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Engaging and Learning for Conservation: Workshop on Public Participation in Scientific Research

Workshop Evaluation – Report 1

May 2011

Prepared for:

American Museum of Natural History

Cornell Lab of Ornithology

National Audubon Society

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About the Institute for Learning Innovation:

Established in 1986 as an independent non-governmental not-for-profit learning research and development organization, the Institute for Learning Innovation is dedicated to changing the world of education and learning by understanding, facilitating, advocating and communicating about free-choice learning across the life span. The Institute provides leadership in this area by collaborating with a variety of free-choice learning institutions such as museums, other cultural institutions, public television stations, libraries, community-based organizations such as scouts and the YWCA, scientific societies and humanities councils, as well as schools and universities. These collaborations strive to advance understanding, facilitate and improve the learning potential of these organizations by incorporating free-choice learning principles in their work.

Executive Summary

Engaging and Learning for Conservation: Workshop on Public Participation in Scientific Research was held at the American Museum of Natural History 7-8 April 2011. This preliminary report synthesizes the process evaluation with the workshop feedback provided by the participants.

The overall goals of the project are to convene a workshop for scientists, educators, and community members involved in public participation in scientific research (PPSR) to share experiences, lessons, protocols, and tool and to collaboratively set forth a coherent agenda for answering outstanding questions for advancing informal education goals leading to conservation outcomes.

The overarching evaluation question, therefore, is one of accountability: did the workshop lead to an agenda that is designed to meet these goals. However, moving toward this end requires meeting several objectives of the workshop which in turn necessitate outcome-based measurement. As the workshop itself is the centerpiece of the proposal, understanding the changes in participants during the workshop around the key products is a way of formatively understanding the potential for success. To this end, a process evaluation including two components was identified as appropriate.

If the success of a workshop is determined by the degree to which participants are satisfied with the process of and the outcomes from the workshop, this workshop was a success. Participants were satisfied with the experience and felt the workshop had moved the field forward toward the stated goals of the project. Overall, participants were satisfied with the facilities ($\bar{x}$ =6.13, SD=.98; note, the scales were all 7-point summated ranking scales), the organization ($\bar{x}$ =5.83, SD=1.20), and the facilitation ($\bar{x}$ =5.88, SD=1.13).

The workshop appears to have been successful in meeting both its goals and the desired outcomes of the participants. It was clear that both levels of goals were in operation during the workshop. Generally, the goals of the organizers, with the attendant outcomes, and the goals of the participants coexisted well during the workshop, but there were a few points at which the goals competed (e.g., with the matrix discussion).

The workshop also appears to have been tremendously successful in creating energy around the work of PPSR.

There were, however, some implications that the organizers could consider for future workshops.

- Pilot activities. Although they may make sense when discussed in the group, when they are actualized with people, they may change. This is a reflection on the matrix activity.

- The opening session was well constructed and implemented. The "talking heads" component of the workshop went well. Even so, participants were ready for legitimate engagement/participation in the work of the workshop earlier than they were allowed to engage. Consider a way of allowing participants to have voice earlier in the process; in this workshop, it would have been most appropriate after the first morning break.

- The workshop, in this case, could have been longer without compromising participation. Additional length, if the agenda were shared early with invitees, would have allowed for more intentional networking time, more thoughtful next steps discussions, and added reflection time to the process.

There are also some important considerations for the organizers in the continuation of this project.

- Consider how to allow the perspectives on PPSR, the entry to and different purposes for PPSR can be addressed in the materials for the field. As the workshop did not see these perspectives converging except for a couple of individuals, it may be important to note and stress these differences throughout the products that emerge.

- The energy around networking was tremendous. There is always a drop in energy when individuals return to their already overly busy working environments. Can the organizers consider and create ways to 'force' engagement with others or some means of active facilitation of networking rather than the usual passive facilitation efforts?

- The strategies for communicating progress on products should be shared collectively and comprehensively by the organizers to all participants.

