



Auckland Island seabirds

Gibson's and white-capped albatross
and white-chinned petrel 2018–19

Project POP2017-04

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PARKER CONSERVATION

Introduction

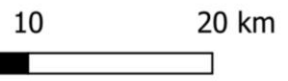


Long-lived, slow-breeding, high conservation concern, vulnerable to accidental capture in fisheries





Est: 2015



Disappointment Isl



Auckland Isl

Adams Isl



Est: 2013



Est: 1991

Scope



Mark-recapture, tracking

white-chinned

Gibson's

white-capped

Gibson's albatross

Population size

Update survival, productivity and recruitment

White-capped albatross

Nest cams

Aerial photos

White-chinned petrels

nine days 15-25 Dec

study burrows

- resightings
- banding new breeders

burrow switch checks

new study burrows



White-chinned petrels



Three GLS recovered

Recapture rate 0.27 (n=47)

- 0.35 two years ago
- only a quarter changed over (9d)

Some burrow-switching

- 3 in new burrows 2–5m away



White-chinned petrels



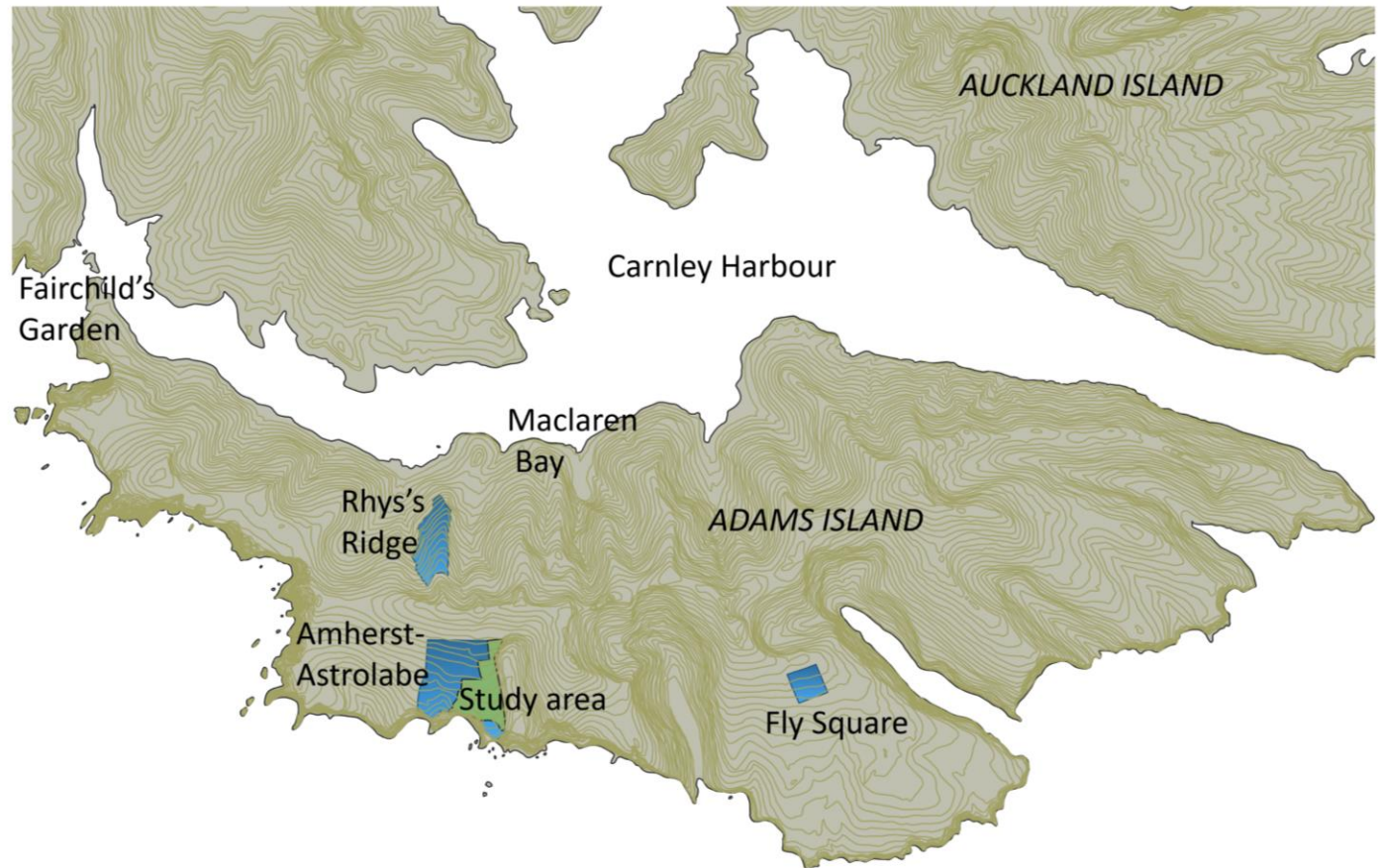
- 230 banded in 131 study burrows (+54 new)
- 4 yrs—no modelling yet—data look suitable



