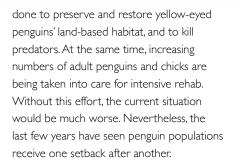
The yellow-eyed penguin is just one of the penguin species that can be thought of as canaries in the ecosystem coalmine. Despite the best efforts of conservationists, there are now fewer breeding pairs of yellow-eyed penguins in the South Island than there were 30 years ago. Overall, the last three breeding seasons can best be described as disastrous.

It's interesting to compare the yellow-eyed penguin's situation with that of the tiny yellowhead/mohua (coincidentally known as the 'bush canary'), which shares the yelloweyed penguin's 'nationally vulnerable' status. There are now only isolated populations of mohua, living in beech forests in the south of the South Island where they face a number of threats, especially from introduced predators such as ship rats. Research shows that the problem is most acute in mast years when beech trees produce huge amounts of seed that trigger off an explosion in predator numbers.

No large-scale conservation work is simple – and certainly none of it is cheap – but at least we can give the mohua a fighting chance of survival by monitoring beech tree flowering and responding to mast events with intensive predator control.

The situation with yellow-eyed penguins is much more complex because they don't live in a single, terrestrial habitat. It's relatively easy to find out what is happening on land – although the dedicated band of nestsearchers who regularly brave driving rain and vicious ongaonga (native tree nettle) to collect data may not agree – but of course at sea it's a different story.

An enormous amount of work has been



During the 2010/11 breeding season nest numbers were on par with other years, but *avian diphtheria* struck Otago Peninsula populations, especially at Boulder Beach and Sandfly Bay where about half the chicks died. The disease first appeared in 1999 but it's still not clear what triggers the regular outbreaks. During the 2010/11 season there were also food shortages, which resulted in underweight birds having to be transferred to Penguin Place's hospital for extra feeding.

If avian diphtheria is something of a mystery, the disease that killed scores of penguins in the 2012/13 season still has scientists almost completely baffled as to what caused otherwise healthy birds to literally drop dead in their tracks. The penguins showed damage to their red blood cells, but all the obvious suspects came up negative. Possibly a biotoxin from an algal bloom was the culprit, but cost restrictions limited further research.

Catlins populations, such as the one at Te Rere, escaped this disease and generally had a good year, but in the next breeding season the overall pattern was the same as that in the rest of the mainland: reduced nest numbers and low chick weights. No fewer than 63 underweight chicks from the Catlins had to be taken in to Penguin Place for care. By the 2014/2015 season, it was the turn of the Long Point population to join the litany of disaster. By March 2015 only 28 chicks were considered likely to fledge, and that included some of the chicks which had been taken in for rehabilitation but were unlikely to survive. (Sixty chicks fledged at Long Point in 2014, and 71 in 2013.)

The reduction in mainland nest numbers in 2014 wasn't unexpected. During the season, however, it became increasingly obvious that when the adult birds were away fishing they were being forced to run a gauntlet of razor-toothed barracouta. By mid-March 2015 almost 50 adult birds had to be taken into care because they were suffering from wounds inflicted during attacks, and of course there's no way of knowing how many more penguins have died at sea.

Could these recent mortality events be entirely 'natural' in the sense of not being caused by humans? Disease, food shortages, environmental fluctuations, predator explosions, population declines – don't they happen all the time?

Well, yes. But normally a species would have to be pretty unlucky to get hammered by all these things at once. It usually takes some catastrophic event to put a species on a downward slide in such a short period of time. This happened to the yellow-eyed penguin's predecessor around these parts, the waitaha penguin, which was eaten to extinction within a century or so of human occupation. Yellow-eyed penguins arrived here by the end of the 15th century, and although they no longer get eaten by humans, there is an ever-increasing probability that we will be responsible for their demise as well.



Yellow-eyed canaries? Humans are still directly responsible for the death of some yellow-eyed penguins, whether this be in fishing nets or from attacks by uncontrolled dogs. Stress caused by human disturbance can lower breeding success. However, most of the population decline is due to less obvious causes. Penguins are an especially sensitive indicator of the damage we are doing to the environment because they are vulnerable at so many different points. Just a few questions to think about:



A malaria-like parasite has been associated with Stewart Island chick deaths. What effect does global warming have on the distribution of insect disease vectors?

Are penguins becoming more susceptible to avian diphtheria? And if so, why?

If the penguin deaths in 2013 resulted from a biotoxin produced by an algal bloom, what caused the bloom? Excess nutrient run-off? Warmer water?

Are penguins starving because of increased competition for food with humans?

Are marine food chains being disrupted because of ocean acidification and/or global warming?

Is the recent increase in numbers of predatory barracouta linked with the warming of the southern oceans?

We don't know what the answer will be as to whether or not yellow-eyed penguins have a long-term future on this planet. But we do know that their demise would be a sharp warning – if we still needed one – about the need to take action in order to reduce the damage that we are doing to this planet that we all must share.

Yeps arrived 1500-ish

An international research team led by scientists from the University of Otago's Department of Zoology has documented one of the most rapid biological transition events ever found.

