

YELLOW-EYED PENGUIN TRUST NEWS

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The Yellow-eyed Penguin Trust, A charity working to save our penguins forever for everyone!

Disease kills penguin chicks

The number of yellow-eyed penguin chicks fledged in Otago this year was the lowest recorded for many years, primarily due to an outbreak of a *Corynebacterium* infection. The disease was first noticed on the Otago Peninsula in early November and for a short time it appeared that the disease was confined to that location, prompting speculation about point sources of infection and Dunedin's Lawyers Head sewerage outfall being viewed with an increased level of suspicion. However that theory was discounted as cases were soon reported everywhere between Oamaru and Stewart Island. Interestingly the disease was not



reported from Codfish or the sub-Antarctic islands.

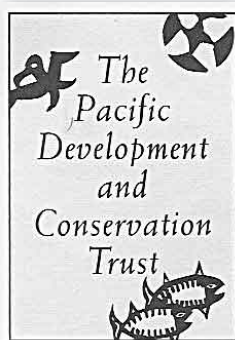
The disease had the largest impact on chicks under two weeks of age and under 500g. Autopsy of the chicks by Associate Professor Maurice Alley of Massey University revealed that many of the chicks had died of starvation because the bacterial infection produced lesions in the chick's mouth and upper respiratory tract and made it difficult for the chicks to swallow. In some cases the infection had spread to the lung or inner ear. Almost 100% chicks in Otago had symptoms of the disease. Mortality varied between sites and ranged from 10-90% with the overall chick mortality estimated at 60%.

Samples taken from dead and live chicks showed the bacteria to be *Corynebacterium amycolatum*, a species not previously known from penguins.

Swabs taken from adults also tested positive for the presence of the bacteria, but the disease was not seen in adult penguins. Swabs were also taken from blue penguins and royal albatross and although the bacteria were present, Massey is unable to yet say if they are the same strain as seen affecting the yellow-eyes. It seems that the corynebacteria are a large but poorly understood group of bacteria. Many species of animal have their own (normally relatively benign) species of corynebacteria and humans are subject to infection by several species (including *C. amycolatum*). One species (*C. diphtheriae*) is the cause of diphtheria, a disease

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Funding continues for the Trust Nursery



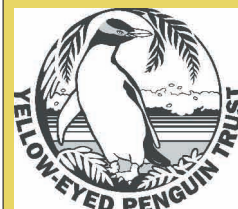
When there are dreadful tragedies in our lives, one must hope that something positive will then happen. When in 1986 the French sank the Rainbow Warrior in Auckland's harbour, no one realised that one day our penguins would benefit.

The Pacific Development and Conservation

Trust was set up with money received from France in recognition of events surrounding the destruction of the Rainbow Warrior. Its net income is made available each year for groups in New Zealand and the South Pacific to use for charitable purposes. The aim is to promote and encourage sustainable development in the South Pacific.

Penguins in Otago will benefit in 2005 thanks to a donation from the PD&CT to the value of \$50,000. This donation will be

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Masthead photo by
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Alvin Setiawan
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PhD thesis
(March 2004)

Life-History consequences of sociality in the yellow-eyed penguin (*Megadyptes antipodes*) in relation to social facilitation, vocal recognition and fidelity towards mates and nest sites

Abstract

Like most seabirds, penguins generally breed in colonies, with some species nesting in very high densities. Such close proximity exposes them to high levels of social stimuli and interaction. In contrast, yellow-eyed penguins (*Megadyptes antipodes*) are said to be solitary breeders. Nests are situated under dense vegetative cover and tend to be far apart and visually isolated from each other, with low levels of social stimuli compared to other penguins. The aim of this thesis was to investigate the consequences of the low level of coloniality on the yellow-eyed penguin life-history traits: reproductive hormone levels, susceptibility to social facilitation, mate and nest site retention and vocal recognition mechanisms.



**Alvin Setiawan and
Mike Hazel**

The large inter-nest distances in yellow-eyed penguins were considered to be a consequence of the patchy distribution of suitable nest sites that can provide sufficient vegetative cover for protection from isolation and predators. The hormone levels of yellow-eyed penguins during the breeding season were found to be similar to those of other penguins, and typical of birds engaged in a monogamous and a biparental care breeding system. Although social facilitation had been thought to have little influence on their breeding schedule, supplementing vocal stimuli with playback of calls during the pre-egg period increased plasma levels of testosterone, estradiol and prolactin, and synchronized egg-laying schedules of yellow-eyed penguins. Consistent with the idea that large inter-nest distances would reduce the likelihood of mate prospecting during the breeding season, yellow-eyed penguins were shown to have very low divorce rates (average of 6%). The large distances between nests were also thought to allow the nest location to be used as a reliable visual cue for identification of mates and chicks, thereby lessening the importance of vocal recognition in this species. The potential for individual identity coding in the vocalizations of adults and chicks was found to be sufficiently high to allow for vocal recognition. However, adults or chicks did not respond differentially towards playback of calls of familiar and unfamiliar adults. Nest location alone may be sufficient for chick recognition in yellow-eyed penguins before the post-guard period as they remain near the nest and are always accompanied by at least one parent. As expected, the vocalizations of chicks became substantially distinct close to and during the post-guard period, when chicks had moved away from the nest site and sometimes formed small crèches.

