

limiting the scope of such enhancement-of-survival findings to the development and implementation of foreign species management plans by the relevant range country, we can create a real incentive for foreign nations to establish programs that conserve both wildlife and habitat through the use of this approach in the most appropriate and compelling situations.

### Examples of Potential Application

Several current examples serve to illustrate the potential application of this new proposed enhancement-of-survival policy. These include the Morelet's crocodile in Mexico; the Asian bonytongue fish in Indonesia, Thailand, and Malaysia; the wood bison in Canada; the markhor in Pakistan; and the Asian elephant in India, southeast Asia, and China. These examples represent species with similar listing status under the ESA but significantly different conservation issues and opportunities under the proposed policy.

### Morelet's Crocodile

The Morelet's crocodile (*Crocodylus moreletii*) is a freshwater crocodile found along the Atlantic coast of Mexico, Guatemala, and Belize. It is listed as endangered throughout its entire range and is also listed in Appendix I of CITES. These listing actions were deemed warranted due to substantial population declines as a result of habitat loss and poaching. All three range countries have enacted laws protecting the Morelet's crocodile within their territories. However, given the current population status and continuing threats, it is doubtful that the species would qualify under the ESA for reclassification.

Part of Mexico's conservation program for this species allows a regulated removal of live specimens from the wild to establish parental stock for captive-breeding operations. This practice is part of a comprehensive conservation and management program for Morelet's crocodiles, which includes sustainable use of the species to encourage its conservation. As part of that program, a significant number of young are annually returned to the wild, and enhancement actions are focused on the wild populations. As a result of this management program, Mexico had been able to register its captive-breeding facilities with CITES to allow international commercial trade. In the case of specimens originating from CITES-registered breeding facilities, the species is treated as a CITES Appendix-II species, and, therefore, only a CITES export permit issued by the exporting

country is necessary. However, this international trade is still excluded from the United States because of the species' endangered status under the ESA.

The FWS recognizes that crocodilian species managed as a sustainable resource in some cases can be utilized for commercial purposes while not adversely affecting the survival of the species. When certain positive conservation conditions have been met, we have acted to allow utilization and trade from managed populations of the American alligator (*Alligator mississippiensis*), Nile crocodile (*Crocodylus niloticus*), and saltwater crocodile (*Crocodylus porosus*). Under the proposed policy, we would consider allowing the importation of products produced by these captive-breeding facilities if they can demonstrate a clear enhancement of the wild population. The potential for trade with the United States, a major importer of leather products, could further encourage Mexico to intensify its conservation efforts for this species in the wild to meet the stricter import requirements under the ESA.

### Straight-horned Markhor

The Pakistan population of straight-horned markhor (*Capra falconeri jerdoni*) is listed as endangered under the ESA and included in Appendix I of CITES. A sport-hunted export quota for Pakistan was approved by CITES in 1997. While reclassification of the subspecies within Pakistan under the ESA is not considered likely due to continuing concerns about the overall status of the subspecies, the Torghar Hills region of Pakistan has a successful community-based management program that has significantly enhanced the conservation of local markhor populations. Under this example, this proposed policy could allow consideration of applications for the importation of sport-hunted trophies from this population, if the necessary enhancement finding could be made, as an incentive to continue and expand the conservation program for this species.

In the early 1980s, local leaders of the Baluchistan Province became alarmed at the dramatic decline in markhor and other wildlife populations in the Torghar Hills region. The decline was attributed to a significant increase in poaching. In 1984 they sought assistance from professional wildlife biologists in the United States on the design of a scientifically based management program for the markhor and other species, and the Torghar Conservation Project was initiated. The project was simple. Local tribesmen were requested to refrain from hunting

in exchange for being hired as salaried game guards to prevent poachers from entering the Torghar Hills region. Game guard salaries and other costs of the project would be defrayed entirely by trophy fees paid by foreign hunters to take a small, strictly controlled, annual quota based on the best biological information available on the status of the markhor and other wildlife species in the area.

Currently, the project employs more than 50 local game guards, protecting approximately 1,000 km<sup>2</sup> of habitat. The project has eliminated poaching in this core protection area, and, as a result, markhor populations, virtually extirpated by 1984, have increased steadily. Since 1994, the markhor population has doubled and is considered to be of adequate size and condition to sustain a small (1–2% of the population) annual trophy harvest. Systematic field surveys have been conducted in the region since 1994 as part of the management program, supported in part by the FWS through its Wildlife Without Borders-India program. The project was maintained informally until 1994, when an officially registered non-governmental organization, the Society of Torghar Environmental Protection (STEP), was established to administer the project. Currently participation in this program is limited to foreign hunters primarily from Europe. Allowing a limited number of U. S. hunters an opportunity to import trophies taken from this population could provide a significant increase in funds available for conservation and would provide a nexus to encourage continuation and expansion of the project into other areas.

### Asian Bonytongue

The Asian bonytongue (*Scleropages formosus*) is a tropical freshwater fish native to Indonesia, Thailand, and Malaysia, and is listed as endangered under the ESA and included on Appendix I of CITES. Although the species was historically harvested for consumption, its demand for the aquarium pet trade, along with other factors such as habitat loss, resulted in significant declines throughout its range. Reclassification of the species under the ESA is not likely due to continuing concern for its overall status. However, since the greatest single threat to the species is illegal collection for the pet trade, captive propagation that results in a controlled legal supply of specimens could significantly reduce the pressure on wild populations. Additionally, the breeding of native species in captivity for commercial