

Overview

The purpose of this summary report is to provide IMM assessors with an update of the nature and extent of seabird interactions in the New Zealand ling longline fisheries, as they are displayed on the Dragonfly Projected Species Captures website

The URL to the Dragonfly Projected Species Captures website:

- <http://data.dragonfly.co.nz/psc/>

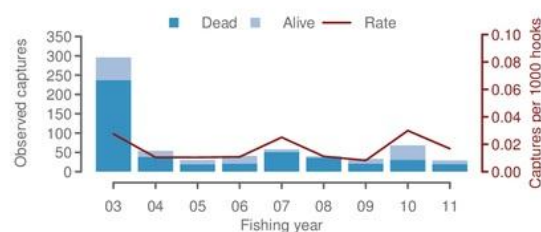
Seabird interactions: Ling LL fisheries in the New Zealand EEZ

2002–03 and 2010–11

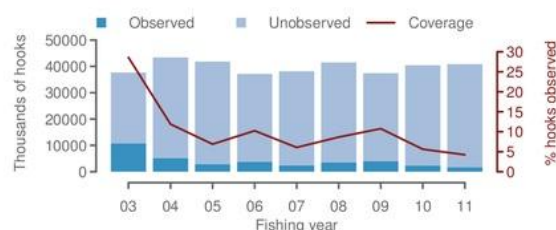
Table 1: Table of effort and captures between 2002–03 and 2010–11 fishing years (see [Abraham and Thompson \(2011b\)](#))

Table of effort and captures by fishing year						
Years	hooks	Observed (%)	Observed Captures	Rate	Mean Estimated Captures	95% c.i.
2002-03	37,671,038	28.6	296	0.027	1,718	1,250-2,268
2003-04	43,397,540	11.9	54	0.010	1,151	761-1,604
2004-05	41,818,638	6.9	30	0.010	1,191	802-1,661
2005-06	37,126,833	10.2	41	0.011	1,037	701-1,431
2006-07	38,124,470	6.1	58	0.025	1,236	833-1,716
2007-08	41,464,276	8.7	40	0.011	1,193	824-1,621
2008-09	37,389,512	10.8	33	0.008	1,037	699-1,458
2009-10	40,413,281	5.6	68	0.030	1,062	716-1,474
2010-11	40,826,726	4.2	29	0.017	1,403	955-1,967

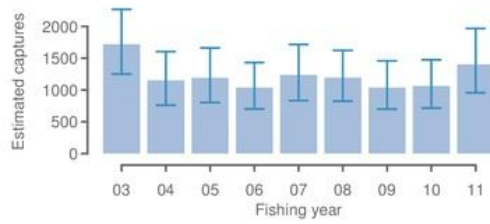
Observed captures of birds in bottom longline fisheries



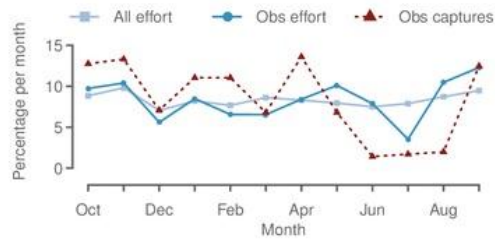
Fishing effort and observations in bottom longline fisheries



Estimated captures of birds in bottom longline fisheries



Fishing effort and observed captures of birds by month



- >100 events
- 10 – 49 events
- 1 – 4 events
- >20 obs events
- 5 – 19 obs events
- 1 – 4 obs events
- observed captures

