

# Penguin Rescue

Annual Report 2018/19



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# Penguin Rescue

[www.penguins.org.nz](http://www.penguins.org.nz)

aka Katiki Point Penguin Refuge Charitable Trust

**Our goal:** remove Yellow-eyed penguins off the endangered species list

**Our mission:** providing sanctuary for penguins

**Our work:**

- optimise penguin habitat
- maximise breeding success and survival
- minimise human disturbance
- enhance management through research
- advocate for penguin conservation

- based at Katiki Point Lighthouse
- two Yellow-eyed penguin colonies:
  - Katiki Point
  - Okahau Point
- started 35 years ago by Janice and Bob Jones and Chris Lalas



Moeraki

Okahau Point

Katiki Point Lighthouse

Katiki Point

# **2018/19 season**

Katiki Point: 23 nests

incl. 3 females recruited at 2 years old

Okahau Point: 18 nests

incl. 3 females recruited at 2 years old

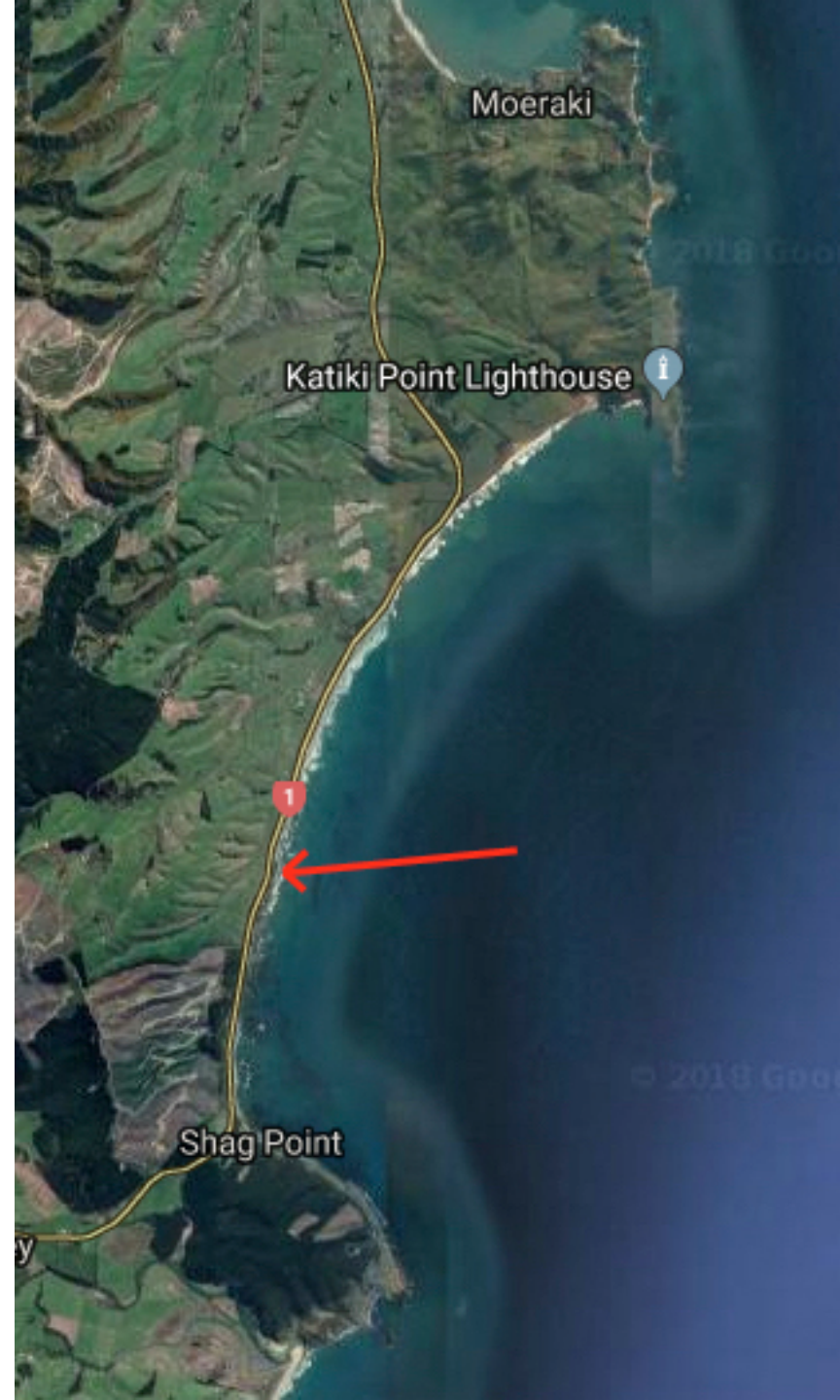
Katiki Beach: 1 nests

Shag Point: 0 nests

# Katiki Beach

1 nest produced 0 chicks

4 stoats, 6 rats, and 1 weasel  
trapped and killed



# Shag Point

0 nests in 2018/19

2014/15 season: 1 nest

2015/16 season: 1 nest

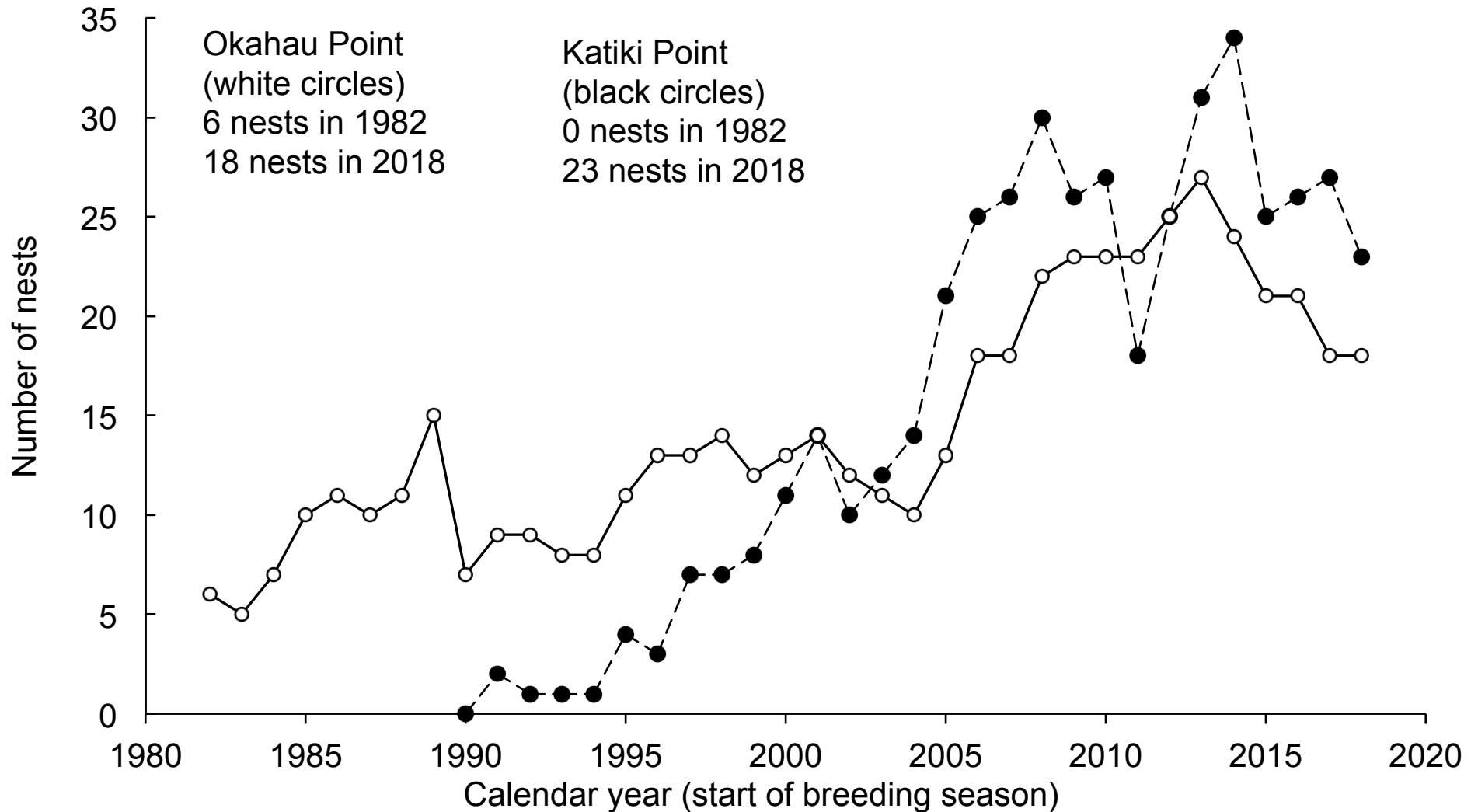
2016/17 season: 0 nest

2017/18 season: 0 nests

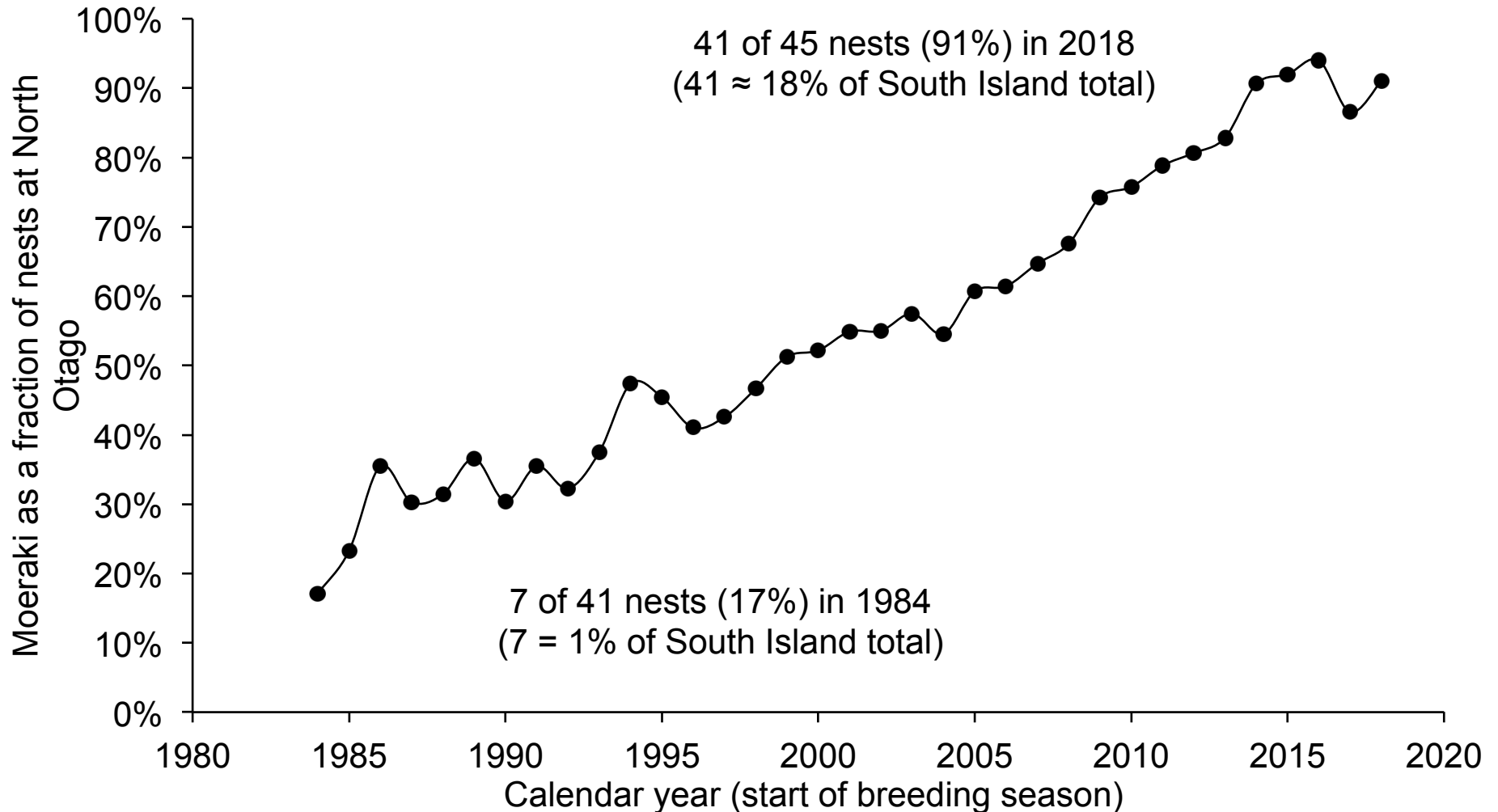
11 stoats, 6 rats, 3 hedgehogs  
and 2 weasels trapped and  
killed



