

Dear Sir

I write regarding the operation of the above Act. I have been a researcher on abalone for 30 years (recently retired), and have observed the decline of the various State fisheries in the southern States (NSW, Vic., Tas., SA and WA). I have published >50 papers on abalone fishery biology, and received an award by the International Abalone Society.

Populations of abalone are organised as metapopulations comprising local populations connected by larval dispersal (see review of Morgan & Shepherd 2006). To maintain sustainable fisheries they have to be managed at a fine scale, not by region or zone (each of which likely contains several to many metapopulations. If they are not so managed, then they can suffer serial depletion as has happened to a variable extent in all the southern States. Specifically what happens is that divers overfish one population and then move on to another. Sometimes overfishing and collapse takes 5-20 years, and then we have a situation of a 'shifting baseline' in which neither researchers nor fishers realise what the fishery was like (or produced) in the past.

However, not all populations collapse, and it seems that some, for various reasons, are more resilient, and have sufficient recruitment to sustain them despite the level of fishing intensity.

Statistics are generally at a broad scale, so do not always reveal the dynamics of what is happening at a fine scale. I have personally investigated declines in SA (see papers below), and have discussed similar declines with divers in other States (NSW, Vic., Tas., and WA) where they are well known to have occurred.

Management at a fine scale can now be achieved readily because catches can be monitored, and capped for individual regions or populations, and the areas closed. Dr Jeremy Prince (WA) and Dr R.W. Day (Vic.) have been active in promoting this approach, and have had some success with fishers in Vic. Also, some fishers in SW Australia had some success in managing their own fishery at a fine scale. However, in no case does the State so manage the fishery. Hence, we may well see, over the long-term, the gradual decline of very profitable fisheries, and great loss of export earnings.

From 1995-2000 I pointed out the decline of many SA populations to fishers, attended their meetings and argued for closures and fine-scale management. I then published papers on the declines. All to no avail. Nothing was done, or has been done since. In every State few to many collapsed populations exist. In virtually all States the collapsed populations go unmonitored and are ignored by government and researchers. To meet the problem some States in the late 1990s and early 2000s attempted stock restoration by promoting (assisted by FRDC Grants) enhancement by placing out hatchery seed in an experimental way. By and large the experiments were successful, but were never followed up. Even submissions under the EPBC Act were fruitless. Divers were opposed to further control, which they saw as restricting their liberty to fish where they wished. The States have been unwilling to introduce controls in the face of industry opposition.

In the case of the EPBC Act, when unsustainable fishing was brought to their attention, conditions were sometimes imposed requiring action, but these appear to have been totally ineffective. The EPBC Act appears to be a toothless tiger.

I am aware that the EPBC Act was not intended to guarantee the sustainable management of all fisheries, but was intended to ensure that rules and practices were put in place by the States to ensure that they would be sustainably managed. To some extent the Act has been successful in this regard. But the Act, by not ensuring that the States do obey their charter of managing resources sustainably, pro tanto is a failure. It may well be that the Act needs to be amended to give it greater teeth to ensure that the States fulfil their obligations agreed to under the COAG Agreement of 1992 for sustainable management of resources.

Sincerely,

Dr S.A. Shepherd AO

References:

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Shepherd, S.A. and Rodda, K.R. (2001). Sustainability demands vigilance: evidence for serial decline of the South Australian greenlip abalone fishery and a review of management. *J. Shellfish Res.* 20: 829-841.

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