



Meeting Summary
Working Group on Performance Measures for Wildlife Conservation Activities
The Heinz Center
June 12-13, 2007

Attendees:

Dennis Murphy, University of Nevada-Reno, Chair
Dave Chadwick, Association of Fish and Wildlife Agencies
Paul Dresler, U. S. Geological Survey
Audrey Hatch, Oregon Department of Fish and Wildlife
Mark Hughes, International Paper
John Kostyack, National Wildlife Federation
Jon Kart, Vermont Fish and Wildlife Department (phone)
Christy Kuczak, U. S. Fish and Wildlife Service
Genevieve Larouche, U. S. Fish and Wildlife Service
Jeff Lerner, Defenders of Wildlife
Barry Noon, Colorado State University
Tim O'Meara, Florida Fish and Wildlife Commission
Sarah Gannon Nagle, National Wildlife Federation
Nick Salafsky, Foundations of Success
Peter Stangel, National Fish and Wildlife Foundation
Robert Szaro, U. S. Geological Survey

Staff:

Kent Cavender-Bares, The Heinz Center (phone)
Jonathan Mawdsley, The Heinz Center

The meeting opened with an expression of best wishes to Robin O'Malley, Program Director at The Heinz Center, who had been diagnosed with Lyme disease the day before and consequently was unable to attend the meeting. Kent Cavender-Bares welcomed attendees on behalf of the Center and gave an overview presentation on the State of the Nation's Ecosystems project. This was followed by introductory material on the scope and purpose of the project (taken from the final approved Scope of Work Document), recent developments in evaluation science, and terms and definitions by Jonathan Mawdsley. Barry Noon gave an overview of the steps to develop performance measures, based on his published work.

Following the presentations, vigorous discussion ensued regarding the scope of the project, with some committee members expressing concern that the project scope was unclear and unfocused. Several options for limiting the scope of the project were

considered, including a focus solely on state-level metrics (this was rejected after it was pointed out that the scope of work for the grant funding the project specified that the recommendations had to be applicable at the “local level”), and a focus solely on a coarse filter approach (an option which seemed to receive more support from the group, but which was ultimately set aside when it became apparent that many states were likely to choose individual species or suites of species as targets for their implementation work).

After lunch, presentations were given by Audrey Hatch from Oregon Department of Fish and Wildlife and Tim O’Meara from Florida Fish and Wildlife Commission, describing the approaches being used by these two wildlife agencies to select conservation targets and the steps that the agencies are following in developing their implementation and monitoring plans.

Oregon has adopted a collaborative, multi-scale approach for monitoring the work being done to implement its conservation strategy. The monitoring team is working closely with existing monitoring programs in the state, including highly-regarded programs that monitor salmon populations and watersheds. In October, 2006, Oregon hosted a monitoring priorities workshop that identified key conservation issues or “system drivers” in the state. The workshop also identified ecoregional species monitoring portfolios for each of the ecoregions represented in the state. Criteria used in developing these portfolios included monitoring need (there are significant data gaps and/or a species is clearly at-risk), public appeal, and representation of key aspects of the habitat or landscape. Two to four species were selected as monitoring targets in each ecoregion. The state is also working closely with Defenders of Wildlife in piloting a new web-based “Regional Cooperative Registry of Conservation Actions.”

Florida has identified five overarching goals for plan implementation, with specific, detailed management objectives accompanying each goal. One of the goals is to develop specific performance measures. Both short-term and long-term actions have been identified for each objective. Florida already has an extensive monitoring program in place for rare species and vegetation types. Tim described Florida’s ranking system for species, which assigns each species a “biological score” based on seven variables (population size, population trend, range size, distribution trend, population concentration, reproductive potential, and ecological specialization) and also an “action score” based on four variables (distribution, population trend, limits to population, and extent of current conservation activities). Species with low biological scores and low action scores are apparently secure and much is known about them. Species with high biological scores and low action scores are vulnerable to extinction but programs are already in place to conserve these species. Species with high biological scores and high action scores are vulnerable to extinction and higher priorities for new conservation actions, as programs for conserving these species are currently lacking.

Following the presentations, the group engaged in an exercise to determine how well the basic model that Barry had presented earlier in the meeting applied to the implementation and monitoring work that the states of Oregon and Florida were proposing. After extensive discussion it became apparent that the model did not necessarily apply at the

overall plan level, but seemed to be more appropriate for describing particular implementation projects (i.e. once target species or habitats have been selected).

The first day concluded with a simple brainstorming exercise suggested by Nick Salafsky, in which each working group member listed one environmental attribute that they might recommend monitoring to give a basic picture of the status of wildlife in a particular state. After consolidation, the group list included the following attributes:

- Water quality and quantity
- Development rate
- Land use / Land cover
- Landscape connectivity
- Native vegetation cover versus invasive cover
- Landscape heterogeneity
- Soil type and health
- Top predator condition
- Species – NatureServe / ESA listing

The second day opened with a presentation from Kent Cavender-Bares describing a series of indicators described in the forthcoming “State of the Nation’s Ecosystems” report from The Heinz Center. Specific indicators included in Kent’s presentation were:

- Core national indicator on at-risk species
- Core national indicator on ecosystem extent
- Core national indicator on pattern of natural lands
- Core national indicator on non-native species
- Core national indicator on changes in stream flows
- Freshwater indicator on in-stream connectivity
- Farmland indicator on soil biological condition
- Urban indicator on area of urban-suburban lands

The state agency staff present at the meeting felt that, in concept, the most relevant of these indicators to their work were those related to species, ecosystem extent, and pattern of natural lands. For several of the other indicators, data are currently lacking for reporting at the state or national level, meaning that the immediate utility of these indicators is limited.

Significant concerns were raised by the group regarding the national indicator for at-risk species, with the general consensus that, as currently defined, the indicator was unsuitable for reporting on the status of Species of Greatest Conservation Need at the state level.

Several problems were identified with this indicator:

- Lack of sensitivity - The Heinz Center metric relies on changes in the global or G-ranks in the NatureServe system, and these rank changes are often not sensitive to population trends at the local or state level.

- Lack of coverage at state level - The state or subnational ranks (S-ranks) in the NatureServe system are great in theory but their application across states is uneven and coverage may be incomplete for key groups in a particular state.
- Inappropriate for "still common but declining" species, which may still be ranked as G4s or G5s but are showing troubling declines. We recognize that this is true for many SGCN.
- Only partial overlap between "at-risk" species (G1-G3) and SGCN (many of which may be G4s or G5s and thus not "at-risk").

While the state agency attendees felt that ecosystem extent indicators were generally a good idea, the utility of the current national Heinz Center indicator (which only reports on broad ecosystem categories) was felt to be limited at the state level.

The landscape pattern indicator was felt to be quite useful and directly relevant to state implementation work in both Florida and Oregon. State agency staff pointed out that the method used to calculate this indicator could also be applied to specific vegetation types of conservation interest, as well as to protected lands.

Following lunch, the group reviewed a draft outline for the project report and provided feedback and comments.

As a last exercise, the group split into two subgroups to discuss the steps in Barry Noon's model for developing performance measures and compare them to the actual implementation strategies being developed by the states of Florida and Oregon.

In the final wrap-up session, the group agreed to pursue two sub-projects. The first sub-project is a search for a better species metric for use in reporting at the state level than the Heinz Center's at-risk species indicator, and the second sub-project is an attempt to identify some short-term measures that could be used in national reporting to OMB and Congress on the effectiveness of the U. S. Fish and Wildlife Service's State Wildlife Grants Program.