



AMSAwa
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Association WA

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The Director
Sustainable Fisheries Section
Department of the Environment and Energy
GPO Box 787
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SUBMISSION ON THE APPLICATION TO THE DEPARTMENT OF THE ENVIRONMENT ON THE MARINE AQUARIUM FISH MANAGED FISHERY AND THE TAKE OF MARINE AQUARIUM SPECIES FOR AQUACULTURE BROODSTOCK PURPOSES

The WA Branch of the Australian Marine Sciences Association (AMSA) is pleased to submit its comments on the Application to the Department of the Environment on the Marine Aquarium Fish Managed Fishery and the Take of Marine Aquarium Species for Aquaculture Broodstock Purposes. AMSA is the peak representative body for marine scientists in Australia with about 800 members representing all disciplines and associated primarily with universities, museums and marine consultancy companies in addition to State and Commonwealth Government agencies. AMSA provides independent scientific comment on matters of relevance to marine science; the opportunity to provide comment on the Marine Aquarium Fish Managed Fishery and the Take of Marine Aquarium Species for Aquaculture Broodstock Purposes is therefore welcome.

Supportive comments

- p 5, par 4: AMSA believes the management strategies outlined in the application are generally appropriate. Permanently closed reference locations require scheduled scientific analysis and comparison to collection zones, as part of the monitoring and management program. This needs to be properly replicated and it will enable natural annual fluctuations in environmental conditions and biological responses to be monitored and management adjustments to be made. Permanently closed reference locations should contain sufficient numbers of representatives for each species collected from the nearby collection area. Natural obvious disease and mortality in natural ecosystems should be reported by the Exemption Holder or licensed collector, to protect the integrity of the ornamental industry. A contingency collection and biosecurity analysis strategy should be implemented under those circumstances.

- p 5, par 7: AMSA supports the new electronic logbook reporting system. Perhaps precise GPS coordinates of stock collection locations can be incorporated, which will support scientific evaluation and monitoring.

Request to consider alteration/clarification

- AMSA recommends an adjustment to the title of the managed fishery from 'Marine Aquarium Fish Managed Fishery' to 'Marine Ornamental Fisheries'. Any fishery is assumed to be managed and the document covers the management of both invertebrates and vertebrates (algae and live-rock), thus the terms Fish and Managed are probably not required in the title. Invertebrates and vertebrates should not be managed as a single fishery, because their biology, ecology, aquarium conditions and/or husbandry will differ. Thus, the term "Fisheries" is also suggested to replace "Fishery". The term "aquarium" describes a holding structure, thus the term "ornamental" would be better suited to reflect the destiny of the collected stock for broodstock or direct trade within the Ornamental Industry.

General comments

- AMSA recommends that routine analysis for disease is performed to protect the integrity of the WA Marine Ornamental Industry; similar to current biosecurity monitoring within the aquaculture industry.
- AMSA suggests that ethical practices are considered from within the industry, with respect to the level of husbandry experience and appropriate animal housing conditions (e.g. appropriate densities, volume/area and water quality). A wildlife license system (similar to native reptiles) may be required for some hobbyists who wish to own "sensitive" or large marine ornamental species, to a) enable a reporting system from the hobbyists and b) ensure hobbyists and commercial stakeholders have appropriate skills for maintaining aquarium systems and meeting the biological and ecological needs of ornamental invertebrates and vertebrates. Notably, some desirable ornamental marine species require a high level of expertise in order to provide appropriate husbandry. Animals are occasionally oversized for hobbyist aquaria, and sometimes an aquarium is not appropriately large enough to account for growth progression- e.g. Port Jackson shark and some other fish species.
- Fragmenting corals for sale is a booming hobbyist trade, following recent developments in LED lighting and improved and affordable water filtration technology. Protecting regional colour morphs of soft corals in natural ecosystems may be required (in "no take" zones), and monitoring for poaching may be essential as the hobbyist coral trade expands.
- Stringent biosecurity is recommended for imported marine ornamental species into WA, to protect natural stocks. For example, starfish wasting disease (Disease agent: Densovirus) has potential to cause widespread devastation in WA echinoderms, should it be introduced. Imported live feeds, such as zooplankton, should be certified free of disease and cleared as intermediate hosts of pathogens of other invertebrates and fish. Procedures for seawater collection and sterilisation should also be considered, to reduce the risks of disease transmission.

- AMSA suggests including what mechanisms are in place for regulating the broodstock collection for aquaculture to ensure that the broodstock is used as such, and not directly sold.

We thank you for the opportunity to comment on the management of the Application to the Department of the Environment on the Marine Aquarium Fish Managed Fishery and the Take of Marine Aquarium Species for Aquaculture Broodstock Purposes, and trust you will take our comments into consideration.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A Sutton', written in a cursive style.

Dr Alicia Sutton

Chair, WA Branch of the Australian Marine Sciences Association