

Number 25 November 2001

Yellow-eyed Penguin News

Has the yellow-eyed penguin been saved?

The yellow-eyed penguin's official status has been moved from "vulnerable" to "endangered" by the IUCN (International Union for Conservation of Nature) recognizing the still fragile status of these birds.

The undoubted success of the Yellow-eyed Penguin Trust is often confused with the notion that the yellow-eyed penguin is now "safe" and that there is no need for further funding.

Unfortunately the road to recovery is a long hard one and the numbers have not yet risen to a point where the future of the penguin is assured.

Stoats, ferrets and cats still hunt penguin chicks. Trapping, expensive though it is, is our only way at the moment of ensuring that the numbers are not further reduced by predators.

Dogs still kill penguins from time to time. The Trust ensures that "No Dogs" signs are erected, produces newspaper articles, and raises awareness of the danger that dogs can bring.

Nesting sites are still vulnerable to stock. On farms where the Trust has input, we ensure that nest sites are stock proof, including placing nest-boxes where there is little or no cover.

Not all penguin habitats are yet protected - regular visits are made to landowners by our Projects Officer, offering assistance and advice (both practical and financial) on protection methods.

Originally we believed that if we could just make mainland habitats safer, migration from the substantial populations of islands further south would ensure the overall numbers of yellow-eyeds would increase. Research has shown us that the South Island.



Stewart Island and sub-Antarctic penguins form distinct breeding groups and there is almost no migration between them.

The Trust funds research that allows us to understand some of the factors that lead to success. Several researchers, including John Darby himself, are currently mining the information painstakingly gathered over years of dedicated observation to see if they can identify these.

So it becomes especially important to manage the South Island habitats as effectively as possible to ensure maximum breeding success. There are still factors over which the Trust has no control that in some years have led to drastic decline in numbers. The disastrous diseases that have led to wholesale adult deaths and subsequent chick

deaths, egg success, the weather patterns, lack of food, survival in their first year, the stress of moulting, plus many othr factors all contribute to the population success or lack of it.

The answer to the question
"Has the yellow-eyed penguin
been saved?" unfortunately has
to be "NO".

What we can say is that without the work of the Trust - managing habitats, funding trapping, assisting landowners, educating and raising awareness - the yellow-eyed penguin could by now be facing extinction. Your continuing support is vital to ensure that we add to our knowledge and maximise the positive assistance that DOES make a difference.

Taken from the 2000 IUCN Red List of Threatened Species:

Endangered = a taxon facing very high risk of extinction in the wild in the near future, as defined by certain criteria. For a comprehensive description of the criteria, see the IUCN web site at www.iucn.org

SCIENTIFIC ARTICLES

Historical records of yellow-eyed penguin (Megadyptes antipodes) in southern New Zealand

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Since humans arrived in New Zealand the yellow-eyed penguin population reduced in range and probably abundance through the combined actions of hunting, destruction of breeding habitat and introduced predators. Previously we have assumed that numbers continued to decrease right through the 20th Century. Peter Moore (Science & Research Unit of Department of Conservation) proposes an alternative history that penguin numbers were already low in the 1940s and rose to a peak by the 1980s.

The chief source of early data comes

mortality rate is so low that the natural increase would compensate for past losses, if we could only preserve what we still have remaining".

Richdale was concerned for the penguins, but as there was little public interest in conservation at the time of his work it seems that one of the best ways to look after them was to keep their location a secret. In his books he did not name his study areas, but the unpublished documents identified them as Penguin Beach, Murphy's Bush/

instance the increase at Penguin Beach (12-51 nests from 1942 to 1965) was helped along by intensive conservation work started by Richdale and continued by Sharpe. The area had deteriorated badly but they rehabilitated the area by fencing out stock, controlling rabbits, revegetating, putting out nest boxes and even artificially feeding single parents or their chicks.

Sharpe continued to monitor the



Lance Richdale was often heard to say:

"Scientific evidence is the authority, not authority the evidence".

Hichdale's unpublished documents.

from Lance Richdale who, in 1936, began 18 years of research culminating in two landmark books ("Sexual behaviour in penguins" in 1951 and "A population study of penguins" in 1957). His unpublished manuscripts in the Hocken Library provide insights from the late 1930s.

