

YELLOW-EYED PENGUIN TRUST NEWS

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

Keeping our penguins safe on land

We really look forward to the day when we can open the newspaper and read a banner headline “Penguin numbers Explode” rather than “Penguin numbers Plummet” as we did back in late November 2002. The article was in response to a press release from the Department of Conservation citing low nest numbers and a large number of dead adults in the Catlins. This season there was an overall mean decrease of 30% of nest sites compared with the 2001/2002 season. Autopsies were carried out on two of the dead birds but failed to establish the cause of death. Throughout the region chick survival rate was relatively poor but fledging weights were good except in the Catlins where the average was down from 5.2kg to 4.3 kg. No major predation by cats or mustelids must mean we are doing something right but the really worrying thing is the lack of juveniles returning to the breeding sites. This is probably a reflection of the low mean fledging weights in the 2001/2002 season and the subsequent poor survival rates when the chicks took to the sea.

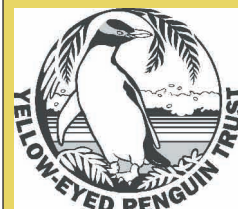
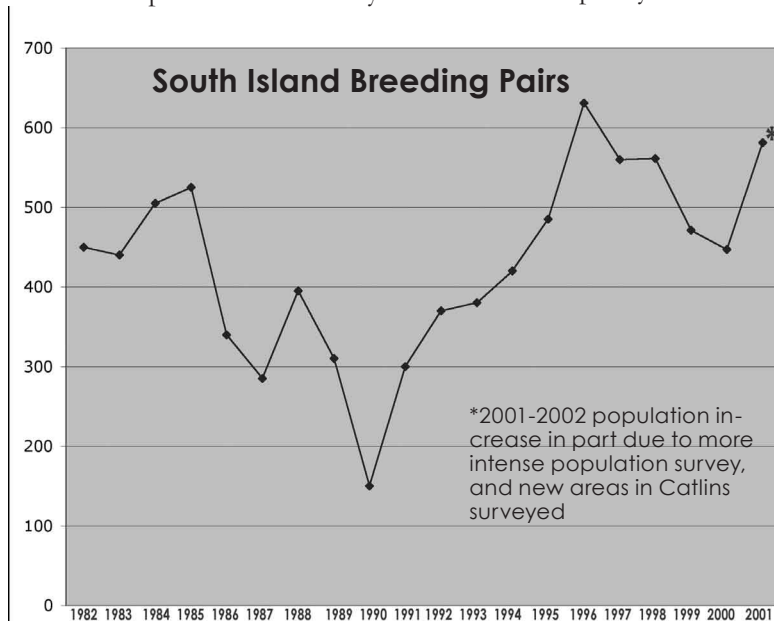
Another issue arose with a small number of chicks with lesions which had a similarity to human diphtheria. We don't yet know what

the significance of this is but it has been noted a number of times in previous seasons. The lesions look like a bit of left over fish mush adhering to the corners of the chick's beaks. It reinforces the idea that there are a number of diseases/viruses present in YEP populations but it is only in times of stress brought on by inadequate food supply that they exhibit themselves.

It is not just lack of food but biotoxins in the sea, avian malaria, poorly treated sewage, could all have an effect, not to mention the increase in Hooker sealions. Leopard seals have also been seen around the Otago coastline and are known to eat penguins.

The graph shows a general increase but it really is a case of two steps forward and one step back. Not knowing what causes these big dips in the population or whether it is a normal cycle of events is very frustrating. Good conservation can only begin with good research. We have stepped up the monitoring of all our reserves so that we can at least be forewarned and have the data for future analysis.

We really could do with a year when there is plenty of food and no predators coinciding with a good breeding year producing healthy fat chicks ready to take on the hazards of the open sea. In the meantime the Trust will do all it can to keep the penguins safe on land at least.



INSIDE THIS ISSUE:

Keeping our penguins safe	1
Research.....	2,3
Nursery tribute	4,5
Members.....	6
Mainland Report	6
Conservation Minister	7
News in Brief	8
Thanks	8
Website changes....	8

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Research: Fifteen years later

There can be few exercises that are more sobering for a scientist than a review of the significance and impact of their own published research. We were thus suitably sobered when we received a request from the Trust to write a brief review of the perceived impact of our doctoral studies of YEPs on current management and research – a sort of retrospective 15 years on.