# Yellow-eyed penguin nests at Katiki Point and Okahau Point from 1982 to 2018



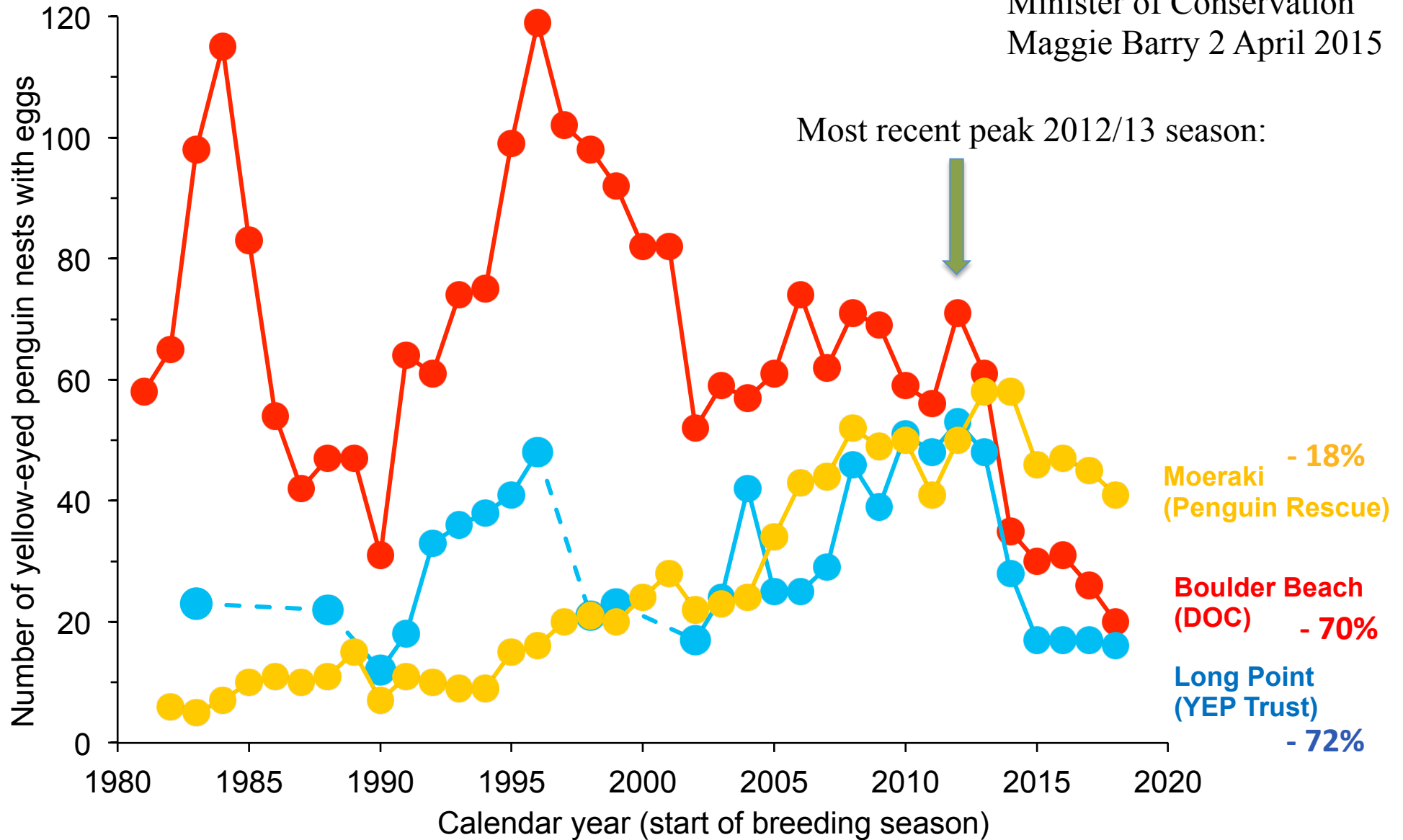
# Yellow-eyed penguin nests at Moeraki as a proportion of all North Otago nests from 1984 to 2018





