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SYLLABUS: ENVIRST 972 Conservation Planning

Planning & Monitoring the Effectiveness of Conservation Projects

University of Wisconsin-Madison, Summer 2016, 4 credits
Mondays 1:00-3:30; Wednesdays 10-12:15, 1:00-4:00
Grainger Hall Room 2280

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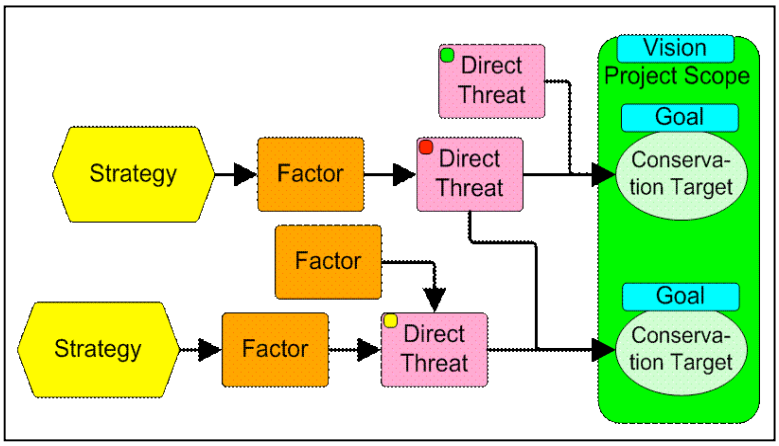
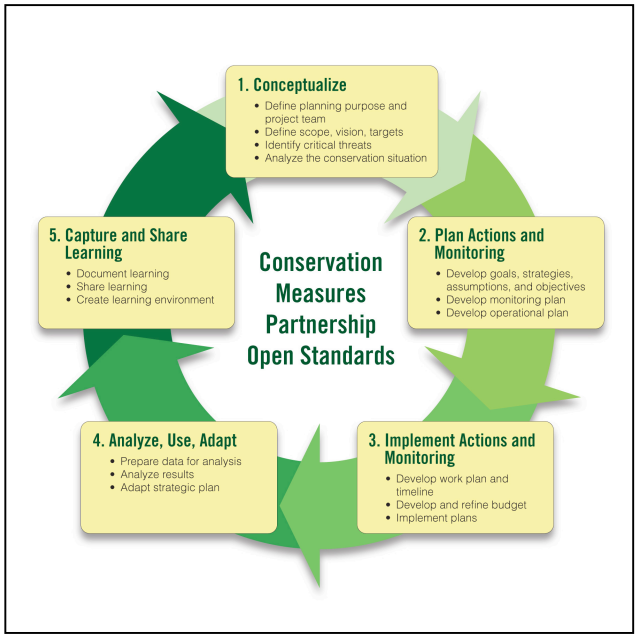


Project Representatives: Karl Gnaedinger, Illinois Indian Boundary Prairies; Tamai Souto, Amazon Conservation Association, Paulina Stowhas and Juan Contardo, Qarapara Green Sea Turtle Project, Rob Vinson, Pahranagat National Wildlife Refuge, Laurie Simons, Desert National Wildlife Refuge Complex; Giselle Block, Pacific Southwest National Wildlife Refuge System.

Course Description: Conservation practitioners typically have extremely limited resources (money, time, and people) to protect ecosystems and minimize threats to environments. To be effective with those limited resources, conservation practitioners need to carefully choose and prioritize their strategies, monitor whether they are being effective, and adapt strategies when they are not working. In addition, to obtain support from funders, partners, or stakeholders, practitioners need to be able to clearly communicate their goals and strategies, demonstrate their effectiveness, and rely on clear, transparent decision-making.



This course is designed for graduate students who are interested in applied conservation, as a career or in terms of managing conservation projects. The goal of the course

is to provide these students with training and experience in a systematic and adaptive process for planning conservation projects. The course is structured around the Open Standards for The Practice of Conservation (above), a process for planning, implementing and evaluating conservation projects developed by the Conservation Measures Partnership, a consortium of leading conservation organizations.