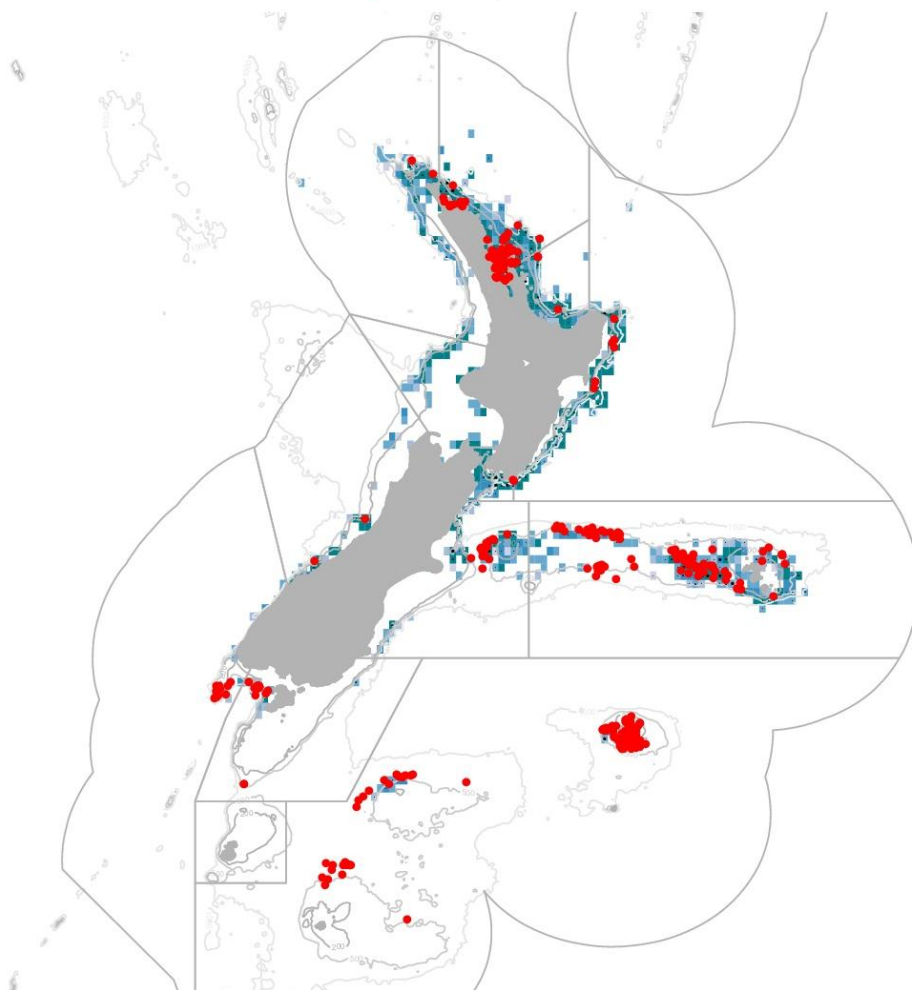


Figure 1: Map of fishing effort and observed captures, 2002–03 to 2010–11

Table 2: Table of observed captures- 2004-2011 (Ling Target)

Table of observed captures: 2004-2008			
Date	Species	Captures	Area
4-Oct-02	Chatham Island albatross	1	Chatham Rise
5-Oct-02	giant petrels	1	Chatham Rise
8-Oct-02	sooty shearwater	1	Stewart Snares Shelf
9-Oct-02	broad-billed prion	2	Stewart Snares Shelf
9-Oct-02	sooty shearwater	7	Stewart Snares Shelf
9-Oct-02	storm petrels	1	Stewart Snares Shelf
11-Oct-02	Cape petrels	1	Stewart Snares Shelf
11-Oct-02	sooty shearwater	1	Sub-Antarctic
12-Oct-02	sooty shearwater	1	Stewart Snares Shelf
14-Oct-02	sooty shearwater	2	Stewart Snares Shelf
14-Oct-02	sooty shearwater	1	Stewart Snares Shelf
14-Oct-02	storm petrels	1	Stewart Snares Shelf
15-Oct-02	sooty shearwater	1	Stewart Snares Shelf
19-Oct-02	sooty shearwater	3	Stewart Snares Shelf
19-Oct-02	white-chinned petrel	1	Sub-Antarctic
20-Oct-02	white-chinned petrel	3	Sub-Antarctic
24-Oct-02	common diving petrel	12	Stewart Snares Shelf
24-Oct-02	northern giant petrel	1	Stewart Snares Shelf
24-Oct-02	northern giant petrel	1	Stewart Snares Shelf
24-Oct-02	sooty shearwater	1	Stewart Snares Shelf
24-Oct-02	Chatham Island albatross	1	Stewart Snares Shelf
25-Oct-02	common diving petrel	1	Stewart Snares Shelf
27-Oct-02	common diving petrel	6	Stewart Snares Shelf
27-Oct-02	sooty shearwater	3	Stewart Snares Shelf
27-Oct-02	sooty shearwater	1	Stewart Snares Shelf
28-Oct-02	common diving petrel	1	Stewart Snares Shelf
28-Oct-02	sooty shearwater	1	Stewart Snares Shelf
28-Oct-02	sooty shearwater	1	Stewart Snares Shelf
28-Oct-02	storm petrels	1	Sub-Antarctic
28-Oct-02	white-chinned petrel	2	Sub-Antarctic
29-Oct-02	sooty shearwater	1	Stewart Snares Shelf
31-Oct-02	common diving petrel	1	Stewart Snares Shelf
3-Nov-02	sooty shearwater	1	Stewart Snares Shelf
4-Nov-02	Cape petrels	1	Stewart Snares Shelf
4-Nov-02	sooty shearwater	1	Stewart Snares Shelf