The reduced level of coloniality in the yellow-eyed penguin has had significant ramifications for the life-history of the species. Differences in the life-history traits of yellow-eyed penguins compared to those of other colonial penguins, reflected differences in their nesting pattern and social behaviour.

Stewart Island update

The Trust's study into factors affecting the breeding success of yellow-eyed penguins on Stewart Island continued this summer. All of the sites monitored last summer on Stewart Island were monitored again this summer and were compared with sites on cat free offshore islands. This gave us a larger 'cats present' sample size to compare. Two contractors were employed to do the monitoring on Stewart Island with some help from volunteers, and DOC staff.

Forty-five nests were monitored – 25 on Stewart Island and 20 on the cat free islands. Sixteen chicks survived to fledging on Stewart Island, giving a fledging success of 43.2%, while the fledging success on the islands, where 25 chicks fledged, was 62.5%. This is a difference of nearly 20%. While it is tempting to say that this supports the original hypothesis that fledging success will be higher in areas where there are no cats, the work this year again did not find carcasses that had signs of cat predation but instead identified several other factors that affected breeding success. These included eggs failing to hatch because they were infertile or the nest being abandoned, an accident befalling the chick in the nest, possible starvation, and disease. The bacterium that caused the mass chick mortality in Otago was also found on Stewart Island and at least one chick probably died because of it. Some chicks died for reasons that couldn't be identified and work next summer will continue to try to identify these causes.

Data loggers 2004

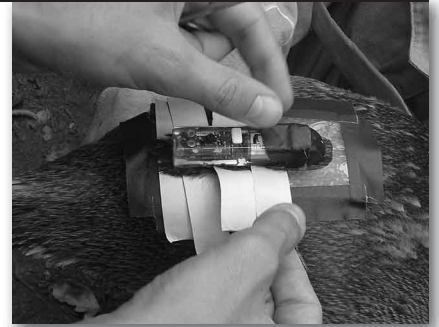
Despite many studies on yellow-eyed penguins, we know little about their habits at sea. Interpretation of the species' population dynamics, and consequently conservation measures, are primarily based on what can be observed on land. Today with the aid of modern satellite technology, studying penguin behaviour at sea through miniature GPS logging devices attached to their backs has opened a new window of opportunity to examine more aspects of the penguins' biology.

These GPS-loggers are manufactured by a German company, earth&OCEAN Technologies who are the only manufacturers able to make these to the required specifications. The Trust purchased three of these at an approximate cost of \$15,000 (funded in part by the 2003 Contact Energy's "Conservation Challenge" donation).

The loggers record the penguins' dive depths at given intervals (usually 1 second) as well as their geographical position after each dive. The average battery life of a GPS-logger is approximately 3 days, so only short-term attachments were conducted. The devices were attached using adhesive cloth tape, allowing for easy detachment without causing any damage to the penguin's plumage.

In collaboration with the University of Otago's Zoology Department and the Department of Conservation' Southland Conservancy, the Trust supported the work being carried out by PhD student Thomas Mattern, to allow deployment of the loggers during periods of this year's breeding season. These devices allowed the recording of a bird's geographic position as well

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Staff and trustee trip to Stewart Island

The Trust has been funding monitoring projects on Stewart Island since 1999, yet in all this time no Trustee has ever managed to view first hand the complex logistics and challenging terrains that made the funding so expensive. Three Trustees and two Staff were part of this familiarisation visit during the nest search period last year.

The trip involved driving to Invercargill, flying

runabout (making one camera unusable!). Then we either crawled through low lying scrub searching for nest sites or looked along the beach for footprints and other signs of incoming penguins. We stayed overnight in Bungaree hut, and visited islands in Patersons Inlet. All of this brought home the complexity of logistics and the need to work safely in different environments. We came away with more understanding of the physical demands and isolation for our field workers. We now have increased respect for our Projects Officer, David Blair, who pioneered our work in this area, and Sandy King and her assistant Jen van der Lubbe who continued it last season.

