SMALL PELAGIC FISH – THE GEELONG STAR

THE ISSUE

- “With the development of industrial fishing, and the invasion of the refuges previously provided by distance and depth, interactions with fisheries resources have come to resemble wars of extermination. This geographical extension met its natural limit in the late 1980s, when the catches from newly accessed stocks ceased to compensate for the collapse in areas accessed earlier, hence leading to a decline of global landing”. Phil. Trans. R. Soc. B 2005 360 5-12; DOI: 10.1098/rstb.2004.1574.

- Australia does not have major productive fisheries like many other parts of the world. Australian waters lack nutrients and consequently, have relatively low productivity. Australia contributes only 0.2% -0.3% of world fisheries production. [http://www.daff.gov.au/fisheries](http://www.daff.gov.au/fisheries)

- Australia, clearly a virtual last resort, is now targeted for the taking of small pelagic fish (SPF or baitfish) by a modern industrial factory ship/trawler. The Dutch vessel now named Geelong Star was licenced by the Commonwealth government to trawl for small pelagic fish (SPF) across the whole of southern Australia (Plate 1).

Plate 1. Geelong Star Licence areas – note closure of Zone 6 due to deaths of Seals and Dolphins.
• **Recreational angling** historically important for Australians involves more than $12.5 billion in economic benefit and more than 60,000 direct jobs. Small pelagic fish (baitfish) represent a direct part of the recreational angling and tourism industry as both bait and the food chain for valuable predator game fish. Off the south coast of NSW and the electorate of Eden-Monaro, Bermagui and Eden in “Zone 6” are recognized pelagic hotspots and have supported a thriving and iconic recreational fishing industry for over 80 years.

• **Localised depletion** is of particular concern in small pelagic fisheries because it could disrupt predator feeding behaviour. Predators usually feed intensively on schools of small pelagic fish in localised areas wherever they occur, and sometimes there are spatial fixed ‘hotspots’ where prey schools and their predators commonly congregate. The Commonwealth Small Pelagic Fishery: General background to the scientific issues, CSIRO 2012.

• Discussions between; The Australian Recreational Fishing Foundation (ARFF), the national organisation representing the recreational fishing community and the Small Pelagic Fishing Industry Association (SPFIA) collapsed earlier this year.

• The objective was to work with the industrial fishing sector towards minimising the impacts of the Geelong Star on the fishery, recreational anglers and the communities that support them. The ARFF had proposed a compromise, restricting access of the Geelong Star to areas that are close to major cities and areas that are close to iconic recreational angling grounds (Plate 2).
Plate 2. ARFF Proposal to restrict Geelong Star access to areas close to major cities and iconic recreational angling grounds.

THE WAY FORWARD

The Small Pelagic Fishery Industry Association Inc, SPFIA, placed the following comment on its FACEBOOK page on 7 November 2015 at 2.37pm:

Someone needs to give Bob Baldwin MP, the member for the NSW Hunter Valley electorate Paterson, a map and a briefing on fishery jurisdictions. Bob reckons the Geelong Star will impact on rec fishing in his electorate. Bob, did you know that NSW has jurisdiction over trawl fisheries from Barrenjoey Headland (Sydney) to the Queensland border and out of the 400 metre depth mark (80 nautical miles to sea)? It is over 200 kilometres from Barrenjoey Lighthouse to Port Stephens. The Geelong Star can only fish in designated Commonwealth waters. It cannot come closer than 200 kilometres to the south and 80 nautical miles to the east. It is beyond belief that the vessel could have any impact on a game fisher from Port Stephens.
- In December 1990 an Offshore Constitutional Settlement (OCS) agreement gave NSW jurisdiction over trawling in depths less than 4000 m (approximately 80 nautical miles from the coast) for waters between Barrenjoey Point (near Sydney) and the Queensland border. South of Barrenjoey Point the Commonwealth retained jurisdiction for trawling outside 3 nautical miles (Plate 3).

- Notwithstanding the map and coordinates presented in its Vessel Management Plan (VMP) dated September 2015, it has now come from the “horses mouth” that the Geelong Star is “not fishing” the zone inside the 4000 m depth contour off the NSW coast north from Barrenjoey Point.

- To satisfactorily protect iconic recreational angling centred off the city of Sydney and off Wollongong, Ulladulla, Batemans Bay, Bermagui and Eden, including the far south coast electorate of Eden-Monaro, the NSW Government and the Commonwealth is asked to extend the 4000 m contour exclusion zone southwards to cover the whole of the NSW coastline (Plate 3).
CONCLUSION

- The main issue with the Geelong Star is **localised depletion** affecting iconic recreational angling sites. Any reduction in the small pelagic species in the long established angling areas could result in a decline of the fish anglers target in the area, even if this reduction is classified as insignificant scientifically, it could still have an impact on the recreational angling experience.

- If the owner of the Geelong Star (Seafish Tasmania) or AFMA agreed to an exclusion zone 80 nautical miles from the NSW coast and as proposed by ARFF elsewhere (Plate 2) this could reduce or eliminate any danger of localised depletion in the areas recreational anglers can access.

Plate 4. The small pelagic fishery within Australia’s 200 nautical mile exclusion zone.

- The small pelagic fishing zone within Australia’s exclusive fishing zone is shown on Plate 4. We believe that recreational anglers will tolerate the Geelong Star’s activity beyond the 4000 m depth contour off NSW
(approximately 80 nautical miles off shore). This leaves a further 120 nautical miles of the exclusive fishing zone available for trawling.

- In Australia, the abundance of the small pelagic fishes is nowhere near as high as that of other regions of the world due largely to the less productive waters surrounding the continent. Regions of localised production, such as the upwelling in the Great Australian Bight (GAB) off southern Australia do, however, support valuable localised fisheries of small pelagic fishes such as sardines and anchovy. CSIRO Marine and Atmospheric Research; Final report for FRDC project 2008/023, March 2011. (The Great South Australian Coastal Upwelling System (GSACUS) is Australia's only deep-reaching coastal upwelling system, with nutrient-enriched water stemming from depths exceeding 300 metres).

Plate 5. Location of Global Upwelling areas worldwide (in red)

RECOMMENDATION

- We propose that the most suitable area for the activity of the Geelong Star is the Great Australian Bight which is the site of the only significant upwelling in Australia and hence nutriment rich and able to sustain a much larger unit biomass.

- The principal distribution of Blue Mackeral, Jack Mackeral and Redbait as targeted by the Geelong Star is shown on the three maps below; CSIRO Management zones from small pelagic fish species stock structure in southern Australian waters. C. Bulman, S. Condie, J. Findlay, B. Ward & J. Young. FRDC 2006/076. March 2008
Catch distribution of blue mackerel

Catch distribution of jack mackerel

Catch distribution of red bait

29 November 2015
Chris Young
Secretary