

Group Project Proposal

1. Title. A Distributed Graduate Seminar to Analyze the Priorities, Obstacles and Opportunities that Exist for the Implementation of U.S. State Wildlife Action Plans

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Other Project Participants

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External Advisory Group

Sara Vickerman, Defenders of Wildlife (*NCSE Project Steward*)
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Dennis Figg, MO Department of Conservation
Kevin Gergely, National Gap Analysis Program
Judy Soule, NatureServe
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4. Proposed Project.

Objectives. This project will analyze and synthesize 52 recently developed State Wildlife Action Plans to identify national and regional conservation priorities, to examine differences among states in plan development and implementation, and to identify implementation opportunities and obstacles. The project has been funded by the National Council for Science and the Environment's Wildlife Habitat Policy Research Program.

Significance. Two recent reviews quantified how well the individual State Wildlife Action Plans have satisfied the minimum requirements of the legislation and the guidance of the International Association of Fish and Wildlife Agencies, but much remains to be done to achieve a comprehensive synthesis. This project is designed around regionally distributed graduate seminars whose participants will collect information about the plans and their ongoing implementation. This information will be synthesized, interpreted, and communicated to managers and practitioners. The project will identify common threads of a national conservation vision, highlight regional-to-national conservation priorities and information needs, and discuss some of the economic, policy, legal, and social challenges and opportunities to achieving the

plans' visions. We also propose to compile a database of the results of the synthesis to make the products of this distributed graduate seminar available to a wide array of interested parties via the Web. The project also provides students with excellent training and exposure to non-game wildlife professionals and other graduate students around the U.S.

Approach. We have designed a five-step process to achieve the project's objectives: (1) project planning, (2) pilot seminars and background research, (3) distributed graduate seminars, (4) synthesis, (5) communication and outreach.

(1) Planning.

We are currently consulting with our external advisory group as well as other experts who are familiar with the development and implementation of the statewide wildlife action plans. The purpose of these conversations is to compile a list of questions these experts believe need answering to increase the effectiveness of the seminar and ultimately the value of the plans.

A project wiki has been implemented in the Biogeography Lab at UCSB to facilitate communication, document and data sharing among project participants.

Our analysis of the state plans has two components: 1) Structured analysis of the plans themselves to provide a common base of contextual information for inter-state comparisons and regional-to-national analyses (see "Contextual Questions" and "Emergent Conservation Priorities and Threats," below), 2) Analysis of early stages of plan implementation ("Conservation Obstacles and Opportunities for Implementation.")

Contextual Questions

1. What are the main conservation goals and how were they developed? (e.g., statewide vs. regional, role of stakeholder processes)
2. What is being protected? (e.g., which species, ecosystems, ecosystem services, productive lands)
3. Have conservation targets been set? (e.g., based on species viability or representation goals)
4. What were the key data sources and scales?
5. Conservation planning tools (e.g., decision support tools)
6. Conservation approaches (e.g., acquisition vs. purchase of development rights, stewardship agreements, restoration, mitigation)
7. Plan alternatives (were alternative conservation scenarios considered?)

Emergent Conservation Priorities and Threats

1. Key threats and approaches to threat mitigation
2. Priority species, ecosystem types, and ecological processes
3. Priority areas

Conservation Obstacles and Opportunities for Implementation

1. Fiscal considerations (e.g., costs, funding sources)

2. Social considerations and implementation strategy and timetable
3. Emerging political processes and institutions
4. Potential synergies with the Gap Analysis Program and other programs (e.g., Farm Bill and farmland preservation, Healthy Forests, carbon markets, highway planning and mitigation, military bases)

These questions and topics will be reviewed and refined in consultation with advisers and seminar leaders during Winter and Spring 2007.

(2) Pilot Seminars and Background Research.

We will organize and conduct pilot seminars in Spring 2007 at a subset of campuses (Indiana, UCSB, Idaho). The members of this Bren group project will participate in the Spring pilot seminar. A similar 1-year group project is already underway at Michigan under Steve Yaffee's supervision.

The pilot seminars will focus on answering the Contextual Questions and begin to identify the Emergent Conservation Priorities and Threats at regional and national levels. At the end of the term, we will conduct a post-mortem to digest the lessons learned and draft seminar guidelines and a database design for the Fall seminar. These draft documents will be discussed by seminar leaders and advisers and finalized in a meeting in May 2007.

(3) Fall 2007 Distributed Graduate Seminars

The Fall 2007 seminars will build on the experience of the Spring seminars to complete the synthesis of Emergent Conservation Priorities and Threats while delving more deeply into Conservation Obstacles and Opportunities for Implementation themes. The evaluation of State Wildlife Actions Plans will be conducted through a distributed graduate seminar conducted by at least eight universities (see Team Members and Roles). The seminars will be held at their respective campuses using regular university facilities. The structure of the distributed graduate seminar will be similar to the model developed at the National Center for Ecological Analysis and Synthesis (NCEAS) for analyzing habitat conservation plans (Harding et al. 2001), recovery plans (Hoekstra et al. 2002) and ecosystem based management.

The members of this Bren Group project will play an active role in all stages of the project, including the Fall seminar. The seminar participants will have an active role in structuring and reviewing the process. We anticipate that the initial set of research questions developed by the advisory group will require further refinement, either by adding new questions, modifying existing questions, and reaching consensus on ambiguous questions (Kareiva et al. 1999). We will use the project wiki to maintain an online forum to encourage communication between participating universities and to resolve issues that may arise. All evaluations of the State Wildlife Action Plans will be internally peer-reviewed prior to synthesis and analysis (Kareiva et al. 1999).