It was inspirational to see natural multi-layered coastal forest right down to the shore, something that is rare on mainland New Zealand and something we would like to aspire to. The local DOC Community Nursery gave us the usual useful tips and tricks that one picks up when visiting other similar work places including broadening species types we need to grow.

The trip also gave us an opportunity to assist with the setting up of an environmental display in Halfmoon Bay and distribute a special Stewart Island Newsletter on the project to all households.

Brent Beaven of the Department of Conservation's Stewart Island Field Centre acted as our guide and offered us one further vision of the future to aim for - a visit to predator free Ulva Island - where birds showed little fear of humans and the abundance of ground orchids alone reminded us of the destructiveness of possums, rats and mice. A pair of reintroduced showy saddlebacks displayed beside us as we left regretfully to return to our predator ridden mainland habitats with their limited vegetation and birdlife, but with renewed determination to discover why the yellow-eyed's are decreasing on Stewart Island.



Sue Murray, Anita Pillai, Margaret Murrell, Lala Frazer, and Pat Mark stop for a photo in Stewart Island.

in a small plane, transferring into a Department of Conservation boat to go up the coast, and being hit by a wave as we beached in a DOC

DISEASE continued from page 1

often fatal in young humans. The disease seen in yellow-eyes has similar oral symptoms to diphtheria, resulting in it being sometimes referred to as “avian diphtheria” but Massey have named the disease *Diphtheritic stomatitis* (meaning a diphtheria-like condition of the mouth), which is not much of a consolation for those of us who’ve just learnt to pronounce *Corynebacterium*.

The bacteria proved sensitive to broad-spectrum antibiotics and courses of up to 10 days were given to chicks at some of the more easily accessible sites. Treatment with antibiotics had varying success. While the supplementary feeding may have improved the

chicks’ chances, it appears the age of the chick at the onset of the disease was the critical factor. Chicks less than 14 days old and 500g bodyweight had a low survival rate. Chicks that survived the disease fledged at good weights and showed no ill effects.

Just what caused the disease is a mystery. It is likely that the bacteria is present in the environment all the time and that there is some other factor that triggers the disease. Massey are searching for other disease agents (eg a virus) that may have allowed the bacteria to bloom, but other possible factors include environmental conditions (weather) and food availability. The fact that this is the second time the disease has been seen in Otago (first seen 2 years ago) and that the chick deaths seen at Stewart Island in the last two years may be related could provide some clues to the disease triggers.

Aside from the impact on the production of chicks, there was also an economic impact for tour operators on the Otago Peninsula and at Oamaru. As nests failed, adult penguins spent less time ashore providing little for operators to show their clients.

The Trust hosted a seminar in early April and invited all those involved - vets, scientists, penguin monitors, landowners and DOC to share their information and plans for the future. Should there be another outbreak, from the distillation of everyone’s experience and lessons learnt we will be well placed to manage the disease.

Attendees at the workshop agreed to:

- Setting directions and priorities for future research by Massey
- Recommendations for the collection and delivery of better quality samples
- The need for the development of treatment standards set (methods, drug, decision trees and training)
- The need for the standardisation of data recording
- The need to maintain hygiene standards when working with wildlife
- The importance of keeping the community informed of developments in your area
- The need for research into the circumstances surrounding the outbreak, e.g. environmental factors



Associate Professor Maurice Alley of Massey University

Courtesy of the OBT

Te Rere Yellow-eyed Penguin Reserve - Catlins



Brian Rance and Euan Kennedy at Te Rere.

It looked like a 4WD rally as a procession of vehicles snaked its way across the rugged and challenging track to the Te Rere Yellow-eyed Penguin Reserve. Over 100 people came to celebrate the 25 year anniversary of the opening of this important Reserve. Tucked away on the Southland coast, this

coastal forest is almost the only one remaining between the Catlins and Bluff and once boasted the largest population of yellow-eyed penguins on the mainland of New Zealand. Te Rere is managed by Southland branch of Forest and Bird (SFB) and the open day was more of a reunion with numerous stories told about the early days, including the time when explosives were used to separate the large flaxes so they could be replanted across the headland. In 1995 a devastating fire swept through the colony killing half the population and the blackened remains of trees bear witness to that tragic day. It was fantastic to see the re-growth and the effort put in by SFB in caring for the Reserve. It was also great to see the enjoyment, the excitement and commitment by so many people, not just on this celebratory day but over the last 25 years, in an area not known for conservationists.

Pest workshops

Rainforest spread over thousands of hectares of difficult terrain on the West Coast makes protection of the kiwi and the blue duck from stoat and possum predation an even more daunting task than protecting penguins. In some areas the situation is desperate. For instance, at Okarito last year rats and stoats took out every kiwi chick.