"The destruction of the vegetation which formed his natural habitat has been no doubt the chief agent in the decimation of his numbers"... "A further toll was taken by commercial collectors" ... "in the 1939-40 season, a whole colony was deprived of its eggs,"... "Then followed a series of devastating massacres by youths with pea-rifles, and it was reported that as many as forty were slaughtered in one afternoon." ... "If depredations continue I estimate that by 1950, extremely few penguins will be left on the Peninsula. Yet in normal seasons their

Cliff, Dick's Bush, Papanui Beach, and the bay adjacent to Cape Saunders.

Bad seasons in the late 1930s saw the study areas decrease from 36 breeding pairs in 1938 to 25 in 1940. That year the first full census of Otago Peninsula found 44 breeding pairs and 13 non-breeders. The 1940s saw numbers recover and by 1952 there were 82 nests in the study areas. "...the nations were at war ... With almost no interference on the breeding grounds and with an adequate food-supply safe in the sea the population was free to expand". After the war when shootings of penguins and burning of areas resumed Richdale urged the authorities to help. Finally, in 1948, Stan Sharpe became the first full-time Otago Peninsula field officer (Wildlife Division, Department of Internal Affairs). More habitat improvement and rabbit control was possible. For

study areas and survey nests of the peninsula, results of which were found in unpublished Wildlife Service files. Penguin numbers increased to at least 169 nests in 1959 and 227 nests in the early 1960s. New areas were found (e.g. Highcliff), yet at some others penguins disappeared. In the mid-1960s and 1970s there was less interest in conservation or monitoring of penguins, hence there are few records of numbers. Alan Wright, the Otago Peninsula Ranger for the Wildlife Service, continued to put out nest boxes at Penguin Beach for a time, but other duties overshadowed penguin work.

Annual nest surveys began again in the early 1980s when John Darby (Otago Museum) became interested in the plight of yellow-eyed penguins. Few of the small coastal remnants of forest and scrub were protected as reserves. Although the total count for the Otago Peninsula peaked at 276 nests in 1985, a series of poor years and a crash in 1990 resulted in only 79 pairs nesting the following year, a mixture of mortality and birds not breeding. This was the lowest number recorded since the count of 44 nests in 1940.

The population fluctuations that we have caught a glimpse of were most likely caused by a mix of human and environmental impacts. Occasional

natural catastrophes drove numbers and the proportion of birds breeding down, leading to concern about their survival on the mainland, but years of good breeding and survival allowed the population to recover. By the 1980s people were more interested in conservation, especially as penguins were high profile and a tourist drawcard.

There have been many fine efforts by government, landowners and the public to fence and protect habitat from grazing animals, revegetate, provide nest boxes and control introduced predators. Little can be done directly about natural catastrophes, but these protective measures allow them to produce sufficient chicks during good seasons and build the population up to better withstand future fluctuations in food supply or the environment. We can be thankful that the penguins were resilient enough to hang on until we became more serious about protecting them.

Richdale, L.E. 1942. A comprehensive history of the behaviour of the yellow-eyed penguin (*Megadyptes antipodes*) Homb. and Jacqu. Unpubl. papers MS 1260/70/1,2, Hocken Library, Dunedin. Hoiho (Megadyptes antipodes) recovery plan 2000-2025

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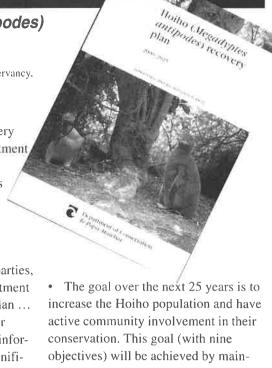
This is one of a series of recovery plans published by the Department of Conservation. Recovery Plans are statements of the Department's intentions for the conservation of particular plants and animals for a defined period.

Excerpts from the plan include:

- Scientist, managers and other parties, both within and outside the Department have refined the contents of this plan ...
- A review of the plan is due after 10 years (2010), or sooner if new information leads to proposals for a significant change in direction.
- A recovery group comprising people with knowledge of Hoiho, and with an interest in their conservation has been established (contact Bruce McKinlay for details of this group).

• The goal over the next 25 years is to increase the Hoiho population and have active community involvement in their conservation. This goal (with nine objectives) will be achieved by maintaining and refining existing strategies, maintaining efforts to retain, manage and create terrestrial habitat, and ensuring continued public support. In addition, actions to investigate the mortality of Hoiho at sea are given a higher priority.

by Melanie Massaro and Alvin Setiawan



RESEARCH REPORT

Boulder Beach – the story continues

Exactly a year ago we began to study the reproductive strategy of the yellow-eyed penguin on Otago Peninsula's Boulder Beach (see the Newsletter November 2000 for more details). This year we continue our work at this site.