Gibson's albatross



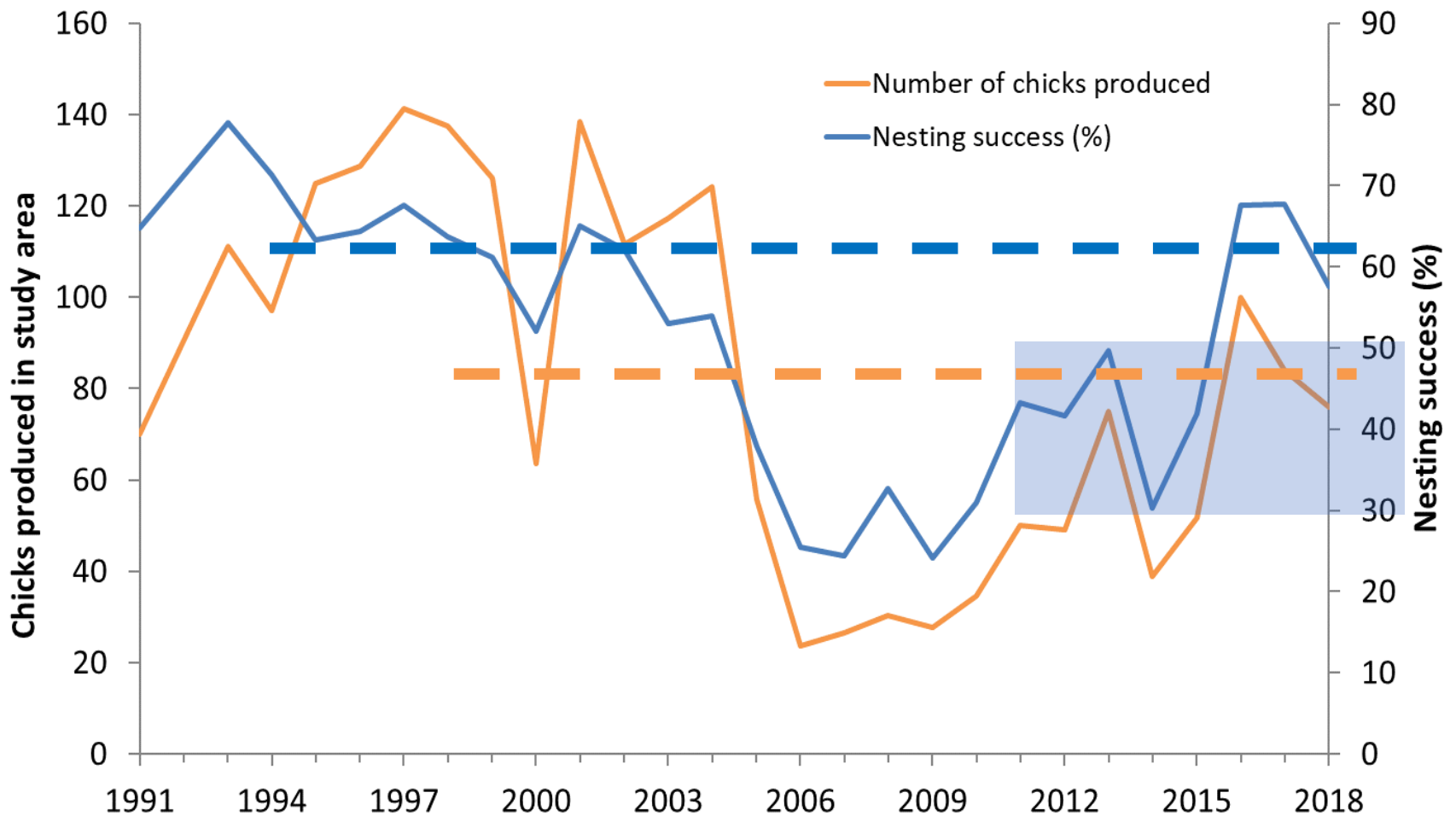
4 December–30 January



