

# SUMMARY PAPER: ORANGE ROUGHY FUR SEAL INTERACTIONS

## Background

The purpose of this summary is to provide ORH stakeholders with the nature and extent of seabird interactions in the New Zealand orange roughy fisheries, as they are displayed on the Dragonfly Protected Species Captures website.

The URL to the Dragonfly Protected Species Captures website:

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

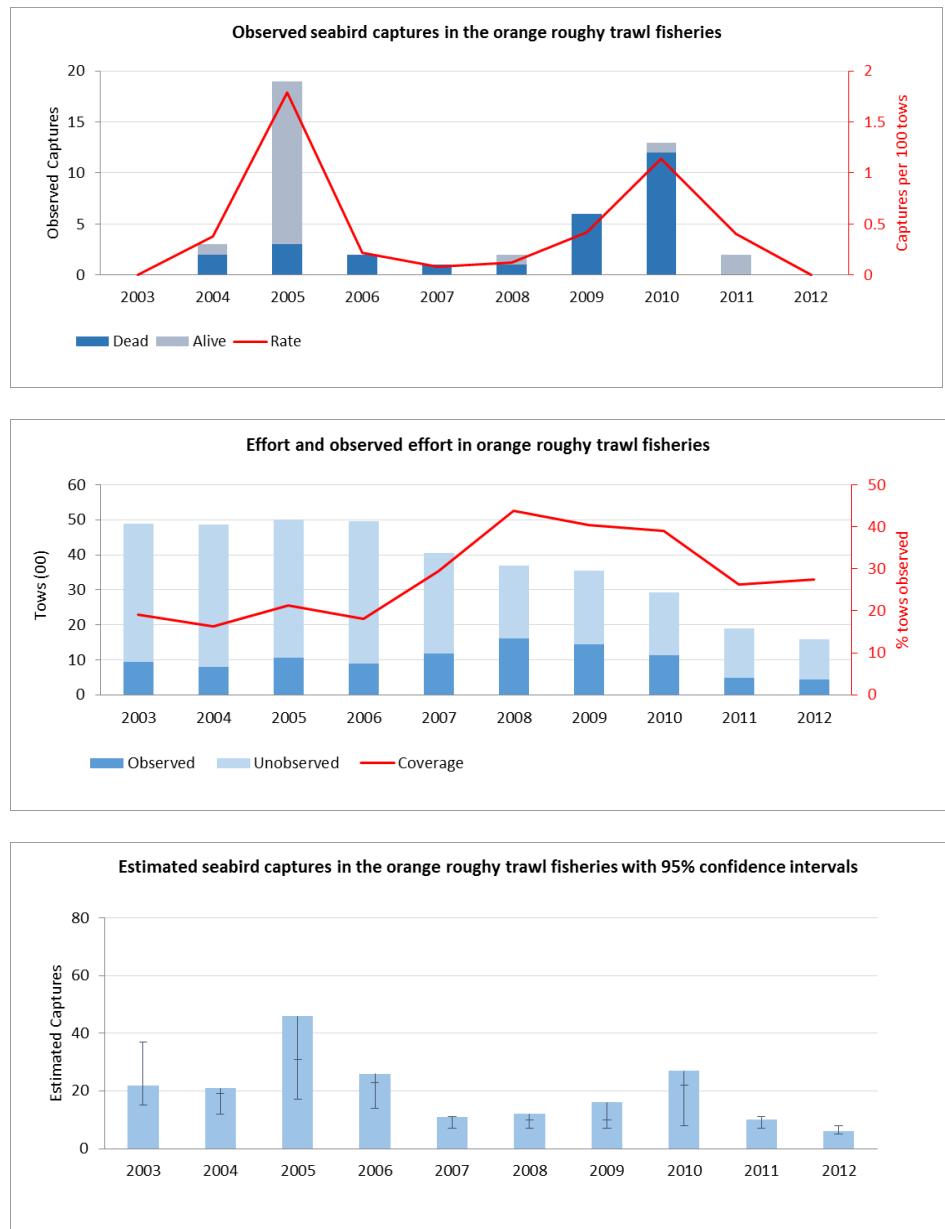
*"Annual observed seabird capture rates in the orange roughy trawl fisheries have ranged from 0.00 to 1.79 per 100 tows between 2002-03 and 2012-13 (Table 1). The average over this period is 0.48 per 100 tows, a very low rate relative to other trawl fisheries by between one and two orders of magnitude" (MPI (2014). p600).*

