



INT 2009/02
Photo-identification of live seabirds captured in New Zealand fisheries

Project update 5 October 2009

Objectives

Using photographs taken by observers, to accurately identify seabirds captured and released alive following interactions with New Zealand fishing vessels during the period 1 October 2004 to 30 September 2010.

1. To identify, from photographs taken by observers, the seabirds captured and released alive during the 2004/05 to 2009/10 fishing years
2. Update the observer database as necessary with correct identifications.

Wider use of photos

- Marine mammals, reptiles and protected fish (also protected corals)
- Dead captures when specimen discarded
- Dead captures when specimen returned for necropsy, but no information obtained
- (possible potential for age/sex/provenance determination in some species)

Progress to date

- 2007/08 observer year used as trial
- Scope widened to assess maximum extent of useful data available
- Photos sought for all protected species interactions where necropsy result not available
- Note: the final 2007/08 observer report will be updated to include confirmed autopsy and photo identifications

Results

				Photo available?	
				Yes	No
Birds					
Dead					
	Necropsy result available	299	- -	- -	
	Discarded/no necropsy result	34	10 (29%)	24 (71%)	
Alive		132	28 (21%)	104 (79%)	
Marine Mammals					
Dead					
	Necropsy result available	1	- -	- -	
	Discarded/no necropsy result	107	95 (89%)	12 (11%)	
Alive		26	7 (27%)	19 (73%)	
Other					
Dead					
	Necropsy result available	0	- -	- -	
	Discarded/no necropsy result	2	1 (50%)	1 (50%)	
Alive		1	1 (100%)	0 (0%)	

Problems encountered

- Matching photos to events in database not always easy
- Poor quality photos: focus, exposure, framing, lack of replication
- Live subjects hard to photograph!

Recommendations: scope

- Identification to species level (but may only be possible to genus/species groups)
- Live captures of all protected species interactions
- Dead captures where necropsy information not available

Recommendations: observers

- Request photos of all protected species interactions, when possible
- Training in how to take photos
- Ensure camera date/time set correctly
- Photo log to match actual photo number

Recommendations: analysis

- All photos to be viewed by expert
- Create genus-level codes
- Combine with necropsy project(s)
- Flag records with identification from photos
- Maintain table linking photo, expert and identification