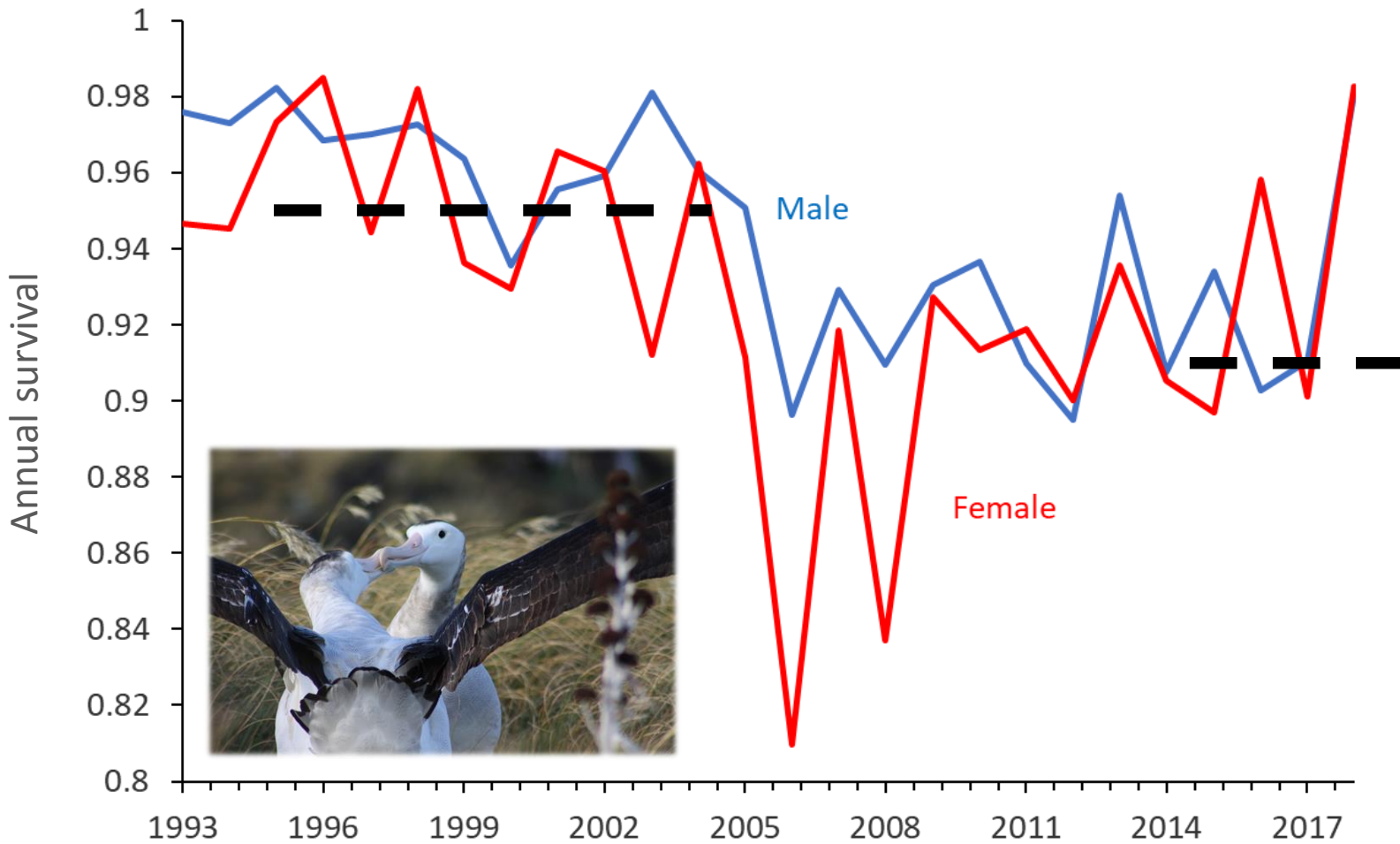
Gibson's tracking



