



# Conservation Services Programme Observer Report: 1<sup>st</sup> July 2009 to 30 June 2010

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# CSP Observer Coverage Achieved vs. Planned 2009/10



Fishery	Days Planned	Days Achieved	% achieved against planned	Total
				Observer days (CSP/ Mfish)
Orange Roughy	61	53	87%	491
Oreo's	54	54	100%	350
Hake	5	5	100%	30
Hoki	214	214	100%	1249
Southern Blue Whiting	16	16	100%	205
Ling – Deepsea	17	16	94%	173
Pelagic trawl - JMA / EMA	111	106	95%	423
Tuna Domestic	44	35	80%	365
Tuna Charter	37	22	59%	210
Scampi	48	45	94%	199
Inshore - BLL	250	252	101%	482
Inshore Trawl	300	301	100%	301
Inshore Set Net	200	134	67%	134
Squid	135	138	102%	593
<b>Totals</b>	<b>1492</b>	<b>1391</b>	<b>93%</b>	<b>7084</b>

# Middle-depth trawl fisheries

## Hoki, hake, ling warehou species



FMA	Effort	Observed	Coverage	Seabird	Seabirds	Mammal	Mammals	Coral	Coral Catch
	Tows	Tows	(%)	Captures*	per 100 tows	Captures	per 100 tows	(kg)	per 100 tows (kg)
1. AKE	14	3	21.43	0	0.00	0	0.00	0	0.00
2. CEE	1300	276	21.23	4	1.45	16	5.80	2	0.72
3. SEC	3747	627	16.73	58	9.25	13	2.07	33.4	5.33
4. SOE	1630	129	7.91	5	3.88	0	0.00	0	7.36
5. SOU	1521	449	29.52	13	2.90	4	0.89	9.5	1.14
6. SUB	779	498	63.93	11	2.21	7	1.41	5.1	0.26
7. CHA	3035	699	23.03	12	1.72	20	2.86	1.3	0.19
8. CEW	1	0	0.00	-	-	-	-	-	-
9. AKW	37	0	0.00	-	-	-	-	-	-
10. KER	0	0	-	-	-	-	-	-	-
<b>Total</b>	<b>12,064</b>	<b>2,681</b>	<b>22.22</b>	<b>103</b>	<b>3.84</b>	<b>60</b>	<b>2.24</b>	<b>51.30</b>	<b>1.91</b>



# Middle-depth trawl fisheries

## Hoki, hake, ling warehou species



- 62 observer trips onboard 37 vessels targeting the hoki, hake, ling warehou species mix
- Protected species interactions from 38 trips onboard 22 vessel
- Net captures again the most common
- 37 of the 163 captures made on a single vessel
  - Predominantly white-capped albatross
  - Delays in hauling were the main cause

# Middle-depth trawl fisheries

## Southern blue whiting



FMA	Effort Tows	Observed Tows	Coverage (%)	Seabird Captures*	Seabirds per 100 tows	Mammal Captures	Mammals per 100 tows	Coral Catch (kg)	Coral Catch per 100 tows (kg)
1. AKE	0	0	-	-	-	-	-	-	-
2. CEE	0	0	-	-	-	-	-	-	-
3. SEC	0	0	-	-	-	-	-	-	-
4. SOE	4	1	25.00	0	0.00	0	0.00	0	0.00
5. SOU	0	0	-	-	-	-	-	-	-
6. SUB	1,195	290	24.27	1	0.34	17	5.86	1	0.34
7. CHA	0	0	-	-	-	-	-	-	-
8. CEW	2	0	0.00	-	-	-	-	-	-
9. AKW	0	0	-	-	-	-	-	-	-
10. KER	0	0	-	-	-	-	-	-	-
<b>Total</b>	<b>1,201</b>	<b>291</b>	<b>24.23</b>	<b>1</b>	<b>0.34</b>	<b>17</b>	<b>5.84</b>	<b>1.00</b>	<b>0.34</b>

# Middle-depth trawl fisheries

## Southern blue whiting

- 6 observed trips onboard 5 vessels
- Protected species interactions from 3 vessels
- 13 of the 18 protected species interactions were from a single vessel
- All mammal captures were fur seals
- Large catches led to offal plants being overwhelmed
- Windows built into the nets allow for fish escape during hauling on large catches



