

2008 Environmental Evaluators Networking Forum

Working Strategically to Support Change and Effectiveness

Co-sponsored by:
U.S. Environmental Protection Agency & The National Fish and Wildlife
Foundation

Thursday, June 12, 2008

7:45 am **Sign-in: Continental Breakfast; Meet and Greet
Registration Area**

8:45 am **Welcome: Overview of 2007 Forum, Outline of Day's Schedule and Goals
Main Auditorium (Visitors Center)**
Katherine Dawes, U.S. Environmental Protection Agency
Matt Birnbaum, National Fish and Wildlife Foundation

9:00 am **Keynote Speaker
Main Auditorium (Visitors Center)**
Marcus Peacock, Deputy Administrator, U.S. Environmental Protection Agency
Moderator: *Tom Kelsch, Director of Conservation Programs, National Fish and
Wildlife Foundation*

9:30 am **Featured Speaker
Main Auditorium (Visitors Center)**
Gary Henry, University of North Carolina

Causal Attribution in Environmental Program Evaluation. Perhaps no other subject is more important or stimulates as much frustration and confusion as the attribution of causality in evaluation generally and for environmental programs specifically. In this presentation, the current understanding of how we attribute causality will be explained. Using the “potential outcomes” framework, the benefits of random assignment to treatment will be explained but also the limitations that undermine labeling all random assignment studies as the “gold standard”. In addition, several alternatives for achieving the objective of obtaining an unbiased estimate of the effects of environmental programs will be presented and discussed.

10:30 am **Break**

10:45 am **Networking Session: Speedy Presentations and a Stroll through the Zoo**
Main Auditorium (Visitors Center)
Moderators: Betsy Shaw, Katherine Dawes, and David Bend

11:45 am **Lunch (Catered)**
Great Meadow

1:30 pm **Concurrent Presentations: Attributing Change to Our Programs**

Approaches to Attributing Change to Our Programs
Classrooms 1&2 (Visitors Center)

David Butry, *National Institute of Standards and Technology*

Applying Program Evaluation Methods to Natural Resource Policy: Are Current Wildfire Mitigation Programs Effective? The federal government has spent over \$830 million annually to suppress wildfires that have burned more than 5.2 million acres in the US between 1994 and 2004. In addition, over 1.4 millions more acres per year are treated with prescribed fire from 1995-2000. Some policy makers are questioning whether the wildfire management is worth the cost. Unfortunately, establishing the causal link from suppression effort and fuels management treatment to wildfire mitigation is fraught with challenges because we do not observe the counterfactual – what would have happened in the absence of management. The field of program evaluation provides the tools to overcome these types of problems, rigorously analyzing outcomes and impacts of specific projects, programs and policies. Although randomized experimental policy trials are the first choice for program evaluation, in practice they are rare. More commonly, sophisticated econometric tools are required to analyze non-randomized interventions like wildfire suppression. Although program evaluation tools have been applied to a wide variety of policy interventions (e.g., poverty reduction, public health), they have rarely been used to evaluate natural resource management and environmental policies. In this presentation we will highlight the lack of rigorous evaluations in natural resource management and draw key insights from other fields. We apply program evaluation tools to analyze the effectiveness of wildfire management in Florida to provide a concrete proof of concept of how to establish counterfactuals and evaluate natural resource and environmental policies.

Marcia Brown, *Foundations of Success*

Using Results Chains as a Framework for Attributing Change to Conservation Programs. Historically, the biodiversity conservation community has placed limited emphasis on program evaluation and thus has been unable to provide evidence of the effectiveness of their actions and to learn from their experiences. Recently, however, there has been a growing interest in program evaluation and an explicit desire to use monitoring and evaluation to learn about, adapt and improve conservation actions. Foundations of Success (FOS) is a nonprofit organization dedicated to improving the practice of conservation. This presentation will describe FOS' experience teaching conservation practitioners to use an innovative tool – results chains – to define their project's "theory of change" and determine how to measure the effectiveness of their actions. In addition to hearing about results chains, participants will be given the opportunity to develop a results chain.