Table of observed captures: 2004-2008

Date	Species	Captures	Area
04 Nov 2002	White-chinned petrel	1	Stewart Snares Shelf
05 Nov 2002	White-chinned petrel	2	Sub-Antarctic
05 Nov 2002	White-chinned petrel	4	Sub-Antarctic
6-Nov-02	sooty shearwater	1	Stewart Snares Shelf
7-Nov-02	sooty shearwater	1	Stewart Snares Shelf
7-Nov-02	sooty shearwater	1	Stewart Snares Shelf
7-Nov-02	white-chinned petrel	1	Sub-Antarctic
8-Nov-02	prions	1	Sub-Antarctic
8-Nov-02	white-chinned petrel	1	Sub-Antarctic
8-Nov-02	white-chinned petrel	1	Sub-Antarctic
9-Nov-02	Chatham Island albatross	1	Chatham Rise
9-Nov-02	Salvin's albatross	3	Chatham Rise
9-Nov-02	sooty shearwater	1	Stewart Snares Shelf
10-Nov-02	Salvin's albatross	1	Chatham Rise
11-Nov-02	Salvin's albatross	1	Sub-Antarctic
11-Nov-02	white-chinned petrel	1	Chatham Rise
11-Nov-02	white-chinned petrel	1	Sub-Antarctic
11-Nov-02	white-chinned petrel	2	Sub-Antarctic
12-Nov-02	Salvin's albatross	3	Chatham Rise
12-Nov-02	white-chinned petrel	2	Chatham Rise
12-Nov-02	white-chinned petrel	2	Sub-Antarctic
13-Nov-02	Chatham Island albatross	1	Chatham Rise
13-Nov-02	white-chinned petrel	1	Chatham Rise
13-Nov-02	white-chinned petrel	2	Sub-Antarctic
13-Nov-02	white-chinned petrel	6	Sub-Antarctic
14-Nov-02	white-chinned petrel	3	Sub-Antarctic
14-Nov-02	white-chinned petrel	2	Sub-Antarctic
14-Nov-02	white-chinned petrel	2	Sub-Antarctic
15-Nov-02	white-chinned petrel	1	Sub-Antarctic
15-Nov-02	white-chinned petrel	3	Sub-Antarctic
24-Nov-02	white-chinned petrel	1	Sub-Antarctic
2-Dec-02	Salvin's albatross	1	Sub-Antarctic
16-Dec-02	white-chinned petrel	1	Sub-Antarctic
3-Jan-03	common diving petrel	1	Sub-Antarctic
4-Jan-03	Cape petrels	1	Sub-Antarctic
17-Jan-03	white-chinned petrel	1	Sub-Antarctic