In August many of the familiar penguins (individual birds are recognised by their band numbers) regularly visited the breeding areas to claim their territories and to reacquaint themselves with their partners from previous years or to attract new mates. Early in September we noticed that a relatively high number of young penguins (most of them were born in 1996 or 1997) were inspecting Boulder Beach as a potential breeding site.

When we started to search for

nests our initial observations were confirmed: a good number of young penguins were occupying potential breeding sites and had succeeded in finding a mate. However, we also found that a few of our oldest penguins did not seem to have survived the winter.

On the 23rd of September the first penguins laid their eggs for this season...and therefore the yellow-eyed penguin story continues.

We would like to thank the Trust for their continuing support of our studies.



Herbert, a paper penguin is born

Guy Wooles, a fine-arts graduate from Wales, recently visited New Zealand to learn more about the conservation of the penguin. Guy began making penguins as a student project where he had to produce an example of recycling, waste management and conservation.

The first penguin, Dennis, assists
Department of Conservation ranger
Dave Houston in Oamaru. The other 16
family members are housed in various
homes around the world, including
Hong Kong, Canada, USA and the
United Kingdom. Travels have seen one
of his penguins reach the North Pole,
and Guy's ambition is to now see one at
the South Pole.

Whilst in Dunedin, Guy 'fathered' another penguin for the Trust. Born on 3rd August, Herbert Hoiho has pride of place in the Office. In his first month after birth, Herbert has enjoyed being part of the Annual Yellow-eyed Penguin Symposium, starring on Channel 9 T V's "Third Floor", and visiting a local school.

Herbert's journeys will be documented, and sent to Guy who will post them on his website where the antics of other penguins are also available to read. Guy says "the penguins give an insight into different cultures and lifestyles around the world, and will hopefully raise awareness of the fragility of life and the need to educate people to protect it". Guy's web site: www.khern.freeserve.co.uk



Penguins and more

by Trustee Lala Frazer originally written for Mainland Products Ltd. direct mail campaign book. Vol. 4

It is not just penguins that benefit from the protection of habitats managed by the Yellow-eyed Penguin Trust. They are also home to many other species of birds, insects, sea mammals, and native plants. Many of these spectacular areas were purchased with the help of the money raised from your Mainland wrapper returns.

A recent exciting find was fernbirds not previously reported at one habitat on the Otago Peninsula. These secretive birds, who use separate male and female clicks to keep in touch as





Fernbird

Lala Fra manage increase

Pikao (Pingao) or golden sedge plant

they move through the undergrowth, have undoubtedly been assisted by the extended growth of bracken as the stock have been removed.

The founding members of the Trust had a vision.

The founding members of the Trust had a vision of penguins living in full coastal ecosystems. "If you read our constitution it foreshadows the current emphasis on biodiversity" says founding Trustee, Lala Frazer. "It also means that we now have to manage our habitats to benefit and encourage the increase in a number of species".

The same habitat is home to the only sea lion pups born on the Otago Peninsula. While males moved back north to the mainland from the sub-Antarctic, females are rare. The first to breed on the Otago coast was therefore greeted with excitement. The fact that she has chosen one of the Trusts' beaches to rear her offspring is a real bonus. Now her daughter, golden coloured Katya is breeding and added,

her pup to the young on the beach. Researchers suspect that our beach has been chosen because of the small pine tree plantation which not only mimics the skyline of their original home but provides shelter. When the mother goes to sea for food she moves the pup into the trees, not only to protect it from the sun but also from dangerous males.

The native bright yellow pikao or pingao dune plant, treasured by Maori weavers, exists naturally on several Trust habitats but is all too easily overgrown by exotic grasses if not tended. Projects to extend it can now be undertaken on penguin habitats.

Walking through one Trust habitat a flock of white faced herons is seen in a flooded dune hollow surrounded by clouds of red admiral butterflies, hearing the click of the fernbird and then out to the beach past the yellow-eyed penguin nests to the noisy chatter from the little blue penguin burrows, admiring the seals on the rocks and the sea lions on the sand, the full range of wildlife that have benefited from the reserve, purchased and managed with Mainland's help, is obvious.