Methodological Challenges to Measuring Impact Main Auditorium (Visitors Center)

Data Credibility: Andrew Pullin, *Bangor University (Wales)* & *Center for Evidence-Based Conservation*

Data credibility: A perspective from systematic reviews in environmental management. If we want to know what works and what doesn't we should collect data and analyse them. But the confidence with which we can interpret those data in the context of our questions depends upon their quality and the strength of the evidence that they provide. The twin threats of error and bias are ever present and encourage misinterpretation. Poor design can lead to inappropriate measures of outcomes and insufficient power for rigorous evaluation. This talk will present some lessons learnt about data credibility from the process of synthesising data in systematic reviews of evidence. We advocate the use of critical appraisal of data to assess quality and fitness for purpose. Using a series of case studies this paper will demonstrate how systematic review methodology has developed in the field of environmental management to address problems of data credibility and methodological quality.

Time Horizons: Elizabeth Kennedy, *Conservation International*

Linking information expectations of decision makers to an affordable monitoring framework is not as simple as scaling up site-scale environmental monitoring protocols. Designing a framework that can scale data to meet multiple audience objectives needs to consider interactions across spatial and temporal scales of interest, as well as attempt to demonstrate attribution in a defensible manner. Because of this complexity, we initially need to think of an optimal way to inform decision making in the near term. One solution is to define conservation targets using global criteria such that units of conservation are discreet (e.g., globally threatened species and sites of global significance for conservation). This aids identification of the types of data to consistently collect in order to enable aggregation and reporting across spatial scales, ecosystem type, intervention strategy or policy situations. By striving to standardize measurable targets and data requirements, we improve our ability to format monitoring information and tailor indicators for different reporting and decision making purposes, whether dependant or independent of spatial scale. We outline the application of a scale independent approach presently used by Conservation International and describe some of the advantages and limitations of this approach for natural resource and development decision making.

Attributing Change to Environmental Education Classroom 3 (Visitors Center)

Moderator: Kara Crohn, *UCLA*

Dan Blumstein, *UCLA*

Educational evaluation as adaptive management. Educational evaluation is used to make decisions about what we teach. I will review why and how we make decisions, and then suggest that educational evaluation can be viewed as adaptive management--a process by which we learn from focused experiments. I will suggest that properly controlled experiments will give us the power to draw robust conclusions about educational efforts, and I will describe the structure of a 'learning experiment'. I will conclude with a discussion about the difficulties of developing the right questions to properly evaluate environmental education. I intend this talk to be provocative and to stimulate discussions about experimental design and question development.

Joe Heimlich, *Ohio State University*

Why should they know that: Causally linking outcomes. Evaluation can measure any level of output, but making ascriptive or causal claims from these data is often difficult because programs are not designed to be measured against such assumptions. Though conservation and environmental organizations often rely upon education programs to build support for the conservation, preservation, or protective actions, they often fail to make explicit causal links between the cognitive outcomes of educational programs and the desired support. This presentation asks critical questions toward better connecting program outcomes, including behaviors, to organizational goals through evaluation.

Zoo Session: Amphibian Conservation (Registration Area)

Brian Gratwicke, *Smithsonian National Zoo*

**Participants (limited to 20, based on order of registration) denoted by green sticker on nametag

2:50 pm **Break**

3:15 pm **Plenary: Influential Evaluation and Attribution**
Main Auditorium (Visitors Center)

Hans Bruyninckx, *Catholic University (Belgium)*

In this presentation we will approach the issue of influential evaluation and attribution, not from the perspective of ‘what is a good evaluation’. Rather, we start from the assumption that evaluation is an integral part of the policy process and thus preconditions for its influence are to be found also in the policy process itself. The key issue is the institutionalisation of environmental evaluation. This means that evaluation becomes normal, in the sense that it is part of the norms and principles of environmental governance. In addition, elements of political capital and evaluation, participatory evaluation, transparency and the changing requirements for evaluators will be discussed.

Jared Hardner, *Hardner and Gullison, Ltd.*

Only a consumer of evaluations can speak authoritatively on what is effective. This presentation is based on observations by an evaluator of what “sticks” – methods that appear to inform decision making by clients.