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Introduction

Engaging and Learning for Conservation: Workshop on Public Participation in Scientific Research was held at the American Museum of Natural History 7-8 April 2011. This preliminary report synthesizes the process evaluation with the workshop feedback provided by the participants.

The overall goals of the project are to convene a workshop for scientists, educators, and community members involved in public participation in scientific research (PPSR) to share experiences, lessons, protocols, and tool and to collaboratively set forth a coherent agenda for answering outstanding questions for advancing informal education goals leading to conservation outcomes.

The overarching evaluation question, therefore, is one of accountability: did the workshop lead to an agenda that is designed to meet these goals. However, moving toward this end requires meeting several objectives of the workshop which in turn necessitate outcome-based measurement. The goal for the workshop was to: Identify best practices for engaging the public in participatory scientific research that contribute to conservation action and environmental stewardship. To meet this goal, there were three objectives for the workshop:

1. Share success stories and take stock of progress in linking PPSR and biodiversity conservation;

2. Identify key strategies for developing conservation-related PPSR initiatives that contribute to participant learning and to scientific/conservation knowledge for society; and

3. Generate ideas for promoting communication, networking, and partnerships among individuals and organizations working in PPSR and conservation.

Methods

Process evaluation. As the workshop itself is the centerpiece of the proposal, understanding the changes in participants during the workshop around the key products is a way of formatively understanding the potential for success. To this end, a process evaluation including two components was identified as appropriate.

The first goal of the process evaluation was to provide potential insights into the degree to which participants were engaged, had their individual needs met, and felt they were moving toward completion of the goals of the workshop. The second goal of the process evaluation was to track movement of the group toward consensus on the workshop products.

There were two components to the process evaluation. The first was a rolling interview of participants. During each break and transition, short interviews were conducted in order

to track movement of the group. The interview was designed to be very short and the goal was to have 35 interviews over the course of the two days.

The second evaluation component was an unstructured observation of the large group and the working groups. These observations are incorporated into the discussion below.

Post workshop measure. At the conclusion of the workshop, participants were asked to complete a post-program response questionnaire. There were a few satisfaction rank-scale items; a short scale of personal benefit; different measures of opportunities and time spent on different tasks of the workshop; degree to which participants believed the workshop moved toward its desired outcomes; and a series of open-ended commitment questions (new audience to engage; new approach to try; and changes in practice in the next six weeks and the next six months).

Findings

There were 32 participants who responded to post-program feedback form. There were also 35 participants who provided data via interviews during breaks and meals over 1.5 days. Of the respondents to the evaluation, of those who shared the data, 12 (40%) were male and 18 (60% were female. They have been with their current institutions for 1-35 years. The average tenure at an institution is 9.83 years, though this is skewed by the longer tenure time; median tenure is 7 years. This is also the median amount of time that the participants have been doing PPSR. The range for this demographic is 0-30 years, and the median is 7.22 years.

Satisfaction

Overall, participants were satisfied with the facilities ($\bar{x}$ =6.13, SD=.98; note, the scales were all 7-point summated ranking scales), the organization ($\bar{x}$ =5.83, SD=1.20), and the facilitation ($\bar{x}$ =5.88, SD=1.13). These strong means and low deviations clearly show fairly uniform satisfaction; there were only two individuals who had a slightly negative impression of the organization (with both rating it a 3) and one who had a slightly negative impression of the facilitation (also rating it a 3).

Desired outcomes from the workshop

Means were also very strongly positive for the benefits individuals feel they received from participating in the workshop. What individuals felt they "got" personally had a very strong mean of 6.19 with a very low deviation of .69, suggesting participants uniformly felt they received what they needed from the workshop. In terms of benefits professionally, the mean was a strong 5.84 with a low deviation of .99. "What I'm taking home with me from the workshop" was also strong with a mean of 5.78 and a low deviation of .94. The mean for the three rank-items combined is a very strong 5.96 with a very low deviation of .79.