Course Objectives:
By the end of this course, students should be:

- Fluent in the language of conservation planning and adaptive management.
- Familiar with the all basic steps for planning, implementing and evaluating a conservation project.
- Skilled at developing clear and useful visions, goals, objectives, and monitoring frameworks.
- Familiar with different approaches to and challenges associated with selecting focal biodiversity targets (species, ecosystems).
- Comfortable using several planning tools including Miradi Adaptive Management Software for Conservation Projects and Miradi Share, conceptual models, threat assessments, and results chains.
- Familiar with some additional skills sets that are critical in planning and implementing conservation projects, including facilitation, fund raising, and external communication.

Readings and Tools:
Required and supplemental reading materials, including the following training manual, will be available on the course website at Learn@UW. FOS. 2009. *Conceptualizing and Planning Conservation Projects and Programs. A Training Manual.* Foundations of Success, Bethesda, Maryland.

Students are required to register for a free Miradi Share account at miradishare.org and will receive a subscription to download the latest version of Miradi Desktop Software. Products developed each week will be recorded in Miradi and stored in the Community Library on Miradi Share. It is recommended that each student bring a laptop computer (Windows or Mac) to class each week. You will be introduced to both programs in the pre-course session on Thursday, June 9th.

Accommodations:
If you have any special accommodations that instructors need to be aware of, please let us know. This would include learning accommodations as well as other programmatic accommodations related your funding requirements (e.g., TA responsibilities), research or internship requirements (e.g., time away from campus).

Course Structure:
Conservation planning cannot be effectively learned in the abstract; it is best learned by doing. Therefore, during the course, students will work in small groups (5-6 students) to prepare a conservation plan for a real world project (e.g., a protected area, a landscape) with a conservation organization. Students will use the Open Standards and Miradi to proceed through steps 1 and 2 of the project cycle (above). By the end of the semester, each student group will work with their

conservation organization partner to produce a draft conservation plan for their respective project.

There are 14 class sessions (including the final evaluation session). Classes will meet on Monday afternoons for 2.5 hours (see details on exceptions for July 4 and July 18 below). The Monday sessions will begin with a brief review and discussion of the previous week's material along with short presentations by student groups (30 min). These presentations will be followed by a 30-40 min lecture and discussion session. The remaining 70-90 min. of the class period will be dedicated to group work in consultation with the project representative, instructor and TA. Classes will meet again on Wednesday mornings for 2.25 hours for a 30-40 min. lecture, followed by 90-105 min. to continue group work.
In addition to the class time, students will have a scheduled 3 hour lab on Wednesday from 1:00-4:00 when student groups will continue work on conservation project assignments, including meetings with project representatives. If required, student teams will need to arrange for additional meeting times outside of these two time slots to complete weekly project products. In addition to weekly assignments, students will be asked to read and be prepared to discuss 1-2 readings per week.

Exceptions to this schedule are that there will be no Monday class sessions on July 4 (Independence Day, a national holiday) or on July 18 (when students are encouraged to attend the North American Congress for Conservation Biology on the UW-Madison campus). Instead, these lectures will take place during the Wednesday lab periods on June 29 and July 20 (see detailed class schedule).

Schedule (see draft Detailed Class Schedule for readings and assignments for each class session):

Week 1 **Introduction to Conservation Planning.** Review course structure. **Conceptualizing your project (Step 1A).** Define the project team, scope, vision and biodiversity targets.

Week 2 **Conceptualizing your project (Step 1B).** Viability assessment for biodiversity targets. **Plan actions and monitoring (Step 2A).** Setting quantitative goals for biodiversity targets. **Special topic:** Define human wellbeing targets.

Week 3 **Conceptualizing your project (Step 1C).** Assessing and ranking direct threats to biodiversity targets. **Special topic.** Incorporating climate change vulnerability assessment into the conservation planning process. **Tips for preparing final written conservation plans.**

Week 4 **Conceptualizing your project (Step 1D).** Complete situation analysis and conceptual modeling. **Planning Actions and Monitoring (Step 2A).** Identifying and prioritizing strategies. **Special topic.** Incorporating climate change adaptation strategies into your conservation plan.

Week 5 **Planning Actions and Monitoring (Step 2A).** Clearly defining your assumptions and desired outcomes in results chains. **Planning Actions and Monitoring (Step**

2B). Developing activities and measurable objectives to evaluate strategy effectiveness. **Draft Conservation Plan is due for review.**

Week 6 **Planning Actions and Monitoring (Step 2B).** Developing a monitoring framework to test assumptions and evaluate the strategy effectiveness. **Implement Actions and Monitoring (Step 3)** Preparing an operational work plan and budget for fundraising. **Instructor feedback on draft Conservation Plans.**

Week 7 **Analyze and Use Monitoring Data to Adapt (Step 4)** and **Capture and Share Learning (Step 5).** Recommendations and examples from evidence-based conservation in practice. **Tips for final presentation.**

Week 8 **Group presentations of final conservation plans** and **completion of written conservation plan.** Completed course and team evaluations.

