Seabird return Protocols

Increasing efficiency and cost effectiveness

Between 100 and 400 seabirds returned for autopsy each year

Based on 5000 and 7000 days

BUT...

Increasing to over 10,000 days

Trade off between cost savings and minimising data loss

Challenges:

Manageable
Representative
Cost effective

4 Species make up about 85% of returns

White-chinned petrels
White-capped albatross
Sooty shearwaters
Buller's albatross

Some Givens:

Everything photographed

Anything uncertain returned

All banded / tracked birds returned

All penguins returned (PIT tags)

Option 1: Status Quo

All seabirds returned

Around 307 seabirds returned

257 form ‘big 4’ species

Option 2: First individual returned

Remainder of identifications confirmed by photograph

161 birds returned

Even sampling but loss of information for more rarely encountered species

Option 2a: For commonly bycaught species first individual returned

As with Option 2 but all rarely caught seabirds returned

183 birds returned

133 from the ‘big 4 species’

Option 3: For commonly bycaught species only photographs taken

Dependant on observers ability

Potentially only 52 birds returned

2 from the ‘big 4 species’ (banded)

Greatest loss of data on condition and stomach contents

Option 4: For commonly bycaught species only return birds from sample trips

Allows representative sampling

Sample half of trips:
175 birds (123 form the ‘big 4’)

Sample 1 in 5 trips
130 birds (78 from the ‘big 4’)

Summary

Highly dependant on observer ID

Risks for cryptic species - Short tailed shearwaters

Feathers/ other samples

Photography protocols

Other Risks / benefits?


3455
54
2
TWC


3455
60
3
XPE