The team used carbon dating and ancient DNA analysis of archaeological penguin remains from coastal New Zealand to establish the timing of penguin extinction and colonisation events.

"Previous research has shown that at the time of human arrival, New Zealand was inhabited by the waitaha penguin. Hunting and habitat change apparently caused the extinction of this unique mainland penguin, before the yellow-eyed penguin later arrived here from the subantarctic," says Dr Nic Rawlence, who carried out the study.

"Until now, we really had no idea when one species went extinct and the other colonised," Dr Rawlence says.

The new dating study has shown that waitaha penguin went extinct around the same time as the giant flightless moa, within 200 years of Polynesian settlement of New Zealand, before 1500 AD. Intriguingly, the yellow-eyed penguin then replaced the extinct penguin within just a few decades, in the early 1500s.

"This very rapid biological shift implies a substantial change in human pressure around this time. Interestingly, recent archaeological studies similarly suggest that the Maori population in southern New Zealand declined around 1500 AD, and coincided with a major dietary shift," says Associate Professor Ian Smith, who was involved in the study.

"This unique combination of factors seems to have allowed yellow eyed penguins to establish the mainland populations we see today," says project leader Professor Jon Waters.

This Marsden and Allan Wilson Centre-funded research included team members from the universities of Auckland, Otago, Adelaide and Oslo, as well as Canterbury Museum and the Museum of New Zealand Te Papa Tongarewa.

The team's findings have been published this week in the leading international journal 'Quaternary Science Reviews'.

For further information, contact: Dr Nic Rawlence, nic.rawlence@otago.ac.nz Prof Jon Waters, jon.waters@otago.ac.nz Assoc Prof Ian Smith, jan.smith@otago.ac.nz



Coming up

PLANTING DAYS Arbor Day, Friday 5 June at Okia Reserve Thursday 2 July at Tavora Reserve

ANNUAL YELLOW-EYED PENGUIN SYMPOSIUM

Saturday I August at University College

Find more info on the website and Facebook

Penquins

WHENUA HOU-CODFISH ISLAND AND STEWART ISLAND-RAKIURA SURVEYS

Concern at steady decline

The steady decline of yellow-eyed penguin nest numbers on Whenua Hou/Codfish Island, from 61 in 2001 to 37 in 2013, has been both concerning and a little puzzling.

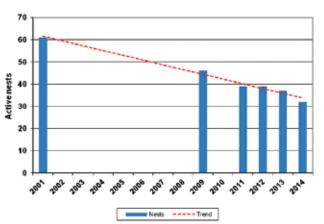
Concerning, as Whenua Hou was the bright spot in the Trust's 1999-2001 Stewart Island-wide survey that revealed significantly lower numbers than estimated, and puzzling because Whenua Hou is free of terrestrial predators and has limited human disturbance.

While poor juvenile survival is the apparent cause of decline (recruitment is very low and sightings of juveniles rare), the accuracy of a single count by two or three experienced nest searchers has always been unknown. Could it be that the nest searchers were becoming less effective over time?

To find out two teams were sent to Whenua Hou in 2014 to undertake a double-count. They worked independently, working in separate areas on separate days, marking nests discretely, recording GPS tracks and saying nothing over the dinner table.

After five days of searching the teams had covered the five discrete search areas and were able to compare notes. Long-time Whenua Hou searchers Dean Nelson and Dave Houston found 30 nests, while the experienced Sandy King and newcomer Aviva Stein found 27 nests – 25 of which were in common, meaning that while a total of 32 nests were found mark-recapture theory provides an estimate of 36. This means that Dean and Dave had a detection rate of 84% and Sandy and Aviva of 76%. While having evenly experienced/able searchers would be ideal, the detection rates were reasonably high and probably would have been higher in better weather (rain doesn't make it easy).

While the double-count method demonstrated that a single search can detect 84% of nests on a rugged and thickly forested island, the two teams also demonstrated that the decline in nest numbers on Whenua Hou is real and ongoing.



The 32 nest sites found were revisited in February 2015 by Sandy King and volunteers Riki Parata, a student studying environmental management at the Southern Institute of Technology, and Dannie Cullen and Samantha Collings, both Sir Peter Blake Trust Conservation Ambassadors. They found 33 chicks still alive with weights ranging from 2.40-6.15kg, with the average weight being 4.81kg. The team felt that some chicks were so underweight and thin that it was unlikely they would fledge. Only 29 chicks are expected to have fledged from Whenua Hou this season.

On Stewart Island monitoring was limited to one site at The Neck. Sandy King and Timu Moxham, a pupil at Halfmoon Bay School, found just three nests in November 2014. They returned in December and found four chicks, which were all still alive in late-January 2015. However, these chicks were very lightweight and only one of them was thought likely to fledge.

These results suggest an issue with food supply so the Trust's proposal to put more effort into marine research makes good sense.

The proposal to trial camera traps to monitor nests on the Anglem Coast of Stewart Island was stymied by problems sourcing the cameras on time.



Timu Moxham and Kyle Learmonth climb aboard Ian Wilson's water taxi



Timu finds an inhabited nest



TRUST RESERVES SURVEYS

Poor numbers

Following on from the lower nest numbers reported in *Hoiho* (November 2014 edition), there has been an overall decline in the number of chicks thought to fledge on Trust-owned reserves.

