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Where the tiger Survives, biodiversity thrives

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No feature of Earth is more complex, dynamic, and varied than the layer of living organisms that occupy its surfaces and its seas, and no feature is experiencing more dramatic change at the hands of humans than this extraordinary, singularly unique feature of earth. This layer of living organisms - THE BIOSPHERE - through the collective metabolic activities of its innumerable plants, animals, and microbes physically and chemically unites the atmosphere, geosphere, and hydrosphere into one environmental system within which millions of species, including humans, have thrived. Breathable air, potable water, fertile soils, productive lands, bountiful seas, the equitable climate of Earth's recent history, are manifestations of the workings of life. It follows that large-scale human influences over the biota have tremendous impacts on human well-being. It also follows that the nature of these impacts, good or evil, is within the power of humans to influence. -www.millenniumassessment.org

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PERSPECTIVES FROM ASIA

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The world grows smaller and smaller, more and more interdependent... today more than ever, life must be characterized by a sense of Universal Responsibility, not only nation to nation and human to human, but also to other forms of life.

-His Holiness The Dalai Lama (from *Tree of Life: Buddhism and Protection of Nature*)

2010

BIODIVERSITY

Japan's Satoyama and Our Shared Future

Where the Tiger Survives, Biodiversity Thrives



PHILIP J. NYHUS & RONALD TILSON

THE TIGER IS IN CRISIS. Once it prowled forests and grasslands stretching to the corners of Asia; today fewer than 4,500 wild tigers remain in just a fraction of their former range. The Bali, Caspian, and Javan subspecies are extinct. The Amur (350), Bengal (2,000), Indo-chinese (1,000), Malayan (500) and Sumatran (300) subspecies are all declining. The South China subspecies is extinct in the wild but 92 remain in captivity. Indeed, 2010 could be the last Year of the Tiger in the Chinese lunar calendar to find the world's largest cat and most potent symbol of wilderness living in the wild. As Asia's dominant predator, tigers need vast areas that support abundant prey living in productive forest ecosystems. Tigers are a classic example of a "keystone species" that maintains the structure of an ecological community. This makes them a reliable and visible indicator of ecosystem health: Where tigers live, biodiversity thrives. The tiger today struggles to retain a small foothold as its forests disappear, poachers eviscerate remnant populations, and the environmental impact of human population growth and economic development continues unabated.


The decline of wild tigers should be of concern to everyone at the COP10 Biodiversity Conference, and there are slivers of hope. Lessons from efforts to manage tigers in the past and present are available to illustrate how countries can take bold steps to protect tigers — or let them become faded photos on office walls.

In the 1950s, China declared war on nature, labeled its 4,000 wild tigers pests, and set out to eradicate them. Vast natural forest areas of China were obliterated. This war on nature originated from the determination of one man: Chairman Mao Zedong. The "Great Leap Forward" and "Cultural Revolution" ushered in a period of vast conversion of forestland to farmland, forced resettlement of millions of urban people and the elimination of the brain trust of scientists who could have studied and salvaged what tigers remained.

In the early 1970s, India, with the largest population of tigers, made a bold and visionary decision to halt the disappearance of tigers and habitat. This was possible because of the courage and commitment of one woman: Prime Minister Indira Gandhi. She launched Project Tiger, eventually establishing 21 nature reserves throughout India specifically managed for tigers. The big cats then flourished and became a symbol of national pride. Over time Ms Gandhi's wisdom was forgotten, her vision dimmed, and India's tigers began to decline through indifference, competing priorities, lack of protection and ineffective prosecution of poachers. In the archipelago of Indonesia, once

the home of three tiger subspecies, two became historical footnotes when the Bali tiger was hunted to extinction around World War II and the Javan tiger blinked out in the 1970s. What remains is a few hundred tigers on the island of Sumatra, and they face an uphill battle. As the twentieth century ended, Sumatra had one of the world's fastest rates of deforestation and exploding oil palm production. The demise of President Suharto's corrupt regime did little to stem this trend. Devolution of power to the provinces opened the floodgates of corrupting money and influence to regional authorities. Despite ongoing and heroic efforts by Indonesian conservationists, the tiger and its forest home are no match for the powerful interests that benefit from timber extraction and oil palm production.

Modern China, faced with the realization it has lost its wild tigers, is at the tipping point of responding in earnest. In spite of international criticism over its policies regarding the commercial breeding of tigers on a massive scale for the pharmaceutical industry, China is in the embryonic stage of planning the restoration of wild tigers. The country's long-term goal is to restore the forest ecosystem and return free-ranging, self-sustaining populations of South China tigers and tiger prey to large national nature reserves within the tiger's historical range in south-central China. The recovery of South China tigers is now a national conservation priority. India, too, has awoken to the realization it must renew its covenant with the tiger. Indonesia, sadly, continues to offer platitudes and has done little to promote meaningful conservation action.

The lesson from these cases is straightforward: The path to tiger conservation, and indeed conservation of Asia's biodiversity, lies in the meaningful, substantial, and sustained commitment of its governments and its leaders. Chairman Mao destroyed the tiger, Prime Minister Indira Gandhi saved the tiger, and President Suharto was too busy selling Indonesia's forests to care about the tiger. If the world is to keep its wild tigers it needs the commitment of more than a few passionate defenders. It needs intrepid leaders to make bold decisions to reverse the course of history. Leadership is needed: to set aside and to protect remaining forest habitat for tigers and other endangered species, to protect tigers and their prey from the omnipresent risk of illegal poaching, to work with communities near these protected areas, and to halt the deadly and illegal trade in tiger products. All of the tiger range state countries would be wise to ask whether they have made the practical and visionary commitments necessary to save their — and the world's — most iconic animals. 



ONLINE: Conservation of the Amur Leopard kyotojournal.org/biodiversity/amur_leopard.htm
Hunting the Hunted (Tigers in Malaysia) kyotojournal.org/biodiversity/hunted.html

WEB SITES The IUCN/SSC Cat Specialist Group brings together the world's leading cat experts dedicated to advancing the understanding and conservation of the world's 36 wild living cat species. www.catsg.org/catsgportal/20_catsg-website/home/index_en.htm.
Tilson, R., and P. J. Nyhus, editors. 2010. *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris*. Elsevier, San Diego. A comprehensive overview of tiger science and conservation by the world's leading tiger authorities elsevier.com/wps/find/bookdescription.cws_home/715808/description#description.
Save the Tiger Fund www.savethetigerfund.org/
Carnivore Ecology & Conservation carnivoreportall.free.fr/index.htm has an extensive searchable database including tigers.
Panthera: www.panthera.org/index.html for selected news on all species of wild cats.
Save China's Tigers — www.savechinastigers.org — established to protect and conserve the tiger and other endangered cat species in China.
Minnesota Zoo, www.mnzo.org/conservation/conservation_world_ChinaTiger.asp, gives a brief summary of the South China tiger program.

What will it say about
the human race if we
let the tiger go extinct?
What can we save? Can
we save ourselves?

—Ashok Kumar



LEFT: PAINTING OF TIGER BY MARUYAMA OKYO; UPPER RIGHT: TIGER AND MAGPIE, KOREA; LOWER RIGHT: PHOTOGRAPH BY PHILIP J. NYHUS AND RONALD TILSON