# Middle-depth trawl fisheries

## Scampi



FMA	Effort Tows	Observed Tows	Coverage (%)	Seabird Captures*	Seabirds per 100 tows	Mammal Captures	Mammals per 100 tows	Coral Catch (kg)	Coral Catch per 100 tows (kg)
<b>1.</b>									
<b>AKE</b>	899	123	13.68	3	2.44	0	0.00	0	0.00
<b>2.</b>									
<b>CEE</b>	717	1	0.14	0	0.00	0	0.00	0	0.00
<b>3.</b>									
<b>SEC</b>	3	0	0.00	-	-	-	-	-	-
<b>4.</b>									
<b>SOE</b>	1224	160	13.07	15	9.38	0	0.00	56.9	35.56
<b>5.</b>									
<b>SOU</b>	0	0	-	-	-	-	-	-	-
<b>6.</b>									
<b>SUB</b>	1182	92	7.78	2	2.17	0	0.00	0	0.00
<b>7.</b>									
<b>CHA</b>	0	0	-	-	-	-	-	-	-
<b>8.</b>									
<b>CEW</b>	0	0	-	-	-	-	-	-	-
<b>9.</b>									
<b>AKW</b>	0	0	-	-	-	-	-	-	-
<b>10.</b>									
<b>KER</b>	0	0	-	-	-	-	-	-	-
<b>Total</b>	<b>4,025</b>	<b>376</b>	<b>9.34</b>	<b>20</b>	<b>5.32</b>	<b>0</b>	<b>0.00</b>	<b>56.90</b>	<b>15.13</b>

# Middle-depth trawl fisheries

## Scampi

- 6 observer trips onboard 5 vessels
- Increase on coverage
- Captures reported from 3 vessels
- 15 of the 20 captures came from a single vessel
  - Offal discharge during haul
  - Use of triple codend net
  - 'Stickers' not cleaned





# Middle-depth trawl fisheries

## Squid



	Effort	Observed	Coverage	Seabird	Seabirds	Mammal	Mammals	Coral	Coral Catch
FMA	Tows	Tows	(%)	Captures*	per 100 tows	Captures	per 100 tows	Catch (kg)	per 100 tows (kg)
1. AKE	0	0	-	-	-	-	-	-	-
2. CEE	0	0	-	-	-	-	-	-	-
3. SEC	100	5	5.00	0	0.00	0	0.00	0	0.00
4. SOE	13	1	7.69	0	0.00	0	0.00	1	100.00
5. SOU	2223	750	33.74	73	9.73	8	1.07	241.2	32.16
6. SUB	1249	302	24.18	20	6.62	3	0.99	2	0.66
7. CHA	4	0	0.00	-	-	-	-	-	-
8. CEW	0	0	-	-	-	-	-	-	-
9. AKW	0	0	-	-	-	-	-	-	-
10. KER	0	0	-	-	-	-	-	-	-
<b>Total</b>	<b>3,589</b>	<b>1,058</b>	<b>29.48</b>	<b>93</b>	<b>8.79</b>	<b>11</b>	<b>1.04</b>	<b>244.20</b>	<b>23.08</b>

# Middle-depth trawl fisheries

## Squid

- 25 observed trips onboard 17 vessels in the squid trawl fishery
  - Overall reduction in observer coverage
- Protected species interactions from 17 trips on all 17 vessels
  - Captures relatively evenly distributed between vessels
- Both fur seal and New Zealand sea lion captures increased.
  - 3 female sea lions, 1 male
- White-capped albatross and white-chinned petrels most commonly captured birds
- Offal management and mitigation practices were generally observed to be good



# Pelagic trawl Jack mackerel and barracouta



	Effort	Observed	Coverage	Seabird	Seabirds	Mammal	Mammals	Coral	Coral Catch
FMA	Tows	Tows	(%)	Captures*	per 100 tows	Captures	per 100 tows	Catch (kg)	per 100 tows (kg)
1. AKE	1	0	0.00	-	-	-	-	-	-
2. CEE	0	0	-	-	-	-	-	-	-
3. SEC	461	121	26.25	5	4.13	1	0.83	0.1	0.08
4. SOE	45	0	0.00	-	-	-	-	-	-
5. SOU	261	111	42.53	8	7.21	3	2.70	0.1	0.09
6. SUB	0	0	-	-	-	-	-	-	-
7. CHA	926	251	27.11	7	2.79	4	1.59	9.7	3.86
8. CEW	1493	415	27.80	0	0.00	1	0.24	5.5	1.33
9. AKW	270	132	48.89	0	0.00	1	0.76	0.5	0.38
10. KER	0	0	-	-	-	-	-	-	-
<b>Total</b>	<b>3,457</b>	<b>1,030</b>	<b>29.79</b>	<b>20</b>	<b>1.94</b>	<b>10</b>	<b>0.97</b>	<b>15.90</b>	<b>1.54</b>