This decline was particularly pronounced at Long Point in the Catlins (28 chicks thought to fledge, down from 60 in 2013/14), while other reserves plateaued at or near their previous lows.

Chick transpondering in late-January was led by Trust rangers Leith Thomson and Aviva Stein, and reflected the extended egg laying in September/October and then hatching. Unlike most seasons when chicks can be marked in one visit, this time multiple visits were required due to their differing ages and size ranges.

The number of chicks thought to fledge also conceals the reality that many chicks were rescued post transpondering, and taken in for rehabilitation as they were losing weight. It is likely that when final figures are collated chick fledging figures will be even lower.

Yellow-eyed Penguin Trust Reserve	Chicks thought to fledge	Chicks fledged 2013/14 2012/13
Long Point	28	60/71
Cosgrove Creek	14	10/18
Okia	6	3/17
Otapahi	13	7/22
Tavora	4	6/4



Disease returns

The disease *avian diphtheria* affects the Otago population of yellow-eyed penguin/hoiho badly every second year. This season there were 252 breeding pairs located on the Otago coast, of which 75 breeding pairs have been found on the Otago Peninsula.

It is thought that the disease first appeared in hoiho chicks in 1999, and in bad years it can affect up to 90% of chicks. It is one of several factors preventing the mainland hoiho population from growing.

The disease causes ulceration of penguin chicks' mouths, making it difficult for them to eat and breathe, and can become fatal if left untreated. This season, approximately 80% of the chicks on the Otago Peninsula were affected by *avian diphtheria*.

Research into the disease has been ongoing for the last decade, however, despite this the disease lacks an identified cause.

This season, a team of experts led by DOC Threatened Species vet Kate McInnes, MPI vet Kelly Buckle, as well as DOC, Penguin Place, and Yellow-eyed Penguin Trust staff took samples from chicks on the Otago Peninsula to try to determine the initiating cause. They are hoping that their research could lead to the discovery of a cure – potentially a vaccine – or better ways of managing the disease, to prevent mass-mortality of chicks in the future. Researchers from Otago and Massey Universities, as well as MPI's Animal Health Laboratory are also involved with the current investigation.





Protecting the great unknown

We are sure you are aware of the efforts now being made to create a Marine Protected Area(s) on the coast between Timaru and Waipapa Point (roughly the southern end of the Catlins coast).

The South-East Marine Protection Forum has been created, a body of 14 people representing many areas of the community. Their job is to gather information from the public and form a consensus of opinion such that they can go back to government next year with a recommendation for one or several areas and the types of their protection.

Yellow-eyed penguins would surely benefit from the fragile environment that they are struggling to survive in, particularly highlighted in the last four poor breeding seasons.

The forum is looking for ideas, suggestions, stories and memories of what the coast used to look like. What biodiversity used to look like and how we value it now. What we would like for the future.

It is well recognised that our coast is a very special one. The spectacular cliffs, estuaries and beaches all the way down the coast are the home of many species of seabirds – New Zealand has more threatened seabird species than anywhere else in the world. Our seas contain an incredibly rich variety of fish, some commercial, some not, but all requiring protection.

Science and experience with marine reserves have proved the benefit of no-take marine reserves is that fish stocks will increase. In fact the spill over from the reserves will benefit fishing adjacent to a reserve, not spoil it. Well designed, a no-take marine reserve will benefit all species. A marine protected area will, to a lesser extent.

On a world scale the oceans and seas are being plundered. Our coastal waters need protection so that future generations can enjoy this fantastic coastline as we have done. Incredible efforts by the Trust with the public over the past 25 years have largely offered the yellow-eyed penguins the breeding habitat they need on land. The focus now is on the 'great unknown' of their life at sea.

The Yellow-eyed Penguin Trust urges readers to add their input to the forum.

This can be done on line by submitting what you feel is important at: www.south-eastmarine.org.nz

Their Seasketch tool is slowly being developed with more data being released by the forum over time. It is a great interactive tool that is good to get a feel of at this stage.

The forum also has an 0800 number - 0800 687 729



The South-East Marine Protection Forum has been established by the government to find out the long-term vision for our coast.

The role of the Forum's 14 members is to identify what's important to you in our marine environment and what you'd like to see protected.

Over the next 18 months, the Forum will meet and consider the best information about the marine environment from Timaru to Waipapa Point. It will then recommend a network of Marine Protected Areas (MPAs) to the government, where they should be located and what protection they should have.

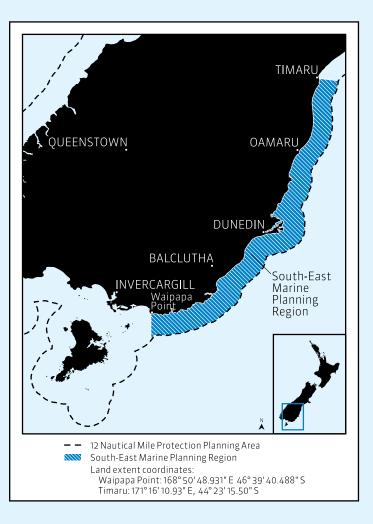
OUR SEA YOUR SAY

Marine protection in New Zealand

The government is committed to creating a network of MPAs to protect a representative sample of New Zealand's coastal environments and habitats and marine areas that are outstanding, rare, distinctive or internationally or nationally important, while minimising impacts on existing users.

