Shell-Shocked

Trade in Turtles Threatens Species

Tortoises and freshwater and terrestrial turtles are the world's most endangered vertebrates. The Service has been involved in CITES efforts to better monitor and regulate their international trade.

G lobal commerce in turtles in the last 20-plus years has followed a well-known pattern of boom and bust in international wildlife trade: Once a species is depleted or regulated, trade shifts to species not as threatened or less regulated.

International trade in turtles is most common in Asia, with supply countries feeding well-established legal and illegal trade networks supplying markets in China and other consumer countries in East Asia. Buyers in Asia primarily use turtles as food or in traditional medicine. But a growing pet trade across the region impacts a number of threatened species. Many freshwater turtles also come from the United States—mostly from turtle farms.

Because of their life-history traitsincluding adult longevity, late maturity, limited annual reproductive output, and high juvenile and egg mortality-turtles are vulnerable to the effects of overharvest. Their long lifespan creates a high probability that some hatchlings will survive to maturity, but this strategy may be overwhelmed by the impacts of human exploitation. Harvest of adults leads to too few eggs being laid and thus fewer hatchlings to survive to maturity. Human exploitation of eggs also leads to fewer hatching and fewer hatchlings surviving to maturity. In this way over-harvest often leads to population collapse.

Along with other countries—including China, Germany, Indonesia and Vietnam the United States has spearheaded efforts not only to list species in the CITES Appendices but also to bring countries together to strengthen implementation and enforcement of CITES. This international cooperation is vital to conserving tortoise and turtle species. Consider the plight of Asian box turtles.

Asian *Cuora* box turtles—about 10 to 12 species—have a history of local and international exploitation for food, traditional medicine and the pet trade. Originally, several of the species were only known from specimens found in Asian food markets.

The locations of wild populations, if any existed, were unknown. As discoveries were made regarding their ranges in the wild, many of these box turtle populations were found to have fewer than 100 individuals, and in some cases only a handful. Even today, the status of Zhou's box turtle in the wild, with approximately 100 known living specimens in captivity, is a mystery.

The golden coin turtle, also known as the three-striped box turtle, has long been used in China, primarily for traditional medicines. Live turtles are kept for good luck or as a financial investment, and turtle populations tolerated low-level collection for these uses for centuries. However, in the last three decades, demand has been fueled by the false belief that jellies and abstracts from this species cure cancer. High demand coupled with habitat loss has pushed this species to the edge of extinction. Despite farming of golden coin turtles by the thousands, demand for wild-caught males still exists because captive breeding seems to produce only females, and high demand encourages the construction of additional farms that require wild animals as breeding stock.

To help conserve the golden coin turtle, Zhou's box turtle and seven other *Cuora* box turtle species, the United States and China have joined together to strengthen CITES protections by proposing to eliminate trade in wild-caught animals. A joint CoP16 proposal includes a zero quota on exports of wild-caught specimens for commercial purposes.

The United States has also partnered with Vietnam on a proposal to transfer the big-headed turtle from Appendix II to Appendix I, which would prohibit commercial trade in the species.

These two proposals, along with six other turtle proposals submitted by the United States, will ensure that turtles are a focus of discussion at CoP16, even though these species may not "make the headlines." \Box

THOMAS LEUTERITZ, PhD and BRUCE WEISSGOLD, International Affairs, Headquarters

Turtle proposals submitted by the United States

Transfer **Burmese star** tortoise to Appendix I from Appendix II.

Add 15 **Asian pond and river** turtles to Appendix II and establish zero quotas for 15 currently listed species (Co-sponsored by China).

Add eight **Asian softshell** turtles to Appendix II and two to Appendix I (Co-sponsored by China).

Transfer **Roti Island snake-necked** turtle to Appendix I from Appendix II.

Add Blanding's turtle to Appendix II.

Add Diamondback terrapin to Appendix II.

Add Spotted turtle to Appendix II.

Transfer **Big-headed** turtle from Appendix II to Appendix I (Co-sponsored by Vietnam)

spotlight

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In March, delegates from around the globe will converge on the Queen Sirikit National Convention Center in Bangkok, Thailand, for the world's most influential meeting on international wildlife trade—a meeting of the Conference of the Parties (CoP) to CITES. At this 16th meeting of the CoP, the most anticipated and potentially controversial proposals center on African elephants, white rhinos, polar bears and sharks.

African Elephant Proposal

Burkina Faso and Kenya have submitted a proposal contending that any legal trade in ivory poses a very serious threat to elephant populations. If passed, CITES would not accept proposals to allow trade in elephant ivory from populations in Appendix II for nine years from the last ivory sale in 2008. This proposal, according to proponents, reflects the intention of a 2007 agreement among the elephant range states and ensures that African elephants are not put under threat from legalized ivory sales.

White Rhinoceros Proposal

Kenya believes the export of white rhino trophies should not be allowed, citing evidence that suggests that hunting trophies offer a legal pathway for criminal networks to obtain horns, which are then illegally sold for medicinal and ornamental purposes. Range states have witnessed unprecedented poaching in recent years, with South Africa losing 668 rhinos in 2012 alone. Kenya's proposal also contends that the continued legal trophy hunting of rhino may be stimulating demand.

Shark and Manta Ray Proposals

Shark species, especially those with low reproductive rates, are vulnerable to overexploitation from the international fin trade and bycatch, or unintentional catch in nets meant for something else. Shark fins are particularly in demand as a food item and are highly valued in international trade, with a wholesale value up to \$39 per pound. Proposals have been put forth to include several species of sharksoceanic whitetip, porbeagle and three species of hammerhead— and all manta rays in CITES Appendix II, to control trade at biologically sustainable levels. Adding commercially exploited marine species to the CITES Appendices has been controversial. Some countries argue that Regional Fisheries Management Organizations (RFMOs) are the only appropriate bodies for dealing with international fisheries issues. The United States firmly believes CITES action can be complementary to measures taken for sharks and other marine species by RFMOs.

Polar Bear Proposal

From 2001 through 2010, an average of 3,200 items made from polar bears were exported or re-exported annually from range states. This represents about 400 to 500 polar bears per year. The United States has submitted a proposal to transfer the polar bear from CITES Appendix II to Appendix I, which would prohibit international trade for primarily commercial purposes. Over time, trade in polar bear skins has increased. The current level of trade may hurt the species because trade, particularly commercial trade, compounds the threat to the species posed by habitat loss. Inclusion of the polar bear in Appendix I would not affect the subsistence harvest of this species by Alaskan natives or other indigenous peoples or the creation of handicrafts using polar bear parts.

When deciding its position on these proposals, the United States will consider a variety of information between now and CoP16, including the proposal itself, its own supplemental research, public comments received during a 60-day comment period, reviews by IUCN Specialist Groups and other consultations. The Service will update U.S. positions as they become available on its CoP16 webpage at <vww.fws.gov/ international/cites/CoP16>. \Box

CLAIRE HOOD, International Affairs, Headquarters