To summarise, between approximately 1983 and 1988 we were enrolled as candidates for the degree of PhD at Otago University, studying YEPs under the supervision of Dr Lloyd Davis. Our broad areas of interest were respectively, growth and diet, and nest site selection, behaviour and breeding success. Both projects had an eye to the conservation implications of our findings

given that financial assistance was coming from what were to be the last and second-to-last Wildlife Service Scholarships. But to satisfy the requirements of PhD it is necessary for any work to develop from a strong theoretical underpinning. Thus the growth and diet work sought to understand the process of food item selection by adults and how food resources are allocated to

morphological development during the chick phase. Some key insights were gained through the serendipity of having data collection straddle two years of good food supply and one very poor year. The nest site selection study examined the local-scale basis for nest site placement, and tried to quantify the effects of habitat modification on nesting success. Given that both projects were the first major focussed studies of YEPs since Richdale's work some 40 years earlier, there was much scope for improving our understanding of some basic biological parameters. As a result therefore, our work was well-placed to provide a basis for future work which would explore in greater detail the conservation implications and the longer-term applicability of our findings, and go on to address questions of theoretical interest for which YEPs are a crucial piece in the puzzle. A biased and brief survey indicates to us that 15 or so years since its publication as a series of journal papers and book chapters, our work has been cited

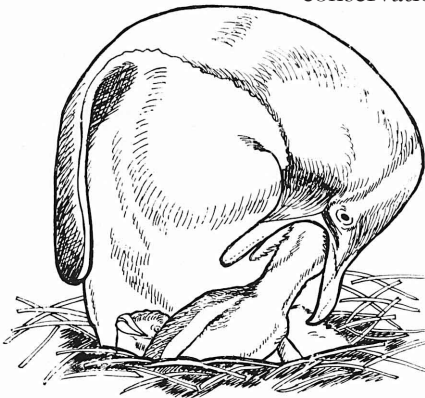
and used (and sometimes refuted) by recent researchers. Also, on the bookshelves of current PhD candidates, temporary homes seem to have found four copies of our theses (we haven't checked to see how dusty they are).

The apparent dichotomy between theoretical and applied research is a debating point for research funding providers, but need not be divisive. Purely applied work runs the risk of being reactive – stepping in to address management concerns only as these arise; purely theoretical work risks being labelled “blue sky” and irrelevant for conservation management. But a happy middle ground is essential and achievable. Apparently theoretical topics should be examined because the new management applications of tomorrow will arise from the pure research of today. Similarly, applied research must proceed from sound principles of ecology, conservation biology, ethology...etc. However, whatever the topic, when the research animal persists in relatively low numbers and has a concomitant high public and commercial profile, a critical consideration must be the potential impact of any proposed research. Virtually any form of research intervention will carry an impact, albeit sometimes very small. It is an obligation upon the researcher to anticipate, to consider, to mitigate and to measure the degree of impact; it is a value judgement to rule on

Unregulated tourist access at Yellow-eyed Penguin breeding sites:

Quantifying visitor numbers and activities at Sandfly Bay, Otago Peninsula

Increases in visitor numbers to coastal Otago have raised concerns about possible effects of unregulated tourism on Yellow-eyed penguin breeding sites. Studies have shown that human activities may cause changes in nest site location, and departure and landing behaviour. At Sandfly Bay on the Otago Peninsula, visitor access is encouraged through signs, a carpark, walking tracks and a viewing hide. This preliminary study aimed to quantify visitor numbers, activities and attitudes at Sandfly Bay during the 2002/03 summer period, and thus understand how to better manage unregulated access sites so that impacts on wildlife are minimised, and tourist experiences



enhanced. Fieldwork involved counts of visitor numbers, the application of a questionnaire, and mapping of visitor movements.

Anecdotal evidence suggests that the number of visitors to Sandfly Bay is increasing but no standardised counts had been conducted in recent years to establish whether this perception is correct. Visitor numbers were recorded throughout November, December and January, with counts made during sample periods between 6am and 10pm. There was a general pattern of few visitors in the mornings, with peak numbers (average of 10/h) from mid afternoon to early evening, coinciding with peak penguin activity on the beach. Counts suggest that on average over 670 people visit Sandfly Bay each week, with visitation concentrated in the period 2pm to 9pm each day.