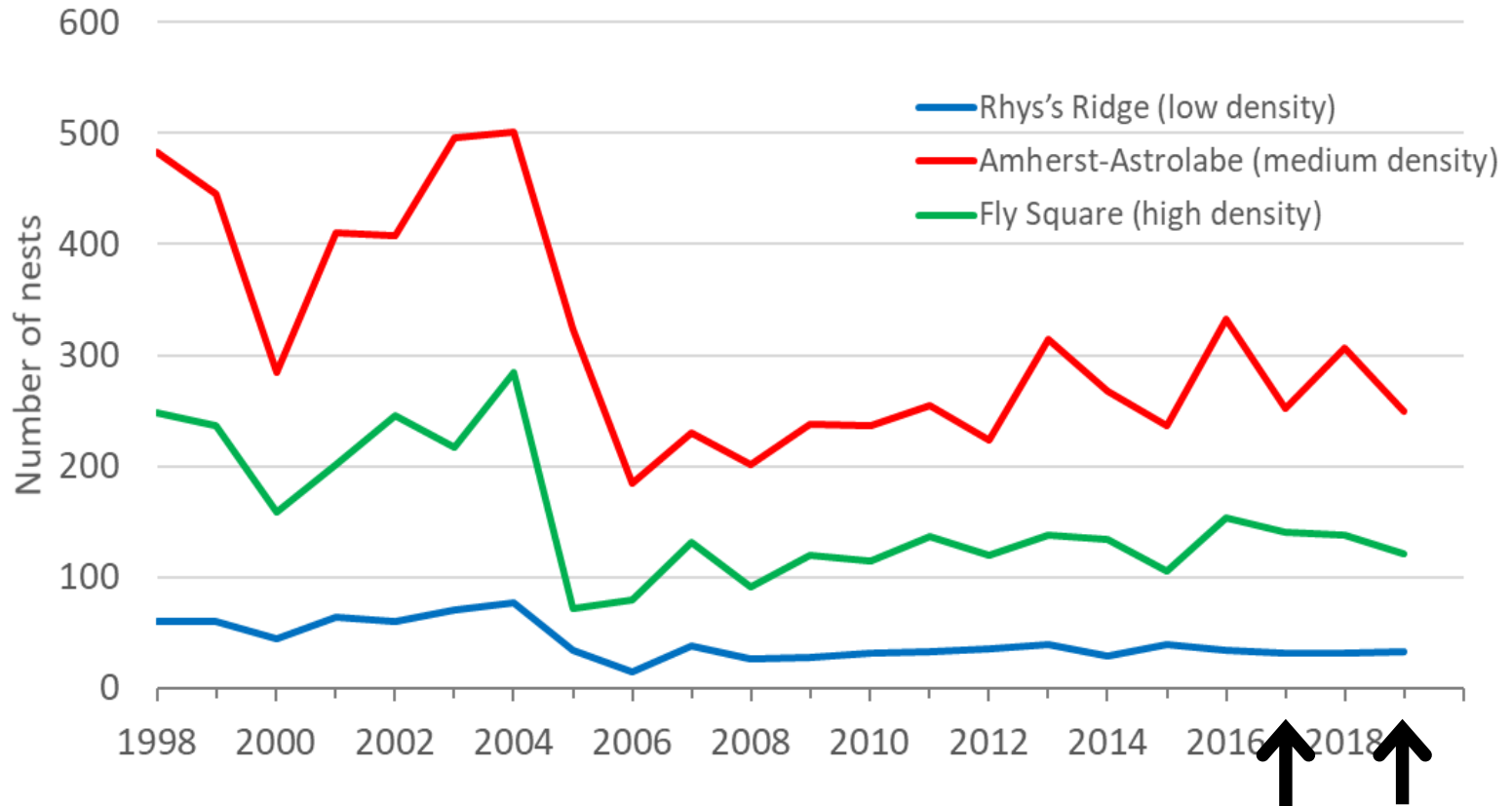
Gibson's productivity



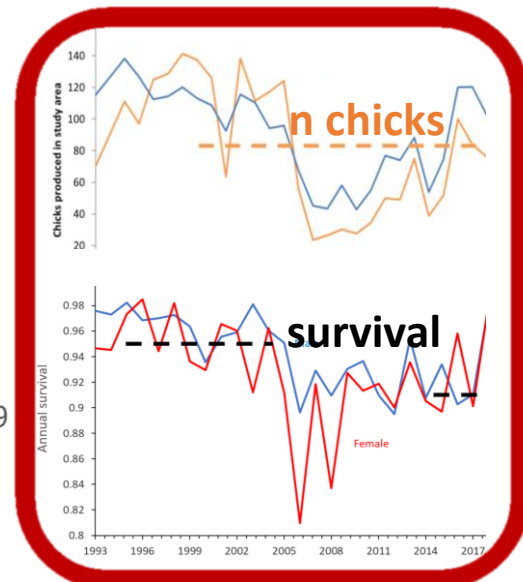