Entering the workshop, participants shared a lot of personal expectations. For most, the dominant expectation was to meet people and to engage in the "social element" of the workshop with "like-minded people." Others shared the social focus, but were more driven

by "seeing people I know from different professional fields in my life" and seeing "good friends." A few noted the location, a couple of participants were drawn by AMNH, and one person noted that New York City was a draw. For a few, the biggest expectation personally was motivation: "fire me up to keep doing it" and "this is the reason I do the work—for the environment and my family."

There were several participants who felt that **personal and professional expectations overlapped.** By far the most consistent outcome participants wanted from the workshop professionally was to make contacts with others and for networking. Although this is similar to the social element of the personal, it was clear that the difference was in the purpose of engaging with others. In talking about professional expectations, there was much more emphasis on exchange. "Learn about what others are doing" and "sharing" were common themes. Others noted the expectation to obtain "new insights" and to "have my program validated." Clearly, the interaction with others doing this work was a tremendous motivator. As on participant said, "I love coming together with a lot of people crossing divides of science, education, and conservation."

"**Learn more** about PPSR" was also a theme for several participants. Some variations on this motivation included "exploring funding" and having a experience that was "hands-on, focused on linking to conservation rather than science outcomes." A couple of individuals were interested in a "better understanding of where the citizen science community is" and to learn "about how PPSR could be embraced by my organization." For a few, the workshop was an opportunity for "linking practice with academic thinking."

Participants were asked what it would take to make their time and effort for attending worth it. Several workshop participants maintained the discussion on the **networking and relationships**. For example, one stated "establish a couple of relationships with ways to connect in the future" while another felt "if I make connections that will support and help my boundary crossing flourish." Some blended the networking with individual outcomes as in "being able to meet people likely to work with and learn new techniques and tools." This group of participants generally spoke around the desired outcome of "if I have one good conversations—it's people who will change how we do our business."

Another theme that emerged was that of **getting one thing** from the workshop. A few people mentioned that one key thing, and what the thing was varied from participant to participant. One person wanted to "hear a really brilliant idea to make a case to my board and to fund it" whereas another hoped to "find a really exciting application for conservation psychology in citizen science" which closely paralled another's hope to "envision ways to integrate PPSR in comprehensive manner in my organization to achieve science and conservation goals."

A third theme was the hope for a "real tangible **product**" or products that would emerge from the workshop. Some of the products mentioned included a "concrete plan with timeline," a "product to be used," and an "exploded view of steps; thinking things through." For two people, the incorporation of "local knowledge into best practices" was the desired product. Another participant was "hoping to see an idea—the ability to evaluate across programs because right now we don't have the metrics to do that" which was supported by

another participant who wanted to "compare success—what works and what doesn't. What's good for one might not work for another."

The final theme was one of **clarity and unity** around PPSR. The goal, for several is "being able to clearly articulate that if we want clear, conservation outcomes with PPSR, *this* is what we must do." A related comment was from a participant who wanted to have people "see citizen science as central to mainstream scientific efforts." A common term across several of these responses was "best practices for our work." The hope for some was that the workshop would lead to a "shared understanding of what the issues are, and where we are going." A goal is that from this workshop, a result would be someone "not advocating for their organization, but collectively."

Participants were asked, in the exit feedback form, the degree to which they were satisfied with opportunities for networking and for reflection. As networking was a primary motivator for participants, this is an especially important data point. The mean (on the same 7 point scale) was 6.25 for opportunities for networking, with a low standard deviation of .88. There was a less satisfaction with time for reflection ($\bar{x}$ =5.16, SD =1.59), but this still positive mean could be reflective of the distribution of learning styles within a group.

Barriers

There were three dominant themes regarding what might prohibit individuals from getting from the workshop what they hoped. The first was the individuals themselves; the second was others; and the third was workshop elements.