MPAs encompass a variety of conservation and management methods. The South-East Marine Protection Forum is focusing its initial work on identifying what people know and value about the area, how people use it and what they want to see at the end of the process rather than focusing on protection tools and procedure.

www.south-eastmarine.org.nz





Passion

Barracouta bites – a cor

This season, not only did the yelloweyed penguins suffer from the *avian diphtheria* outbreak, but in February and March, there were an unprecedented number bitten by barracouta. These predatory fish have razor-sharp teeth and swim through the sea snapping at anything that moves.

Whether the penguins were a deliberate target is unknown, but what is known is that more than 50 birds have been treated for bites to their feet, lower legs and abdomens as a result. Many organisations were involved in the care of these injured birds and the Trust played a major role, not only in searching beaches for injured birds, but also in raising awareness and funds to assist a variety of organisations involved.



Department of Conservation

DOC has a statutory obligation under the Wildlife Act (1953) and Conservation Act (1987) to manage yellow-eyed penguins and as such, guides any rehabilitation of this protected species. Their own limited budget has been exhausted during this process, as veterinary supplies and transportation costs have exceeded all expectations of a 'normal' year's rehabilitation requirements. Local DOC ranger, Mel Young, coordinates meeting the birds' needs when they have been located on beaches. Mel collects them, organises treatment and/or transportation, depending on their state of health. Remember these birds can turn up on remote beaches anywhere along our eastern coastline, so sometimes considerable travel is involved. DOC also has a Wellington-based vet, Kate McInnes, who can be called on at short notice to advise on any events, and suggest care regimes that may be required each season.



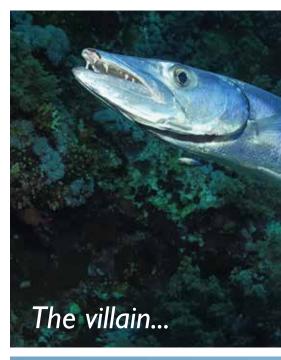
St Kilda Veterinary Centre

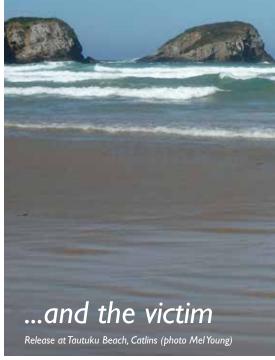
Injured birds brought in by the Trust and/ or DOC are assessed as to whether their injury requires minimal attention by way of surgery and a stitch or two, or more extensive surgery, followed by rehabilitation in an approved facility. For many years, local Dunedin veterinary services have been provided free of charge by vet Tony Malthus and his team at St Kilda Veterinary Centre, and their commitment to help save these birds is of the 'unsung-hero' nature.



Penguin Place

Following veterinary care, birds are then sent to an approved penguin hospital for rehabilitation, where they may stay for a few days or several weeks. When in care they are fed, medicated and given space to swim in an enclosed pool to ensure their natural instincts for water and preening are not lost. Penguin Place on the Otago Peninsula is a commercial tourism operation run by the McGrouther family under the leadership of Lisa King and has, as part of its operation, a rehabilitation facility. During the 'barracouta biting' season this facility was home to numerous birds in care to manage the variety of injuries. Penguins in care require feeding twice a day, up to 1kg of fish smolt (15-20cm long) at each feed so as you can imagine that is a lot of fish. The Yellow-eyed Penguin Trust





A huge thank you to everyone who supported this Urgent Appeal which, in only a few weeks, reached the amazing target of just under \$7000 which was then dispersed among the nine identified groups outlined here. Donations can still be made through the Yellow-eyed Penguin Trust's 'Donate Now' button or send a cheque to PO Box 5409, Dunedin 9054.

Passion

nmunity rallies





Or direct banking: Account name: Yellow-eyed Penguin Trust Bank: SBS Dunedin Account number: 031355-0549558-00

And remember, however you donate, please use the reference word 'Barracouta' to ensure your donation goes to this appeal. was delighted that, also through the Urgent Appeal, came offers of fish.

As a result Penguin Place received fish from Ngai Tahu Seafoods, Sanford (Timaru), Canterbury Pet Food, Clearwater Salmon Hatchery (Christchurch) and Pendarves (Auckland). Sincere thanks to all.

Penguin Rescue

This is another rehabilitation centre, permitted by DOC, to care for penguins injured or underweight. Run by the Katiki Point Penguin Charitable Trust this centre is based on the Moeraki Peninsula near the famous lighthouse, and is managed by Rosalie Goldsworthy. Here penguins (of all species) are cared for and fed back to a healthy weight before being released into the wild.