Table of observed captures: 2004-2008

Date	Species	Captures	Area
18-Jan-03	white-chinned petrel	1	Sub-Antarctic
19-Jan-03	white-chinned petrel	1	Sub-Antarctic
22-Jan-03	Salvin's albatross	1	Sub-Antarctic
24-Jan-03	Salvin's albatross	2	Sub-Antarctic
25-Jan-03	white-chinned petrel	1	Sub-Antarctic
29-Jan-03	white-chinned petrel	1	Sub-Antarctic
30-Jan-03	white-chinned petrel	2	Sub-Antarctic
31-Jan-03	white-chinned petrel	1	Sub-Antarctic
1-Feb-03	Salvin's albatross	1	Sub-Antarctic
1-Feb-03	white-chinned petrel	1	Sub-Antarctic
2-Feb-03	Salvin's albatross	1	Sub-Antarctic
3-Feb-03	white-chinned petrel	2	Sub-Antarctic
5-Feb-03	white-chinned petrel	2	Sub-Antarctic
8-Feb-03	white-chinned petrel	1	Sub-Antarctic
9-Feb-03	Snares Cape petrel	1	Sub-Antarctic
9-Feb-03	white-chinned petrel	1	Sub-Antarctic
9-Feb-03	white-chinned petrel	1	Sub-Antarctic
10-Feb-03	white-chinned petrel	2	Sub-Antarctic
11-Feb-03	white-chinned petrel	3	Sub-Antarctic
12-Feb-03	white-chinned petrel	8	Sub-Antarctic
12-Feb-03	white-chinned petrel	4	Sub-Antarctic
13-Feb-03	white-chinned petrel	1	Sub-Antarctic
14-Feb-03	Salvin's albatross	1	Sub-Antarctic
14-Feb-03	white-chinned petrel	1	Sub-Antarctic
14-Feb-03	white-chinned petrel	1	Sub-Antarctic
14-Feb-03	white-chinned petrel	8	Sub-Antarctic
15-Feb-03	white-chinned petrel	2	Sub-Antarctic
15-Feb-03	white-chinned petrel	1	Sub-Antarctic
16-Feb-03	white-chinned petrel	9	Sub-Antarctic
16-Feb-03	white-chinned petrel	1	Sub-Antarctic
17-Feb-03	white-chinned petrel	6	Sub-Antarctic
17-Feb-03	white-chinned petrel	6	Sub-Antarctic
20-Feb-03	white-chinned petrel	1	Sub-Antarctic
20-Feb-03	white-chinned petrel	1	Sub-Antarctic
20-Feb-03	white-chinned petrel	1	Sub-Antarctic

Table of observed captures: 2004-2008

Date	Species	Captures	Area
21-Feb-03	white-chinned petrel	3	Sub-Antarctic
21-Feb-03	white-chinned petrel	2	Sub-Antarctic
22-Feb-03	white-chinned petrel	3	Sub-Antarctic
22-Feb-03	white-chinned petrel	2	Sub-Antarctic
26 Mar 2003	Sooty shearwater	1	East Coast South Island
27 Mar 2003	white-chinned petrel	1	East Coast South Island
29 Mar 2003	white-chinned petrel	1	East Coast South Island
30 Mar 2003	white-chinned petrel	1	East Coast South Island
30 Mar 2003	white-chinned petrel	1	East Coast South Island
27 Mar 2003	Southern Buller's albatross	1	East Coast South Island
18-Jun-03	grey petrel	4	Sub-Antarctic
19-Jun-03	grey petrel	1	Sub-Antarctic
25-Jun-03	grey petrel	2	Sub-Antarctic
26-Jun-03	Cape petrel	1	Sub-Antarctic
28-Jun-03	grey petrel	1	Sub-Antarctic
28-Jun-03	grey petrel	1	Sub-Antarctic
28-Jun-03	grey petrel	2	Sub-Antarctic
2-Jul-03	Cape petrel	1	Sub-Antarctic
2-Jul-03	grey petrel	4	Sub-Antarctic
4-Jul-03	grey petrel	10	Sub-Antarctic
4-Jul-03	grey petrel	4	Sub-Antarctic
4-Jul-03	grey petrel	3	Sub-Antarctic
5-Jul-03	grey petrel	3	Sub-Antarctic
8-Jul-03	grey petrel	3	Sub-Antarctic
8-Jul-03	grey petrel	3	East Coast South Island
8-Jul-03	grey petrel	1	East Coast South Island
12-Jul-03	grey petrel	1	Sub-Antarctic
16-Jul-03	grey petrel	1	Chatham Rise
20-Jul-03	grey petrel	1	Chatham Rise
20-Jul-03	grey petrel	1	Chatham Rise
20-Jul-03	grey petrel	1	Chatham Rise
22-Jul-03	grey petrel	1	Chatham Rise
5-Aug-03	Cape petrel	1	Chatham Rise
6-Aug-03	grey petrel	1	Chatham Rise
6-Aug-03	grey petrel	2	Chatham Rise