We will cover four main observations. First, evaluations need to be relevant. The first clues to the *potential* effectiveness of an evaluation are whether the intended users are placed to make decisions that are important to the program being evaluated, whether the users asked you to perform the evaluation, and how the users intend to use the evaluation (inform a decision process, summarize progress, or fulfill an accountability requirement). Second, the evaluation needs to work with the data that is attainable under reasonable constraints of time and budget. With that data, as much quantitative rigor should be used as possible, while recognizing the evaluation’s place along a continuum that ranges from scientific research at one extreme and rapid assessment at the other. Third, involve stakeholders in the evaluation process. Involvement can occur in the design of evaluation questions, selection of data, design of analysis, interpretation of initial findings, and development of final evaluation. Fourth, deliver actionable recommendations. While decision makers need a small set of recommendations,

those implementing change require the detail and nuance. These are casual observations from a series of recent program evaluations in the field of conservation. Closer study will reveal numerous other factors, undoubtedly, that influence the effectiveness of an evaluation, such as ideology of decision makers, institutional inertia, personal interests, and other sources of information available to decision makers.

4:30 pm **Reflections and Day Two Preview**

5:00 pm **Adjourn**

5:15 pm **Reception at The National Zoo**

Friday, June 13, 2008

8:00 am **Continental Breakfast**
Registration Area

8:30 am **Day 2 Introduction**
Main Auditorium (Visitors Center)
Katherine Dawes, *U.S. Environmental Protection Agency*
Matthew Birnbaum, *National Fish and Wildlife Foundation*

8:45 am **Featured Speaker**
Main Auditorium (Visitors Center)
Nick Salafsky, *Foundations of Success*

Improving Conservation Effectiveness through Adaptive Management: Current Efforts and Future Directions. A key question facing all conservation practitioners and organizations is: “Are our actions effective in achieving our conservation goals?” We must answer this question at both the level of individual projects and across our discipline in order to be able to adapt and change our actions over time, learn about which actions work and do not work, and convince our donors and society that conservation is a worthy investment.

Over the past few decades, there has been growing convergence in many fields of human endeavor towards project-cycle based adaptive management as the primary method for answering this effectiveness question. The conservation organizations involved in the Conservation Measures Partnership (CMP) all apply some form of project cycle management to their work. The CMP took these different systems and created a common version, the *CMP Open Standards for the Practice of Conservation*. In this presentation I first provide a brief introduction to the *Open Standards*, illustrate how they have been used around the world, and provide an introduction to *Miradi*, a new software program being developed to help implement these standards. I also show how these standards and this software, coupled with linked databases of conservation projects and practice, provide the foundation for true evidence-based conservation to occur, both within projects, and across the field of conservation.

If we are to practice what we preach, we can use the *Open Standards* to frame and then test our own meta-hypotheses about the effectiveness of adaptive management. In the second part of this presentation, I offer a “first-iteration” application of the standards that can hopefully serve as a launching point for not only Friday’s conference sessions, but collaborative research and practice in the future.

9:30 am **Break**

9:40 am **Plenary: Evaluation’s Role in Management**
Main Auditorium (Visitors Center)
Moderator: Jenni Wallace, *NOAA*

Angela Bednarek, *Pew Charitable Trusts*

Knowledge to Action: Protecting Ocean Life through Science. The path from knowledge to action is rarely straightforward. This talk will describe the work of the Lenfest Ocean Program in turning science into effective policies for marine ecosystems. The talk will also describe some of the challenges in moving scientific information to policy-makers. Finally, the presentation will offer some lessons learned from the Lenfest Ocean Program's work for making the path from knowledge to action more direct.

Brett Jenks, *RARE*

Pride is a conservation education program that utilizes the precepts of entertainment-education and social marketing to promote biodiversity conservation in critically threatened regions in developing countries. A series of formal evaluation studies, networking strategies, and informal evaluative inquiries have driven a 20-year process of adaptive management that has resulted in extensive structural changes within the Pride program, and organizational changes at Rare. This paper describes the types of evaluation research that Rare has used to drive adaptive management, and argues that (1) qualitative data gathered from all partners and staff through structured interviews is the most effective at identifying problems with current programs and procedures, (2) that networking with other influential organizations is the most effective strategy for suggesting new directions and opportunities, (3) quantitative data gathered through surveys is effective at measuring program impact and quality, and (4) reflective inquiry using accepted business strategies is effective at restructuring organizationally.