Grading:

Weekly group project presentations (6) – 5 pts. each 5-minute group presentation and discussion highlighting challenges and lessons learned on the process of conservation planning steps taken over the last week (see details below)	**30**
Draft group written Conservation Plan – due Week 5 Instructors' evaluation for completeness (coverage of OS steps to date), clarity and effective communication of key concepts.	**50**
Final group Conservation Plan presentation – due Week 8 -25 from other class-mates' evaluation of your team's presentation (logical organization, clarity of presentation, persuasiveness) -30 from instructors' evaluation (logical organization, clarity of presentation, thoroughness of research, fact-checking)	**55**
Final group written Conservation Plan – due Week 8 Instructors' evaluation for completeness (coverage of all steps), design, clarity and effective communication of key concepts.	**55**
Class - individual attendance and participation (14) – 2 pts. each	**28**
Lab – individual attendance and participation (7) – 3 pts. each	**21**
Group peer evaluation Project team evaluation of individual participation, contribution to team products and time management	**11**
Total	**250**

The highest score in the class will receive an A. Scores between this and 50% will be determined on a curve at the instructor's discretion. A score below 50% will fail.

Guidelines for Weekly Group Project Presentations (5 minutes total; Upload PowerPoint to team dropbox by noon on Monday of weeks 2-7):

- Brief update on status of planning products your team drafted over the past week.
- If relevant, include any challenge that your team faced in drafting the planning products this week and provide advice to others on the process you used to overcome that challenge.

- Describe if and how material from the week's readings influenced the development of your planning products.

Instructor and Student Expectations:
Instructors expect students will arrive on time for class or notify us beforehand of planned tardiness or absences. If you unexpectedly encounter problems attending a session you MUST notify the TA by email prior to the end of class. Failure to attend class or notify us of absences before they occur will result in loss of points from participation. Instructors expect all students will complete all assignments by class start on the day listed in the syllabus. Assignments must be based on your own original, creative thinking. Late assignments will lose 25% of their value immediately and 25% for each full day late. Appropriate reasons for late assignments include: medical emergency for self or immediate family or professional travel (this requires formal letter of explanation from the host or agenda showing student's name).

Readings:
Aziz, A., A. C. Barlow, C. C. Greenwood, and A. Islam. 2013. Prioritizing threats to improve conservation strategy for the tiger Panthera tigris in the Sundarbans Reserve Forest of Bangladesh. *Oryx* 47:510-518.

Bottrill, M., K. Didier, J. Baumgartner, C. Boyd, C. Loucks, J. Oglethorpe, D. Wilkie, and D. Williams. 2006. *Selecting Conservation Targets for Landscape-Scale Priority Setting: A comparative assessment of selection processes used by five conservation NGOs for a landscape in Samburu, Kenya.* World Wildlife Fund, Washington, D.C.

CMP. 2012. *Addressing Social Results and Human Wellbeing Targets in Conservation Projects*. Conservation Measures Partnership.

CMP. 2013. *Open Standards for the Practice of Conservation, v. 3.0.* Conservation Measures Partnership. Washington, D.C.

Ellenson, J., L. Leckwee, M. Stewart, and R. Thompson. 2015. *Lowery Creek Watershed Management Plan. Spring Green, Wisconsin*. In collaboration with the Driftless Area Land Conservancy, Lowery Creek Watershed Partnership.

Ferraro, P. J. 2009. Counterfactual thinking and impact evaluation in environmental policy. *New directions for evaluation* 2009:75-84.

Fontaine, J. J. 2011. Improving our legacy: Incorporation of adaptive management into state wildlife action plans. *Journal of Environmental Management* 92:1403-1408.

FOS. 2009. *Conceptualizing and Planning Conservation Projects and Programs. A Training Manual.* Foundations of Success, Bethesda, Maryland.

Grantham, H. S., M. Bode, E. McDonald-Madden, E. T. Game, A. T. Knight, and H. P. Possingham. 2010. Effective conservation planning requires learning and adaptation. *Frontiers in Ecology and the Environment* 8:431-437.