# Pelagic trawl

## Jack mackerel and barracouta

- 32 observer trips onboard 13 vessels
- Distribution of coverage similar to the previous year
- Protected species interactions occurred on 10 trips onboard 6 vessels
- Overall reduction in common dolphin captures
  - 3 animals captured in the same event
  - Headline height an issue





# Deepwater trawl Orange roughy, cardinalfish and oreo



	<b>Effort</b>	<b>Observed</b>	<b>Coverage</b>	<b>Seabird</b>	<b>Seabirds</b>	<b>Mammal</b>	<b>Mammals</b>	<b>Coral</b>	<b>Coral Catch</b>
<b>FMA</b>	<b>Tows</b>	<b>Tows</b>	<b>(%)</b>	<b>Captures*</b>	<b>per 100</b>	<b>Captures</b>	<b>per 100</b>	<b>Catch</b>	<b>per 100</b>
					<b>tows</b>		<b>tows</b>	<b>(kg)</b>	<b>tows (kg)</b>
<b>1. AKE</b>	224	66	29.46	0	0.00	0	0.00	19.20	29.09
<b>2. CEE</b>	1053	66	6.27	1	1.52	0	0.00	152.00	230.30
<b>3. SEC</b>	695	158	22.73	0	0.00	0	0.00	38.80	24.56
<b>4. SOE</b>	2052	1131	55.12	23	2.03	1	0.09	117.80	10.42
<b>5. SOU</b>	18	18	100.00	0	0.00	0	0.00	0.00	0.00
<b>6. SUB</b>	1689	755	44.70	6	0.79	0	0.00	1,744.90	231.11
<b>7. CHA</b>	95	92	96.84	0	0.00	0	0.00	1.00	1.09
<b>8. CEW</b>	0	0	-	-	-	-	-	-	-
<b>9. AKW</b>	145	79	54.48	0	0.00	0	0.00	9,862.50	12,484.18
<b>10. KER</b>	0	0	-	-	-	-	-	-	-
<b>Total</b>	<b>5,971</b>	<b>2,365</b>	<b>39.61</b>	<b>30</b>	<b>1.27</b>	<b>1</b>	<b>0.04</b>	<b>11,936.20</b>	<b>504.70</b>

# Deepwater trawl

## Orange roughy, cardinalfish and oreo

- 37 observed trips onboard 12 vessels
- Coral bycatch from 32 trips onboard all 12 vessels
- 96% of coral caught was Scleractinia
- On vessel responsible for 10 of the 12 tonnes of coral caught
- 'Deck strikes' and 'Warp strikes' make up the majority of interactions with seabirds



# Inshore fisheries Inshore trawl



	Effort	Observed	Coverage	Seabird	Seabirds	Mammal	Mammals
FMA	Tows	Tows	(%)	Captures*	per 100 tows	Captures	per 100 tows
1. AKE	9,768	171	1.75	-	-	1	0.58
2. CEE	10,147	0	-	-	-	-	-
3. SEC	15,554	441	2.84	10	2.27	-	-
4. SOE	1,021	0	-	-	-	-	-
5. SOU	4,038	204	5.05	7	3.43	-	-
6. SUB	796	0	-	-	-	-	-
7. CHA	15,909	258	1.62	5	1.94	-	-
8. CEW	1,946	0	-	-	-	-	-
9. AKW	1,821	0	-	-	-	-	-
10. KER	0	0	-	-	-	-	-
<b>Total</b>	<b>61,000</b>	<b>1,074</b>	<b>1.76</b>	<b>22</b>	<b>2.05</b>	<b>1</b>	<b>0.09</b>

# Inshore fisheries

## Inshore trawl

- Observer trips conducted onboard 22 vessels
- Interactions with seabirds or mammals were observed onboard 9 vessels
- Coverage lower than the previous year
- Interactions were dominated by a mass deck strike event
- White-capped albatross suffered the highest mortalities
- Warp-strikes more common than net captures





# Inshore fisheries

## BLL- ling, bluenose, hāpuku, bass



<b>FMA</b>	<b>Effort Lines</b>	<b>Observed Lines</b>	<b>Coverage (%)</b>	<b>Number of hooks observed</b>	<b>Seabird Captures*</b>	<b>Seabirds per 1000 hooks</b>	<b>Mammal Captures</b>	<b>Mammals per 1000 hooks</b>
<b>1. AKE</b>	1477	73	4.94	56,522	29	0.513	0	0.000
<b>2. CEE</b>	2520	0	0.00	0	-	-	-	-
<b>3. SEC</b>	1126	53	4.71	49,450	3	0.061	0	0.000
<b>4. SOE</b>	1989	141	7.09	180,200	7	0.039	0	0.000
<b>5. SOU</b>	218	0	0.00	0	-	-	-	-
<b>6. SUB</b>	105	0	0.00	0	-	-	-	-
<b>7. CHA</b>	818	0	0.00	0	-	-	-	-
<b>8. CEW</b>	323	0	0.00	0	-	-	-	-
<b>9. AKW</b>	760	16	2.11	5,770	0	0.000	0	0.000
<b>10. KER</b>	0	0	-	-	-	-	-	-
<b>Total</b>	<b>9,336</b>	<b>283</b>	<b>3.03</b>	<b>291,942</b>	<b>39</b>	<b>0.134</b>	<b>0</b>	<b>0.000</b>