Department of Conservation trapping programmes in the Nelson Lakes District have demonstrated that survival rates of kaka chicks

can be increased with intensive trapping. David Blair, our Projects Officer was asked to assist with a series of trapping workshops held at Harihari, Karamea and Reefton, ably organised by the Regional Co-ordinator of the Canterbury Landcare Trust, Shelley Washington.

The workshops covered effective and humane trapping, equipment, techniques, the choice of appropriate sites, and the necessity for maintaining good records, as well as giving

a chance for hands on experience with traps. We were pleased to share our methods and expertise. Two more workshops are planned - one at Riverton in Southland (15 April) and Moeraki in North Otago (29 June). If you would like to attend, or arrange another workshop in your area assisted by the Trust's biodiversity funding, please contact the Trust Office.



Trapping on the Peninsula

On the Otago Peninsula the Trust, in association with landowners and the Dunedin City Council, have been running a co-operative trapping programme along the main routes and known mustelid areas over the last two years.

One trap on Hooper's Inlet caught 3 stoats and 2 ferrets indicating, as had been predicted, that this area could be an important highway for reinfestation of mustelids into the end of the Otago Peninsula. If we can catch the predators at this point before they get into those highly sensitive wildlife breeding habitats in the previous trapping round, it has to be an advantage.

The Dunedin City Council has once again contributed Task Force Green labour to ensure that an extended area can be trapped. Jonathon Lewis, who last year led the team with such commitment, came back as a volunteer to lead the team again this year.

During the season 9 stoats were caught, and 7 ferrets. This was a concern as ferrets had not appeared in traps for a couple of years, neither here nor up and down the coast. As ferrets are generally considered easier to catch than stoats this could indicate that as we get better at stoat control, a place is left for ferrets to move back in.

This year's results confirm that time and effort (not to mention the associated finance!) need to be put in to ensure long term protection of our wildlife. We hope to continue next year, taking advantage of the known hot spots gained over the past two trapping seasons.



Mustelid Trapping Field Guide

Help to control
ferrets, stoats and
weasels and protect
New Zealand's wildlife.



The second edition of the Trust's best selling booklet *Mustelid Trapping Field Guide* is now available. Order your copy on the enclosed order form, or contact the Trust Office for bulk order price.



Help our Hoiho

The Mainland “Help our Hoiho” consumer promotion helped to further raise awareness of the plight of the yellow-eyed penguin and gave consumers and schools alike a chance to get up-close and personal with some of the most precious wildlife Otago has to offer. In this, our final instalment on the promotion, we will outline just what the prizes entailed and how much the winners appreciated the chance to discover first hand some of the work that goes into caring for our Hoiho.



All 5 family winners of the Help our Hoiho promotion have had an experience none of them are likely to forget. An action packed day was planned for the lucky winners which included time exploring the Peninsula, meeting the yellow-eyed penguin, albatross, fur seals and sea lions and spending time with the Trust's Nursery staff, Margaret and Anita.

The tours were conducted by Sam's Wildlife Tours and Elm Wildlife Tours. These excursions were not just your everyday run of the mill tour. Both companies are able to take the road less travelled and really give their customers the inside scoop on all peninsula wildlife. Every family has expressed their appreciation and enjoyment of the fantastic day they experienced.

Port Chalmers Primary School's Room 8 children won the ultimate prize in Mainland's nationwide Help our Hoiho competition. The children won a class field-trip to see the yellow-eyed penguin on the Otago Peninsula and work with the Yellow-eyed Penguin Trust for a day. Mainland also gave them \$2,000 which the children have decided to put toward an environmental project to build a garden at the school. Because travel costs were not as great as might have been, the remainder of the money was distributed to those other schools who showed outstanding effort.



The day started with a trip on the boat, the Monarch, to Wellers Rock followed by a bus trip to help with planting on the Trust reserve Omihi. Lunch at Natures Wonders was followed by a trip on the 8-wheel drive argos which was a fun way for the children to see the seals and learn more about the wider eco system on our Peninsula.

Then it was off to Penguin Place for a tour and an up-close encounter with the penguins. The children were then given Mainland yellow-eyed penguin T-shirts as a memento of their experience.



Mainland has sponsored the Yellow-eyed Penguin Trust for 15 years, and this latest promotion helped to push the total sponsorship closer to the \$1 million mark.

Mainland would again like to thank the following for their assistance and whose help made these prizes something special for each and every winner.

- All of the yellow-eyed penguin supporters in helping to make this a very successful promotion to raise the awareness of our precious penguin.
- Tapui Books for their assistance and extra donation provided to the winning schools.
- The Trust for their very keen assistance

in the huge task of managing the promotion.

