

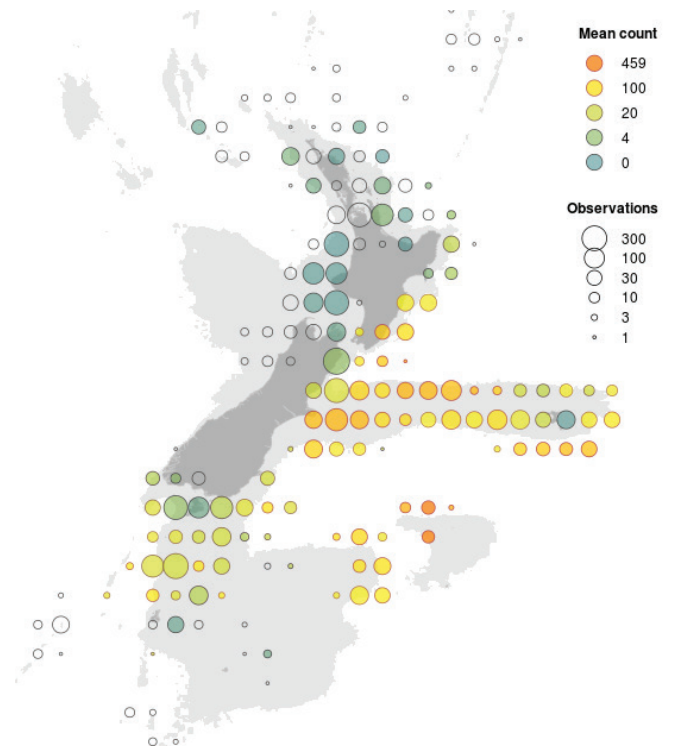
MOLLYMAWK MITIGATION



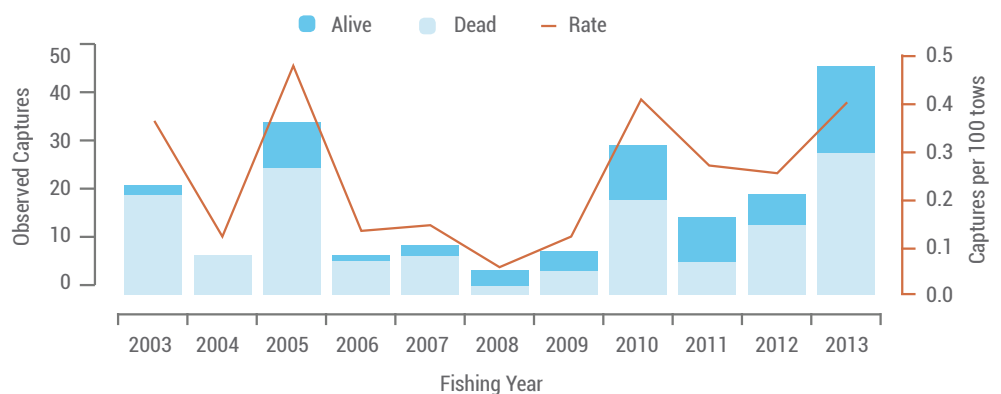
MANAGING RISK TO SALVIN'S ALBATROSS

- 98% of world's population breed at Bounty Islands (about 40,000 pairs nested in 2013)
- Approx 1200 pairs nest on the Snares Western Chain islets
- Classified as Nationally Critical (DOC) due to reported decline in population and Very High Risk in MPI Level 2 Risk Assessment
- Arrive in New Zealand in August, with egg laying occurring in September, chicks fledge 7 months later
- Migrate out of New Zealand zone autumn and midwinter
- Majority of birds forage across Bounty Platform, Chatham Rise, ECSI and Cook Strait but will be found also on Snares Shelf and EC North Island.

BREEDING SEASON FORAGING RANGE



OBSERVED CAPTURES OF SALVIN'S BY DEEPWATER TRAWLERS – 2003-2013 (SOURCE MPI: 2014)



- As the Salvin's is one of a set of aggressive mollymawks that are interacting with our fisheries, focus on reducing captures of this species will also greatly reduce risk to Chatham's, southern and northern Buller's and white-capped albatross on different fishing grounds at other times
- Southern Buller's show a similar trend in increase in captures mostly on the Snare's Shelf and at a different time - between March and July.

Left: Breeding Salvin's albatross at Bounty Islands, Paul Sagar

RISK

- Particularly vulnerable to trawlers but also caught by bottom longline and to lesser extent surface longline
- Target fisheries in FMA 3 and 4 for scampi, hoki, barracouta, and silver warehou; to a lesser extent FMA 5 and 6 for squid and southern blue whiting are primary sources of captures
- Highest number of captures occur on western Chatham Rise between Canterbury Banks and the 180 line mid CR
- Warps are main source of mortalities but in the last two years majority of captures have been in the net (most have been fatal)
- Trawl fishery capture rate has increased over the last three years.

MITIGATION

Basic measures as per all the mollymawk species:

- **Excellent offal control at all times:**
 - **No offal discharge during shooting and hauling**
 - **Batching offal during tow**
 - **Options when unable to fishmeal**
- Good bafflers and tori lines (deploying both at times of high risk)
- Net restrictors in 3rd net of scampi trawls
- Line weighting, tori lines and offal control on longliners (or only ever night set).

CASE STUDY OF RISK - EXAMPLES OF REAL EVENTS FROM 2013

EVENT 1 - 6 Salvin's mollymawks (dead) taken on starboard warp

Operation:

- Domestic factory trawler on CR in December, fishmeal plant operating, targeting hoki

Mitigation in use:

- Two boom baffler and VMP offal procedures

Cause:

- Large bycatch of silver warehou; heads discarded overboard through starboard sump in path of starboard warp; fitted bird scaring devices inadequate

Corrective Actions:

- When fishmeal plant is bypassed - hold or batch offal; deploy tori lines.

EVENT 2 - 5 Salvin's mollymawks (dead) taken on port warp

Operation:

- Domestic factory trawler on CR in December, targeting hoki

Mitigation in use:

- Two boom baffler, tori line deployed and VMP offal procedures

Cause:

- Fishmeal processing interrupted; offal from port discard chute in path of port warp; fitted bird-scaring devices not adequate, tori line not over warp path

Corrective Actions:

- Better batching of offal; more focus on offal control contingency plans when fishmeal plant unavailable; upgrade bird scaring devices.

EVENT 3 - 6 Salvin's mollymawks (5 dead, 1 alive) caught in net

Operation:

- H&G vessel midwater trawl on western CR in September targeting barracouta; fishmeal plant operating

Mitigation in use:

- Two boom baffler and VMP offal procedures

Cause:

- Offal released from factory deck freeing ports during hauling; bad weather slowed hauling

Corrective Actions:

- Better attention to offal and waste on factory floor at critical times of operation, reduce hauling time.