For many participants who noted networking as part of their entry expectations, "how much effort [they] make" would determine success upon leaving the workshop. By the end of the first morning, some individuals were already noting they had already achieved their intended outcome such as "One or two good connections with another project or professional to work together in the future" and "if I have one good conversation" as it is "people who will change how we do our business."

Several individuals noted it could be others who would limit their opportunity to obtain what they hoped from the workshop. One person felt that entry expectations would not be met if it were "all just talk about the same things and cover the same territory without generating new ideas or a sense of action." Another person noted that "whenever we have competing issues, it's hard to come together. People who don't deviate from their own agenda" could become a barrier. One person felt "if there are not the right side conversations," they would not get what was needed from participation. And there was one person who noted that there were a "lot of people who've worked closely together over a long time. I'm a little concerned about how new people are invited into the discussion."

The workshop itself could have, for some of the individuals, offered a barrier to getting what they needed. The "organizational challenge" of the workshop theme centered around concerns such as "if the workshop doesn't get to best practices" or "if during the meeting, sit and listen the whole time" that would block success. One participant was concerned

that the focus be to "learn the process versus learn about cases." Other concerns were that the discussion might "get distracted/too abstract" another wanted to be sure to "get specific ideas, concepts, and resources." "The intensity of the agenda" and the ubiquitous "not enough time" were also put forward as potential barriers. One participant did identify a barrier that emerged during the workshop: the participant questioned "how to get to know someone on another project—one on one time is limited, there are noisy meeting rooms, noisy restaurants, and we're running place to place."

Meeting objectives

Although participants felt the workshop did move the field forward, the strength of agreement was not generally strong. Overall success at meeting goals had a positive agreement score of 4.93 with a clean standard deviation of 1.12. In the following table (1) the specific goals for the workshop and the participants' perceptions of the degree to which the workshop "moved the field ahead" by addressing that objective appear in rank order.

Table 1:   Workshop Objectives in Rank Order

Item	$\bar{x}$	Std Dev
Sharing success stories linking PPSR and biodiversity conservation	5.34	1.29
Generating ideas for promoting networking among individuals and organizations working in PPSR	5.19	1.42
Generating ideas for promoting communication among individuals and organizations working in PPSR	4.94	1.46
Generating ideas for promoting partnerships among individuals and organizations working in PPSR	4.78	1.31
Identifying key strategies for developing conservation-related PPSR initiatives	4.72	1.25
Identifying strategies for expanding PPSR to new audiences	4.59	1.50
SUM	**4.93**	**1.12**

The structure of the workshop is reflected in the rank scores above. For example, the time spent on case studies, and the opportunities for individuals to share their efforts in small groups would likely be a factor for perception of meeting that workshop objective. Likewise, the desire for networking as entry condition and the opportunities for creating connections is likely an influence on the networking objective being met. Both these ranking were moderately positive.

The other objectives all had positive rankings, but not strong.

Perspectives on PPSR

During the process interviews, participants were asked to describe what is an effective PPSR effort for biodiversity. Four distinct patterns emerged. These patterns held true also in the discussions, both small and full group, in terms of what individuals hold as to the purpose in PPSR. The four patterns all relate as to what individuals view as the "beneficiary" of PPSR which they named as 1) people; 2) science; 3) bridging; and 4) policy.

People

People was the larger of the groups, but also had the greatest range in terms of how PPSR was addressed in the answers. Some individuals saw PPSR as involving others as in the comment "participants involved in reaching the conservation outcome, the process of science, increased understanding of science as a tool in society, and grasp drivers of the conservation problem trying to address," or "participants feel they better understand the issue—not just telling them questions, but helping and being engaged in developing the study so they know more about their world." For others, PPSR is about engaging and "maintaining engagement." One respondent felt that an effective effort is one that changes the participants so "people care enough to engage in conservation actions." Several focused on issues of diversity and "having a cross section of the population as participants": because "diverse backgrounds and interest enriches information on how the study is designed, how it is talked about, and how it is used." For several in this group, PPSR is the "opportunity to make science democratic." In discussions during the workshop, these individuals would focus more on the 'who' than the 'how' and comments such as *I don't care if the data are useful, I care about the people who were involved* were overheard.