**To order your
Mainland Chart call:
0800 243 373**



KIDS' PAGE

May 2005

The Yellow-eyed Penguin Trust, A charity working to save our penguins forever for everyone!

Hey kids, one of our members from England, Henricus Peters, sent us this great word find puzzle.

Can you find the following words?



Yellow-eyed penguin word find

*Complied by Henricus Peters**

CHICK
EGGS
HOIHO
NEST
PENGUIN
RESCUE
SEA
TREES
CONSERVATION
FERRET
ISLANDS
RAREST
SCIENTISTS
SHRUBS
YELLOW-EYED

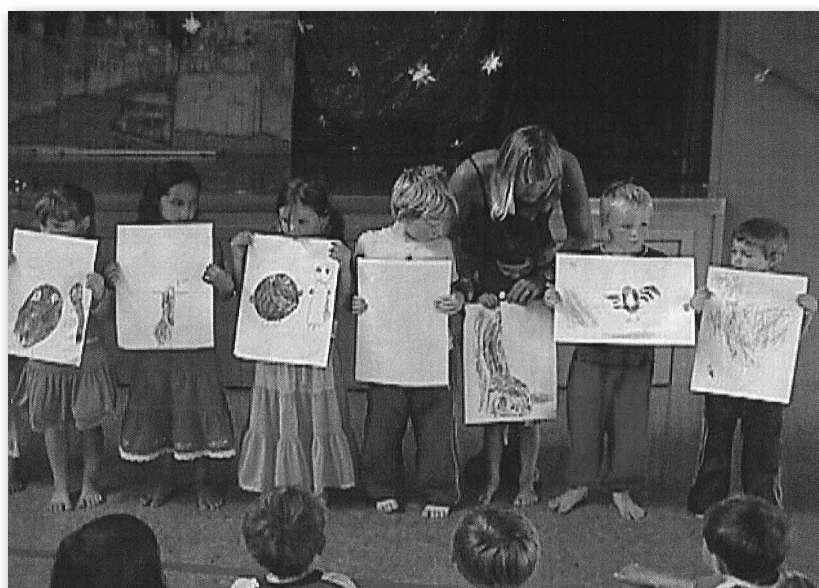
H	E	L	M	R	S	T	S	E	R	A	R
C	O	N	S	E	R	V	A	T	I	O	N
C	H	I	C	K	E	A	V	S	F	V	E
S	O	S	H	E	S	G	G	E	N	E	S
H	R	L	O	O	C	N	R	A	R	R	T
R	S	A	G	E	U	R	Y	E	P	I	P
U	E	N	T	R	E	E	S	C	A	P	E
B	S	D	O	T	P	E	N	G	U	I	N
S	O	S	C	I	E	N	T	I	S	T	S

Words may appear forward, backward, diagonal and there are two "tricks"! Cross out each clue as you find it. Good luck. (Answers on last page...no peeking.)



Te Huruhi School

Many thanks to Room 22 at Te Huruhi School on Waiheke Island for their support in sending us Mainland cheese tokens and sending us some photos of the yellow-eyed penguin pictures they displayed at their Junior Syndicate assembly.



Don't forget to visit our website...

www.yellow-eyedpenguin.org.nz

Making a Difference at the YEPT Nursery

January 2005 marked the end of a very special year for the Yellow-eyed Penguin Trust Nursery. The events, activities and changes were largely made possible through the generous support of the Vodafone Foundation New Zealand “World of Difference” programme.”

The funding was initially awarded to Margaret Suman and her co-worker Anita Pillai for their volunteer work at the Nursery in 2002/03. The grant included money for a salary for one full-time position, training and travel.

Margaret and Anita have job shared this position enabling full time Nursery staffing for the first time ever. This has enabled the Trust to achieve so much during 2004. They have produced more plants to take advantage of our increased resources on our habitats by using our Ranger to plant them, and have hosted many community groups.

Thanks must go to the former and now retired Nursery Manager, Jim Ellison, who created such a lovely site on which to welcome people and who came back to do some construction during the year.

Money for training allowed both Margaret and Anita to visit other nurseries around the country and make repeated trips to their favourite, the DOC Nursery at Motukarara near Christchurch, to share ideas and learn new tips for raising plants.

Having more time has also allowed them to propagate a wider variety of plant species which will increase the natural biodiversity values of our own reserves and the other places on the coast where we plant.

