

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Seventeenth meeting of the Conference of the Parties
Johannesburg (South Africa), 24 September – 5 October 2016

ADDITIONAL INFORMATION ABOUT THE CHAMBERED NAUTILUS LISTING PROPOSAL

1. This document has been submitted by the United States of America*, in relation to amendment Proposal CoP17 Prop. 48 on Inclusion of the Family Nautilidae in Appendix II.
2. On behalf of the co-proponents, we are pleased to provide the fact sheet annexed to this document (provided in English, Spanish, and French), which further supports our position to include these species in CITES Appendix II.
3. We would also like to draw your attention to the review made by the FAO Advisory Panel ([CoP17 Doc. 88.3 Annex 3](#)), which concluded that chambered nautilus meet the CITES Appendix-II listing criteria because of their low productivity and major declines at locations where long-term fishing has occurred.
4. In addition, the United States would like to reiterate that drift shells, those that wash up on beaches as a result of natural mortality, make up a very small part of the shell trade in these species. Drift shells would be unable to satisfy the U.S. demand for shells and current volume of trade, much less global demand. In addition, these shells are often broken or damaged and not as valuable in trade. TRAFFIC's study of trade of chambered nautilus showed that the majority of harvest is from targeted fishing to catch live specimens with intact, whole shells (see [CoP17 Inf. 2](#)).
5. Thus, while we believe that drift shells do not make up a large portion of the trade, to the extent they are in trade, the use of drift shells resulting from natural mortality is thought to have minimal impact on wild nautilus populations. As such, the United States considers that making a non-detriment finding for drift shells should be relatively simple, provided the relevant CITES authorities are satisfied that the material was derived from drift shells.
6. The United States will work with other range and consumer States, the Secretariat, FAO, and organizations as appropriate to explore capacity building opportunities to help ensure that range States have assistance with implementation of the listing, for example, in making non-detriment findings, facilitating management of these species, and developing identification material.

* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

CoP17 Proposal #48: Include the Family Nautilidae in CITES Appendix II



NOAA FISHERIES



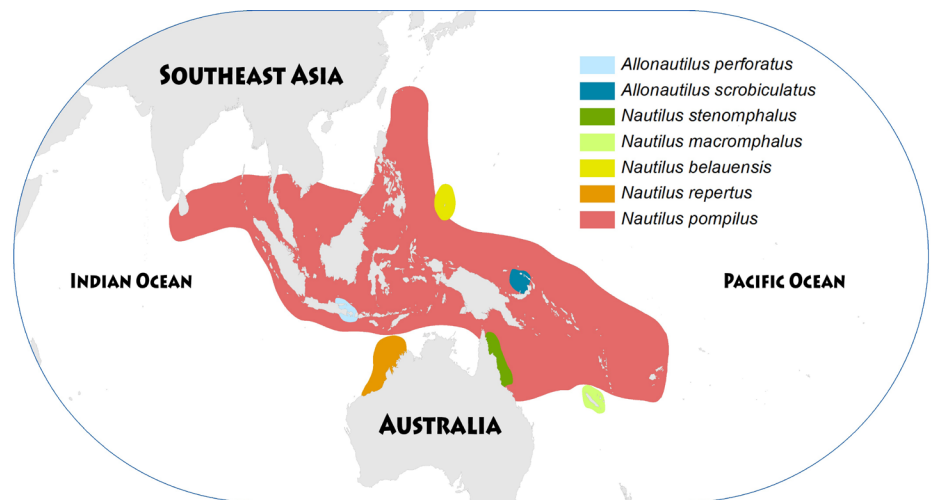
U.S. Fish & Wildlife Service



The United States, along with Fiji, India, and Palau, submitted a proposal for consideration at the 17th meeting of the CITES Conference of the Parties (CoP17) to include all species of chambered nautilus in Appendix II of CITES. International trade in nautilus commodities is demand-driven with a worldwide consumer market, but current management and regulations are not sufficient to protect these slow-growing, late-maturing, low-productivity species from being overharvested for international trade. As range States involved in the harvest or trade of these charismatic species, we believe that CITES regulation is needed to ensure that international demand is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences. An Appendix-II listing will regulate, not ban, the commercial trade in these species and will engage more than 180 countries to ensure that international trade is both legal and sustainable.

What is a chambered nautilus?