Science

A smaller, but very consistent group framed their perspectives of PPSR from that of science. For these individuals, an effective effort is "one that provides data; one that has practical, long-term applications and results in some type of tangible/visible conservation action." It is important for these participants that efforts are "making basic observations that are scientifically sound and really meet scientific and educational objectives" and for some in this group, that means having "well defined set of goals, set *a priori*" with an "up-front process for development of thoughtful methods to document change." In the discussions during the workshop, these individuals would consistently contribute concerns regarding rigor and use of data.

Bridge

A third group is those that bridge the people and the science perspectives. For example, one participant said an effective PPSR effort is one that "balances public needs/wants/and desires with the needs, wants, and desires of science in service of conservation." A purpose of PPSR is, as another commented, "reshaping how we think about science and conservation to be more holistic with the people piece up front" with the purpose being

that PPSR then "increases both biodiversity goals and social justice; balances needs for biodiversity conservation with human benefits of participants and human benefits from conservation." One individual bridged science and people perspectives with a thought about "strategy for sustainability across time so that efforts are not lost when the researcher leaves."

Policy

The smallest group, but one that continued to challenge the others in the workshop, was a group that had a focus on the policy implications from the data obtained in PPSR efforts. Whether the perspective was a question of "how to link to policy and decision-makers without sacrificing quality and credibility" or simply to "draw the attention of policy makers," this group was interested in ensuring "close links to policy makers and the information they need." Effective programs are those that engage "a significant number of participants from a broad background collecting good information so that it affects changes in policy and education beyond the project.

Workshop Flow

Observations were made during the course of the workshop for the purpose of triangulating patterns observed in the process evaluation interviews.

At the beginning of the workshop, participants interviewed seemed to start primarily with professional interests and had the most trouble enunciating what they believe makes an effective PPSR effort.

At lunch the first day, there was a change in how people responded from the morning break. There was a bit more tension and there was a start of comments that they felt they might not achieve their expectations.

In the afternoon, a trend was noted toward greater concerns about achieving expectations. This was coupled with a slight resistance to the process and to the setting. There were expressions of discontent.

By evening, there was a marked increase toward satisfaction on meeting individual goals and interviewees were fine with the process. This continued through the balance of the workshop.

Most groups must have a period of frustration or discontent before they can make strides toward meeting the objectives of the task or for themselves. The question must be asked, was this positive, created dissonance or was this negative unintended dissonance?

Prior to the first set of interviews, there were a lot of "talking heads," but each speaker was brief and well prepared. The process moved quickly and people were highly attentive. At the first break, the group was loud and talking on task. After the break, the session resumed with more short presentations of different cases. Although the format was

slightly different, it did not 'feel' different and in observing from the back of the room, there was a tremendous increase in people checking e-mail on their laptops and on their phones during this second session.

My sense as an observer is that this second session had an unintended dissonance. Post lunch, the first discussion efforts were based on prepared and presented cases. This activity was, from my perspective, to lead in part to intended dissonance which is the necessary process for getting groups to move from individuals to task groups.

After the break, the discussions continued, but incorporated more of all participants' perspectives. This seemed to be the needed activity to move toward cohesion. By evening, individuals were seeing positive outcomes for themselves and there were no more comments on process or concern about workshop goals.

There were, after this, only two points of tension of note. The first was that of the "matrix" and trying to force an activity on the structure. The intention was good and for those participants who understood the intention and did not get bogged down in the instructions, the activity worked well. For those participants whose learning preferences include linear thinking and understanding outcomes before entering a process, the matrix was a difficult and not fully satisfying activity. The process of drawing together the ideas that emerged from the discussions using the matrix appeared to be satisfying across participants.