A questionnaire was administered to a sample of Sandfly Bay visitors as they returned from the beach. The purpose was to assess attitudes and awareness of the wildlife, and motivations for visiting. Data entry is still ongoing. Early indications are that over a quarter of visitors were Kiwis, with German, Dutch, Australian, Swiss, Swedish, and Israeli visitors represented in lower proportions.

An important aspect of the study was the recording of visitor movements on the beach. To do this a target individual was chosen and their path and actions were recorded onto a geo-referenced aerial photograph of Sandfly Bay. This will allow identification of regions of high activity, and assessment of the extent to which human presence may affect penguin landings. In addition, the mapping revealed some contradictions between what we observed people doing, and what they say they did, including proximity of approaches to wildlife.

Acknowledgements

This project was funded by the Yellow-eyed Penguin Trust, the Department of Conservation, the Dunedin City Council, and by University of Otago Science Division Summer Student Scholarships to AS and ED. We wish to thank Trust members and DoC staff for invaluable assistance and advice. Renaud Mathieu assisted with mapping; Anna Carr helped with questionnaire design.

Department of Zoology
University of Otago



Philip Seddon,
Amelia Smith and
Erin Dunlop

Hide at Sandfly Bay

Stewart Island breeding locations revisited

Spring 2002

Three seasons after a comprehensive nest census on the north east coast of Stewart Island we decided to revisit three breeding locations to see if the numbers compared with the earlier visit and to look carefully for juvenile yellow-eyed penguins to give us an indication of breeding success.

Four volunteers ably assisted the Project Officer, David Blair.

Not an easy job at the best of times with early morning and late night beach counts and crawling through vines and penguin poo to locate nests.

There was seasickness, large rats and enough equipment and food to out last a week of storms. Pity someone left the meat in the fridge at Halfmoon Bay! To compensate, the weather was great, and the early 5am starts thrilling. The results were positive and showed us that there were a similar number of breeding pairs as last time, but ominously no juveniles were identified on or near any of the beaches we surveyed. The Trust hopes to support research here into the relationship of feral cats and the yellow-eyed penguin breeding locations in the future.



"Running a nursery takes hard work. Luckily I have help from

The YEPT Nursery or a tribute to Jim E

1988 The NZ Lottery Board gave a grant of \$25,000 to establish a plant nursery to produce eco-sourced plants.

1989 Plant Nursery established in grounds of Dunedin Methodist Mission Home at Company Bay on the Otago Peninsula.



1990 Jim Ellsion was employed to oversee the production of plants at the Nursery, and to coordinate planting, fencing and weed control in the habitats.



From John Darby, founding Trustee

"Jim is one of those rare individuals who is just simply a very hard-working, honest to goodness, "nice guy" who has an uncanny ability to turn his hand to almost anything and do it exceptionally well."