Chambered nautilus are marine invertebrates which are prized for their distinctive chambered shells. As cephalopods, the Family Nautilidae is related to squids and octopuses but differs by having external shells, lengthy maturation and producing few young. There are two main genera of chambered nautilus and seven species.



Map Credit: Food & Agriculture Organization

Where are chambered nautilus found?

Native to tropical coastal reef habitat of the Indo-Pacific, most of these species are endemic to only one or two countries. *Nautilus pompilius* is considered native to as many as 16 countries, but information suggests that geographically-isolated populations in these countries may represent distinct species.

What are the threats to the chambered nautilus?

Threats to chambered nautilus include targeted harvest for commercial international trade, habitat degradation throughout most of their range, as well as risks associated with bycatch, ecotourism, predation, and small population size. Chambered nautilus are particularly vulnerable to overfishing due to their low reproductive potential and inability to recolonize areas where they have been over-exploited.

Chambered nautilus mature around 10-15 years of age and then produce a small number of eggs each year that require at least a year to develop. They cannot survive in water that is too warm or too deep, so they live in isolated populations separated by deep water. They do not swim in the open ocean, nor do they have a mobile larval phase. Thus, they are very unlikely to recolonize an area that has been overharvested, except through chance events, such as tropical storms.



Chambered nautilus

In addition, many parts of chambered nautilus territory are under pressure from human activities that degrade or destroy their habitat, including destructive fishing practices and pollution.

Naturally rare, chambered nautilus are extremely vulnerable to overexploitation. Populations have low abundances where surveyed, with 15 or fewer individuals per square kilometer in unfished areas, and between 1 and 3 orders of magnitude fewer individuals where targeted harvest has occurred.



Photo credit: Gregory Baroni

Chambered nautilus are low-productivity species, with populations typically consisting of only about 10% juveniles. Since harvest of chambered nautilus removes predominantly mature individuals, this further reduces the number of potentially reproductive-age individuals that could contribute to the population, decreasing their resilience to harvest.

Harvested primarily for their beautiful shells, not as a source of food, chambered nautilus are predictable in their habits and easy to catch with baited traps. Significant population declines have been documented in areas where targeted fisheries exist or have existed, including in India, Indonesia, New Caledonia, the Philippines, and possibly in Palau. One population showed a 97 percent decline in trap yields within 16 years; another population showed 100% decline within two years. The fishery follows a boom-bust cycle that moves on to a new location once a population is depleted. There is evidence that such serial depletion is occurring in harvesting sites within the Philippines and Indonesia.

What are the commodities of chambered nautilus in trade?

These species are targeted primarily for their shells. Consumption of the meat is largely as a byproduct of the shell trade. Shells are traded internationally as souvenirs to tourists and shell collectors, as jewelry and home décor items ranging from whole-shell decorative objects to chambered nautilus shell-inlay lacquerware, and living animals are taken for public aquariums and research. All seven species can be found in global trade.

What protections are currently in place for chambered nautilus?

Although they are not “fish,” chambered nautilus are harvested by fishermen and this harvest is not addressed in any fisheries management plans. Where commercial harvest is ongoing, there have been no known studies by natural resource authorities to determine the status of populations or the impact of such harvest. Where protections exist, they appear to be poorly implemented and enforced. In some cases, species that are protected may be traded under the names of other non-protected chambered nautilus species in order to avoid regulations. Thus, active fisheries to satisfy international demand continue largely unregulated.

Do chambered nautilus meet the criteria for a CITES Appendix II listing?

Yes. All of the currently recognized species of chambered nautilus are found in international trade. They are naturally rare, with small, isolated populations. Even the widest-ranging species may represent distinct species of chambered nautilus, so the loss of any one population could result in the loss of a species.

What would be the impact of including chambered nautilus in Appendix II of CITES?

Chambered nautilus shells are valuable in trade and harvest is driven by international demand. Given the extensive targeted harvest of chambered nautilus for commercial international trade, along with their highly vulnerable life history characteristics, protection under Appendix II of CITES will benefit the conservation of these species and ensure that continued harvest is legal and sustainable. An Appendix-II listing will complement domestic measures that appear to be inadequate to control the harvest pressure caused by international trade, and listing the entire family would remove the loophole in existing protections and increase capacity to address illegal trade.



Photo credit: Christopher Rogers

Therefore, we the co-proponents, seek your support to include the Family Nautilidae in CITES Appendix II.