The second point of tension was the reduction in time for the ending discussion groups. The reduction in time and the change in process was not well communicated to the facilitators and the sessions therefore were uneven in the level of participant engagement.

Engagement

It was during the afternoon session on the first day that the pattern of *how* participants engage became obvious. There were three approaches to engaging with PPSR: there are those who engage from a people orientation, those who engage from a conservation orientation, and those who engage from a science orientation. These approaches were not addressed either in the individual groups or the full group. There was no moving toward a unified perspective. These patterns continued in the groups, especially the people and the conservation orientations.

Another ongoing challenge is underlying assumptions related to purpose of doing PPSR. These are similar to, but not entirely the same as the orientations above and are parallel to the perspectives on PPSR that emerged from the interviews. These observed purposes were:

> For the purpose of scientific data for change
> For the purpose of engaging people in science
> For the purpose of changing policy
> For the purpose of changing individual behavior

Again, these often were coupled or ganged together by individuals, but they were sometimes barriers to moving together. Individual beliefs around these purposes created the boundaries that most led to disagreements and questioning.

There were also clearly two levels of goals: those of the organizers and those of the participants. Generally, these levels coexisted well during the workshop, but there were a few points at which the goals competed (e.g., with the matrix discussion) where individual goals were frustrated by the process built to meet the organizers' goals.

Regarding the amount of time spent on the different components of the workshop, time spent in case analysis ($\overline{x}$ = 3.97,Std Dev = 1.26) and time spent in presentations ($\overline{x}$ = 3.94, Std Dev = 1.16) were both almost perfectly aligned with what would be considered 'just right.' Both the length of the workshop ($\overline{x}$ = 3.16, Std Dev = 1.17) and time spent in project designs ($\overline{x}$ = 3.16, Std Dev = 1.51) were perceived as having slightly too little time. Time spent in next step discussion was considered the element that had too little time spent on it ($\overline{x}$ = 2.96, Std Dev = 1.24). This finding is consistent with the ranking of the satisfaction item related to willingness to commit more time to attending this type of program which had a strong mean of 6.06 (Std Dev 1.29).

Exit intentions

Participants were asked what one or more new approach they thought they would like to try in their PPSR efforts. They were also asked what they might see themselves doing differently in the next six weeks, and the next six months.

New Approach

There were no themes shared by more than four participants. But the approaches did cluster into six categories.

Involving people in data analysis. Several participants thought they would like to "find ways to help people use and analyze data to make conclusions and draw findings" or "build on co-created analysis ideas." One thought of "involving more local people in the analysis portion, and not just the data validation process" and another hopes to "develop training workshops in data analysis and more instead of just data collection." One participant desires to try to "engage participants beyond data collection to telling their stories using data."

PPSR Steps. Two participants want to try to "use the PPSR 7 steps" and to "evaluate my project against the 7 steps of PPSR." A third participant blended evaluative thinking with the steps and by "walking through a logic model and a mechanism for examining our strategic plan and our intentional outcomes. Then moving toward walking through the steps." A fourth participant wants to "try to better communicate the steps to PPSR projects to our online project managers."

Evaluative thinking. Three participants want to try approaches related to evaluation. One hopes to inspire "more coherent thinking regarding evaluation of success from respect of participants" while another desires "better thought out goals and outcomes." The third participant hopes to "use some of the vetted evaluations being developed by DEVISE as options for project mangers to use for their evaluation."

Networking. Continuing the themes from earlier, three participants want to try "partnering with other museums; network with other PPSR projects," do "more social networking," and to "do better at sharing."

Diversify participants/use local knowledge. There were also three participants who hope to engage more critically on the local level. One would like to through "linking local data to larger scale data set" while another sees "more concrete strategies and feelings of dedication to tackle the concerns and needs of underserved communities of color to engage them in PPSR." The third in this theme wants to "find ways to tap into local knowledge—…the knowledge of the elders or people who have been living in an area for a long time."