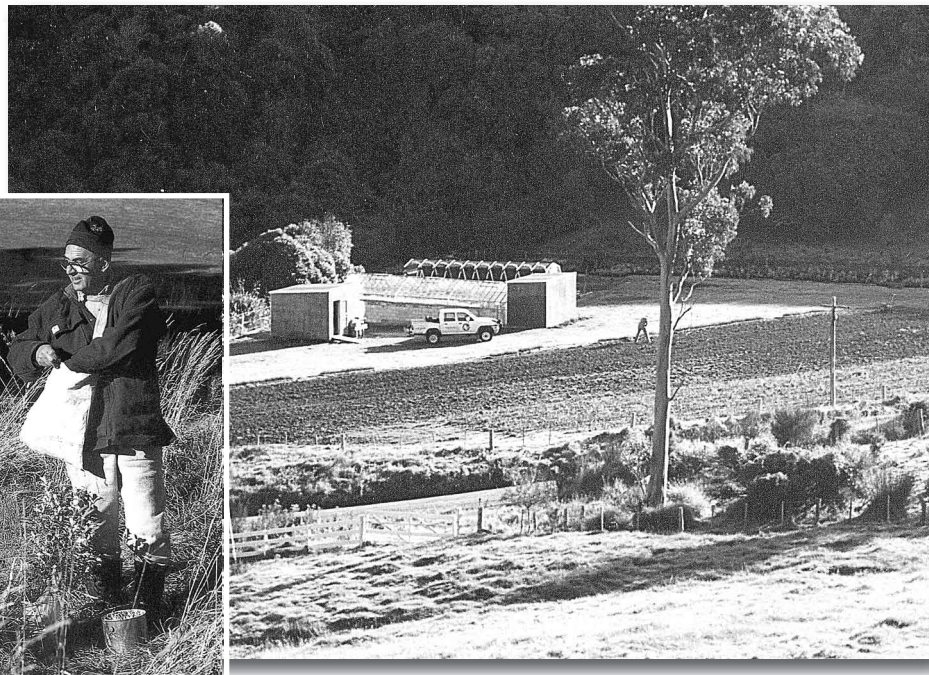
From Sandi Legge, volunteer

*"Jim will be surely missed...[but change is inevitable, and I wish the new nursery manager every success and enjoyment of this very pleasant job...]
I have thoroughly enjoyed my time there as a volunteer. Jim is a wonderful guy!"*

From Dave Asquith, volunteer

I first started working with Jim on an occasional basis shortly after he was employed with planting out at the habitats. During the shift to the present nursery site I held the job, it was always a pleasure to be working with him. Because of his varied experience in engineering he never seemed to be short of an innovative solution, whatever the problem. Rushed, he always worked in a methodical way and got the job done quickly and efficiently. His quiet sense of humour made every day with him a pleasure. Jim is one of a rare breed."

1993 The Nursery moved to private land in Company Bay with more area for growing flaxes, glasshouse, shade house and tool shed.



1994 Nursery production continued at 5000 plants per year.

1996 Jim and his planting bags which were used to carry tools, fertiliser etc. to the habitats.



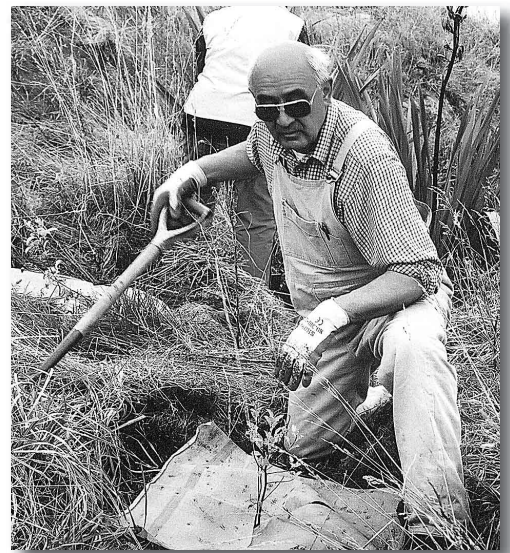
... volunteers which helps keep costs down.....Donating a tree is a very concrete way of helping save one of the rarest penguins in the world."
 - Jim Ellison

to a great nursery manager Ellison



From Moira Parker, founding Trustee

"Jim was perfect for the job and I believe we couldn't have found a better person. His background and experience included automotive engineering, forest service propagation, building and farming - all highly relevant to his new role of establishing a plant nursery and working in yellow-eyed penguin habitats. Over the years, Jim's ingenuity and ability to improvise saved the Trust thousands of dollars. He was a superb ambassador for the Trust, gave 110% to the job and we will miss him greatly."



2001 Jim plants a pittosporum alongside the creek at Tavora.

*...ed by YEPT. This was mainly helping
 ...ped him on a more regular basis. Whatever
 ...perience in horticulture and mechanical
 ...blem. Although Jim never appeared to be
 ...efficiently. His pleasant companionship and
 ...eed, a real gentleman."*

1999 Working with Task Force Green employees



2002 Jim retired after 13 years of employment with the Trust - he can now rest on the shovel and watch from the sidelines!



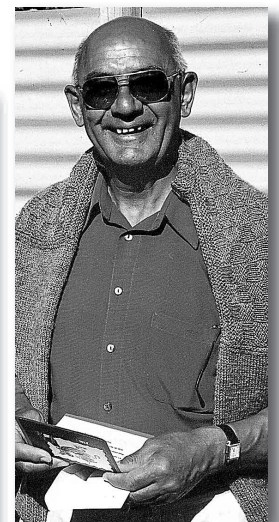
2000 The Nursery moved next door to a decommissioned sewerage treatment station giving more room for plant propagation, a sunnier aspect and lockable buildings.