Blue penguin observatory

The Oamaru
Blue Penguin Colony
and the Waitaki
Development
Board are
embarking on a
large develop-



ment programme in the next few months. Denis Dove, Manager of the Colony told us "we are building a large 350 seater grandstand together with a 2500sq ft Visitor Centre. Overseas and local visitors have been asking for better facilities – so we are building these 'state of the art' facilities".

They hope to raise approximately \$1.5 million from grants, trusts and businesses in the district. Other funds are being raised by a variety of fundraising projects. One involved the sale of seats in the new grandstand for varying amounts of money in receipt for differing sponsorship packages.

The Yellow-eyed Penguin Trust has supported the development of this penguin reserve by becoming a "gold" sponsor. Part of our acknowledgement was the receipt of 10 complimentary passes. Some of these will be used for prizes in this issue of the Kids Page competition – so be in to win!



Oamaru penguin symposium

The third biennial Oamaru Penguin Symposium was held in Oamaru on June 21st and 22nd, 2001 and was attended by 70 penguin researchers and conservationists from New Zealand, Australia, Germany, Japan and the USA.

To date the meeting has focused on aspects of blue penguin biology, ecology and conservation, but this year papers were for the first time presented on some of the other penguin species found in the New Zealand region, namely yellow-eyed, Snares crested and Adelie. A workshop session focused on the use of flipper bands, possible problems, improvements and alternatives, such as leg bands and transponders. Many attendees also took the time to observe blue penguins at the nearby Oamaru Blue Penguin Colony and yellow-eyed penguins at Bushy Beach.

The next Oamaru Penguin Symposium will be held in June 2003.

Yellow-eyed penguin annual symposium by Bruce McKinlay

A bout 40 regulars and newcomers attended a good day of presentations and discussions at the annual Yellow-eyed Penguin Symposium held on August 4th at Dunedin.

A highlight was the presence of Wynston Cooper and Phred Dobbins from the Department of Conservation's Southland Conservancy. Wynston talked about the populations on the Southland coast and Foveaux Strait Islands, and Phred talked about his efforts to combine yellow-eyed penguin management efforts with other cat control pro-

grammes on Rakiura (Stewart Island).

In the afternoon
Melanie Massaro and
Alvin Setiawan (PhD
students from the
University of Otago)
presented their research
work on the Otago
Peninsula investigating
the impact of age on
female yellow-eyed

penguin reproduction and changes in hormones during the breeding season. Pauline Williamson talked about her research work into predator management on Banks Peninsula, using local farmers' trapping efforts in both white flippered penguin and yellow-eyed penguin habitat. There were updates on

The Symposium has again proved its usefulness as a point of contact between a wide range of members of the yellow-eyed penguin community.

the Trust's very successful population survey of yellow-eyed penguins on Stewart Island, conducted by their Projects Officer, David Blair. Finally Bruce McKinlay reported on work he has been undertaking on the rehabilitation of yellow-eyed penguins by Janice Jones at Katiki Point.

The Symposium has again proved its



usefulness as a point of contact between a wide range of members of the yellow-eyed penguin community. The ability to come together and listen to the activities of other workers should not be underestimated. Once again it was good to have the discussions facilitated by Stewarts Coffee!

Tavora open day



A n open day was held at our Tavora Reserve in North Otago earlier this year. The day attracted approximately one hundred people who helped the Trust celebrate the developments in the area – new interpretation panels, a car parking area, fences and the completion of the loop-track walkway.

Officially opened by the Otago Regional Council chairperson, Louise Rosson, the day was to acknowledge



the support from the ORC through their Wetland Enhancement Funding.

Activities included the golden sedge, pingao, being planted in the sand dunes, a barbecue, conducted walks along the spectacular coastline, lolly scrambles and treasure hunts.

The area is protected by a conservation covenant and is open to the public. See our website members' page for directions on how to find this reserve.







Mainland Report

By Janine de Vryer, Product Manager - Natural Cheese & Butter

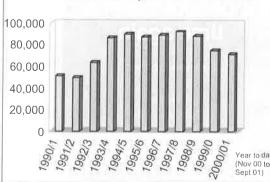
Mainland Products Ltd are happy to announce that we have agreed to continue our sponsorship of the Yellow-eyed Penguin Trust for 2002, our sponsorship of this worthwhile cause commenced 11 years ago.

