

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 2014 to 31 December 2014 to the Department of Conservation CSP Technical Working Group

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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:

- Quarterly reports (available on CSP website):
 - Delivered on 5 January 2015 (covering 1 July to 30 Sept. 2014)
 - Delivered on 31 March 2015 (covering 1 July to 31 Dec. 2014)
 - Due 30 June 2015 (covering 1 July 2014 to 31 March 2015)
- Final reports:
 - Draft due 31 October 2015 (covering 1 July 2014 to 30 June 2015)
 - Final due 15 December 2015 (Bell, E.A. XXXX. Identification of seabirds captured in New Zealand fisheries: 1 July 2014 – 30 June 2015. CSP Contract Report, Department of Conservation, Wellington)



NECROPSY PROGRAMME

(1 July 2014 to 31 December 2014):

92 seabirds returned (to date)

- 14 taxa
- 6 species (XSA, XWC, XWM, XGP, XSH, XBM) = 89.2.5% of returns
- 30.4% returned in October
- 58.7% males
- 95.6% adults (83% breeding)
- None banded to date



NECROPSY PROGRAMME

(1 July 2013 to 31 December 2013):

18 vessels (to date)

- 35 trips
- Maximum of 13 birds from a single trip (another vessel returned 8 in a single trip)
- 5 vessels returned only one bird each
- 15 birds returned from surface longline vessels
- 74 birds returned from trawl vessels
- 1 bird returned from set net
- 2 birds impacted vessels



NECROPSY PROGRAMME (FISHERIES):

Species	Trawl	Surface Longline	Impact	Set Net	Total
Buller's albatross	6				6
Cape petrel				1	1
Fairy prion			1		1
Great-winged petrel	1				1
Grey petrel	9				9
Grey-backed storm petrel	1		1		2
NZ white-capped albatross	9	1			10
Pacific albatross	1				1
Salvin's albatross	23	1			24
Sooty shearwater	9				9
Southern Royal albatross		1			1
Westland petrel	2				2
White-chinned petrel	12	12			24
White-faced storm petrel	1				1
Total	74	15	2	1	92
% Total	80.43%	16.30%	2.20%	1.10%	

NECROPSY PROGRAMME (CAPTURE LOCATION):

	Hook	Trawl						Impact	Total
		Warp	Net	Codend	Lengthener	Pound	Trawl Door		
Buller's albatross		3	2		1				6
Cape petrel			1						1
Fairy prion								1	1
Great-winged petrel			1						1
Grey petrel			8		1				9
Grey-backed storm petrel						1		1	2
New Zealand white-capped albatross	1	2	6				1		10
Pacific albatross		1							1
Salvin's albatross	1	12	7	3			1		24
Sooty shearwater			7	1		1			9
Southern royal albatross	1								1
Westland petrel			2						2
White-chinned petrel	12		12						24
White-faced storm petrel						1			1
Total	15	18	46	4	2	3	2	2	92
% Total	16.3	19.6	50	4.3	2.2	3.3	2.2	2.2	
Albatross %	20	100	32.6	75	50	0	100	0	
Non-albatross %	80	0	67.4	25	50	100	0	100	

