

# Environmental Review

A Monthly Newsletter of Environmental Science and Policy

Volume Ten Number Seven

July 2003

## Is the Latest Science Being Applied to Recovery Plans?

Introduction:

As we convert ecosystems to our uses other plants and animals either adapt to the new conditions, or move to another area. Failing that, they die.

Over exploitation of natural resources, be they fish or trees, is comparatively easy to deal with. Habitat loss for non human species is relentless, diffuse, and proving difficult to stop. The scale of what we are letting slip away was recognized 100 years ago by non other than a conservative Republican president, Theodore Roosevelt.

Scientists who engage in the politics of conservation have to resolve a professional conflict. Scientists are trained to be objective, to guard against their own preconceptions and let the facts fall into place. Once a scientist crosses the line to become an advocate, even if it's for a modicum of restraint, their objectivity is open to question. However, the attitude that scientists must remain above the fray or else compromise their objectivity is in our opinion a false dichotomy. Scientists must of course strive for objectivity when they do science. That does not excuse them from our common obligation as caretakers of our natural heritage to work in politics on behalf of endangered species and conservation in general.

We spoke with John Stinchcombe about how science is being applied on behalf of endangered species. Using

## CONTENTS:

### THE SCIENCE OF ENDANGERED SPECIES

John Stinchcombe

### CONSERVATION PRIORITIES IN INDONESIA Douglas Sheil



information from a review of 136 recovery plans he and his co-authors evaluated the flow of scientific information to the people who write and implement recovery plans; for example, how advances in genetics are being applied to real world conservation problems.

**ER:** Dr. Stinchcombe, what is your training?

**JS:** I received a Bachelor of Arts degree in biology at Bucknell University. I had a broad background in biology as well as the social sciences and humanities. My Ph.D. training at Duke University was not as a conservation biologist, but as an evolutionary biologist/ecologist. I'm interested in

how the relationships between plants and animals evolve.

**ER:** Co-evolution?

**JS:** That's right. Most of my dissertation work explored co-evolution between plants and the animals that eat them. But conservation biology remained an interest both for personal reasons and having some connection to organisms, and for ethical reasons: I feel we should be trying to save species and protect biodiversity. I also felt like the graduate training in biology with the math and statistics and a broad background offered a lot of tools to make some contributions other than doing pure science.

**ER:** You're at Brown now?

**JS:** Yes. I finished my degree at Duke in 2001, and since then I've been a postdoctoral research associate at Brown University. My research here is on the evolution of life history traits in plants; for instance, the timing of reproduction, growth trajectories, and things of that sort.

**ER:** How did you become interested in recovery plans?

**JS:** As far as this paper is concerned, I originally got involved in the data collection of a big project on reviewing recovery plans as part of a graduate seminar I took at Duke University. A group of scientists designed a questionnaire to extract as much information as possible out of a large sample of recovery plans. Then they sent the