Table of observed captures: 2004-2008

Date	Species	Captures	Area
7-Aug-03	grey petrel	1	Chatham Rise
8-Aug-03	grey petrel	1	Chatham Rise
8-Aug-03	grey petrel	2	Chatham Rise
10-Aug-03	grey petrel	1	Chatham Rise
11-Aug-03	grey petrel	1	Chatham Rise
11-Aug-03	grey petrel	1	Chatham Rise
12-Aug-03	grey petrel	1	Chatham Rise
13-Aug-03	grey petrel	1	Chatham Rise
16-Aug-03	Cape petrel	1	Chatham Rise
18-Aug-03	grey petrel	1	Chatham Rise
19-Aug-03	grey petrel	1	Chatham Rise
23-Aug-03	grey petrel	1	Chatham Rise
24-Aug-03	Cape petrel	1	Chatham Rise
24-Aug-03	grey petrel	3	Chatham Rise
25-Aug-03	Cape petrel	1	Chatham Rise
28-Aug-03	Cape petrel	1	Chatham Rise
28-Aug-03	Cape petrel	1	Chatham Rise
30-Aug-03	grey petrel	1	Chatham Rise
1-Sep-03	grey petrel	1	Chatham Rise
8-Sep-03	grey petrel	1	Chatham Rise
15-Sep-03	grey petrel	1	Chatham Rise
10-Oct-03	sooty shearwater	1	Stewart Snares Shelf
19-Oct-03	sooty shearwater	2	Stewart Snares Shelf
20-Oct-03	sooty shearwater	1	Stewart Snares Shelf
21-Oct-03	sooty shearwater	1	Stewart Snares Shelf
24-Oct-03	sooty shearwater	6	Stewart Snares Shelf
24-Oct-03	sooty shearwater	1	Stewart Snares Shelf
28-Oct-03	sooty shearwater	1	Stewart Snares Shelf
29-Oct-03	sooty shearwater	1	Stewart Snares Shelf
30-Oct-03	sooty shearwater	1	Stewart Snares Shelf
30-Oct-03	sooty shearwater	2	Stewart Snares Shelf
30-Oct-03	white-chinned petrel	1	Stewart Snares Shelf
28-Nov-03	Salvin's albatross	1	Sub-Antarctic
30-Nov-03	white-chinned petrel	1	Sub-Antarctic
01-Dec-03	Salvin's albatross	1	Sub-Antarctic

Table of observed captures: 2004-2008

Date	Species	Captures	Area
04 Dec 2003	white-chinned petrel	1	Sub-Antarctic
06 Dec 2003	Salvin's albatross	1	Sub-Antarctic
06 Dec 2003	Salvin's albatross	1	Sub-Antarctic
08 Dec 2003	Salvin's albatross	1	Sub-Antarctic
08 Dec 2003	white-chinned petrel	1	Sub-Antarctic
11 Dec 2003	Salvin's albatross	2	Sub-Antarctic
18 Dec 2003	Salvin's albatross	1	Sub-Antarctic
23 Jan 2004	Salvin's albatross	1	Sub-Antarctic
5-Feb-04	Salvin's albatross	1	Sub-Antarctic
6-Feb-04	White-chinned petrel	1	Sub-Antarctic
6-Feb-04	White-chinned petrel	1	Sub-Antarctic
6-Feb-04	White-chinned petrel	1	Sub-Antarctic
9-Feb-04	White-chinned petrel	2	Sub-Antarctic
10-Feb-04	white-chinned petrel		Sub-Antarctic
11-Feb-04	white-chinned petrel		Sub-Antarctic
13-Feb-04	white-chinned petrel		Sub-Antarctic
15-Feb-04	white-chinned petrel		Sub-Antarctic
12-Jun-04	New Zealand white-capped albatross	1	West Coast South Island
24-Aug-04	Cape petrel	1	Chatham Rise
5-Nov-04	sooty shearwater	2	Fiordland
10-Nov-04	white-chinned petrel	1	Fiordland
11-Nov-04	white-chinned petrel	1	Fiordland
11-Nov-04	white-chinned petrel	2	Stewart Snares Shelf
13-Nov-04	white-chinned petrel	1	Fiordland
17-Nov-04	white-chinned petrel	1	Fiordland
17-Nov-04	white-chinned petrel	4	Fiordland
27-Nov-04	black-browed albatrosses	1	Stewart Snares Shelf
27-Nov-04	Cape petrels	1	Stewart Snares Shelf
10-May-05	sooty shearwater	1	Sub-Antarctic
18-May-05	grey petrel	1	Sub-Antarctic
30-Sep-05	white-chinned petrel	1	Chatham Rise
6-Oct-05	Chatham Island albatross	1	Chatham Rise
7-Oct-05	albatrosses	1	Chatham Rise
7-Oct-05	Chatham Island albatross	1	Chatham Rise
29-Oct-05	sooty shearwater	1	Stewart Snares Shelf