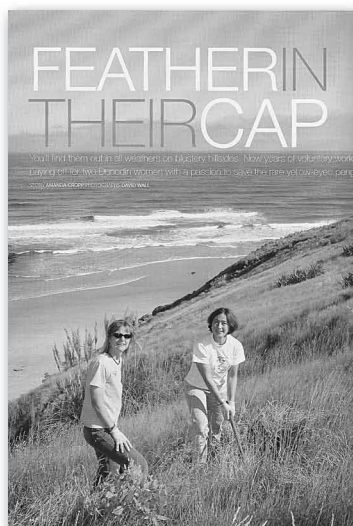
They have also created two new self-guided walks for our reserves, one at Okia on the Otago Peninsula and the other at Tavora in North Otago. The walks are intended to encourage greater public use of the parts of the reserve not used by penguins, while raising awareness of the natural features or the impact of conservation work carried out in the area. Both appear to be very successful and there have been many favourable

comments received about them.

The volunteer support base is greater than ever. There are the hard core volunteers who come out every week (sometimes even twice weekly) who help them achieve the success and popularity the Nursery now enjoys. The “volunteer Wednesday” – a day when individuals can pop in and lend a hand are very popular and on some days there can be up to 10 people working, chatting and learning about conservation.

Community groups such as Task Force Green, Conservation Corps, Portobello School, Otago Polytechnic students and students from the Mirror Trust are also regular visitors. Some, after completing their courses, have continued to visit and help out, which is very gratifying.

The Nursery, Margaret and Anita have also been the focus of several media articles – all thanks to the profile given to them by the Vodafone NZ Foundation funding. This profile and the work that they have been able to do has allowed us to demonstrate what we can do given the funding. And it has paid off! We are fortunate to be able to continue our work this year thanks to our new sponsor the Pacific Development and Conservation Trust. In presenting us with this grant they reiterated to us that it is the special way in which we combine our conservation work and community involvement that make us unique and worth funding. We are grateful for their recognition and look forward to an equally exciting and eventful 2005.



Next magazine
article, July 2004.

FUNDING CONTINUES

CONTINUED FROM PAGE 1

used to fund our Nursery Managers’ salary and cover some of the operating costs. With the help of volunteers, co-managers Margaret Suman and Anita Pillai will continue raising and planting native flora to ensure penguins’ habitats provide shade and shelter. The Nursery aims to produce approximately 10,000 plants in 2005, including some rare species.

This cheque was presented to the Trust during a recent “Sponsors Thank You” Function at the Nursery. This was a special occasion to thank our valued funding providers and show them our Nursery operation.



YEPT staff and Josie happily accept cheque from trustees, Esther Cowley and Keni Moeroa of Pacific Development and Conservation Trust, sponsors of the Nursery for 2005.

Habitat news

While the past summer was not so good for us humans, all the Trust habitats have benefited from the abundant rain. We haven't had to water plants, as in the 2003-04 summer, and the main job as always, was keeping ahead of the grass growth with the spray release programme. We plan to maintain plantings for three years, after which time they should be able to successfully compete with the exotic pasture grasses and other assorted weeds.

Okia:

The plantings on the Margaret Hazel slope are looking great, with several dozen cabbage trees and kanuka now showing above the grass and the remaining plants well on their way. A seat commemorating the life of Margaret Hazel has been placed at the top of the slope, with a magnificent view out over Okia and Victory Beach.

We are gearing up for the first large scale planting at mid-beach, carrying out restoration plantings, under contract to the Dunedin City Council. A range of native plants appropriate to the area will be planted over the next 5 years, including pingao and sand tussock on the foredune and ngaio/pittos/broadleaf and cabbage trees on the back dunes.

Omihi:

Situated near Taiaroa Head, but on the ocean side of the Peninsula, Omihi or Reids Beach, is a non-public, lovely spot with some old Trust plantings, including totara, ngaio and kanuka dating from the early 1990s. We plan to augment these during the coming planting season. The plantings carried out last season, in four enclosures among sheep pasture on the north side of the beach, have generally fared well. Only the odd plant has fallen victim to rabbits, when their netting protector became dislodged.

Otapahi:

Last season, we planted areas at the northern and southern ends of the reserve, and both have grown well. Upcoming plantings will once again build on these areas. The hardiness



Planting pingao at Tavora with DOC Conservation Corps and Nursery volunteers.

of *Hebe elliptica* is impressive, with some rather small plants that went in last winter flourishing on an extremely exposed headland opposite Wharekakahu Island.

Tavora:

The early planting areas alongside the stream at the southern end of the Reserve are closing up and excluding the pasture grasses, while newer plantings on the flat and up the Bobby's Head track are pushing above grass height. Perhaps the most exciting development has been the pingao planting on the beach. Graham Thurlow, local farmer and member of the Tavora Committee, used his tractor to clear a large area of exotic marram, which was then planted out. The subsequent maintenance has been a lot easier, and the pingao is looking very healthy with some plants already setting seed.