Standardization. Two participants desire to try a "standardization of monitoring protocols/evaluation measures" and to "renew efforts to provide structure and standardization for monitoring and analysis."

Miscellaneous. Four participants shared ideas that did not fall into any of the above themes. One intends to do "fact finding to move forward with new ideas." Another desires to "implement the toolkit and modified logic model into a project" while a third hopes to "try to bring policy makers in earlier in the process/invite them to participate." For a fourth participant, the approach is one that, "even though it makes me uncomfortable, I'm thinking about ways to communicate/interact on a regular and frequent basis with the science education community."

Do differently in the next six weeks

There were four themes that emerged related to intentions over the next six weeks. These themes emerge more naturally from the focus of the workshop and the entry expectations held by the participants.

Networking. Nine participants see themselves continuing to use the networks amplified or created during the workshop. Whether it is to "build on momentum from contacts/networks to collaborate on existing projects" or simply to "reach out to community for expertise," these participants see themselves "building on contacts made and exploring potential new partnerships." Others hope to "connect" or "contact" others in order to "connect more actively with PPSR folks and projects I met here." Others intend to use the networks to seek "information about existing PPSR efforts we might connect our education programs" and for "linking my project website to some of the national PPSR efforts."

Use tools from the workshop. Seven participants see themselves using the tools from the workshop within the next six weeks. For some, it includes "applying the steps for designing PPSR projects" or "revisiting my PPSR projects in light of the 7 steps (and more)." Others

intend to think "much more about PPSR in more local, small scale contexts" and to "identify and articulate goals for PPSR activities" and "being more attentive to the entire PPSR process in my work." One participant intends to "read and use 'Tools of Engagement'" while another plans to "write a PPSR strategy" for their institution.

Share with others. Three participants plan to share information from the workshop with others in the next six weeks. One will "go through my notes with my citizen science team" while another will "update my organization on the workshop and toolkit." A third participant intends to be "sharing with existing network new ideas, resources and lessons learned in the workshop."

Critically examine program. Another three participants intend to critically examine their programs for purposes such as to "identify a few potential missed opportunities for conservation in our existing program" and "looking through the lens of a systematic way of looking at and evaluating my own program." The third will be "explicitly looking at our intentional conservation outcomes and clarifying those from the scientific and educational outcomes."

Three other commitments were made. One participant intends to "explore opportunity for using new software tools for data management." Two other participants had comments related to *Diversity.* One will work at "designing our new project, specifically looking at new audiences/minorities" while the other plans "follow-ups with several workshop participants on the topic of diversity."

Do differently in the next six months

Some of the themes carried from six weeks into six month plans, but interestingly, most were not carried forward by the same individuals.

Local implementation. Six participants have plans for "thinking more about PPSR in more local, small scale contexts" or stepping back and working "at a more local level to improve the project as it's adopted nationally." Others intend to "solidify new PPSR activities" or "identify and articulate goals for PPSR." Another intends to be "revising the projects accordingly and thinking about how more local public interaction could be through PPSR." Another participant carried through the theme of diversity and in six months plans to "really push diversification as an initiative in my organization."

Sharing. Six participants are planning to be doing more intentional sharing efforts in the next six months. Three were very specific and noted "organizing a workshop for my Citizen Science Advisory Board;" facilitating "a webinar for my network on DEVISE"/"on the Conservation Toolkit"; presenting "the Toolkit to my peers locally in a workshop." Three were more generic and include "implementing these learnings and sharing them with my colleagues" and "adding features...that better support the steps discussed at this PPSR workshop to encourage more thought about co-created projects." The final participant in this theme intends to be "seeking information about existing PPSR efforts we might connect to our education programs and potentially doing some organized PPSR with some of our audiences."

Networking. Continuing the theme of networking, in six months, five participants intend to be using and "benefiting from networking with contacts from this meeting." The goal is to "follow up with new contacts" in order to have "something more tangible come out of these networks." Other comments referred to specific actions to "get in contact with the people I'd like to collaborate with" and to follow-up "on the idea of sharing or developing a partnership project internationally."