Table of observed captures: 2004-2008

Date	Species	Captures	Area
31-Oct-05	Cape petrels	1	Stewart Snares Shelf
10-Nov-05	northern giant petrel	1	Stewart Snares Shelf
13-Nov-05	northern giant petrel	1	Stewart Snares Shelf
14-Nov-05	sooty shearwater	1	Stewart Snares Shelf
16-Nov-05	sooty shearwater	1	Stewart Snares Shelf
19-Nov-05	white-chinned petrel	1	Stewart Snares Shelf
20-Nov-05	white-chinned petrel	1	Stewart Snares Shelf
20-Nov-05	white-chinned petrel	1	Stewart Snares Shelf
24-Nov-05	New Zealand white-capped albatross	1	Stewart Snares Shelf
9-Jan-06	white-chinned petrel	1	Chatham Rise
10-Jan-06	white-chinned petrel	1	Chatham Rise
10-Jan-06	white-chinned petrel	1	Chatham Rise
13-Jan-06	white-chinned petrel	1	Chatham Rise
14-Jan-06	white-chinned petrel	1	Chatham Rise
17-Jan-06	Salvin's albatross	1	Chatham Rise
17-Jan-06	white-chinned petrel	1	Chatham Rise
19-Jan-06	white-chinned petrel	1	Chatham Rise
19-Jan-06	white-chinned petrel	1	Chatham Rise
20-Jan-06	white-chinned petrel	1	Chatham Rise
21-Jan-06	white-chinned petrel	1	Chatham Rise
25-Apr-06	common diving petrel	1	East Coast North Island
31-May-06	wandering albatrosses	2	East Coast North Island
1-Sep-06	Cape petrel	1	Chatham Rise
10-Sep-06	Cape petrel	1	Chatham Rise
8-Oct-06	white-chinned petrel	1	Fiordland
9-Oct-06	white-chinned petrel	1	Fiordland
10-Oct-06	white-chinned petrel	1	Fiordland
10-Oct-06	white-chinned petrel	1	Fiordland
17-Oct-06	white-chinned petrel	1	Fiordland
17-Oct-06	white-chinned petrel	1	Fiordland
21-Oct-06	prions	1	Fiordland
21-Oct-06	sooty shearwater	1	Fiordland
21-Oct-06	white-chinned petrel	1	Fiordland
22-Oct-06	white-chinned petrel	1	Fiordland
22-Oct-06	white-chinned petrel	2	Fiordland