New Friends of Bushy Beach

A smaller rehabilitation centre, based in Oamaru, cares for about six birds at any one time. They too feed and medicate any birds in their care back to optimal health before releasing. This facility is managed by Colin Wolverson and Sue Downton.



Air New Zealand

Our national airline provides mercy flights for penguins requiring more intensive veterinary care, all free of charge. This season at least 15 birds were flown to Massey University's Wildbase and a further six to Wellington Zoo. Each trip by plane would normally cost about \$300 return, so this offer by Air New Zealand is a great saving on budgets. Staff at Dunedin Airport ensured the penguins were stowed away safely in cages big enough for them to move, and yet had no openings that may see beaks or feet jammed.



Massey University's Wildbase

Injured birds flown to Palmerston North to Massey University's Wildbase centre are requiring more extensive surgery to treat injuries, and often stay on site for a few weeks to ensure any infections are controlled, before being flown back to Otago for rehab and eventual release back into the wild. The Yellow-eyed Penguin Trust has, for several years, partnered with Wildbase and enjoys hosting veterinary students annually to assist in the monitoring programme and to give them a hands-on experience of working with an endangered species.



Wellington Zoo

Wellington Zoo has become more involved in penguin rehabilitation this year thanks to the personal interest of their resident vet, Lisa Argilla, and how timely it was! The Zoo is a charitable trust and their conservation fund is used for treatments such as that for the injured penguins. A penguin in care for a period of 4-6 weeks is likely to cost between \$1500-\$2000 so you can see why our Urgent Appeal and other direct donations have been so vital.

Thank you

People



A juvenile yellow-eyed penguin at home on Enderby Island

Return to sub-antarctic islands

Aviva Stein, YEPT Ranger

For the fourth year running, the Yellow-eyed Penguin Trust and the Department of Conservation have joined forces, along with six keen volunteers to get an idea of penguin numbers in the Subantactic Auckland Islands.

On November 14th, we met our fellow expedition members in Invercargill for quarantine and briefing, and spent a luxurious night at the Tuatara backpackers. After our last night on terra firma, we set sail from Bluff on the *Evohe*, a tried and trusted 25 metre yacht for these conditions with a great captain, Steve Kafka, and crew.

We were lucky to have seasoned crew member David Smith, a YEPT Trustee on board, as well as Hamish McFarlane, notorious tender driver and YEPT committee member.

After 32 hours of one of the roughest sailings known to personkind, we arrived in the shelter of Ranui Cove and moored there for the night. The following day, we dropped offYEPT Senior Ranger Leith Thomson and Karin Sievwright a Massey student, who was scoping out the area for her PhD work on yellow-eyed penguins on Enderby Island.

This year we were counting penguins going into the water to begin their day of fishing from 5am to 9am. Counts were carried out over two consecutive days at each site.

After helping get the Enderby Island crew settled, we boarded the boat again and started our mission to different sites as far south as Adams Island, the weather dictating where we were able to moor on several occasions. It was a military exercise some mornings getting 10-12 people breakfasted, thermos flasks full, pre-shaken hand-warmers into pockets, and off the boat and on shore with one dinghy. Some days were better than others for penguin counts, with the range of 6 to 72 being recorded. The terrain was also varied, from sandy beaches to rough rocky platform landings in choppy water in the dark.

After the counts were completed, the team was able to go ashore for excursions and check out the wildlife, shipwrecks, old depots, and WWII defence ruins. We were also able to help a University of Otago botany study which involved measuring the circumferences of southern rata trees. A highlight of the trip for me was the walk up Southwest Cape to the white-capped albatross colony. The views were stunning!

It was a great group of rowdy volunteers, and they were all very impressed by DOC ranger Ray's fearlessness around charging sealions – see www.youtube.com/watch?v=NdMgBD5i58Y.

People

A highlight was Luca, the Italian chef who cooked us gourmet fare three meals a day throughout the trip. In contrast, the low of the trip was running out of coffee!

Leith Thomson, YEPT Ranger

Having enough coffee on my island was a great relief.

Our main mission on Enderby Island was to carry out penguin counts at the Rocky Ramps Landing and Sandy Bay every day for a week. This was not achieved though, as the Derry Castle site required two observers for two days. To get out to this site required us to leave the hut at 3:30 am and walk across swampy terrain, in the dark with head torches, trying to pick our way through snoring sea lions. Some of our penguin watching spots had also been chosen by the occasionally inquisitive sealion or skua, which meant having lessons in sharing on both sides.

My other task for the island was helping Karin set up a nest searching monitoring plot behind rocky ramp for her study site. This entailed many muddy days with a compass, GPS and tough knees to navigate the rata forest. Because of my previous experience on Enderby Island, I was able to act as navigational guide around the island. Some of my many highlights of this trip were seeing some snipe and snipelets up close, albatross swooping overhead and a sooty albatross flying out of my viewfinder.

Once again, we thank the crew of *Evohe* for the safe trip, and we look forward to updating our members on the results of the data we collected.



Leith and Aviva with YEPT Trustee, David Smith

Yep review

In 2014, a grant from the Department of Conservation's Community Conservation Partnerships Fund – Putea Tautiaki Hapori was allocated to the Trust for "Securing capacity to transform: the next 25 years of yellow-eyed penguin conservation".

