

Resources for Promoting Conservation Biology Literacy and Civic Engagement in Environmental Problems: Modules and Case Studies from the Network of Conservation Educators and Practitioners (NCEP)

Michael J. Foster, Ana Luz Porzecanski, Nora Bynum, Eleanor Sterling, Center for Biodiversity and Conservation, American Museum of Natural History, NY, USA



SUMMARY

In many countries in the tropics, limited access to educational and training resources is one of the greatest obstacles to building capacity in biodiversity conservation. NCEP was developed to address this issue, and rests on two straightforward ideas: increasing university professors and conservation trainers' access to high-quality instructional materials, and fostering an active approach to teaching and learning that models the realities of conservation practice and connects classroom inquiry with real world problems. We develop and freely disseminate a series of multi-component teaching modules in several languages (English, French, Laotian, Spanish), and run local professional development workshops for educators. More than 70 complete or partial modules are available for use and testing free of charge (at <http://ncep.amnh.org>), and since 2001 we have reached more 1,000 faculty members, practitioners and students through 50 workshops and training events in 11 countries. Project evaluations indicate that the project is succeeding at many levels and have helped us identify best practices as well as future challenges.

THE CAPACITY CHALLENGE

- Governments, the scientific community, and civil society in many places around the world have recognized the importance of sustainable management and conservation, and ambitious programs of conservation and management have been identified in numerous countries.
- But training opportunities and resources for building capacity in conservation are limited in many countries.
- A greatly increased cadre of highly capable professionals will be required if we are to sustainably manage and conserve the biosphere, and our mission is to develop the capacity needed to sustain the earth's diversity.



OUR RESPONSE

The Amnh's Center for Biodiversity and Conservation developed NCEP to help bring about its vision of a network of highly trained of individuals effectively managing and sustaining the world's biological and cultural diversity. NCEP has two main goals:

Increasing access to high-quality, free of charge instructional materials and information on the conservation of biological and cultural diversity.

Develop and disseminate a series of multi-component, adaptable teaching modules for university professors and conservation trainers in several languages.

Fostering an active approach to teaching and learning that models the practice of conservation.

Run local professional development and active teaching workshops for educators.

Ecosystem Loss and Fragmentation
M.F. Lavery and J.P. Giblin

INTRODUCTION
Ecosystem loss and fragmentation has been termed the greatest worldwide threat to biodiversity and the primary cause of species extinction (Wilcove and Murphy, 1985; Forman and Danielson, 1986; Simberloff, 1996). Today, fragmentation continues to occur at an exponential rate and is now the most ubiquitous feature of the

Metapopulations and Dispersal

Biological Dimensions of the Fragmentation Process

Sample pages from the NCEP module *Ecosystem Loss and Fragmentation*



ACTIVITIES & RESULTS

- NCEP modules are available to educators worldwide, but we also implement specific projects in Bolivia, Laos, Madagascar, Mexico, Myanmar, Peru, Rwanda, the Solomon Islands, the United States, and Vietnam, where we form diverse partnerships with government agencies, NGOs, universities, and individuals.
- More than 70 complete or partial modules are available for use and testing free of charge from our website, including 37 modules in English, 20 in Spanish, and 8 in French.
- Since 2001, we have run 50 workshops and training events in 11 countries for more than 1,000 university faculty members, conservation practitioners, and students.
- More than 1,000 users are registered on the project website, and an average of 200 modules are downloaded each month.

<http://ncep.amnh.org>

Network of Conservation Educators & Practitioners

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Modules Search

Topic: Title: Search

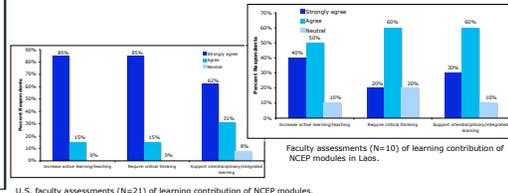
Advanced Search by language:

20 modules found, viewing page 1 of 1

- Applied Sustainability
- Assessing Threats to Conservation, Practice and Assessment
- Biodiversity and Forest Ecosystem Assessment
- Biodiversity Conservation and Invasive Species Management and Assessment
- Biological Diversity
- Genetic and Systematics: An Overview of Theoretical and Technical Issues
- Classroom Assessment Techniques
- Conservation Genetics
- Ecosystem Loss and Fragmentation
- Ecological Justice
- Evolutionary Biology and Conservation
- International Training for Practice, Conservation and Assessment
- Introduction to Practice, Conservation Biology
- Marine Conservation Biology
- Marine Protected Areas and MPAs Networks
- Marine Resources and Local Fisheries

Evaluations of efforts to date in Bolivia, Laos, and the US indicate that module usage continues to increase and that modules:

- provide up-to-date information on relevant topics
- are easily modified to meet teaching needs
- include multi-disciplinary and global perspectives
- increase active learning
- contribute to student learning



PROMOTING CIVIC ENGAGEMENT

- All of our materials are fully adaptable. Users can modify them to include local examples or locally relevant activities.
- All present opportunities to link classroom study and inquiry on conservation issues to real world problems, from the local to the global scale.

MODULE: The Global Carbon Cycle and Climate Change

EXERCISE: Reviewing Standards for Evaluating Climate Change Mitigation Projects
Students critically evaluate the climate, community, and biodiversity impacts (CCB) standards for assessing land-based carbon projects and contribute to making them easier to implement by land managers. The students get to participate in an international effort by submitting their comments on the official CCBA website.

MODULE: Invasive Species and Mechanisms of Invasions

EXERCISE: Assessing Non-Indigenous Plant Presence
Students assess the extent of non-indigenous plant presence in their local ecosystems. This exercise includes field surveys at five selected plots and analysis of the data. Students become familiar with the threat of invasive species as it unfolds in their own backyard. The exercise can be adapted to include additional investigations into the management plans of their city or county for those invasive species, and the policy behind those measures.

EXAMPLES

JOIN US!

Many modules are still in development, and you are invited to participate by:

- testing completed modules in the classroom
- reviewing modules at various stages of development
- adapting module materials

Contact us at biodiversity@amnh.org



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