# 3 key mainland breeding sites for yellow-eyed penguins

Minister of Conservation  
Maggie Barry 2 April 2015



## **Minimum effect of rehabilitation effort on 2018/19 breeding pair numbers**

Katiki Point: 23 females bred

16 (70%) have been rehabilitated and released

**At best there would have been 7 nests**

Okahau Point: 18 females bred

10 (56%) have been rehabilitated and released

**At best there would have been 8 nests**

**Moeraki decline since 2012: - 70%**

# Rehabilitation July 2018 - June 2019

Yellow-eyed penguins:

	<b>individuals</b>	<b>admissions</b>	<b>release rate of individuals</b>
adults	52	58	98%
juveniles (1 yr old)	2	2	100%
pre-fledging chicks	43	43	91%
post-fledging chicks	11	17	100%
<b>TOTAL</b>	108	120	95%

# Malaria treatment

	<b>Total in colonies</b>	<b>Admitted to rehab</b>	<b>Full Malaria treatment</b>
Female breeders	41	20 (49%)	10%
Male breeders	41	14 (34%)	20%
Male non-breeders	26	12 (46%)	23%
pre-fledging chicks	52	43 (83%)	21%
post-fledging chicks		9	44%

# Breeding success in 2018/19

	<b>Katiki Point</b>	<b>Okahau Point</b>
Number of nests	23	18
<b>Fertility</b> eggs hatched / laid	<b>86%</b> (44/38)	<b>91%</b> (30/33)
<b>Chick survival</b> chicks fledged/ hatched	<b>66%</b> (25/44)	<b>77%</b> (23/30)
<b>Chicks raised per pair</b> chicks fledged/ nest	<b>1.09</b>	<b>1.28</b>

# Predator control

- Predators killed
  - Katiki Pt: 20 cats, 5 ferret, 5 stoats, 2 weasels, 40 rats
  - Okahau Pt: 4 cats, 10 ferrets, 2 stoats, 1 weasel, 4 rats

No predation of yellow-eyed penguins but  
6 white-faced storm petrels have been found dead

# Major concern: food shortage

- Catastrophic starvation event
- November rains – murky ocean
- 11 chicks (21%) into rehab before 20 December
- 32 more chicks into rehab in Jan - Feb
- About 50% of resident adults thru rehab

# **The usual concerns: 2018/19**

- Outbreak of Diphtheria
- Malaria
- Interference by non-breeding males
- Tourism



# Outbreak of Diphtheria 18/19

		<b>Katiki Point</b>	<b>Okahau Point</b>
Number of chicks hatched		38	30
treated	Number	<b>32 (84%)</b>	<b>22 (73%)</b>
	Survival	<b>26 (81%)</b>	<b>18 (82%)</b>
untreated	Number	<b>6 (16%)</b>	<b>8 (27%)</b>
	Survival	<b>3 (50%)</b>	<b>6 (75%)</b>

# Mitigating Diphtheria

- All chicks checked every other day for symptoms  
7+ days old
- Symptoms: plaques, sunken neck, size, unequal chicks
- 5 consecutive days of Baytril or until symptoms are gone
- Sibling treated

# Interference by non-breeding males

Mitigating:

Artificial egg

Prerequisite:

Nest site/box



# Effect of the continued onslaught of uncontrolled tourists

- **1 egg was stolen**
- Eggs of 3 pairs fostered away



To protect 18% of South Island  
yellow-eyed penguin population

what is the cost?

\$ 51,000 spent

7472 hours volunteer work = 4 full time positions

33 volunteers; an average of 143 volunteer hours per week



**Any questions?**