Mainland Products recently undertook a national direct mail campaign with volume four of our Mainland Book. An article written by Yelloweyed Penguin Trustee Lala Frazer was included, and we are confident that the inclusion of this article will provide awareness of the good work done by the Trust. To date we have

received extremely favourable feedback on the content of this book, which also included an article on Central Otago artist Grahame Sydney.

Redemptions of the back label of Mainland Natural Cheese products and the Mainland Butter parchment continue to be strong as seen in the graph below.





Volunteering with the Trust

Bill and Dianna Wilson have been ably assisting the Trust over the past year, thanks to their initial interest in penguins being fuelled by the Mainland cheese advertisements. Being members living in Kaitaia (in the very north of NZ), they followed the actions of the Trust through the newsletters, and supported their work by regularly returning Mainland Products Ltd cheese and butter labels.

Penguins of New Zealand and Ross Dependency



"New Zealand - Penguin Capital of the World" - is how NZ Post are advertising their latest 12 stamps due for release in November. Six of the penguins that breed in New Zealand are featured on these stamps, with the yellow-eyed penguin on the \$2 stamp. The other six stamps feature the emperor and Adelie penguins from the Ross Dependency.

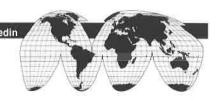
Stamps, first day covers and presentation packs will all be available for purchase from NZ Post outlets, or order them from the website at www.nzstamps.co.nz

Bill, a Pom with a kiwi mother, came to NZ in 1967 to visit relations and never left. Bill and Dianna, both school teachers, enjoy tramping, photography and looking at wildlife. They had made many trips to the South Island to enjoy the outdoor life and opportunities offered in that part of New Zealand.

So after 30 years in one of New Zealand's remote parts, they decided to shift to Dunedin – a university city known for its friendliness, ease of getting around and changeable seasons!

On their settlement in Dunedin, they approached the Trust to see how they could take a more active role in an organisation they had always supported. They have been helping with the planting programme, and working in both the office and the nursery assisting with a variety of tasks.

Bill says "Yellow-eyed penguins have so much against them, and yet plug on so determinedly, that we feel particularly happy to help their survival





Dianna helping at the Nursery

in any way we can".

We too, sincerely thank Bill and Dianna for their "plugging-on" with the Trust.

Annual General Meeting



Date: Tuesday 27th November Time: 7:30pm

Place: Otago Art Society Rooms, Great King Street,

Dunedin
Guest Speaker: Pete

McClelland,
Programme Manager Outlying
ands, DoC "Rat eradication on the

Islands, DoC "Rat eradication on the Campbell Islands"

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.

Web site developments

The web site development has steadily progressed over the last six months. Please keep viewing it for updates – these are made in the first week of each month.

Our apologies for the online subscriptions and donations' function not yet working. We are not prepared to proceed until we are assured that this is secure, and at present this is not possible using this server. We are continually hopeful that this will happen in the near future.

Because parts of our site are still under construction, the current user name and password for the "Members only" section will remain the same for the next 6 months.

www.yellow-eyedpenguin.org.nz

Yellow-eyed penguin census

The Yellow-eyed penguin Trust's Projects Officer, David Blair, and volunteer's will again be contributing to knowledge about the yellow-eyed penguin population.

The Trust is assisting the Department of Conservation Coastal Otago with a comprehensive survey of yelloweyed penguins breeding in the Catlins and Southland in mid-October. The search method and data recording used is that undertaken for the earlier Stewart Island census work

During mid-November the Trust's Projects Officer and volunteers will be carrying out a two week census of yellow-eyed penguins on Whenua Hou/Codfish Island (situated off the north west coast of Stewart Island). Because it has no rats, cats, possums or wekas, the survey is particularly important to obtain a comparison with other sites that do have these land predators. Codfish Island was last surveyed in 1992.

The Department of Conservation Southern Islands Area is contributing to the cost of the Trust's work by providing air transport (a major cost) to and from the island. Volunteers will stay in the hut also used by DOC workers monitoring the kakapo on the island.

On completion it will have taken 300 person days to carry out this census which is part of the first comprehensive survey of breeding yellow-eyed penguins on Stewart Island. The cost in wages, allowances and resource costs to the Trust is expected to amount to just over \$20.000. Next year the Trust will publish a report combining all of the penguin census work since 1999. This work as reported in the May newsletter will "help future researchers find the answer to some of the unknowns involving the yellow-eyed penguin on Stewart Island."

