

INT 2010/02: 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 2012 to 31 March 2013 to the Department of Conservation CSP Technical Working Group

1 August 2013

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 October 2010 to 30 June 2011**
(delivered 15 December 2011; Bell, E.A. 2011. Identification of seabirds captured in New Zealand fisheries: 1 October 2010 – 30 June 2011. CSP Contract Report, Department of Conservation, Wellington; <http://www.doc.govt.nz/documents/conservation/marine-and-coastal/marine-conservation-services/int-2010-01-seabird-id-final-report-oct-2010-to-june-2011.pdf>)
 - **1 July 2011 to 30 June 2012**
(delivered 15 December 2012; Bell, E.A. 2012. Identification of seabirds captured in New Zealand fisheries: 1 July 2011 – 30 June 2012. CSP Contract Report, Department of Conservation, Wellington; <http://www.doc.govt.nz/Documents/conservation/marine-and-coastal/marine-conservation-services/int-2010-02-seabird-id-final-report-2011-12.pdf>)



STAGE OF PROJECT:

- Quarterly reports
- 4 per year
 - 2010-2011 and 2011-2012 available via CSP website
- This year:
 - 1 July 2012 to 30 September 2012 (delivered 7 January 2013)
 - 1 July 2012 to 31 December 2012 (delivered 27 March 2013, <http://www.doc.govt.nz/Documents/conservation/marine-and-coastal/marine-conservation-services/int-2010-02-seabird-identification-jul-dec-2012-update.pdf>)
 - 1 July 2012 to 31 March 2013 (delivered 28 June 2013)



NECROPSY PROGRAMME

(1 July 2012 to 31 March 2013):

278 seabirds returned (to date)

- 14 taxa
- 4 species (XWM, XWC, XSH, XSA) = 90% of returns
- 37% returned in February & 27% in March
- 75% males
- 97.5% adults (56% breeding)
- 1 banded (Chatham albatross, female banded 6/12/2008 on The Pyramid)



NECROPSY PROGRAMME

(1 July 2012 to 31 March 2013):

27 vessels

- 67 trips
- Maximum of 19 birds from a single trip
- 2 vessels returned only one bird each
- 5 birds returned from bottom longline vessels
- 8 birds returned from surface longline vessels
- 264 birds returned from trawl vessels



NECROPSY PROGRAMME (FISHERIES):

Species	Trawl		Longline		Total
	Bottom	Midwater	Surface	Bottom	
Black-backed gull				2	2
Buller's albatross	1	7	2		10
Campbell albatross	1		2		3
Chatham Island albatross	1				1
Common diving petrel	1				1
Fairy Prion	1	1			2
Flesh-footed shearwater				3	3
Grey petrel	1		2		3
NZ White-capped albatross	2	60			62
Petrel (unidentified)		1			1
Salvin's albatross	14	5	1		20
Sooty shearwater	17	18			35
Southern Royal albatross		1			1
Westland petrel			1		1
White-chinned petrel	33	99	1		133
Total	72	192	9	5	278
	264		14		

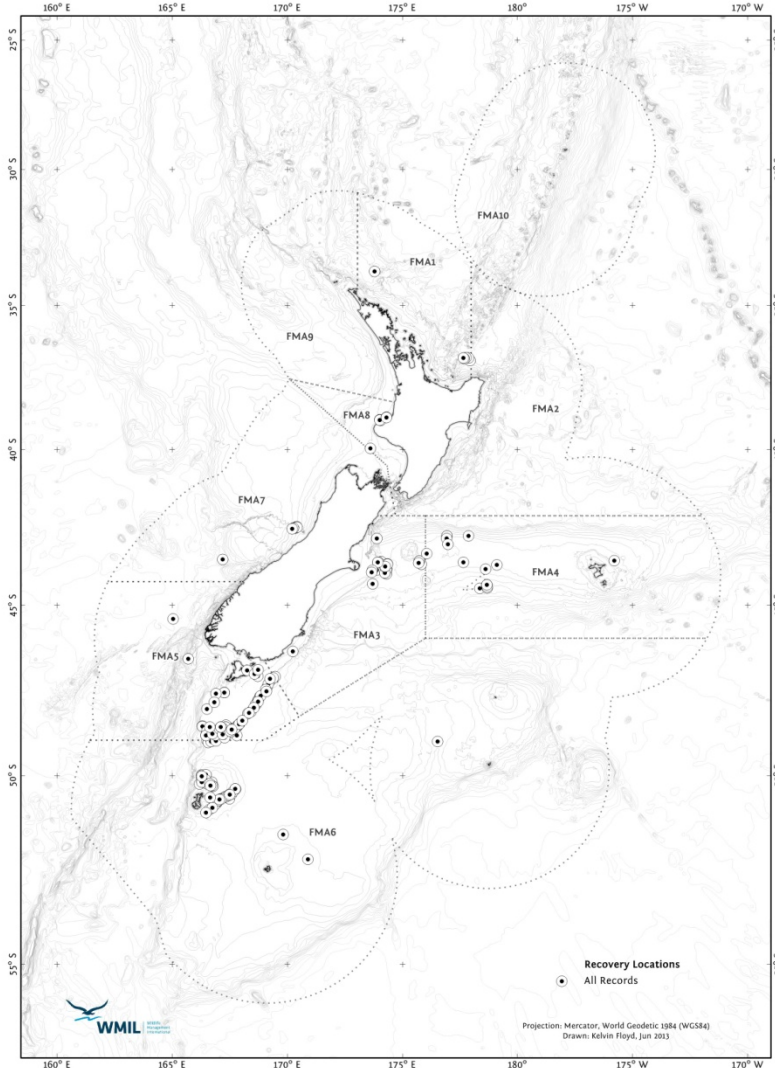
NECROPSY PROGRAMME (CAUSE OF DEATH):

