

## *Part II: Interdisciplinary Problem Solving in Practice – Student Cases From 1999*

Part II of the Bulletin offers a selection of work by Master's students from the autumn 1999 "Species and Ecosystem Conservation: An Interdisciplinary Approach" course. These cases represent the first application of the interdisciplinary approach by these students. Papers were written to be readable by a wide audience. Throughout the semester, students worked in small teams of two to six individuals and assisted each other in learning concepts and analyzing cases. The end product was a set of relatively short papers (about 15 pages each). Authors could not go into great detail because of the length restriction, but were quite knowledgeable about their cases. The papers were regarded as an opportunity to develop skill in authoring a "policy brief" that could be presented to a decision maker, scientist, manager, or the public. Students were able to demonstrate their analytic and writing skills in this exercise.

The 1999 class formed itself into ten teams. The work of four of the teams is featured in this Part of the Bulletin, although the names of all of the students in the class and the titles of their case applications are also listed (Table 1) and mapped (Figure 1). Space precluded printing all cases. Each team had a unifying theme, such as "species conservation," and each team member crafted his or her analysis to be consistent with the theme. To illustrate how interdisciplinary problem solving is applied, a single paper from each of the four selected teams is presented in this Part along with abstracts from the papers of other team members. Also, the overhead illustrations used in the oral presentation of each featured paper are included. Overheads give readers a better sense of how case analyses were presented to the audience. Each team had about an hour to present their work to classmates and this was followed by half an hour of discussion.

Topics investigated by the 1999 class ranged from rare species conservation to large ecosystem management challenges. Cases looked at planning, public participation, decision making, and other topics at various scales—local, regional, national, and international. A number of analyses focused on the United States, including the Florida Everglades ecosystem, wolves in Washington State and Minnesota, water projects in California, biodiversity in America's grasslands, and marine conservation in Chesapeake Bay. International cases come from the Federal Islamic Republic of the Comoros, Colombia, Costa Rica, Cambodia, Democratic Republic of Congo, Kenya, Indonesia, China, Ecuador, Paraguay, Bhutan, Nepal, Thailand, Namibia, and Uganda. The diversity of individual analytic and presentation styles and the range of topics and geographic settings provided a broad variety of cases to learn interdisciplinary concepts.

Table 1 Authors and titles of student papers from the 1999 "Species and Ecosystem Conservation: An Interdisciplinary Approach" course (see Figure 1 for map showing locations).

1. **Baillie, Alexandra.** 1999. IUCN/Species Survival Commission action plans: An interdisciplinary approach.
2. **Brown, Mark.** 1999. Conservation of biodiversity and sustainable development in the Federal Islamic Republic of the Comoros.
3. **Byrd, Daniel.** 1999. The Everglades: Holistic ecosystem approach to restoration and management.
4. **Cabrera, Heather.** 1999. Bring back the beast: A policy analysis of the proposed reintroduction of gray wolves to the Olympic Peninsula of Washington.
5. **Casas, Adriana.** 1999. The oil industry and the U'wa: Conflicting views, Colombia.
6. **Cesareo, Kerry.** 1999. From upper to lower river: A decision process analysis of the Housatonic River Restoration in New England.
7. **Chen, Linus.** 1999. Biodiversity conservation in Costa Rica.
8. **Dillon, Tom.** 1999. Biodiversity and civil society in Cambodia: Improving conservation.
9. **Elias, Roberta.** 1999. An application of the policy sciences to restoring the degraded Quinnipiac marsh ecosystem, New Haven, Connecticut.
10. **Frey, Gregory.** 1999. The upper Yuba River studies program: Ecosystem and species restoration in California.
11. **Gorman, George.** 1999. New Haven's Quinnipiac Marsh: A diamond in a dump, New Haven, Connecticut.
12. **Hollamby, Matthew.** 1999. Biodiversity conservation in Ecuador: The role of international organizations.
13. **Ilambu, Omari.** 1999. The impact of human conflict on eastern lowland gorilla conservation in Kahuzi-Biega National Park, Democratic Republic of Congo.
14. **Jones, Greg.** 1999. The Canadian north Atlantic cod fishery: A case study of management and conservation policy.
15. **Kelly, Tierney.** 1999. Colorado lynx reintroduction: Why a simple idea is so controversial.
16. **Kuebler, Caroline.** 1999. Black tailed prairie dogs: A new era of management?
17. **Kugler, Lisbet.** 1999. The Bering Sea: Management of an ecosystem and the World Wildlife Fund.
18. **Lanfer, Ashley.** 1999. Recommendations for a smooth ecological and social transition into the future for agro-pastoralists of the Baringo lowlands, northern Kenya.
19. **Mardiah, Siti Nissa.** 1999. Ecotourism: An alternative sustainable utilization of Indonesian biodiversity and its conservation.
20. **McGray, Heather and Aurelia Micko.** 1999. A student analysis of the School of Forestry and Environmental Studies' curriculum decision process.
21. **Meisler, Jonathan.** 1999. Environmental policy creation and implementation in southwest China.
22. **Morton, Jeff.** 1999. The Quinnipiac River Tidal Marsh: A policy process review in New England.
23. **Muchnick, Barry.** 1999. (W)helping the wolves: A perspective on delisting endangered species in Minnesota.
24. **Nyce, Chris.** 1999. Conflict resolution between local communities and park management in Lake Mburo National Park, Uganda: The African Wildlife Foundation's role.
25. **Osborn, Anne.** 1999. Arid prairie ecosystem restoration in the United States.
26. **Padwe, Jon.** 1999. Resolving land conflict along the border of the Mbaracayú Reserve, Paraguay.
27. **Schaub, Erika.** 1999. An examination of the participants in the prairie dog conflict, United States.
28. **Scheffler, Tracy.** 1999. Bridge over troubled waters: Faith-based stewardship in Chesapeake Bay.
29. **Sherrow, Hogan.** 1999. The cheetah (*Acinonyx jubatus*) in Namibia: An application of the policy sciences to endangered species conservation.
30. **Stein, Julie.** 1999. The Yellowstone grizzly bear policy process.
31. **Stevenson, Michael.** 1999. Galapagos Islands: Managing introduced species in an endangered ecosystem.
32. **Taylor, Francis.** 1999. Philosophical pragmatism and the policy sciences.
33. **Teelen, Simone.** 1999. The cougar (*Felis concolor*) controversy in the west.
34. **Williams, Scott.** 1999. The first Quabbin Massachusetts deer hunt: A review.
35. **Yonten, Deki.** 1999. The impact of tourism in Jigme Dorji National Park, Bhutan.
36. **Young, Christie.** 1999. The illegal extraction of *mai hom*, a non-timber forest product, in Khao Yai National Park, northeast Thailand.
37. **Zieglmayer, Kim.** 1999. Tourism and development: Implications for snow leopard conservation in the Annapurna Conservation Area, Nepal.



Figure 1 Location of study site or region of students' case analyses (see Table I for key to paper titles and authors).