## New Zealand seabird interactions with vessels targeting orange roughy

**Table 1: Table of effort and New Zealand seabird captures, 2002-03 and 2012-13**

Table of effort and captures by fishing year				
Year	Tows	Observed Percent	Observed Captures	Rate
2002-03	4895	19.1	0	0
2003-04	4865	16.3	3	0.377
2004-05	5001	21.2	19	1.787
2005-06	4948	19.4	2	0.207
2006-07	4058	29.3	1	0.084
2007-08	3689	43.8	2	0.123
2008-09	3544	40.4	6	0.418
2009-10	2922	38.9	13	1.141
2010-11	1889	26.2	0	0
2011-12	1589	27.5	0	0
2012-13†	1592	11.5	2	1.087

† Provisional data, no model estimates available. (see MPI (2014))



Figures 1, 2 & 3: Graphs of orange roughy effort and seabird captures, 2002-03 and 2011-12

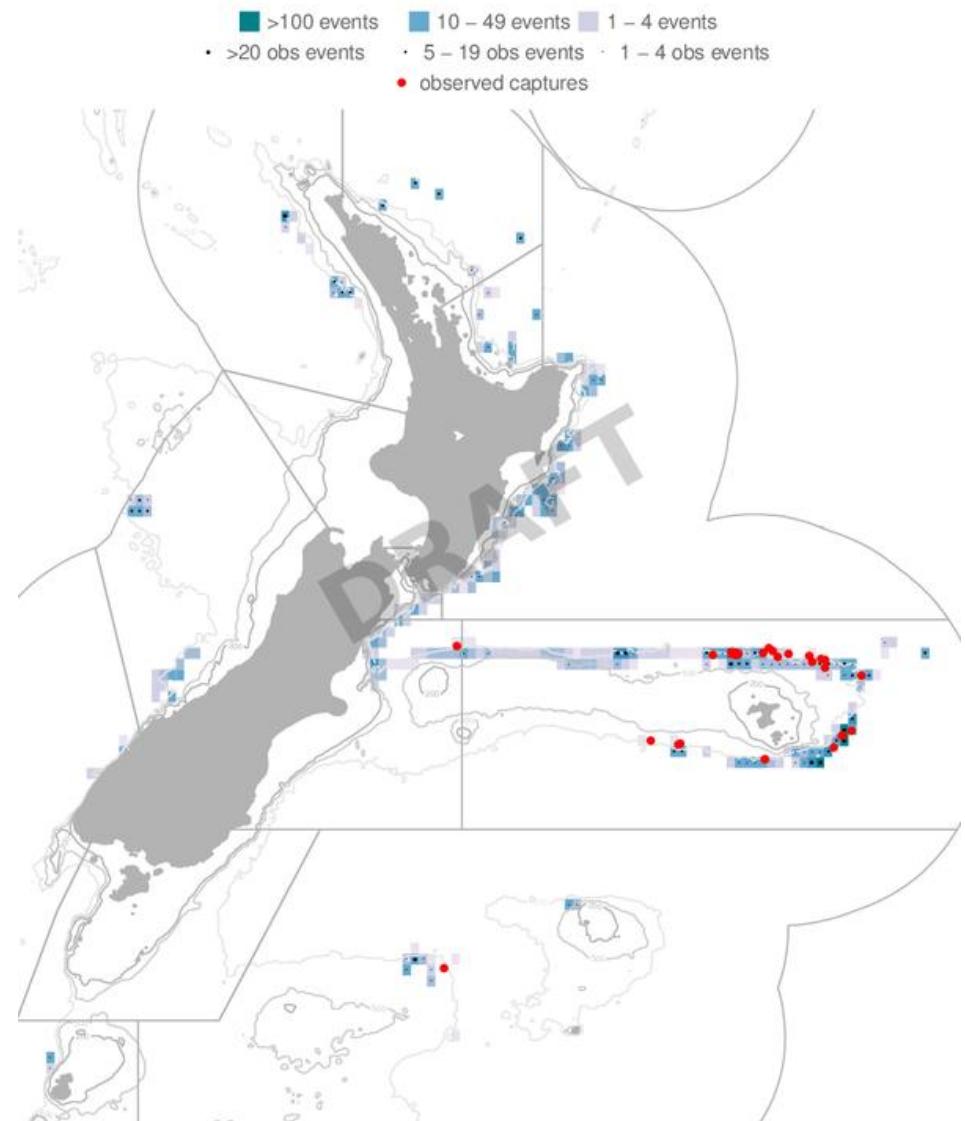


Figure 4: Map of effort and seabird captures between years 2002-03 and 2012-13

Table 2: Table of observed New Zealand seabird captures in Orange Roughy Target tows on the Chatham Rise 2003-04 to 2012-13§

Table of observed captures 2003-04 to 2012-13			
Year	Species	Status	Area
2003-04	Salvin's albatross	dead	Chatham Rise
2003-04	northern royal albatross	dead	Chatham Rise
2003-04	grey petrel	alive	Chatham Rise
2004-05	grey petrel	dead	Chatham Rise
2004-05	common diving petrel	alive	Chatham Rise
2004-05	Cape petrel	alive	Chatham Rise
2004-05	Salvin's albatross	alive	Chatham Rise
2004-05	Cape petrel	alive	Chatham Rise
2004-05	Salvin's albatross	alive	Chatham Rise
2004-05	Cape petrel	alive	Chatham Rise
