

INT 2013/16: Identification of seabirds captured in New Zealand fisheries

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Presentation of results from seabirds returned or photographed in New Zealand fisheries between 1 July 2013 to 31 December 2014 to the Department of Conservation CSP Technical Working Group

20 May 2014

SPECIFIC OBJECTIVES:

NECROPSY (examination of returned dead seabird specimens):

- Determine **the taxon, sex, and where possible age-class and provenance** of seabirds killed in New Zealand fisheries;
- Detail the **injuries, body condition and stomach contents** and, where possible, the **likely cause of mortality** ;
- Report **any changes in the protocol** used for the necropsy of seabirds;

PHOTOGRAPHS (examination of photographs):

- Determine **the taxon and, where possible, sex, age-class and provenance** of seabirds captured in New Zealand fisheries (for live captures or dead specimens discarded at sea).



STAGE OF PROJECT:

- Final reports:

- ***1 July 2013 to 30 June 2014***

(**draft report due to be delivered 31 October 2014**; and final report (Bell, E.A. XXXX. Identification of seabirds captured in New Zealand fisheries: 1 July 2013 – 30 June 2014. CSP Contract Report, Department of Conservation, Wellington) due to be delivered 15 December 2014)



STAGE OF PROJECT:

- Quarterly reports
- 3 per year
 - Previous contract (INT2010/02) reports for 2010-2011, 2011-2012 and 2012-2013 available via CSP website
- This year:
 - 1 July 2013 to 30 September 2013 (delivered 7 January 2014)
 - 1 July 2013 to 31 December 2013 (delivered 30 March 2014)
 - 1 July 2013 to 31 March 2014 **(due to be delivered by 30 June 2014)**



NECROPSY PROGRAMME

(1 July 2013 to 31 December 2013):

128 seabirds returned (to date)

- 13 taxa
- 5 species (XSA, XWC, XSH, XBM, XGP) = 87.5% of returns
- 38% returned in October
- 61% males
- 98.4% adults (54% breeding)
- 1 banded (Salvin's albatross, female banded October 2012 on The Bounties) and was also carrying a GLS device (P. Sagar study)



NECROPSY PROGRAMME

(1 July 2013 to 31 December 2013):

23 vessels (to date)

- 38 trips
- Maximum of 29 birds from a single trip (another vessel returned 14 in a single trip)
- 5 vessels returned only one bird each
- 16 birds returned from surface longline vessels
- 112 birds returned from trawl vessels



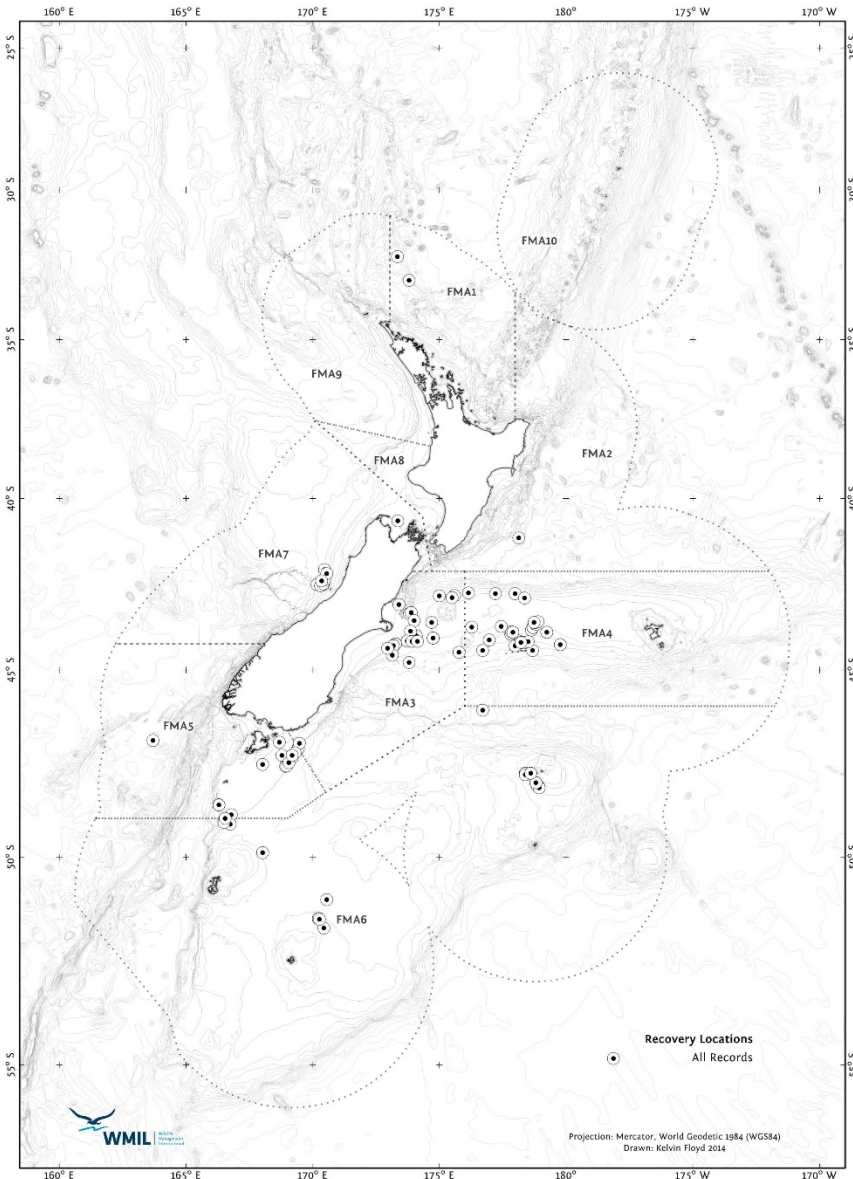
NECROPSY PROGRAMME (FISHERIES):