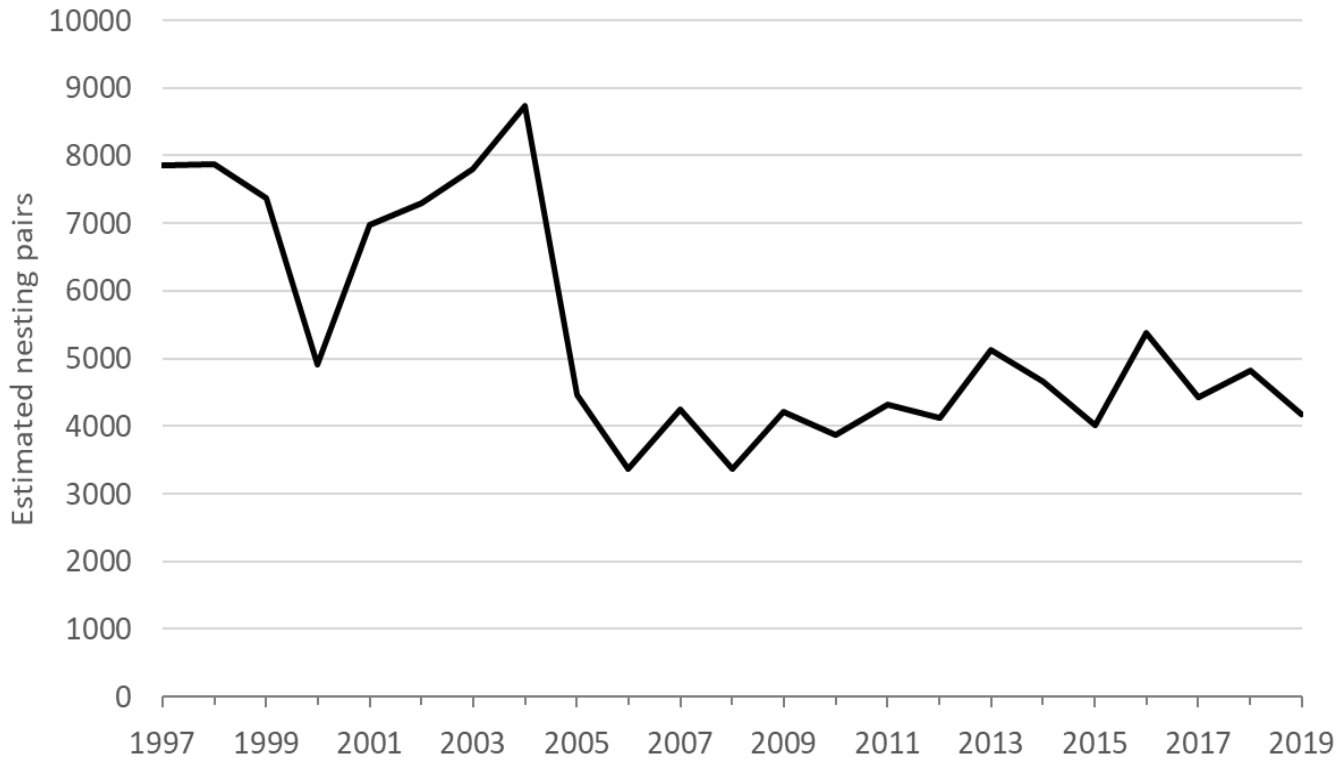
Gibson's survival