Species	Longline				Trawl			Vessel strike	Total
	Bill or Throat	Wing	Legs or Feet	Not obvious	Warp	Net	Cod-end		
Black-backed gull				2					2
Buller's albatross				2	5	2	1		10
Campbell albatross	2				1				3
Chatham Island albatross						1			1
Common diving petrel								1	1
Fairy Prion							1	1	2
Flesh-footed shearwater	3								3
Grey petrel				1		2			3
NZ White-capped albatross	1				35	23	3		62
Petrel (unidentified)						1			1
Salvin's albatross	1				3	16			20
Sooty shearwater						31	3	1	35
Southern Royal albatross						1			1
Westland petrel						1			1
White-chinned petrel						120	13		133
Total	7			5	44	198	21	3	278
% of total longline or trawl	58.3			41.7	16.7	75.3	8.0		
Albatrosses (%)	57.1			40	100	21.7	19.1	0	
Non-albatross (%)	42.9			60	0	78.3	80.9	100	

NECROPSY PROGRAMME (OBSERVER ID):

Species	ID correct	ID'd to correct 'species' group*	ID'd as seabird large or albatross*	ID'd as petrel unidentified*	ID wrong	ID not on label	Total
Black-backed gull	1				1		2
Buller's albatross	9					1	10
Campbell albatross		2					3
Chatham Island albatross	1						1
Common diving petrel	2						2
Fairy Prion	1				1		2
Flesh-footed shearwater	3						3
Grey petrel	2						2
NZ White-capped albatross	51	3	1		1	6	62
Petrel (unidentified)						1	1
Salvin's albatross	18				1	1	20
Sooty shearwater	24			2	6	3	35
Southern Royal albatross		1					1
Westland petrel		1					1
White-chinned petrel	112	2		8	7	5	134
Total	224	9	1	10	17	17	278
% total longline or trawl	80.6	3.2	0.4	3.6	6.1	6.1	

NECROPSY PROGRAMME (LOCATIONS):



Birds returned from:

FMA 1

FMA 3

FMA 4

FMA 5

FMA 6

FMA 7

FMA 8

NECROPSY PROGRAMME (DISPOSAL):

- Quarterly updates of available birds to Iwi and Museums
- First in, first served basis
- 279 birds given to Iwi
- 26 birds given to Museums
 - All banded birds go to Te Papa



PHOTOGRAPH IDENTIFICATION

(1 July 2012 to 31 March 2013):

- 143 seabird interactions reported or photographed (excluding those returned in autopsy programme)
 - 66 photographed and reported in MPI COD extract
 - 25 photographed, but not in extract
 - 52 listed in extract, but not photographed
- 23 different taxa
- Missing data from MPI COD extract (for most of March 2013) needs to be delivered

PHOTOGRAPHS (IDENTIFICATION) (1 July 2012 to 31 March 2013):

	Dead	Alive	Unknown	Total
Photographed & listed in MPI COD extract	19	47	0	66
No photograph, but in MPI COD extract	3	49	0	52
Photographed, but not in MPI COD extract	3	22	0	25
Total	25 (17.5%)	118 (82.5%)	0	143

PHOTO-IDENTIFICATION (66 EXTRACT/PHOTO BIRDS):

Species	Confirmed	New, consistent	New, not consistent	Total
Antipodean albatross		2		2
Buller's albatross	2		2	4
Campbell albatross		1		1
Gibson's albatross		1		1
Grey petrel	1		11	12
NZ white-capped albatross	8	1		9
Salvin's albatross	5			5
Snares cape petrel		1	27	28
Sooty shearwater	1			1
White-chinned petrel	1		1	2
White-faced storm petrel	1			1
Total	19	6	41	66
% total	28.8	9.1	62.1	

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 (although this has improved)

ACKNOWLEDGEMENTS:

- This work is funded through the Conservation Services Programme (Project INT2010/02), 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.