Michael Jacobsen, *King County, WA*

Evaluation's role in public management: King County's experience in increasing the role of information. Elected officials and bureaucratic managers need information to make decisions. However, the role of ideology, intuition, and interests can often trump the role of information. This presentation highlights the implications of these "four Is" for elected officials and managers. The presentation also discusses the ways in which there is increasing demand for information to meet transparency and accountability mandates in the public sector. Finally, the presentation will discuss current public sector responses for increasing the role of information in decision-making and uses examples from King County, Washington to show how this is being done in practice.

10:40 am **Break**

11:00 am **Concurrent Presentations: Adaptively Managing Our Performance**

**Systematic Approaches to Building Evaluation Capacity
Classrooms 1&2 (Visitors Center)**

Moderator: Matt Keene, *U.S. EPA*

EPA Partnership Program Evaluation Guidelines

Jennifer Nash, *Harvard University*

Jennifer will offer the example of the U.S. EPA's recent effort to develop evaluation guidelines for its voluntary partnership programs. This effort attempts to institutionalize evaluation among some 55 established programs of varying sizes and objectives. Jennifer will consider the catalyst for this effort, the steps EPA has taken to develop the guidelines, and results to date. Discussion

will identify strategies for addressing the barriers that impede systematic approaches to evaluation and will draw on participants' experiences.

Conservation Measurement Partnership

Tim Reed, *The Nature Conservancy*

Tim will present, for the sake of example, on the history and current workings of the Conservation Measures Partnership (CMP), "a partnership of conservation NGOs that seek better ways to design, manage, and measure the impacts of their conservation actions". In essence, this project management framework, called "The Open Standards", is about institutionalizing adaptive management across all biodiversity conservation work. Measures and Evaluation (M&E) is a critical part of these Open Standards. The discussion will aim to highlight the challenges of implementing a systematic framework and some of the ways the CMP (and its member organizations) has tried to overcome these hurdles.

Evaluating Collaboration

Classroom 3 (Visitors Center)

Lou Nadeau, *Eastern Research Group*

Evaluating Collaborative Environmental Programs: Some Thoughts on What Questions to Ask.

Many environmental programs involve collaboration among multiple organizations. Evaluations of these programs, however, often ignore the collaborative aspects of a program. Dr. Nadeau will discuss the types of evaluation questions that we should be asking of collaborative environmental efforts.

Susan Goodwin, *Department of Interior*

Susan Goodwin, from the DOI Office of Collaborative Action and Dispute Resolution, will discuss two evaluation studies of environmental conflict resolution (ECR) cases. An ECR case is a type of collaborative process involving multiple parties working to reach agreement on environmental, natural resource or public lands issues, and involves an independent third-party facilitator or mediator. CADR will use the evaluation studies to promote the use of ECR in the Department and to increase understanding about the factors that lead to greater success in an ECR process. One of the studies evaluates 52 recently completed ECR cases across many federal agencies (15 DOI cases) and analyzes factors that contribute to ECR success – whether an agreement was reached, the quality of the agreement and whether there was improvement in the working relationships between the parties to the ECR process. The other study focuses on the environmental and economic outcomes of an ECR case, and the two DOI cases that are being evaluated deal with the use of off-road vehicles on national seashores.

Tom Koontz, *Ohio State University*

Evaluating the Performance of Collaborative Environmental Governance. Collaboration has increasingly supplemented and supplanted other forms of environmental governance, such as centralized planning and command-and-control regulation. Hence, practitioners and academics routinely debate whether collaboration improves the environment over alternative governance systems. But the debate is largely rhetorical and theoretical, because there is little empirical evidence to suggest whether collaboration has a positive or negative impact on the environment. This paper reviews the current state of research on collaborative governance, and suggests ways to design research studies that test the links between collaborative processes and environmental outcomes. The paper also argues that collaborative governance should be held to environmental performance standards, just like other governance systems,

**From Measurement to Management
Main Auditorium (Visitors Center)**

Moderator: Elizabeth O'Neill, *Four Elements Consulting*

In the biodiversity conservation sector, we see that the adoption of robust systems for monitoring and evaluation remains limited. In an analysis conducted last year by the Conservation Measures Partnership, of 40 projects that had undergone conservation audits, less than 25% had M & E systems in place. This would seem to be a critical lapse in good practice and begs the question: knowing that we invest literally billions of dollars each year in the name of biodiversity conservation, and given the continuing rapid loss of biodiversity worldwide, why do we not have in place good M & E systems to ensure that our investment of dollars and effort is being used efficiently and is having the desired impacts?