The granting of this money was contingent upon a "review of yelloweyed penguin recovery with Terms of Reference to be developed jointly by Yellow-eyed Penguin Trust, Ngai Tahu and the Department of Conservation".

The Trust was delighted to receive this funding, recognising our role as a conservation NGO in species recovery conservation. The Trust believes the review itself is timely and appropriately aligned to the current Recovery Plan, ensuring the plan's value as a policy document is retained, since it is regularly referenced by the Trust. As an NGO we are committed to best practice and critically evaluating what directions the future work should target. This review aims to address what these may be. The review will be undertaken in two stages.

The first stage will be a stock-take of progress against the objectives of the current Hoiho Recovery Plan, which is available at the website www.doc.govt.nz/Documents/science-and-technical/TSRP35.pdf

The second stage will be about developing a revised strategy. The role of organisations is clearly part of this assessment but is not the primary focus. Work has commenced for stage one only.

The team undertaking the stock-take will be made up of representatives of the three lead entities: Bruce McKinlay (DOC, YEP Recovery Group Leader, Project Lead for Part I of this review), Yvette Couch-Lewis (Te Runanga o Ngai Tahu), and Sue Murray (General Manager, Yelloweyed Penguin Trust).

Ngai Tahu Whanui, DOC staff and members of the hoiho/yep community will be provided with opportunities to express their observations and experiences in working in hoiho/yep conservation within the context of the objectives of the Recovery Plan. Information about group and individual comments presented in the stock-take report will not be attributable to individuals/groups without their consent. If you would like to be involved in Part 1 (the stocktake) and have not been contacted, please email *YEPstocktake@doc.govt.nz*



Trustee Luke Gardener on the Anglem Coast of Stewart Island

People

SIR PETER BLAKE TRUST DOC CONSERVATION AMBASSADOR 2015

Dannie Cullen

In June last year I was fortunate enough to attend Dr Jane Goodall's public talk on her life's work in Africa and also her unyielding hope for the future of conservation. I was in my last year of my science degree at the time whilst also studying towards a diploma in film in hopes of combining the two fields to communicate science and conservation via media.

My passion for the environment has always been present but it was at the end of Dr Goodall's presentation that this passion evolved. I was motivated to protect my country's rich biodiversity and I sought to find out how I could be more involved with conservation out in the field before I ventured behind the screen.

It was at this time that the Sir Peter Blake Trust also announced they had extended the Blake Ambassador Programme to include two new Conservation Ambassadorships. The opportunity asked for "young New Zealanders with a passion for the environment and conservation, and a particular interest in working with native species" and I knew that the ambassadorship was my chance to get involved in conservation on the practical, hands-on level that I had hoped for.

It was later announced that the native species would be one of New Zealand's most threatened species, the yellow-eyed penguin. As a marine biology major and lover of everything in the ocean I realised that the ambassadorship wouldn't be just a chance, it would be a dream.

Only a few months later I received the call from the Sir Peter Blake Trust to inform me that the dream would become reality. My fellow Conservation Ambassador Samantha Collings and I were to fly down to Dunedin!

We spent the following weeks in the Catlins, Otago Peninsula and Codfish Island where we conducted chick assessments at numerous field sites. These assessments involved performing a health check which included checking their body condition,



weighing each chick and taking beak and foot measurements. At some sites we also tagged any chicks that fitted the tagging criteria. These were all vital to the successful monitoring of the penguins' breeding success and it required a lot of work to visit every known nest site!

However, once a nest was found and the health check performed, there was nothing more rewarding than seeing two penguin chicks waddling back into the nest. It made all the hard work and effort well worth it!

During our last week of the ambassadorship we were finally able to see more of the work done by the Yellow-eyed Penguin Trust. We set and checked traps in the Okia Reserve to help reduce the number of small mammals that can predate on the penguin eggs and chicks. We also worked at the Trust's plant nursery assisting in penguin habitat restoration, another crucial part of their conservation.

I experienced so many special moments during the ambassadorship such as releasing

a rehabilitated adult penguin back into the wild at Papatowai, listening to the bellbirds sing whilst working on Codfish Island and seeing my first ever albatross. However, what was most special was getting to see what hard work, heart and soul the Yellow-eyed Penguin Trust and Department of Conservation rangers put into the protection of these penguins. I was reminded of Dr Goodall's talk and the power of hope.

I think the biggest reward of the ambassadorship was getting to witness first hand the power of hope and how beneficial this has been to both the local community and penguins alike. It is my hope that in the future more people will become united in helping to protect the environment and safeguard our threatened species, such as the yellow-eyed penguin. Whether it's through volunteering, donations, or just by raising awareness.

In the words of Dr Seuss "The Lorax": "Unless someone like you cares a whole awful lot, Nothing is going to get better. It's not."

People

SIR PETER BLAKE TRUST DOC CONSERVATION AMBASSADOR 2015

Samantha Collings

Dannie Cullen and I were fortunate enough to be the 2014 Sir Peter Blake Trust DOC Conservation Ambassadors. A series of ambassadorships are offered by the Trust to provide once in a lifetime opportunities for young New Zealanders, upholding Sir Peter's vision for leadership and environmentalism.