Otekiho:

This small reserve, located just before Pilots Beach/Taiaroa Head is managed by the Trust on behalf of the Dunedin City Council. Probably the most rabbit prone area managed by the Trust, all plantings require netting protectors. The plantings from last winter are growing vigorously and we've spent several days releasing older plantings being swamped by *muehlenbeckia*.

2005 PUBLIC PLANTING DATES

19 June
10 July
31 July

Contact the Trust Office for details closer to the day.



Adam Du Fall

Adam first became a member of the Yellow-eyed Penguin Trust through a Mainland Cheese advertisement at the young age of seven. After he became a member, he insisted his mum buy only Mainland cheese products because he was aware that a donation was made to the Trust with every purchase. He looked forward to his bi-annual newsletter and even did a variety of school projects on penguins.

Some years later as part of a research project with the Bay of Plenty Polytech, Adam contacted the Trust in an email to see if there was anything he could do. Projects Officer, David Blair and Ranger Dave McFarlane were in the process of embarking upon an intensive predator trapping project on the Otago Peninsula and welcomed the extra help.

Adam helped the Daves set up 100 traps on the Otago Peninsula and it was his job to check the 20 km of trap lines on a weekly basis and record the results.

And if that didn't keep him busy enough, whenever Adam had any free time, he helped plant native trees and shrubs on some of the Yellow-eyed Penguin Trust habitats. One project was helping plant over 2000 pingao plants at Tavora and Katiki Beach. Needless to say, we can't thank Adam enough for his help and we hope he received high marks for his project.

Members like Adam help make the Trust one of the best conservation organisations in New Zealand and he proves to us how important it is to educate young people about the endangered yellow-eyed penguin.

Vodafone continues to support the Trust

Following on from the 2004 "World of Difference" win by our Nursery managers, Vodafone New Zealand Foundation have continued to support the Trust – this time

it is our

Ranger who has received recognition.

Dave McFarlane was appointed to the position of the Trust's Ranger in October 2003 thanks to a grant from the Department of Conservation's

Biodiversity Condition Fund. This grant finishes in October 2005, and Vodafone New Zealand Foundation have picked up the grant to fund Dave's work for the following year.

Dave's main task is to maintain the Trust's own habitats – planting, weeding, watering and pest control assistance. Due to his full time employment, our habitats have benefited because we have more resources to allow for a greater number of plants to go into the habitats, and the control of our animal pests

are further maintained. Our sincere thanks to Vodafone New Zealand Foundation for this wonderful ongoing recognition of our work.

DATA LOGGERS continued from page 3

as its dive behaviour. Trialled on three birds at Bushy Beach (near Oamaru) last year, the results showed a 'map' of travel where the penguins appear to use underwater landmarks to guide them to the best foraging areas. We now wish to know if this is the same for the Stewart Island population where there are different oceanographic environments to that off the Otago coastline. Along the northern and north-eastern coast of Stewart Island the shelf is located more than 100km off-shore resulting in a wide shelf area compared to the North Otago shallower and narrower continental shelf which is less than 50km off-shore. This research will be continued in 2005.

By studying the foraging behaviour of yellow-eyed penguins breeding at locations with different oceanographic features, we may shed light on a previously unknown component of their biology and assist in developing customised management strategies for the species' different habitats.



Nugget Point Marine Reserve

The Department of Conservation (DOC) has decided to pursue the idea of a marine reserve at Nugget Point in the Catlins area of South Otago. The Yellow-eyed Penguin Trust wrote to DOC in support of the proposal, although we are disappointed at the limited area applied for. Not only would the Trust like to see a larger area of marine penguin habitat protected, say an entire feeding zone, but we believe that the adjacent terrestrial penguin habitat which is currently bisected by a busy road and used as a car and bus park ideally should be set aside as a pedestrian-only, penguin-friendly area. The combination of sea and land-based protection would go a long way towards enhancing Nugget Point as a conservation and tourist centre, and, increasingly, tourism seems like a natural ally of conservation, albeit an ally requiring vigilant monitoring. If we accept the vociferous opposition to the marine reserve reported in the *Otago Daily Times* as representative then it is fair to say that in this part of New Zealand the voice of conservation is very much in the minority. Commercial fishers, recreational fishers and Bill English, the local MP, all reject the rationale for a reserve. Mr English has advocated that what the area needs most is tourist infrastructure, yet public toilets have been vandalised, - according to the local police most likely in protest at the reserve plan being put forward. At the launch last year of the Catlins Tourism Strategy Mr English was openly critical of DOC's performance, and the CEO of Clutha District, Ciaran Keogh, publicly called for a change of government, an unusual act for a public servant to indulge in. Local conservationists reported being all too familiar with the CEO's openly partisan behaviour.