Groves, C. R., E. T. Game, M. G. Anderson, M. Cross, C. Enquist, Z. Ferdaña, E. Girvetz, A. Gondor, K. R. Hall, J. Higgins, R. Marshall, K. Popper, S. Schill, and S. L. Shafer. 2012. Incorporating climate change into systematic conservation planning. *Biodiversity and Conservation* 21:1651-1671.

Groves, C.R., and E.T. Game, 2015. *Conservation planning: informed decisions for a healthier planet.* Roberts and Company Publishers, Greenwood Village, Colorado.

Heller, N. E., and E. S. Zavaleta. 2009. Biodiversity management in the face of climate change: a review of 22 years of recommendations. *Biological Conservation* 142:14-32.

Johnson, A., J. Goodrich, T. Hansel, A. Rasphone, S. Saypanya, C. Vongkhamheng, Venevongphet, and S. Strindberg. 2016. To protect or neglect? Design, monitoring and evaluation of a law enforcement strategy to recover small populations of wild tigers and their prey. *Biological Conservation*.

Margoluis, R., C. Stem, N. Salafsky, and M. Brown. 2009. Design alternatives for evaluating the impact of conservation projects. *New Directions for Evaluation* 122:85-96.

Margoluis, R., C. Stem, N. Salafsky, and M. Brown. 2009. Using conceptual models as a planning and evaluation tool in conservation. *Evaluation and Program Planning* 32:138-147.

Margoluis, R., C. Stem, V. Swaminathan, M. Brown, A. Johnson, G. Placci, N. Salafsky, and I. Tilders. 2013. Results chains: a tool for conservation action design, management, and evaluation. *Ecology and Society* 18:22.

McShane, T. O., P. D. Hirsch, T. C. Trung, A. N. Songorwa, A. Kinzig, B. Monteferri, D. Mutekanga, H. Van Thang, J. L. Dammert, and M. Pulgar-Vidal. 2011. Hard choices: making trade-offs between biodiversity conservation and human well-being. *Biological Conservation* 144:966-972.

Parrish, J. D., D. P. Braun, and R. S. Unnasch. 2003. Are we conserving what we say we are? Measuring ecological integrity within protected areas. *Bioscience* 53:851-860.

PDC. 2011. *Strategic Plan for Painted Dog Conservation Organisation. 2012-2017*. Painted Dog Conservation Organisation, Dete, Zimbabwe.

Poiani, K., R. Goldman, J. Hobson, J. Hoekstra, and K. Nelson. 2011. Redesigning biodiversity conservation projects for climate change: examples from the field. *Biodiversity and Conservation* 20:185-201.

Salafsky, N., D. Salzer, A. J. Stattersfield, C. Hilton-Taylor, R. Neugarten, S. H. M. Butchart, B. E. N. Collen, N. Cox, L. L. Master, S. O'Connor, and D. Wilkie. 2008. A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions. *Conservation Biology* 22:897-911.

Salafsky, N., R. Margoluis, K. H. Redford, and J. G. Robinson. 2002. Improving the practice of conservation: a conceptual framework and research agenda for conservation science. *Conservation Biology* 16:1469-1479

Salzer, D., and N. Salafsky. 2006. Allocating resources between taking action, assessing status, and measuring effectiveness of conservation actions. *Natural Areas Journal* 26:310-316.

Schwartz, M. W., K. Deiner, T. Forrester, P. Grof-Tisza, M. J. Muir, M. J. Santos, L. E. Souza, M. I. Wilderson, and M. Zulberberg. 2012. Perspectives on the Open Standards for the Practice of Conservation. *Biological Conservation* 155:169-177.

Tear, T. H., P. Kareiva, P. L. Angermeier, P. Comer, B. Czech, R. Kautz, L. Landon, D. Mehlman, K. Murphy, M. Ruckelshaus, J. M. Scott, and G. Wilhere. 2005. How Much Is Enough? The Recurrent Problem of Setting Measurable Objectives in Conservation. *Bioscience* 55:835-849.

USFWS. 2015. *Natural Resource Management Plan for Anaho Island National Wildlife Refuge, Pyramid Lake, Nevada.* U.S Fish and Wildlife USFWS, Department of Interior, Pacific Southwest Region.