Carlos Albacete, *Trópico Verde & ParksWatch*

Between 2001 and 2008, Tropicico Verde / ParksWatch Guatemala ran three evaluations of Laguna del Tigre National Park and Biotope in Northern Guatemala. The evaluation methodology was designed to respond to the needs of science as well as the need to address threats and cause change. This presentation will discuss some of the challenges faced during the evaluation process and describe how the evaluation was used to achieve the desired changes.

Cynthia Gill, *U.S. AID*

Another Point of View: Monitoring and Evaluation from a Donor Perspective. This presentation will explore where a donor for conservation sees monitoring and evaluation today. Limitations and opportunities for M&E will be explored in a provocative dialogue.

Zoo Session: Tiger Conservation (Registration Area)

John Seidensticker, *Smithsonian National Zoo*

Mahendra Shrestha, *Save the Tiger Fund*

**Participants (limited to 20, based on order of registration) denoted by blue sticker on nametag

12:00 pm **Lunch** (Catered)
Great Meadow

1:30 pm **Concurrent Roundtable Sessions**

Session A: National Fish and Wildlife Request for Third-Party Multi-Year Evaluation Proposals

Main Auditorium (Visitors Center)

Session B: Building Capacity for Program Evaluation: Lessons from Environmental Education

Classrooms 1&2 (Visitors Center)

Moderator: Annelise Carleton-Hug, *Trillium Associates*

Lynette Fleming, *University of Wisconsin-Stevens Point*

An Online Course to Build Evaluation Capacity – Applied Environmental Education Program Evaluation (AEEPE). To address the need to build evaluation capacity in the field of EE, the Environmental Education Training Partnership (EETAP) and U. S. Fish and Wildlife Service collaborated to develop an online evaluation course with the aim of teaching environmental educators how to design and implement evaluations of their own programs. This presentation will outline the course content and requirements, highlight capacity building successes, and reveal some of the challenges, including reducing the attrition rate, helping students understand what outcomes can be attributed to their programs, and creating a virtual learning community.

Michaela Zint, *University of Michigan*

My Environmental Education Evaluation Resource Assistant or "MEERA" - A Web-Based Resource for Increasing Environmental Educators' Evaluation Capacity. Federal agencies are partnering to enhance and support the evaluation efforts of environmental education programs. For example, the U.S. Environmental Protection Agency and the U.S. Forest Service are currently working with the University of Michigan on the development and evaluation of a web site entitled My Environmental Education Evaluation Resource Assistant (MEERA), www.meera.snre.umich.edu. This presentation will describe MEERA's features, highlight its unique aspects relative to other "clearinghouse" sites, and share results from past, and plans for future, evaluations. Discussion will focus on MEERA's value as a model for other evaluation contexts and on the use of technology as a means to increase evaluation capacity.

Zoo Session: Golden Lion Tamarin Conservation Classroom 3 (Visitors Center)

Devra Kleiman, *Zoo-Logic, LCC*

****Participants (limited to 20, based on order of registration) denoted by yellow sticker on nametag**

The tiny golden lion tamarin (GLT), one of the world's most endangered primates, is threatened by loss of its forest habitat, mainly due to urban sprawl from the city of Rio de Janeiro and the increased loss of habitat for cattle ranches and agriculture. Pioneered by National Zoo staff and supporters, this science-based program began with a successful captive breeding and reintroduction effort more than 25 years ago, when all data pointed to certain extinction of the species. From a population of 75 tamarins in 15 zoos in 1972, today we have 480 tamarins in over 100 zoos and we manage the captive tamarin population at Zero Population Growth. The GLT Conservation Program has also achieved some amazing successes in Brazil, including bringing the wild population back from only a few hundred to over 1500 within about 20 years. A global model for other endangered species recovery programs, the GLT conservation effort has resulted today in a wild population of tamarins that is almost secure. One of the key elements contributing to the success of this program has been the fact that formal strategic planning has been done on a periodic basis. Additionally, this program is one of very few endangered species recovery programs that has had a formal external evaluation.

2:40 pm **Break**

3:00 pm **Plenary: Implications of Climate Change for Evaluation**
Main Auditorium (Visitors Center)

The goal of this session is to promote a more systematic discussion among environmental evaluators on the implications of climate change on evaluation. In the future, insights gained in the field of evaluation should be more extensively utilized in the climate policy arena. In addition, there is a need for evaluators in many other areas to more systematically realize and take into account the implications climate change has for their evaluations.

