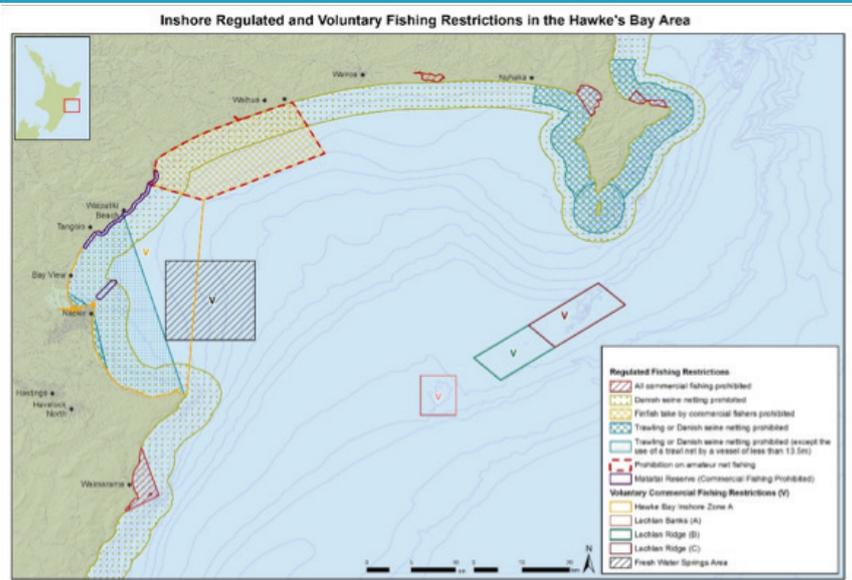


In the summer of 2016 (the peak recreational fishing period) a proactive initiative saw the commercial industry, through Fisheries Inshore NZ and the Port Napier Fishermen's Association, agree to voluntarily implement measures to help improve the recreational fishing experience. Development of the initiative was achieved as a result of a series of discussions with the recreational sector that were facilitated by the Ministry for Primary Industries. Voluntary closures are indicated with the letter in the associated figure.

In November 2016 the Hawke's Bay Marine and Coastal (HBMAC) Group was initiated by Hawke's Bay Regional Council to provide a forum for all stakeholders to identify and discuss integrated marine and terrestrial management. The HBMAC recognised that for the Hawke's Bay area a holistic understanding was required of the marine environment, the impacts on it and how best to manage them.



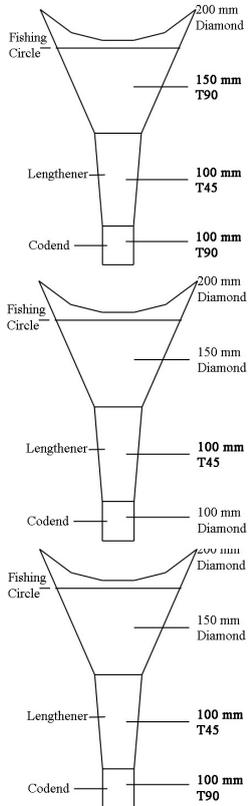
## HAWKE'S BAY GEAR TECHNOLOGY WORKING GROUP

Fisheries Inshore NZ, fishers, vessel managers, independents, NIWA and the Ministry for Primary Industries have set up the Hawkes Bay Gear Technology Working Group to progress gear selectivity trials. The objective of the trials is to demonstrate reductions in catches of small fish for key species when compared with a standard Industry trawl. These trials are another part of the commercial sector's contribution to the HBMAC Group. When compared to a control net (100mm diamond), the commercial sector is aiming for:

- A 50% reduction in the number of gurnard (round cross-section) caught under 30cm in total length;
- A 25% reduction in the numbers of snapper, tarakihi and trevally (elliptical cross-section) caught under 27cm in total length.

### TRIAL 1 (29TH MAY 2011-19TH FEB 2013)

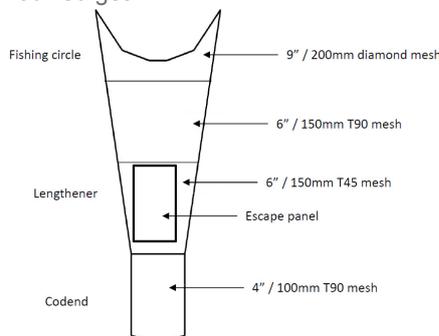
Three different trawl net configurations using T45 or T90 mesh were tested against a diamond mesh trawl.



SOURCE: Oliver Wade

### TRIAL 2 (1ST – 4TH APRIL 2014)

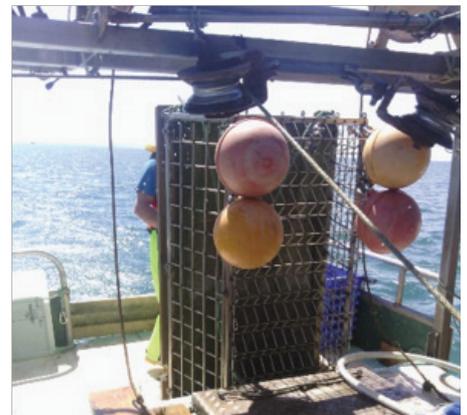
Novel rectangular “mesh” panels were trialled on board the Nancy Glen II. Underwater video was used to observe escape behaviour associated with the with modified gear.



SOURCE: Rick Burch & Dr Emma Jones

### TRIAL 3 (13TH – 18TH OCTOBER 2016)

Comparing the selectivity of a novel cage-style cod-end with a standard 100mm diamond mesh cod-end for flatfish in depths of less than 50m.



SOURCE: Dr Emma Jones

### TO DATE

- Trials 1 and 2 have had positive results for changes in selectivity for gurnard;
- Trawls 1 and 3 in Trial 1 resulted in significant reductions in the number of gurnard caught (over 50% reduction);
- Trial 3 demonstrated a reduction in catches of small flatfish (specifically the target species, sand flounder).
- Valuable data have been collected on changes in gear selectivity; and
- Potential shown for “simple cost-effective” gear modifications to improve selectivity.

### NEXT STEPS

- Data collected to date will be reviewed and the working group will assess next steps;
- Potential for further research including investigating the use of morphological data to model gear selectivity changes based on gear modifications.