2004-05	Cape petrel	alive	Chatham Rise
2005-06	Cape petrel	dead	Chatham Rise
2005-06	southern Buller's albatross	dead	Chatham Rise
2005-06	southern Buller's albatross	dead	Chatham Rise
2006-07	Gibson's albatross	dead	Chatham Rise
2007-08	New Zealand white-faced storm petrel	alive	Chatham Rise
2007-08	northern giant petrel	dead	Chatham Rise
2008-09	Cape petrel	dead	Chatham Rise

2008-09	Chatham Island albatross	dead	Chatham Rise
2008-09	New Zealand white-capped albatross	dead	Chatham Rise
2008-09	Chatham Island albatross	dead	Chatham Rise
2008-09	New Zealand white-capped albatross	dead	Chatham Rise
2008-09	common diving petrel	dead	Chatham Rise
2009-10	Salvin's albatross		Chatham Rise
2009-10	Chatham Island albatross	dead	Chatham Rise
2009-10	Salvin's albatross	dead	Chatham Rise
2009-10	Chatham Island albatross	dead	Chatham Rise
2009-10	Salvin's albatross	dead	Chatham Rise
2009-10	Salvin's albatross	dead	Chatham Rise
2009-10	Salvin's albatross	dead	Chatham Rise
2009-10	southern Buller's albatross	dead	Chatham Rise
2009-10	New Zealand white-capped albatross	dead	Chatham Rise
2009-10	New Zealand white-capped albatross	dead	Chatham Rise
2009-10	Cape petrel	alive	Chatham Rise
2009-10	Cape petrel	dead	Chatham Rise
2009-10	Cape petrel	dead	Chatham Rise
2012-13†	albatrosses	dead	Chatham Rise
2012-13†	southern royal albatross	dead	Chatham Rise

§ There are no recorded interactions occurring in ORH7A

† Provisional data (see MPI (2014))