# Consuming sustainable seafood: guidelines, recommendations and realities

Farmery, AK, O’Kane, G, McManus, A, and Green, BS

**Supplementary information**

The Status of key Australian fish stocks report covers 83 Australian species made up of 294 individual stocks. The report focuses on the ongoing sustainability of the harvest from the fish stocks of these species, providing scientific assessments of the status of the stocks. A fish stock is considered sustainable if the biomass (the mass of the fish stock) is at a level sufficient to ensure that future levels of fish surviving to enter the fishery (recruitment) are adequate and that fishing pressure is controlled to avoid the stock becoming recruitment overfished 1. The broader ecological effects of fishing, such as bycatch (the incidental catch of non-commercial species), are discussed briefly for each species but are not included as part of the formal assessment 1.

The Australian Marine Conservation Society (AMCS) assessments include seafood caught and farmed in Australia, as well as imports. The AMCS also assesses broader ecological considerations such as bycatch and the impact of fishing on habitats. Individual fishing or farming methods are assessed against the AMCS criteria, resulting in an overall ranking of either: Green 'Better Choice'; Amber 'Eat Less'; or Red 'Say No'. The key references used are the government fishery assessments, however, a number of research reports, journal papers and other publications have reportedly been consulted in addition to the government reports (www.sustainableseafood.org.au).

The Sustainable Table sustainable seafood guide 2 is based on information from the GoodFishBadFish ‘seafood converter’, which allows people to select a fish from the list to find out information on their sustainability, alternative options and cooking tips (<http://goodfishbadfish.com.au/>). The information is based on government stock assessments and AMCS listings.

The MSC’s Principles and Criteria for Sustainable Fishing were developed through an international consultative process with fishery stakeholders 3 and incorporate broader components of ecosystems, including the sustainability of species taken (target and bycatch), as well as the impacts of fishing on other ecologically related species, endangered, threatened or protected species, habitats, and the productivity, diversity, structure and function of ecosystems 4. The MSC has developed a Fisheries Assessment Methodology (FAM) based on three principles: (1) maintaining the productivity of fish stocks; (2) maintaining the structure, productivity, function and diversity of the ecosystem on which the fishery depends; and (3) effective management that meets the requirements of laws and standards and operational frameworks that require responsible and sustainable use of fish stocks 3.

The ASC has developed species specific standards for aquaculture, although work is underway to develop an ASC Core Standard that will combine all existing standards. Farms are audited by a Conformity Assessment Body for compliance with the seven principles laid out in the standards. These principles cover the conservation of species, habitats and ecosystems; protection of wild aquatic populations; health and disease management; and responsible resource use among others (<http://www.asc-aqua.org>).

**References**

1. Flood M, Stobutzki I, Andrews J, Ashby C, Begg G, Fletcher R, et al. Status of key Australian fish stocks reports 2014. Canberra: Fisheries Research and Development Corporation2014.

2. Sustainable Table. Switch the Fish Guide. 2016 [cited 2016 12 December 2016]; Available from: <https://www.sustainabletable.org.au/Hungryforinfo/FishyBusiness/tabid/143/Default.aspx>.

3. MSC. MSC Fishery Standard: Principles and Criteria for Sustainable Fishing. 2002.

4. Grieve C, Brady DC, Polet H. Best Practices for Managing, Measuring, and Mitigating the Benthic Impacts of Fishing. Marine Stewardship Council Science Series 2011; 3:81 – 120.