Table of observed captures: 2004-2008

Date	Species	Captures	Area
30-Oct-06	white-chinned petrel	1	Fiordland
7-Aug-07	Cape petrel	1	East Coast North Island
8-Aug-07	Indian Ocean yellow-nosed albatross	1	East Coast North Island
2-Sep-07	Chatham Island albatross	1	Chatham Rise
2-Sep-07	grey petrel	1	Chatham Rise
4-Sep-07	Chatham Island albatross	1	Chatham Rise
4-Sep-07	Salvin's albatross	2	Chatham Rise
5-Sep-07	Chatham Island albatross	3	Chatham Rise
5-Sep-07	Salvin's albatross	3	Chatham Rise
6-Sep-07	albatrosses	1	Chatham Rise
6-Sep-07	Chatham Island albatross	5	Chatham Rise
6-Sep-07	Salvin's albatross	9	Chatham Rise
6-Sep-07	small seabirds	1	Chatham Rise
7-Sep-07	Chatham Island albatross	2	Chatham Rise
7-Sep-07	Salvin's albatross	8	Chatham Rise
18-Sep-07	Cape petrel	1	Chatham Rise
10-Oct-07	white-chinned petrel	1	Chatham Rise
10-Oct-07	white-chinned petrel	2	Chatham Rise
11-Oct-07	sooty shearwater	5	Stewart Snares Shelf
19-Mar-08	white-chinned petrel	1	Sub-Antarctic
21-Mar-08	white-chinned petrel	2	Sub-Antarctic
1-Apr-08	white-chinned petrel	1	Sub-Antarctic
20-Apr-08	white-chinned petrel	2	Sub-Antarctic
16-Jun-08	Cape petrels	1	East Coast South Island
29-Jun-08	southern Buller's albatross	1	East Coast South Island
3-Jul-08	grey petrel	1	East Coast South Island
6-Jul-08	southern Buller's albatross	2	East Coast South Island
8-Jul-08	grey petrel	2	East Coast South Island
8-Jul-08	grey petrel	1	East Coast South Island
17-Apr-09	crested penguins	1	Sub-Antarctic
21-May-09	grey petrel	1	Sub-Antarctic
6-Aug-09	Cape petrel	1	East Coast South Island
11-Aug-09	grey petrel	1	East Coast South Island
11-Aug-09	grey petrel	1	East Coast South Island

Table of observed captures: 2004-2008

Date	Species	Captures	Area
25-Aug-09	Cape petrel	1	Chatham Rise
13-Sep-09	Salvin's albatross	1	Chatham Rise
17-Sep-09	Chatham Island albatross	1	Chatham Rise
18-Sep-09	white-chinned petrel	1	Chatham Rise
6-Nov-09	sooty shearwater	5	Stewart Snares Shelf
6-Nov-09	sooty shearwater	1	Stewart Snares Shelf
8-Nov-09	sooty shearwater	1	Stewart Snares Shelf
28-Nov-09	white-chinned petrel	1	Stewart Snares Shelf
15-Jun-10	Cape petrel	1	Sub-Antarctic
20-Jun-10	Cape petrel	1	Sub-Antarctic
30-Oct-10	white-chinned petrel	1	East Coast South Island
2-Nov-10	white-chinned petrel	1	East Coast South Island
3-Nov-10	white-chinned petrel	1	East Coast South Island
3-Nov-10	white-chinned petrel	1	East Coast South Island
4-Nov-10	white-chinned petrel	1	East Coast South Island
9-Nov-10	white-chinned petrel	1	Chatham Rise
10-Nov-10	white-chinned petrel	2	Chatham Rise
12-Nov-10	white-chinned petrel	1	Chatham Rise
23-Nov-10	white-chinned petrel	1	Chatham Rise
24-Nov-10	white-chinned petrel	1	Chatham Rise
24-Nov-10	white-chinned petrel	1	Chatham Rise
25-Nov-10	white-chinned petrel	1	Chatham Rise
27-Nov-10	white-chinned petrel	1	Chatham Rise
2-Dec-10	Salvin's albatross	2	Chatham Rise
1-Mar-11	white-chinned petrel	3	Sub-Antarctic
1-Mar-11	white-chinned petrel	1	Sub-Antarctic
2-Mar-11	white-chinned petrel	2	Sub-Antarctic
6-Mar-11	white-chinned petrel	1	Sub-Antarctic
8-Mar-11	white-chinned petrel	1	Sub-Antarctic
9-Mar-11	southern royal albatross	1	Sub-Antarctic
10-Mar-11	white-chinned petrel	1	Sub-Antarctic
11-Mar-11	white-chinned petrel	1	Sub-Antarctic

Aaron Irving

Senior Policy Advisor