So, it is into such an unsympathetic environment that DOC's proposal is lodged. To date the debate has been characterised more by heat rather than light and for a conservation NGO (Non- Governmental Organisation) like the Trust the challenge will



be to pursue our mission, the protection of penguins and the promotion of biodiversity, while maintaining good relations with as many stakeholders as possible. Currently we have ongoing positive relationships with many conservation-minded farmers who have invited our involvement in penguin management on their properties.

Hopefully, cool heads will prevail amongst the opponents of the reserve proposal, and we will see no more vandalism. No doubt DOC will remain open to any reasonable and sensible suggestions that may still achieve the conservation and sustainability outcomes that everyone professes to want. Whatever happens, the Trust will continue to advocate for enhanced penguin habitat at this important site.



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BRUCE FITZGERALD

Please remember us in your Will

Managing and/or purchasing penguin breeding habitat and controlling predators such as stoats and ferrets are some of our ongoing tasks.

Saving the yellow-eyed penguin is a long-term task.

Bequests will help secure its survival.

Please remember us in your Will.

Penguin Snippets

1 Did you know that Bremerhaven Zoo in Germany flew in female Humboldt penguins from Austria to tempt its males after discovering that most were in same-sex relationships and not producing offspring? To date the gay penguins have not been tempted! Gay and lesbian groups around the world were outraged, forcing the Zoo's director to abandon the experiment.



2 During the recent visit of His Royal Highness Prince Charles, Moeraki residents had a visit from their own Royal.

A royal penguin was rescued from Millers Bay at Moeraki with low body weight and moulting, so was being cared for at the Moeraki Lighthouse Reserve. While home is Macquarie Island where there are approximately 850,000, only five have ever been recorded in Otago, the last one in 1984. And then, one week later... ..another stranded royal penguin turned up at Moeraki!

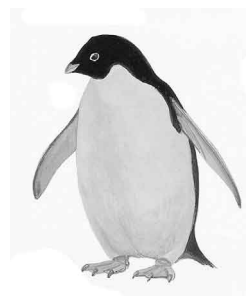
3 The Department of Conservation's after hours phone runs hot during the moulting season, as concerned members of the public phone in about 'sick' and 'injured' penguins. Often it is the unruly state of their moulting feathers that make these birds look sick or injured. One such call resulted in DOC rescuing a 22-year old penguin with an injured foot on St Kilda Beach, a popular swimming beach in Dunedin. However the veterinary check-up showed that this bird was suffering from a severe case of arthritis in one of its feet! Now experts are pondering as to the treatment of this common human condition in penguins!

4 Another call alerted DOC personnel to a distressed penguin on a beach near Nugget Point. On investigation, it was found to be a juvenile bird about to enter its moult

that just could not move – it was too fat too walk! Weighing in at a massive 8kg, this bird was 1kg heavier than the average pre-moult juvenile! What are they eating in that area?

5 For the first time in 75 years, the first king penguin has arrived on our shores - at Buller on the West Coast of New Zealand. King penguins normally live on the sub-antarctic islands south of New Zealand and on Macquarie Island. The reason for this unexpected visit is unknown, but the bird appeared to be in good health.

6 In 2000 a large iceberg split off the Ross Shelf in Antarctica and posed a potential ecological disaster for Adelie penguins. The build up of sea ice caused by the presence of the berg (which is larger than some countries at about 140 km long and 40 km wide), reduced the adults' ability to access waters where they catch fish and krill. Adults were having to walk over 100km in some instances to get food for their chicks. Usually the birds are able to swim to these areas which is a quicker and more efficient use of their energy. The good news on the horizon - or at least disappearing over the horizon - is that the ice berg seems to be on the move and heading north. Hopefully, the negative effect of the berg on the penguins' breeding success will recede the further it moves away.



ILLUSTRATIONS COURTESY OF NATURAL LINES "WORLD OF PENGUINS"

Answers to puzzle from page 7

H	E	L	M	R	S	T	S	E	R	A	R
C	O	N	S	E	R	V	A	T	I	O	N
C	H	I	C	K	E	A	V	S	F	V	E
S	O	S	H	E	S	G	G	E	N	E	S
H	R	L	O	O	C	N	R	A	R	R	T
R	S	A	G	E	U	R	Y	E	P	I	P
U	E	N	T	R	E	E	S	C	A	P	E
B	S	D	O	T	P	E	N	G	U	I	N
S	O	S	C	I	E	N	T	I	S	T	S