This is the first year that the Conservation Ambassadorship has been offered, and Dannie and I had the opportunity to work on the hoiho with DOC and of course, the Yellow-eyed Penguin Trust.

We got to experience the best of what the Otago/Southland region has to offer – spending a week in the Catlins, a week on the Otago Peninsula, a week on Codfish Island and in Invercargill, and a week around the Dunedin area.

Throughout our time down south we gained some incredible skills and experiences that we hadn't thought possible. From helping Wellington Zoo wildlife vet Lisa Argilla with anesthesia during surgery on the penguins, to helping out at Penguin Place, to monitoring and predator trapping with the YEPT – we were lucky to gain insight into all aspects of how conservation works.

The main work we conducted was chick assessments. These involved visiting nest sites and performing a health check on the present chicks, including checking their body condition, weighing each chick, and taking foot and head measurements.

This fieldwork proved tough however, rewarding with the data we were able to



collect. Compiling all our collected data found a mixed outlook for the penguins, however what did stand out was the contrast in survivorship between areas with rehabilitation and those without. The efforts that St Kilda Vets, Air New Zealand, Massey University Wildbase and Penguin Place went to were phenomenal and so crucial for the penguins now with the ongoing barracouta biting issue.

As the first DOC ambassadors, and the only females of this year's team, it has been a privilege to work alongside such passionate and hardworking people and organisations. This trip has highlighted what a position we are in to continue and expand upon the work that is being done in conservation, and it was so encouraging to see that our efforts over just one month did make a difference.

Chicks that we took into care reached healthy weights, penguins that we rescued and helped with surgery on were released, and significant amounts of data were collected – which all contributes to the survival of such a charismatic New Zealand animal, one that is crucial to our biodiversity.

This experience only fuelled my passion for conservation that I have gained throughout my upbringing and time at university, and I can't wait to keep going in a field I am so passionate about.



Leave something in paradise

Please remember the Yellow-eyed Penguin Trust in your Will. Your bequest can be invested in restoring penguin habitats and controlling predators to help secure the hoihos' survival. Charities Commission Registration Number CC22822



People



YEPT Trustees being briefed by YEPT General Manager, Sue Murray (right) on Murray Beach

Rakiura revisited

Luke Gardener, YEPT Trustee

The Yellow-eyed Penguin Trust has had a long-standing presence on Stewart Island-Rakiura. General manager of the Trust, Sue Murray, a number of board members and our graphics man, Stew Robertson, made a trip to 'The Island' at the beginning of the year to renew ties with long-serving contractors and supporters of the Trust. It was also an opportunity for new board members to gain an understanding of the realities of yellow-eyed penguin conservation work on the island.

Ian Wilson, Stewart Island Water Taxi & Eco Guiding, provided transport for the Trust around a number of key monitoring sites, from the Murray River on the northern coast, to sites around Paterson Inlet. Sandy King, long-time contractor for the Trust, took great delight in taking new trustees to a number of previously monitored nest sites. When most people are asked to describe the habitat of penguins the first image they think of is an iceberg. It's unusual that someone would think to describe the towering rimu, miro, rata, lancewood and bush lawyer (so so much bush lawyer) of Stewart Island as "home", providing essential shade and isolation for the yellow-eyed penguins. While this means that nests are often in beautiful bush-clad locations, it also means that monitoring these birds involves spending most of the day bashing, crawling and climbing through bush that some people might describe as being a 'tad horrendous.' This is of course the reality of monitoring, particularly on Stewart Island, where this work is made more logistically challenging by the need to access most sites by boat. This provided an important eye opener for new trustees who were able to get an idea of the time consuming and physical nature of field work, as well as the enthusiasm of the field workers we employ.

Between visits to penguin habitats around Paterson Inlet, the Trust was also able to spend time visiting Ulva Island, catching up with old friends, and making some new ones, as well as re-establishing ties with a number of Stewart Island DOC staff.

Penguin conservation work is expensive, particularly in the more remote areas of the country. As such, the Trust is extremely grateful for the discounts that a number of Stewart Island businesses provided to us during our visit, including Stewart Island Flights and Ian, who has supported the work of the Yellow-eyed Penguin Trust for a number of years. The Trust also gives Sandy King a special thank you for the continued work she does for the Trust both as contractor and advocate for yellow-eyed penguin conservation work, as well as being our guide around the island for three days.



Oddity of nature

Lloyd Esler

Every now and again a high spring tide chews into the base of the sand dunes. The dunes are held together by the roots of marram which can be eight metres or more long. As the roots are exposed by the loss of sand they twist together and break free. After a couple of days of rolling up and down the beach the roots form balls or sausages which pile up along the tide line. They don't last long. Exposed to water, wind and sun they rot away or break apart or are buried. Not every storm makes marram balls. Sometimes the roots just pile up in untidy heaps. Perhaps they need several days rolling in the rough surf to shape them properly and if the sea settles down too soon, they remain ill-formed.