1998 Installing interpretative signs



2003 The management of the Nursery is undertaken by two trustees, assisted by a dedicated group of volunteers.



Happy retirement Jim, we will miss you! - YEPT



We are obsessed with penguins. Our house is crammed with penguin memorabilia, our clothes all seem to have penguins on them, Barbara's car is covered in penguins. We belong to several penguin conservation organisations (including being life members of the Yellow-eyed Penguin Trust).



Some time ago, we decided to see all the species in the wild. Our first were Fiordland penguins in December 1994.

Since then our penguin obsession has grown exponentially. We set up our web site (www.pobox.com/~penguins) to educate people about these precious birds. We spent our vacation in 1996 at the International Penguin Conference where Peter was lucky enough to discover that his talents as a Physicist could be put to good use in designing new methods to tag penguins. That has led to many trips back to South Africa and allowed us to become closely involved in Penguin conservation and research there.

In July this year – less than a decade after we saw our very first wild penguin we will meet the Galapagos penguins and thus join that select club of penguin lovers who have seen all the species in the wild. Then it will be time for a return trip to New Zealand to meet up with yellow-eyed once again!

Peter and Barbara Barham

Dog by-law change at the Nuggets



Kath Widowson

The Kaimataitai beach north of the Nuggets Reserve (South Otago), is a place where juvenile yellow-eyed penguins frequent and where moulting adults come ashore in the autumn. It is also a place where people love to release their dogs. To the Trust it seemed that these two activities were incompatible so the Project Officer set off to explain this to the locals and gain support for a dog by-law banning dogs from this short stretch of beach. In short this activity was successful, and after a series of

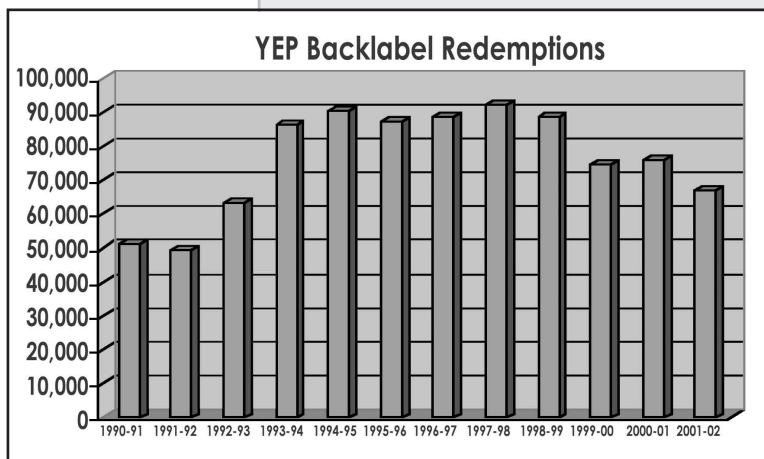
committee meetings and a hearing, the by-law was promulgated thanks to the wisdom of the Clutha District Council and the support of the Department of Conservation and the Yellow-eyed Penguin Consultative Group. A wonderful interpretive sign designed by the Trust and generally supported by the locals and visitors to this area strengthens the by-law. YEP MOULT IN PEACE!

MAINLAND REPORT



Mainland natural cheese products are now featuring a redesigned backlabel. This label includes useful nutritional information and a new look panel containing details on the redemption of barcodes to support the Yellow-eyed Penguin Trust. Instructions are also included on how to obtain a wallchart through our 0800 CHEESE customer services number.

Barcode redemptions were down in number last year and for the first quarter of this year they are below that of the same period last year. We would like to encourage you to keep sending in your barcodes, as this is such a worthwhile



To order your Mainland Chart call:
0800 243 373

Mustelids are always a threat to yellow-eyed penguins

Stoats and ferrets are always present in and around penguin breeding sites.

The predominant natural food for these animals are mice and rabbits, but the range of diet is quite wide. No one knows why, but sometimes mustelids will embark on a killing spree taking more than they need for immediate food. A particularly bad year which the Trust hopes will not be repeated, was back in 1999 when 47 chicks and eggs were taken by mustelids on the Otago Peninsula.

