



**The Goodwin-Niering Center for Conservation Biology and  
Environmental Studies, Connecticut College**

**Summary of paper presented at the conference:  
Saving Biological Diversity:  
Weighing the Protection of Endangered Species vs. Entire Ecosystems  
April 6 – 7, 2007**

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**Advancing Conservation in a Globalized World  
Presented by Jonathan Hoekstra**

Summary by Mike Seager '09

In the last presentation of the conference, Jonathan Hoekstra, who works with The Nature Conservancy on its Global Conservation Approach Team, spoke about advancing conservation movements in today's globalized world. Hoekstra began by talking about the five most important factors in today's globalized economy: Large scale fishing, farming, logging, energy production and transportation. Each one of these industries supplies necessary resources in a large enough quantity to support the globalized lifestyle that so many people rely on today. Hoekstra said that since it is the nature of these large-scale industries to make as much profit in the short run as possible, sustainability and conserving biodiversity are not their top priorities. Because of this, many species are losing their habitats or natural resources they rely on to survive. Hoekstra said that the effects of globalization raise important moral and scientific questions that we must address. One question is, what do we owe to protecting the other species that we share this earth with? Should our human priorities trump all others? What is a morally acceptable way of using the resources the world provides us?

Hoekstra writes in "Beyond Noah: Saving Species is not Enough," an article he wrote with other scientists and conservationists, "we must also look to conserve the

diversity of ecosystems to incorporate many unknown and poorly studied species and communities that are distributed according to environmental gradients, as well as to conserve ecological and evolutionary processes necessary to sustain biodiversity.”<sup>1</sup> He said that while 22% of land on earth has been developed, 12% of it has been protected by governments or NGOs. If we allow too much land to be developed, we might interrupt important ecological or evolutionary processes, which could have incalculable effects upon the human race or the world itself.

Hoekstra illustrated exactly how far reaching and omnipresent globalization has become. In order to do this, he examined some of the products in his own house to find out where they came from. Starting in his kitchen, Hoekstra found coffee from Central and South America, Africa and Mexico. He also found wine from Italy and France and rice from India. He then looked in his closet and found clothes with labels from India, China, Korea and other countries in Southeast Asia. Hoekstra didn't realize how large his global footprint actually extended before examining some of the products he took for granted in his house. He felt that he owed some responsibility to protect the places where these products come from, since the transportation, energy and resources used to bring him his favorite shirt have negative effects on the land it comes from. But what are these effects more specifically? Hoekstra has been investigating this question in previous years in his work for the Nature Conservancy.

One of Hoekstra's maps showed all the different classified biomes in the world. According to Hoekstra, biomes are, “global scale biogeographic regions, such as tundra, or tropical grasslands and savannahs, shaped by climate and distinguished from one

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<sup>1</sup> Hoekstra, Jonathan M (among a number of other authors). “Beyond Noah: Saving Species Is Not Enough.” *Conservation Biology*. Pages 1672-1673. Volume 18, No. 6, December 2004.

another by the unique collections of ecosystems and species assemblages that have evolved there.”<sup>2</sup> Hoekstra’s group at the Nature Conservancy gathered data on the rate of development to conservation in each of these regions.

The most severe development to conservation gap in any biome in the world today are the Temperate Grasslands, Savannas and Shrublands. According to Hoekstra’s data, 45.8 % of this biome has been converted into land dominated by human use, while only 4.6 % of the land is protected. Biomes that follow close behind in their poor development to conservation ratios are Mediterranean Forests, Tropical/Subtropical Dry Broadleaf Forests and Temperate Broadleaf and Mixed Forests. Hoekstra approaches conservation looking at these numbers, rather than solely relying on statistics that only deal with individual endangered species. To Hoekstra, conserving endangered land is a more effective way to ease the growing threat to biodiversity than looking at the issue on a species by species basis.

In Hoekstra’s article “Confronting a Biome Crisis,” he writes “Confronting the biome crisis requires a concerted and comprehensive response aimed at protecting not only species, but the variety of landscapes, ecological interactions, and evolutionary pressures that sustain biodiversity....” Hoekstra, in a sense, poses the question, what is the point of saving individual plants and animals if they will soon have no place to live?

How does one go about mending the holes that his/her globalized footprint leaves on the world? How should an individual attempt to counteract the effects of such a large and decentralized entity as “the globalized economy?” Hoekstra’s suggestion that he kept reiterating throughout his presentation was, “think globally, act locally.” Hoekstra

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<sup>2</sup> Hoekstra, “Confronting a Biome Crisis: Global Disparities of Habitat Loss and Protection.” *Ecology Letters*. 2005. Page 1.

said that we must come to terms that Globalization is real and won't be going away any time soon. However, he said that there are ways that we can learn to live with globalization in a more sustainable manner. In order to do this, people must come together on conservation movements and promote sustainable practices on a local scale. Starting at the local end of the spectrum and working with neighbors and people in their cities, the movement will eventually grow and expand to a larger scale. The Nature Conservancy asserts that you can't conserve a place in isolation from your neighbors. He said conservation should be a collaborative effort on both the micro and macro level.

The Nature Conservancy embodies this "think globally, act locally" philosophy and has used the biome stress data Hoekstra and his team have collected to promote land conservation in some of these different eco-regions. Focusing more heavily on the regions that have high development to conservation ratios, The Conservancy has given their data to various other NGOs in hopes of gathering allies in local conservation movements across the globe. These NGOs include Birdlife International, Conservation International, Greenpeace, Wildlife Conservation Society, WWF, and the World Resources Institute among others. While Hoekstra and The Nature Conservancy are fighting the negative impacts of globalization, they are doing it on a local, case-by-case basis. Instead of only trying to conserve ecological hotspots or specific plots of land that have been deemed necessary for a single endangered species' survival, his group has decided to focus on local efforts to conserve categories of land that are threatened by globalization and development. Hoekstra's ability to narrow the problem down to a local endeavor is quite effective and is successful in creating real results.

Bibliography

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The Nature Conservancy Website: <http://www.nature.org/>