

these comments will be used to revise the text before a final version is produced.

With basic training completed, the next step is to establish demonstration village “farms” to test the methods in a rural situation. WorldFish will continue to support the two Western Province communities with the fledgling fishery. The final manual will be

produced in an easy-to-follow pictorial style sometime in early 2005. One of the aims of the current ACIAR project is to transfer the technology elsewhere in Solomon Islands and to other Pacific Island countries. Updates on the results of extension efforts will be reported in future issues of this bulletin.



Figure 1. Catch being retrieved from a crest net.



Figure 2. Workshop participants practice rearing shrimp in jars in a raceway.



## Seahorses take to the world stage

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The most charismatic of fish, seahorses, are now subject to regulations that affect their movement across national borders. The new rules have generated debate as aquarists ponder the implications of the listing of all 34 known species of the genus *Hippocampus* by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Though they present some challenges to the aquarist community, the mechanics of the treaty are relatively straightforward, and anyone interested in keeping and trading seahorses should become familiar with them. Aquarists are significant buyers of seahorses, and have a role to play in the global effort to ensure the survival of seahorses and their habitats.

CITES is an international agreement between more than 160 nations that aims to ensure the international trade in plants and animals does not threaten their survival in the wild. Some 30,000 species are covered by CITES, which lists them in

three Appendices. The first covers species threatened with extinction. Trade in these species is banned except under exceptional circumstances. Appendix II species may become threatened if trade is not regulated, and Appendix III lists species at the request of countries needing help protecting local populations.

CITES agreed in 2002 to place all seahorses in Appendix II. The decision was built on careful analyses of the trade and the conservation status of wild populations, along with growing support among fishers and dealers. More than 24 million seahorses are traded annually among almost 80 nations, making them one of the world's largest wildlife management issues. The listing also opens the door to what many hope will be a new era for CITES, as commercially important fully marine fish had never before been placed under binding international regulation. (See article by Sadovy in issue number 11 of this bulletin for more detail on

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the history of CITES with respect to marine fish and species popular in the live fish trade.<sup>2)</sup>

The seahorse listing took effect on 15 May 2004. Countries wishing to export seahorses now have to prove the exports do not threaten existing wild populations (known as “non-detriment findings”). But many countries are presently unable to adequately assess the sustainability of seahorse exports, as data on populations, fisheries and trade are sparse or nonexistent. As a result, and following a proposal by Project Seahorse, a CITES technical advisory panel known as the Animals Committee formally approved a 10 cm minimum size limit as an interim management tool to support “non-detriment findings” (with a few limited potential exceptions relating to smaller species). In April 2004, the CITES Secretariat recommended that member countries implement the minimum size limit, at least until they assess international trade levels, impacts on domestic populations, and other long-term management tools for making non-detriment findings.

A minimum size is a simple but powerful tool. The recommended limit of 10 cm (as measured from the top of the coronet to the tip of the straightened tail — see Fig. 1) is not just a round, convenient number. It is slightly greater than the maximum recorded height at first maturity for most species, and most seahorses of that size have had a chance to reproduce. A minimum size is also believed to be the favoured management option among many of those whose livelihoods depend on the trade.<sup>3</sup> Minimum size limits are easily understood and



**Figure 1.**  
Height measurement to be made for specimens of seahorses of wild origin in trade, as recommended by the CITES Animals Committee.

*Photo illustration  
by James Hrynyshyn/Project Seahorse.*

enforceable. Fishers can determine whether they are complying with their obligations simply by measuring their catch, as can fisheries enforcement officers and customs officials. Countries are free to consider other options, such as no-take zones, closed seasons and gear restrictions, but in the near future the minimum size will likely be the tool of choice of most CITES signatories. Trade in the smaller seahorses often favoured by hobbyists and aquariums is affected by the limit, but only in the case of imports of wild-caught species. Aquarists still have access to captive-bred species and seahorses caught and sold within national borders.

There are currently many challenges facing those involved in the live trade, transportation and care of seahorses. The latest data show that the volume, scope and interconnectedness of the trade have grown since the first trade survey was published in 1996. All sectors of the seahorse fishery have a role to play as we develop robust and flexible conservation plans. Improved husbandry, handling and transport practices are needed to better acclimatize wild-caught seahorses to captive conditions. The Marine Aquarium Council (<http://www.aquariumcouncil.org>) and similar organizations may be useful in encouraging better management through certification. All aquarists should consider the conservation status of seahorses when making their consumer choices. With a concerted effort on all our parts, seahorses will continue to amaze and fascinate for the foreseeable future.

What you can do:

- Familiarize yourself with CITES and your national and regional wildlife regulations; national regulations may be stricter (as in the European Union) than CITES.
- Ask questions about the source of any specimens.
- Use informed and reliable retailers and suppliers.
- Support marine conservation organizations that use best-available science and respect the communities and groups that rely on those resources.

Project Seahorse is an international and interdisciplinary marine conservation organization with offices in Australia, Canada, Hong Kong, the Philippines, the UK and USA. Its website is <http://www.projectseahorse.org>. For more information on CITES, visit [www.cites.org](http://www.cites.org). For information regarding wildlife trade regulations of the European Union, go to <http://www.eu-wildlife-trade.org>.



2. <http://www.spc.int/coastfish/News/lrf/11/LRF11-Sadovy.pdf>

3. See: Martin-Smith, K.M., Samoily M.A., Meeuwig J.J. and Vincent A.C.J. 2004. Collaborative development of management options for an artisanal fishery for seahorses in the central Philippines. *Ocean & Coastal Management* 47(3-4):165-193.