It is important therefore to protect the breeding birds by trapping. At Okia Reserve between December and April, the Trust set a small number of permanent trapping tunnels. This system utilising 2 mk 6 Fenn traps has a low labour input, doesn't require baits or constant maintenance. To date 34 (17 stoats and 17 ferrets) mustelids have been caught.



The YEP fights back in predator control!
(This really was witnessed by staff and trustees!!)



Jeff Connell, DoC Otago Conservator

The Honourable Chris Carter gets up close and personal!

Minister of Conservation visits Dunedin

"...I was really impressed by the wide range of conservation activities undertaken by the Trust to ensure the future of this extraordinary and endangered species. The yellow-eyed penguin is under threat from many of the same environmental and predatory hazards as other species unique to New Zealand. The preservation of penguin populations in the South is a major undertaking and you have my admiration and support. I really enjoyed the visit to Dunedin and was glad that DoC were able to show me a yellow-eyed penguin on its nest..."



November 2002

Coastal Dunes Vegetation Network Conference February 2003

"Great conference", "good speakers", "yummy food" were some of the comments received from 110 delegates who attended the Coastal Dune Vegetation Conference (CDVN) in Dunedin. The local Pingao Recovery Group, a close associate of the Trust, organised the three day conference which attracted people from all over the country.

The Trustees supported the event by catering for one of the days. A high point in the conference not only for the delegates, but also for us, was a field trip to our Tavora Reserve. Here we were treated to the sight of the restored dunes including the rare sand tussock, *Austrofestuca littoralis*, as well as a pair of penguins.



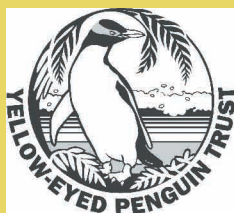
Quite unexpectedly during the visit the Trust was awarded the CDVN trophy for the "Best Coastal Restoration Project of 2003". So thank you CDVN and thank you to all those that have put in the hard work at Tavora.

Thank you to:

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News in Brief

A huge thank you to members of the Hastings Havelock North branch (Forest and Bird) who collected 294 cheese and butter barcodes from Mainland products. Keep on collecting!



The YEPT truck recently had an overhaul and we would once again like to thank

 **TOYOTA**  Cooke Howlison Toyota
for their continuing sponsorship.

Public Planting Days

Would you like to volunteer to plant trees this winter? Put the following dates in your diary now!

Sunday 8th June, Sunday 27th July and Sunday 3rd August.

In the week prior to each date, ring the Trust Office, or watch the weekly paper for details if you would like to help.

Also, Saturday 12 July. Planting day at TeRere Reserve, Southland. Contact Trust Office for details.

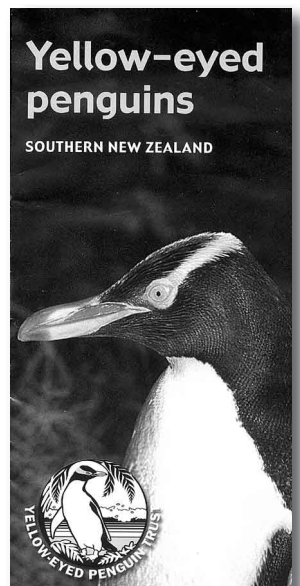
New website

www.yellow-eyed penguin.org.nz

Have you visited our website lately? You will see many changes, and hopefully find things a little easier to use. The 'members only' page is under construction as we are reviewing its content.

New brochure

Last year the Trust produced a new brochure "Yellow-eyed penguins: Southern New Zealand". It combines information originally available in four separate brochures, and we think the new look is pretty impressive! All due to the creative talents of Stewart and his team at Advertising & Art, Dunedin. Thank you!



Oamaru Penguin Symposium

The 4th Oamaru Penguin Symposium will be held in Oamaru, on the east coast of the South Island of New Zealand on Thursday and Friday, 19th & 20th June, 2003. The meeting will focus upon the following themes;

Rehabilitation centres and programmes - their economic success and role in penguin population well-being.

Predator management in and around penguin colonies, e.g., pro-active or re-active response?

Conservation issues for penguins of our greater region.

New Zealand crested penguins – biology, populations and changes.

For more information and registration details

A.G. Hocken,

"East Riding", 223, Whiterocks Road, RD 6-D Oamaru. New Zealand.

E-mail: agh@ihug.co.nz

Phone: +64-3 434-8188



DENIS PATERSON

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.