- Department of Conservation Southern Islands Area Manager, Greg Lind, states: "the Department of Conservation is absolutely rapt with the efforts of the Yellow-eyed Penguin Trust in furthering the knowledge of the penguin species in Southland. The work of the Trust to date on Stewart Island has provided valuable data on the status of the species and enabled the Department to direct resources where possible. The field programme on the island has been professionally managed and skilfully completed. Staff in Southern Islands Area are pleased to assist with the ongoing work on Whenua Hou (Codfish Is) which will help complete the assessment of the vulnerability of yellow-eyed penguins across its range".
- Department of Conservation Coastal Otago Programme Manager Biodiversity Assets, Dean Nelson, states: "the Coastal Otago Area staff appreciate the willingness of the Trust to provide help with the Catlins survey and being able to tap into a group of experienced volunteers who have developed their skills on the Stewart Island survey work".



MALCOM RUTHER

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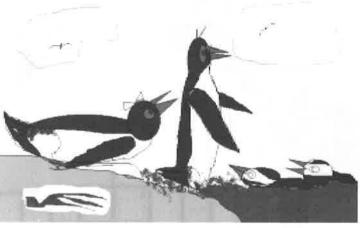
Herbert's New Feathers.

Fledging.

ne morning in January while Herbert and Henny were sunning themselves in front of their nest tree. Herbert noticed that his tummy and chest were turning white. When he looked closely at Henny he noticed that the grey fluff was disappearing from her front too. Some of it was floating in the air around the pair of them. Herbert was having strange feelings. His tail and back felt uncomfortable and prickly and when he prodded with his beak he could feel the new feathers coming. It felt strange. He helped the new feathers emerge by pulling out the baby fluff with his beak and prodding his oil gland. This oil gland would help keep his new feathers clean and dry. He noticed that Henny was beginning to look more sleek than fluffy.

It is now mid February. Herbert and Henny had been so fat that they could hardly move, but now the parents didn't come and feed them so often. Herbert and Henny began to move further and further from the nest and nearer to the sea. The only brown fluff left now was on the top of their heads. Herbert thought that Henny looked silly. Herbert was so hungry now that he clambered down the well marked penguin track until he was at the edge of the water. He nervously prodded his oil gland and watched as the waves came in. Sometimes he got wet and he found that it was quite pleasant being cool at the





edge of the surf. One day his parents came back early and called for him to come into the water with them. Herbert and Henny soon found that they could use their flippers and swoop and dive and follow the adults. As dusk fell the young birds stood near the sea and when the adults came down the next morning they followed them out into the bay to start their great adventure out into the world of food and danger.

Hey Kids... Turn the page to answer the questions Dave has for you this time!

Questions for you from front page:

- 1. Why did the adults stop feeding Herbert and Henny so much food after they had most of their new feathers?
- 2. What is it that penguins do to make their new feathers waterproof?
- 3. Can you tell real male and female penguins apart by their size?
- 4. What is the adult saying to Herbert and what do you think Henny is saying?

5. Draw a picture of the two juveniles on their first underwater swim.

Hope to hear from you soon! Take care. David.



Please post to: Yellow-eyed Penguin Trust, Attn: David, P.O. Box 5409, Dunedin. Competition closes 01 February 2002.

Penguin Facts Crossword Across 2 When the yellow-eyed penguin comes ashore it uses its _ and flippers to help regulate its temperature. 3 All penguins use their flipper like an _ _ _. 4 The male yellow-eyed penguin _ _ on the eggs while the female is fishing. 5 Under water the yellow-eyed penguin can fly very _ _ _ _. 7 Yellow-eyed penguins come to shore through the ____. **9** Like all birds yellow-eyed penguins like to _____ 11 These birds can excrete _ _ _ from its drinking water. Prizes -Tickets to the Blue Penguin Colony in Oamaru Down 1 ____ are particularly viscious predators of the yelloweyed penguin. **2** ____ are also viscious predators of yellow-eyed penguins, and were farmed for fur. **6** The domestic $_$ $_$ is a danger to the yellow-eyed penguin. 8 An abbreviation for yellow-eyed penguins could be _ _ _. 10 Yellow-eyed penguin's diet is 12 The yellow-eyed penguin has a distinctive _ _ _ .