## Inshore fisheries

# BLL- ling, bluenose, häpuku, bass

- Observer trips conducted onboard 4 vessels
- Protected species interactions from three of these trips
- 27 black petrel interactions occurred at hauling
  - All from a single vessel
  - All in close proximity to the breeding colony
  - All released alive, however long term survival not assessed
- Indicates the need for better education amongst the fleet with regard to mitigation and line weighting



# Inshore fisheries BLL- snapper



	Effort	Observed	Coverage	Number	Seabird	Seabirds	Mammal	Mammals
FMA	Lines	Lines	(%)	of hooks	Captures*	per 1000	Captures	per 1000
				observed		hooks		hooks
<b>1. AKE</b>	6029	494	8.19	671,645	30	0.045	0	0.000
<b>2. CEE</b>	0	-	-	-	-	-	-	-
<b>3. SEC</b>	2	0	0.00	-	-	-	-	-
<b>4. SOE</b>	0	-	-	-	-	-	-	-
<b>5. SOU</b>	0	-	-	-	-	-	-	-
<b>6. SUB</b>	0	-	-	-	-	-	-	-
<b>7. CHA</b>	8	0	0.00	-	-	-	-	-
<b>8. CEW</b>	15	0	0.00	-	-	-	-	-
<b>9. AKW</b>	137	0	0.00	-	-	-	-	-
<b>10. KER</b>	0	-	-	-	-	-	-	-
<b>Total</b>	<b>6,191</b>	<b>494</b>	<b>7.98</b>	<b>671,645</b>	<b>30</b>	<b>0.045</b>	<b>0</b>	<b>0.000</b>

# Inshore fisheries

## BLL- snapper

- Observer trips conducted onboard 33 vessels
- Protected species captures onboard 12 vessels
- Tori line and mitigation use amongst the fleet was highly variable
- One vessel accounted for 18 of the 30 captures
  - New entrants to the fleet
  - Proximity to breeding colonies
  - Lack of mitigation and line weighting
- Mentoring of new entrants to the fleet to reduce risk of similar incidents



# Inshore fisheries

## Setnet



FMA	Effort Nets	Observed Nets	Coverage (%)	Length of nets observed (m)	Seabird Captures*	Seabirds per 1000m net	Mammal Captures	Mammals per 1000m net	Protected Fish Captures	Protected Fish per 1000m net
<b>1.</b>										
<b>AKE</b>	7483	8	0.11	4,828	0	0.000	0	0.000	0	0.000
<b>2.</b>										
<b>CEE</b>	1588	0	0.00	0	-	-	-	-	-	-
<b>3.</b>										
<b>SEC</b>	4025	1,583	39.33	558,851	4	0.007	7	0.013	0	0.000
<b>4.</b>										
<b>SOE</b>	13	0	0.00	0	-	-	-	-	-	-
<b>5.</b>										
<b>SOU</b>	564	343	60.82	315,840	4	0.013	3	0.009	1	0.003
<b>6.</b>										
<b>SUB</b>	3	0	0.00	0	-	-	-	-	-	-
<b>7.</b>										
<b>CHA</b>	710	0	0.00	0	-	-	-	-	-	-
<b>8.</b>										
<b>CEW</b>	1928	0	0.00	0	-	-	-	-	-	-
<b>9.</b>										
<b>AKW</b>	7446	0	0.00	0	-	-	-	-	-	-
<b>10.</b>										
<b>KER</b>	1	0	0.00	0	-	-	-	-	-	-
<b>Total</b>	<b>23,761</b>	<b>1,934</b>	<b>8.14</b>	<b>879,519</b>	<b>8</b>	<b>0.009</b>	<b>10</b>	<b>0.011</b>	<b>1</b>	<b>0.001</b>

# Inshore fisheries Setnet



- Observer trips conducted onboard 15 vessels
- Wider spread of coverage through the year
- Protected species interactions on 9 vessels
- 2 Hector's dolphins captured
  - Timaru
  - Kaikoura
- White pointer shark captured
- First reported captures of Stewart Island Shag and Fiordland crested penguin