Lifeline for safeguards?

There's a saying that "sport and politics don't mix". A wholly inaccurate and foolish statement if ever I've heard one – history is littered with events and moments which undeniably highlight that the two are not mutually exclusive; witness 1981 in NZ, any number of boycotted Olympic Games and the current debacle with FIFA.

The same can't be said for conservation for I've never heard under the same false assumption and pronounce that "conservation and politics don't mix". Unfortunately conservation in the 21st Century is inextricably intertwined or, probably more accurately, subservient to politics and whomever currently wields the governmental crown and sceptre of the day.

The result of the Northland by-election is now known. If one is a conservation supporter one wouldn't normally associate one's votes with Winston Peters – his sensibilities are more aligned with grey rather than green. However if you're a fellow tree hugger as I am, you'll be pleased Peters has trounced his opposition and won the seat. Because Peters has won, National will have to call upon other parties (the annexed Act poodle doesn't count) to push through their third term agendas, of which an RMA reconstruction – read evisceration – is at the top of their list.

National would like to make the RMA more economically and commercially focused and place these considerations at the very heart of the legislation, trumping all else. I suspect water and the ownership of it is also a primary driver.

In the past the Maori Party and Peter Dunne have not supported National's RMA reboot and National will be unable to express their political ideology onto the RMA.

This also assumes that Dunne won't flip-flop on his earlier stance, and Peters won't side with National (neither of which I'd gamble even a fiver on not happening). The Maori Party is the only guaranteed resistant in this equation.

And so, via a convoluted set of political complexity, environmentalists who don't live in Northland and maybe historically have not been cheerleaders for the Peters' fan club, will nevertheless be pleased that he has pulled off a remarkable victory, and staved off the assault on our environmental legal safeguards.

Kindest regards Anton Oliver Patron, Yellow-eyed Penguin Trust



Mainland support

As all good things take time, some Mainland cheeses can take up to three years to produce! We have been running a nationwide campaign called the New Zealand Cheese Forecast to get people to try different cheese and vote for their favourite – helping forecast which cheese to make in the future.

The focus of this campaign is Mainland's six hero cheeses – Swiss, Vintage, Epicure, Blue Vein, Havarti and Smoked. Although they may sound a bit scary, take the opportunity to try something a bit different and vote for your favourite on our Facebook page – Mainland NZ. And remember, the Yellow-eyed Penguin Trust will receive \$1 for each barcode redeemed either online, or sent to them.

For more information about the NZ Cheese Forecast, Mainland products, recipes or how you can help us raise funds for the yellow-eyed penguin, visit www.mainland.co.nz.

The Mainland team 0800 CHEESE (0800-243-373)





Crowdsourcing and Facebook; suddenly our organisation is deeply involved in social media, all for a good cause and raising lots of interesting questions. This newsletter reports the story of barracouta biting penguins and how tackling this problem involved several organisations and individuals, some of whom were recruited directly, p2p (person to person), through our Facebook page.

This intervention fits well with our 'turning to face the sea' (see: previous newsletter) and crowdsourcing is an ideal way quickly to gather funds in an emergency. However, we won't make a habit of using this approach, but keep it for when circumstances really are challenging and an immediate response is essential.

Before social media, appealing directly to members was treated with the same caution as crowdsourcing will be now; our last such appeal, which was generously supported, was to assist in the purchase of Long Point. The question is, what is the best way to match our financial needs with the various kinds of funding available? This question constantly exercises our minds.

Another issue raised by our response to the avian diphtheria outbreak, the underweight chicks' season and the barracouta bites is; to what extent should human animals, us, intervene or interfere in the lives of non-human animals? Much ink has been spilt debating this question. Those who argue the non-interventionist position, let nature take its course, implicitly are proposing there is a clear distinction between natural and non-natural, wild and captive, and that there are some immutable laws of nature which should govern our conservation effort. Our position, in contrast, is that everything practical should be done to help the yellow-eyed penguin attain the numbers required to form a self-sustaining population and that this should involve the minimum intervention possible. Rest assured we do nothing affecting yellow-eyed penguins without considering likely outcomes and possible unintended consequences. Only then do we act.

Happy reading.

Eric J. Shelton Yellow-eyed Penguin Trust Board Chair



A white-capped mollymawk (Thalassarche cauta) cruising Big Glory Bay, Stewart Island

Thank you to our regular

supporters: Supporters Group Nursery supporters AdArt Brand Promotion Anton Oliver, Patron Blackhead Quarries Canon New Zealand Department of Conservation Downie Stewart DCC (Task Force Green) Foote Haulage (Woodlands) Kieran Read, Ambassador Mainland Brand Malcam Trust Conservation Corp Otago Polytechnic Horticulture, Arbor & Landscape Depts South Otago Branch Forest & Bird

Thank you for funding from:

DOC Community Conservation Partnerships Fund EcoWai and programme partners Gilmour Motors Penguin Fund of Japan Portobello Blues Festival Two Bearded Men

Special thanks in this issue to:

Donors to the Urgent Appeal on Barracouta attacks

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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.

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Penguins. Plants. People. Passion.