

## Editorial

# Wildlife Trade: Threat to Global Health

For decades, the wildlife trade has been condemned by conservationists because of its devastating effect of reducing the size and resilience of local wild populations of endangered species. Animal rights activists have also called for a halt to trade because of the cruelty inherent in capture and transport of living organisms. The concerted action of these two communities was key to the establishment of the Convention on International Trade in Endangered Species of Flora and Fauna (CITES), which has had significant impacts on trade, such as on elephant tusks out of Africa and Asia, and parrots from Latin America. However, commerce in wildlife for food and pet trades has grown since the enactment of CITES in 1975, especially among species not listed as endangered. Neither the specter of species losses in remote places nor instances of animal cruelty has aroused much public concern.

Now, however, the public is becoming aware of the threat of the wildlife trade to human health—a concern on anyone's agenda. In the wake of severe acute respiratory syndrome (SARS), a viral respiratory illness, people have learned that frequenting live exotic animal markets can bring a risk of acquiring a new disease as if they themselves had explored a remote area that was the origin of the animals for sale. They are learning that most wild-caught animals found in markets and pet shops have never been tested for diseases and parasites. This is a key moment for those of us concerned about the rapid global spread of pathogens to press for a major reassessment of wildlife capture, transport, health surveillance, and enforcement practices. The humane and wildlife conservation communities will join the *EcoHealth* community in a campaign to protect global health by addressing the problem of diseases caught up in the wildlife trade.

In fact, the campaign has begun. In Bangalore, India, on January 14, 2004, leading conservation and health scientists from 10 countries, including Argentina, Brazil, Cuba, Guatemala, India, Indonesia, Mexico, Sri Lanka, the United States, and Venezuela, known collectively as the Wildlife Trust Alliance, signed a joint declaration calling on governments and international organizations to undertake an urgent reappraisal of wildlife trade. The Alliance enumerated seven steps:

1. Increase public awareness about the spread of diseases associated with wildlife trade.
2. Improve surveillance of the wildlife trade for human and wildlife pathogens, not just a handful of livestock diseases.
3. Promote adequate and standardized quarantine procedures and health documentation for transported wildlife.
4. Fund research to understand and forecast risks of disease transmission across species.
5. Enhance capacity to monitor and enforce regulations on wildlife trade.
6. Strengthen legislation, law enforcement capacity, and prosecution of people involved in illegal trade.
7. Provide resources to strengthen local capacity to address these issues.

The scale of the wildlife trade is enormous; annual illegal trade alone is estimated at US \$6.2 billion according to Interpol, making it among the world's most lucrative criminal activities. For the most part, profits from the illegal trade accrue to small groups of intermediaries, many of whom are also linked to drug and weapon smuggling.

Even the legal trade is poorly regulated, with accurate figures available only for endangered (CITES-listed) animals. These species are traded in quantity. For example, between 1990 and 1994, the legal global wildlife trade involved more than 1.8 million parrots; more than 140,000 monkeys, apes, and other primates; and more than 228,000 monitor lizards.

If disease issues linked to wild animal trade are not addressed, there can be serious health consequences. There is a strong likelihood that the SARS coronavirus originated from wild animals traded in China for food. The disease cost more than US \$50 billion in global economic loss in 2003. West Nile virus was introduced to the United States in 1999, probably from the Middle East as part of the pet trade in birds. It has spread rapidly across the United States and into northern Mexico, and currently threatens to invade Hawaii and the neotropics, where a host of endangered bird species will be at risk from West Nile virus-driven extinction.

While representatives of the pet industry might argue that ownership or consumption of exotic animals is a harmless activity, the truth is that in addition to potential devastation of local populations and suffering by innumerable individual animals, the disease risk to humans and domestic animals is intolerable. The relatively insignificant economic benefit to a small segment of the pet industry is outweighed by the potential economic devastation of disease outbreaks. We must put a halt to the unintended disease-engendering consequences of wildlife trade.

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