# Longline fisheries

## SLL- Charter tuna



<b>FMA</b>	<b>Effort Sets</b>	<b>Observed Sets</b>	<b>Coverage (%)</b>	<b>Number of hooks observed</b>	<b>Seabird Captures*</b>	<b>Seabirds per 1000 Hooks</b>	<b>Mammal Captures</b>	<b>Mammals per 1000 Hooks</b>
<b>1. AKE</b>	0	0	-	-	-	-	-	-
<b>2. CEE</b>	21	21	100.00	53,265	9	0.169	0	0.000
<b>3. SEC</b>	0	0	-	-	-	-	-	-
<b>4. SOE</b>	0	0	-	-	-	-	-	-
<b>5. SOU</b>	120	120	100.00	320,542	46	0.144	16	0.050
<b>6. SUB</b>	0	0	-	-	-	-	-	-
<b>7. CHA</b>	25	25	100.00	69,931	10	0.143	0	0.000
<b>8. CEW</b>	0	0	-	-	-	-	-	-
<b>9. AKW</b>	0	0	-	-	-	-	-	-
<b>10. KER</b>	0	0	-	-	-	-	-	-
<b>Total</b>	<b>166</b>	<b>166</b>	<b>100.00</b>	<b>443,738</b>	<b>65</b>	<b>0.146</b>	<b>16</b>	<b>0.036</b>

# Longline fisheries

## SLL- Charter tuna

- All 4 vessels observed
- All lines observed
- Seabird and mammal captures from all vessels
- High numbers of captures
  - Birds particularly abundant and aggressive in SOU
- Mitigation trials undertaken testing tori lines





# Longline fisheries

## SLL- Domestic tuna and swordfish



	Effort	Observed	Coverage	Number	Seabird	Seabirds	Mammal	Mammals
FMA	Sets	Sets	(%)	of hooks observed	Captures*	per 1000 Hooks	Captures	per 1000 Hooks
1. AKE	1028	91	8.85	80,648	24	0.298	8	0.099
2. CEE	1171	50	4.27	52,006	11	0.212	0	0.000
3. SEC	0	0	-	-	-	-	-	-
4. SOE	0	0	-	-	-	-	-	-
5. SOU	0	0	-	-	-	-	-	-
6. SUB	0	0	-	-	-	-	-	-
7. CHA	186	9	4.84	11,000	43	3.909	3	0.273
8. CEW	3	0	0.00	-	-	-	-	-
9. AKW	278	48	17.27	47,695	3	0.063	0	0.000
10. KER	44	0	0.00	-	-	-	-	-
<b>Total</b>	<b>2,710</b>	<b>198</b>	<b>7.31</b>	<b>191,349</b>	<b>81</b>	<b>0.423</b>	<b>11</b>	<b>0.057</b>

# Longline fisheries

## SLL- Domestic tuna and swordfish



- 19 trips onboard 16 vessels
- Protected species interactions from 10 trips on 8 vessels
- 42 of the 93 protected species interactions were from one vessel
  - Bird abundance
  - Moon phase
  - Deck lighting
  - Line weighting
- Skipper / Crew were new to the fishery, indicates the need for an induction or mentoring programme for risk management

# Longline fisheries

## Ling bottom longline



FMA	Effort Lines	Observed Lines	Coverage (%)	Number of hooks observed	Seabird Captures*	Seabirds per 1000 hooks	Mammal Captures	Mammals per 1000 hooks
1. AKE	0	0	-	-	-	-	-	-
2. CEE	44	0	0.00	0	-	-	-	-
3. SEC	0	0	-	-	-	-	-	-
4. SOE	217	147	67.74	127,615	0	0.000	0	0.000
5. SOU	84	84	100.00	172,090	8	0.046	0	0.000
6. SUB	307	91	29.64	150,238	2	0.013	0	0.000
7. CHA	0	0	-	-	-	-	-	-
8. CEW	0	0	-	-	-	-	-	-
9. AKW	0	0	-	-	-	-	-	-
10. KER	0	0	-	-	-	-	-	-
<b>Total</b>	<b>652</b>	<b>322</b>	<b>49.39</b>	<b>449,943</b>	<b>10</b>	<b>0.022</b>	<b>0</b>	<b>0.000</b>

# Longline fisheries

## Ling bottom longline

- 1 vessel observed for 3 trips
- Mitigation use and offal management observed to be consistent
- Captures increased over the previous year
- 6 of the 10 captures were from a single event
- Captures dominated by sooty shearwaters