Species	Bottom/Midwater Trawl	Surface Longline	Total
Antipodean albatross		1	1
Buller's albatross	8	2	10
Campbell albatross	2		2
Chatham albatross		1	1
Grey petrel	9		9
NZ White-capped albatross	6		6
Salvin's albatross	33	7	40
Short-tailed shearwater	3		3
Snares Cape petrel	1		1
Sooty shearwater	12	3	15
Southern Royal albatross	1		1
Westland petrel		1	1
White-chinned petrel	37	1	38
Total	112	16	128
% Total	87.5%	12.5%	

Species	Longline			Trawl			Vessel strike	Total
	Bill/Neck	Wing	Legs/Feet	Warp	Net	Cod-end or Pound		
Antipodean albatross	1							1
Buller's albatross	1			5	3	1		10
Campbell albatross				1		1		2
Chatham Island albatross				1				1
Grey petrel					9			9
NZ White-capped albatross				5		1		6
Salvin's albatross		2	1	13	22	2		40
Short-tailed shearwater					3			3
Snares Cape Petrel							1	1
Sooty shearwater					9	5	1	15
Southern Royal albatross				1				1
Westland petrel					1			1
White-chinned petrel	5	5			27	1		38
Total	7	7	1	26	74	11	2	128
% of total longline or trawl	11.7			20.3	57.8	6.3	1.6	
Albatrosses (%)	33.3			100	33.8	45.5	0	
Non-albatross (%)	66.7			0	66.2	55.5	100	

NECROPSY PROGRAMME (OBSERVER ID):

Species	ID correct	ID correct 'species' group	ID seabird large or albatross	ID wrong	ID not on label	Total
Antipodean albatross		1				1
Buller's albatross	9			1		10
Campbell albatross				2		2
Chatham Island albatross	1					1
Grey petrel	8			1		9
NZ White-capped albatross	6					6
Salvin's albatross	26		1	10	3	40
Short-tailed shearwater				3		3
Snares Cape Petrel		1				1
Sooty shearwater	13	1		1		15
Southern Royal albatross	1					1
Westland petrel	1					1
White-chinned petrel	33			4	1	38
Total	98	3	1	22	4	128
% total	76.5	2.3	0.9	17.2	3.1	



NECROPSY PROGRAMME (LOCATIONS):

Birds returned from:

FMA 1

FMA 2

FMA 3

FMA 4

FMA 5

FMA 6

FMA 7

NECROPSY PROGRAMME (DISPOSAL):

- Albatross stored indefinitely and non-albatross stored for 12 months (before disposal at landfill)
- Quarterly updates of available birds to Iwi, Museums and Universities
- 34 birds (albatross) given to Iwi
- 2 birds given to Museums (all banded birds go to Te Papa)
- 16 birds (shearwaters) given to Auckland University



PHOTOGRAPH IDENTIFICATION

(1 July 2013 to 31 December 2013):

- 42 seabird interactions reported or photographed (excluding those returned in autopsy programme)
 - 3 photographed and reported in MPI COD extract
 - 11 photographed, but not in extract
 - 28 listed in extract, but not photographed
- 15 different taxa
- Missing data from MPI COD extract (November 2013 onwards) needs to be delivered

PHOTOGRAPHS (IDENTIFICATION) (1 July 2013 to 31 December 2013):

	Dead	Alive	Total
Photographed & listed in MPI COD extract	0	3	3
No photograph, but in MPI COD extract	3	25	28
Photographed, but not in MPI COD extract	1	10	11
Total	4 (9.5%)	38 (90.5%)	42

Of the 3 photographed/extract birds, only one photograph received (correctly identified as XFP)

PHOTO-IDENTIFICATION - ISSUES:



PHOTO-IDENTIFICATION - ISSUES:

- Still getting interactions that are not photographed (i.e. listed in extract, but no images)
- Still getting photographs of bird interactions with no extract information
- A range in the quality of photographs
- Difficulties in matching photo with information
 - No label with dead birds
 - Live specimens can't be labelled, but photo logs sometimes insufficient
- Delays in obtaining images and extracts
- Receiving only partial extracts for reporting period

ACKNOWLEDGEMENTS:

- This work is funded through the Conservation Services Programme (Project INT2013/16), Department of Conservation.
- Thanks to all Ministry of Fisheries observers who retained the birds for autopsy, took the photographs, and completed log books (which contain important information on cause of death and other aspects of the interaction onboard).
- Kristopher Ramm who provided the link between Wildlife Management International Ltd, the Department of Conservation and the Ministry of Fisheries Observer Programme, and helped provide clarification on any discrepancy with autopsy tag data and photograph records.
- Kelvin Floyd (WMIL) developed the WMIL autopsy and photo-identification database.