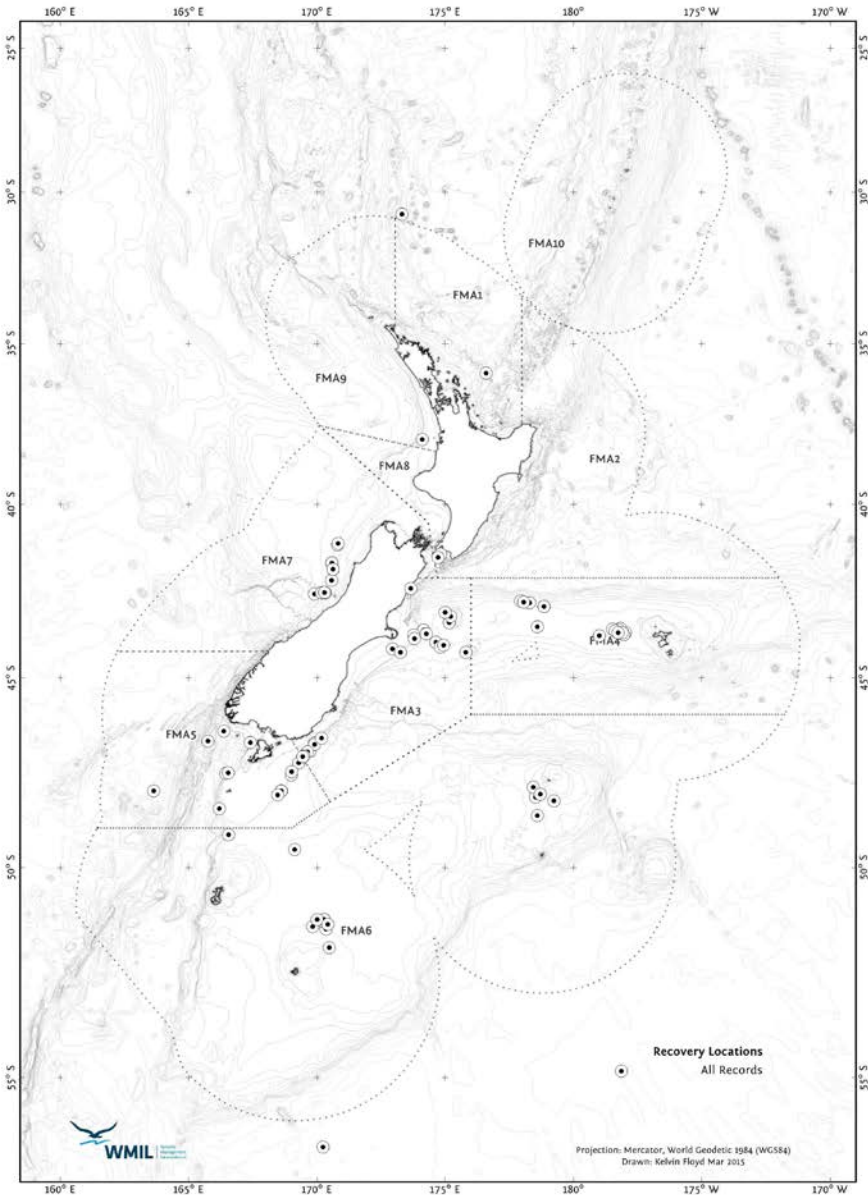
NECROPSY PROGRAMME (INJURIES):

Species	No injuries	Broken bones	Greased	Lacerations	Liced	Hook	Waterlogged
Buller's albatross		4	3	2			6
Cape petrel	1						
Fairy prion	1						
Great-winged petrel	1						1
Grey petrel	6	3					8
Grey-backed storm petrel		1					1
NZ white-capped albatross	1	5	3	3		1	8
Pacific albatross			1				1
Salvin's albatross	7	16	9	4		1	7
Sooty shearwater	6	3					7
Southern royal albatross	1					1	
Westland petrel	1			1			2
White-chinned petrel	11	11		1	1	12	19
White-faced storm petrel		1	3				1
Total	36	44	19	11	1	15	62
% Total	39.1%	47.8%	20.6%	12.0%	1.1%	16.3%	67.4%
% Albatross	25	56.8	84.2	81.8	0	20	
% Non-albatross	75	43.2	15.8	8.1	100	80	

NECROPSY PROGRAMME (OBSERVER ID):

	ID Correct	ID as Correct spp Group	ID Wrong	Total
Buller's albatross	5	1		6
Cape petrel		1		1
Fairy prion		1		1
Great-winged petrel			1	1
Grey petrel	9			9
Grey-backed storm petrel		2		2
New Zealand white-capped albatross	8	1	1	10
Pacific albatross		1		1
Salvin's albatross	22		2	24
Sooty shearwater	9			9
Southern royal albatross		1		1
Westland petrel	2			2
White-chinned petrel	21	1	2	24
White-faced storm petrel		1		1
Total	76	10	6	92
% Total	82.6	10.9	6.5	

WRONG IDS: XGF & XWC recorded as XBP, XSA as XBM and XWM as XGA



NECROPSY PROGRAMME (LOCATIONS):

Birds returned from:

FMA 1

FMA 2

FMA 3

FMA 4

FMA 5

FMA 6

FMA 7

FMA 9

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
 - 503 birds given to Iwi (since 2010)
 - 8 birds given to Museums (since July 2014 & all banded birds go to Te Papa)
 - 16 birds (shearwaters) given to Auckland University
 - 2 birds (petrels) given for the DOC seabird-detector dog training



PHOTOGRAPH IDENTIFICATION

(1 July 2014 to 31 December 2014):

- 58 seabird interactions reported or photographed (excluding those returned in autopsy programme)
 - 4 photographed and reported in MPI COD extract
 - 5 photographed, but not in extract
 - 49 listed in extract, but not photographed
- 17 different taxa
- Missing data from MPI COD extract (November 2014 onwards) needs to be delivered

PHOTOGRAPHS (IDENTIFICATION) (1 July 2014 to 31 December 2014):

	Dead	Alive	Total
Photographed & listed in MPI COD extract	0	4	4
No photograph, but in MPI COD extract	0	5	5
Photographed, but not in MPI COD extract	5	44	49
Total	5 (8.6%)	53 (91.4%)	58

**Of the 4 photographed/extract birds, all were
correctly identified**

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.