Gibson's census blocks



Gibson's population trend



White-capped albatross



White-capped albatross



Bands deployed

- 2015: 150
- 2016: 83
- 2017: 160
- 2018: 128
- 2019: 122

Banded population 643 birds
(+ historic bands)



WCA recaptures



Resighting rates

21% of 150 in 2016	3 d on island
24% of 233 in 2017	2.5 d
33% of 393 in 2018	2.5 d
34% of 557 in 2019	2.5 d

White-capped albatross



Study impact and feasibility

- Nervous species
- Steep terrain
- Windy
- Delicate island
- Challenging access



WCA 2015-19



- Marked population established
- Building recapture histories for robust survival estimates
- Short visits but resighting rates encouraging
- Short visits limit changeovers
- **Primary focus now resighting**

WCA nest camera trial



- Up to 9½ months (from Jan 2018)
- Badly-corroded cameras only 2½ mo
- Full set 17,270 images reviewed





Swift

0003   057F 13°C 23/03/2018 14:45:04



Chick success
~0.29

(5 fledged of 17
nests followed
from late incub)

WCA nest cams



- Fledging ~27 July (12 July–23 Aug)
- Adults first return to colony 30 Sept–10 Oct (2 cameras)—back full-time by 17 Oct (one camera)
- Low chick success; breeding success unknown but will be lower yet
- **Breeding success and failure rates**
 - Nest cams over 2 yrs to follow full breeding season
 - More nests

WCA aerial photographs



- Castaways B photographed 7 February
- 260 suitable photos archived
- Main difference: 3 wks later
- Correct with breeding failure rates during incub (nest cams)



Recommendations



White-chinned petrel

- Data look good for demographic estimates given more annual checks

Gibson's albatross

- Recovery still slowed by relatively high annual mortality and >10yrs low productivity
- Pop size, structure, trend should remain priorities

White-capped albatross

- Resighting priority, min 5d in Feb
- Breeding success, failure rates: nest cams over two years

Acknowledgements



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Heli pilot **Brian Patterson** and **Steve Kafka** and *Evohe* crew provided safe passage to, around and from the islands