We envision a combination of quantitative and qualitative analysis of the plans made possible by formal, consistent content analyses undertaken by each of the participating seminar groups. We also intend to go beyond the printed plans through structured and non-structured interviews with key individuals and organizations. These interviews will be important in helping us understand

more fully how the plans were developed, how they are being received at state and local levels, and what legal, cultural and political influences will likely control their implementation. Thus the analysis will complement and expand on previous reviews that focused primarily on the content of the plans (Lerner et al. 2006) and the data sources (Maxwell 2006).

(4) Synthesis.

We will organize our analyses along the lines described above, that is, (a) a general profile of the plans (contextual questions), (b) identification of emergent regional-to-national threats, conservation priorities, and information needs, and (c) identification of implementation obstacles and opportunities. Our synthesis will emphasize conservation needs and expected conservation outcomes rather than simply whether the plans met the legal requirements and recommended guidance, which has been assessed by Lerner et al. (2006).

While the seminars will provide the raw data for the review, we will need to hold a final workshop in Winter 2008 to conduct the overall evaluation and synthesis. This meeting will be held in Santa Barbara. Seminar leaders, advisors, and one graduate student representative from each campus will be invited to attend. (All Bren group project members will participate.) The focus of the workshop will be on the key findings from the individual seminars, answers to the specific questions, tentative recommendations for managers and practitioners, and the structure of the communication products.

(5) Communication and Outreach.

We will draft a report with the findings and recommendations from the seminars, based on the outcomes of the workshop. The draft report will be sent to seminar leaders and advisors for internal review, prior to submitting the final report to NCSE/WHPRP. A summary for policy makers will also be prepared. We anticipate one or more journal papers in the conservation and/or environmental policy or planning literature.

(6) Major Tasks and Timeline

November 2, 2006	WHPRP Program Committee Meeting, Annapolis
November 10, 2006	Complete Statement of Work and Letter of Agreement
Winter 2007	Creation of project wiki for internal use by project participants
Winter 2007	EAC conference call to detail information requirements
Spring 2007	Pilot seminars to test research methods
May 2007	Planning workshop with seminar leaders
June 2007	Finalize seminar guidelines and design database
Summer 2007	Student Interns continue database development
Fall 2007	Seminars
November, 2007	WHPRP Program Committee Meeting, Annapolis
Winter 2008	Synthesis workshop to present and discuss project findings, including Advisory Committee, seminar leaders, selected student participants
March, 2008	Draft report to seminar leaders and advisors for internal review
April, 2008	Submit final report to NCSE/WHPRP
April, 2008	Inaugurate web site to publish data, analysis, examples of best practices,

(7) Deliverables

Final Report: Based on the detailed analyses we will identify major priorities, obstacles and overall opportunities that exist in regard to the implementation of State Wildlife Action Plans in general, and their habitat conservation component in particular. The final report will highlight threats and habitat types of highest priority for conservation planning at regional-to-national scales, updating and perhaps expanding the report a decade ago by Noss et al. (1995)). We will offer general recommendations for addressing both obstacles and opportunities for plan implementation, identify unmet needs for information, and summarize promising conservation tools and approaches .

Summary for policy makers: The report will be condensed into a shorter publication of key findings and recommendations.

Journal Articles: We will prepare at least 2 papers for peer-reviewed journals. One paper will be an overview of the emergent national conservation vision and conservation priorities contained in the plans. Another might make recommendations on partnerships and economic/institutional/political changes that would expedite achieving this emergent vision.

Presentations: We anticipate making a set of presentations to wildlife habitat conservation policymakers, managers, and practitioners at conferences, NGO board meetings, and to agency staff. The investigators will be primarily responsible for this outreach component at the national level, but we will also encourage the seminar leaders to conduct similar presentations within their regions as opportunities arise.

(8) Communication of Results

We will communicate results through a combination of printed and online media with face-to-face presentations. As described in the Deliverables section, the results will be documented in a report and the peer-reviewed literature. Key findings and recommendations will be presented at meetings of conservation practitioners. A web site will be established with documents, results, recommendations, best practices, and recommendations for follow-on activities.

We also have tentative support from the Gap Analysis Program for funding of approximately \$60,000 to supplement NCSE funding for the project (see Letter of Support from GAP Operations Manager, Kevin Gergely, in the proposal), dependent upon availability of appropriated funds and approval by the USGS Office of Acquisition and Grants. GAP funding, if obtained, will be applied in large part to the outreach component of the project.

6. Literature

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- Maxwell, J. 2006. Role of GAP data in State Wildlife Plan development: Opportunities and lessons learned. Gap Analysis Bulletin 14: online at <http://www.gap.uidaho.edu/bulletins/14/Maxwell.htm>.
- Noss, R.F., E. T. Laroe III and J.M. Scott. Endangered Ecosystems of the United States: A Preliminary Assessment of Loss and Degradation. Biological report 28. USDI national Biological Service, Washington, D.C.
- 5. Client.** National Council for Science and the Environment (<http://ncseonline.org/>) and the Doris Duke Foundation.
- 6. Anticipated Financial Needs.** The project is funded by NCSE. Additional funding from the U.S. Gap Analysis Program is anticipated. No Bren funding is required.