Identification of seabird killed and returned in New Zealand fisheries

1 July 2011 to 31 December 2011



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NECROPSY PROGRAMME (1 July to 31 Dec. 2011):

- 40 seabirds returned
- 11 taxa
- 13 vessels, 16 trips
- Maximum of 9 birds from a single trip
- 5 species = 77.5% of returns
- 45% returned in October, 22.5% in August, 17.5% in November
- 82.5% males
- 95% adults
- 1 banded (Antipodean albatross)





NECROPSY PROGRAMME (FISHERIES):

| | Trawl | | | | | Longline | | | | | | |
|---------------------------|--------|------|----------|------|-------|----------|------|--------|------|-------|----|--|
| Species | Bottom | | Midwater | | | Surface | | Bottom | | Total | | |
| | Squid | Hoki | Other | Hoki | Squid | Other | Tuna | Other | Tuna | Other | | |
| Antipodean albatross | | | | | | | | 2 | | | 2 | |
| Buller's albatross | 1 | | 1 | | | | | | | | 2 | |
| Campbell albatross | | | 1 | | | 1 | | | | | 2 | |
| Grey petrel | | | | | | 5 | | | | | 5 | |
| NZ Banded Dotterel | | | | | | 1 | | | | | 1 | |
| NZ white-capped albatross | | | | | | 3 | | | | | 3 | |
| Salvin's albatross | | | 6 | | | 2 | | | | | 8 | |
| Sooty shearwater | | | 12 | | | | | | | | 12 | |
| Southern royal albatross | | | | | | 1 | | | | | 1 | |
| Westland petrel | | | | | | | | | | 1 | 1 | |
| White-chinned petrel | | | | | | 3 | | | | | 3 | |
| Total | 1 | 0 | 20 | 0 | 0 | 16 | 0 | 2 | 0 | 1 | 40 | |
| | | | 3 | 7 | | | | | 3 | 40 | | |





NECROPSY PROGRAMME (CAUSE OF DEATH):

| | Longline | | Trawl | | ., . | |
|------------------------------|-------------------|----------------|-------|-----|------------------|-------|
| Species | Bill or Throat | Not obvious | Warp | Net | Vessel strike | Total |
| Total | 2 | 1 | 8 | 28 | 1 | 40 |
| % of total longline or trawl | 67 | 33 | 22 | 78 | | |
| Albatrosses (%) | 100 | | 100 | | | |
| Non-albatross (%) | | 100 | 25 | 75 | 100 | |





NECROPSY PROGRAMME (OBSERVER ID):

| | | | ID as | ID as | | New | ID | |
|---------------------------|---------|-------|-----------|-----------|----------------|--------|-------|-------|
| Species | ID | ID | correct | seabird | ID as 'petrel' | code | not | Total |
| | correct | wrong | 'species' | large or | | needed | on | |
| | | | group | albatross | | necaca | label | |
| Antipodean albatross | | | | 2 | | | | 2 |
| Buller's albatross | 2 | | | | | | | 2 |
| Campbell albatross | 1 | 1 | | | | | | 2 |
| Grey petrel | 2 | | | | 3 | | | 5 |
| NZ Banded Dotterel | | | | | | 1 | | 1 |
| NZ white-capped albatross | 2 | | 1 | | | | | 3 |
| Salvin's albatross | 8 | | | | | | | 8 |
| Sooty shearwater | 10 | | | | | | 2 | 12 |
| Southern royal albatross | | 1 | | | | | | 1 |
| Westland petrel | 1 | | | | | | | 1 |
| White-chinned petrel | 3 | | | | | | | 3 |
| Total | 29 | 2 | 1 | 2 | 3 | 1 | 2 | 40 |
| % of total | 72.5 | 5 | 2.5 | 5 | 7.5 | 2.5 | 5 | |





NECROPSY PROGRAMME (DISPOSAL):

- Quarterly updates of available birds to Iwi and Museums
- First in, first served for specimens
- Over 50 birds given to Iwi and Museums (Otago and Te Papa)
- Interest from China (for a special seabird exhibition) for approximately 30 specimens
- One specimen (black petrel) provided to NGO for education purposes





PHOTO-IDENTIFICATION (1 July to 31 Dec. 2011):

- 19 seabird interactions reported or photographed (excluding those returned in autopsy programme)
 - Only up to 30 September 2011
 - 6 photographed and reported to MinFish
 - 13 reported, but not photographed
- 4 different taxa
- Photographs and extract up to March 2012 has just been delivered to WMIL





PHOTO-IDENTIFICATION (IDENTIFICATION):

| UP TO 30 SEPTEMBER ONLY | Dead | Alive | Unknown | Total |
|--|------|-------|---------|-------|
| Photographed & listed in MinFish extract | 0 | 6 | 0 | 6 |
| No photograph, but listed in MinFish extract | 1 | 8 | 4 | 12 |
| | (8%) | (61%) | (31%) | 13 |
| Total | 1 | 14 | 4 | 10 |
| Total | (5%) | (74%) | (21%) | 19 |

| Species (observer) | Confirmed | New, consistent | New, not confirmed | Total |
|----------------------|-----------|-----------------|--------------------|-------|
| Buller's albatross | 1 | | | 1 |
| Common diving petrel | 1 | | | 1 |
| Grey Petrel | 1 | | | 1 |
| Salvin's albatross | 3 | | | 3 |
| Total | 6 | | | 6 |





PHOTO-IDENTIFICATION - ISSUES:

- Many interactions not photographed (i.e. listed in extract, but no images)
- Poor photo quality
- Difficulties in matching photo with information(no autopsy label photographed for live specimens, photo logs sometimes insufficient)
- Delays in obtaining images and extracts





VISIT FROM JAPANESE FISHERIES OBSERVER

- Visited in early March 2012
- Observed the necropsy programme
 - Watched the necropsy of a range of bird species
 - Was impressed with the data recording and storage system used by WMIL
 - Likely to use a similar system in Japan
- Shown a selection of photos
 - Japan uses only photo system for their bycatch, with good guidelines and manual for observers





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- 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 photoidentification database.