Until now, program and policy evaluation has not been a central issue in climate discourse or policy. Within the climate community, more efforts have focused on emission monitoring, verification of emission reductions of Clean Development Mechanism (CDM) projects, and assessing additionality for climate mitigation projects. The evaluation community, for its part, has only recently started to deal with climate change, for example in the EASY-ECO conferences in Europe and the International Conference that took place in Alexandria, Egypt, in May of this year. This session aims to bridge the gap between the climate and evaluation communities by starting a vivid discussion on the many implications of climate change and climate policy on evaluation.

Moderator: Rob van den Berg, *The Global Environment Facility*

In 2006 the GEF Evaluation Office convened a group of interested parties to organize an international conference on evaluating climate change and development. This idea emerged from the recognition that no world-wide meeting had ever been organized on ex-post evaluation of climate change interventions, or for that matter environment or sustainable development in general. The first such conference took place at the Bibliotheca Alexandrina in Egypt on May 10-13, 2008. More than 200 professionals from all over the world attended.

The Conference presented best practices in evaluating mitigation efforts from a selection of more than 300 reports and studies. It concluded that it should be possible to extract guidelines and frameworks from these best practices, which could be established as international norms and standards. On adaptation to climate change, the conference presented many examples of monitoring and evaluation systems that enabled communities and governments to assess vulnerability to climate change and to empower them to reduce that vulnerability.

The documents and presentations of the conference will be made available to the evaluation community through a repository of knowledge, which will hopefully inspire communities of practice to continue the work on extracting best practices and exchanging experiences in incorporating adaptation and vulnerability issues in evaluation. The website of the conference and the follow-up work is www.esdevaluation.org.

Diana Lane, *Stratus Consulting*

Environmental Evaluation in the Age of an Uncertain Climate. This presentation seeks to identify and articulate key challenges involved in taking climate change into account when conducting environmental evaluations. The first part of the presentation will provide a brief overview of regional vulnerabilities to specific climate impacts, so that evaluators can learn how to focus on the specific issues most likely to impact the projects they are evaluating. The second part of the presentation provides a conceptual framework for thinking about how climatic uncertainty can be incorporated into logic models. This framework takes into account the context and external conditions under which a program exists and the project attributes, such as resilience, that are likely to lead to successful project outcomes in the face of climate change.

Per Mickwitz, *Finnish Environment Institute*

Implications of Climate Change for Evaluation. Program and policy evaluation has not yet been a central issue in climate policy (e.g. monitoring and verification have been much more central). The evaluation community, on the other hand, has not yet encompassed climate change to any significant degree. Climate change will, however, have major implications for evaluation. These implications can be divided into two categories: 1) evaluation of climate programs and policies; and 2) implications of climate change on the evaluation of “non-climate” programs and policies. The second category can be further divide into: A) implications through changes of the climate; B) implications due to interactions with climate programs and policies (both mitigation and adaptation); and C) implications because other policies and programs, e.g. traffic or agricultural programs, integrate climate aims. In the presentation examples of all types of implications (1&2 and A,B&C) are discussed conceptually and through practical examples from Finland and Europe.

In the case of evaluations of climate programs and policies targeted at sectors – or actors – involved in emission trading the impact on emissions is not a central evaluation issue. Cost, side-effect and distributional issues are central features of these evaluations. The demand for evaluation of the impacts on greenhouse gas emissions of programs and policies related to sectors and actors not participating in emission trading will increase when targets regarding these activities become binding and stricter. Uncertainties related to the changing climate and its environmental impacts have been extensively discussed. Although less emphasized than technological development, social and economic processes, consumer attitudes and corporate strategies are among the most uncertain aspects of the climate change issue. Evaluations will have to address all these types of uncertainties. At the same time these uncertainties will also have implications for the context of the evaluation processes including their use and legitimacy.

4:00 pm **Reflections, Discussion, and Announcements**

Main Auditorium (Visitors Center)

Nick Salafsky, *Foundations of Success*

Gary Henry, *University of North Carolina*

Moderators: Matt Birnbaum & Katherine Dawes

5:00 pm **Adjourn and Celebrate!**