Internal application. Three participants see themselves continuing to adjust their programs by "going through the steps and questions to see if any adaptation needs to be done" or to "solidify the design of our next project to specifically include 'the matrix'." One participant wants to walk through the steps "with respect to the conservation outcomes" of the current project.

Evaluation. Carrying over the concept of evaluation, three participants intend to be incorporating evaluation in some different way in the next six months. Whether it is "starting to implement my evaluation plan for PPSR" or "implementing projects with evaluation strategies informed by PPSR questions/steps." One participant's goal is to revisit the "evaluation programme for other existing PPSR projects."

Conclusions and Recommendations

If the success of a workshop is determined by the degree to which participants are satisfied with the process of and the outcomes from the workshop, this workshop was a success. Participants were satisfied with the experience and felt the workshop had moved the field forward toward the stated goals of the project.

The workshop appears to have been successful in meeting both its goals and the desired outcomes of the participants. It was clear that both levels of goals were in operation during the workshop. Generally, the goals of the organizers, with the attendant outcomes, and the goals of the participants coexisted well during the workshop, but there were a few points at which the goals competed (e.g., with the matrix discussion).

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There were, however, some implications that the organizers could consider for future workshops.

- Pilot activities. Although they may make sense when discussed in the group, when they are actualized with people, they may change. This is a reflection on the matrix activity.

- The opening session was well constructed and implemented. The "talking heads" component of the workshop went well. Even so, participants were ready for legitimate engagement/participation in the work of the workshop earlier than they were allowed to engage. Consider a way of allowing participants to have voice

earlier in the process; in this workshop, it would have been most appropriate after the first morning break.

- The workshop, in this case, could have been longer without compromising participation. Additional length, if the agenda were shared early with invitees, would have allowed for more intentional networking time, more thoughtful next steps discussions, and added reflection time to the process.

There are also some important considerations for the organizers in the continuation of this project.

- Consider how to allow the perspectives on PPSR, the entry to and different purposes for PPSR can be addressed in the materials for the field. As the workshop did not see these perspectives converging except for a couple of individuals, it may be important to note and stress these differences throughout the products that emerge.

- The energy around networking was tremendous. There is always a drop in energy when individuals return to their already overly busy working environments. Can the organizers consider and create ways to 'force' engagement with others or some means of active facilitation of networking rather than the usual passive facilitation efforts?

- The strategies for communicating progress on products should be shared collectively and comprehensively by the organizers to all participants.

End of Report: 9 May 2011

Appendices

Appendix 1   **Instruments**

Process questions

Name: Date/time:

What were your expectations in coming to this workshop personally and professionally?

Upon leaving, what is the one thing that would make you say it was worth your time to be at this meeting?

What might keep you from leaving with that?

What, in your mind, is an effective PPSR effort for biodiversity?

What do you think is your role in PPSR?

Thanks!

PPSR Workshop Feedback

Thank you in advance for taking just a few minutes to complete this feedback form. We're doing it for several reasons—one being to give you some time to pull together your thinking about this workshop! Some of the questions here will allow you to think about what you plan on doing when you get back home.

Which is also why we're asking for your name on this form. Your responses will be confidential—only the evaluator will ever see your responses with your name. But in 6 weeks, we're going to be sending a follow-up to this, and we want to be able to see what's happened in your work between now and then, so we need to track your responses. As with all evaluations, there are no right or wrong responses, only what you think. You can choose to respond or not to any or all items. There is no penalty for not completing the feedback, although it *is* important to the organizers and to the funder.

As always, we want some feedback on the workshop itself. For each of the following, please tell us the degree to which you were satisfied with each of the following components of the workshop:

	Completely Dissatisfied						Completely Satisfied
The facilities	1	2	3	4	5	6	7
The organization of the workshop	1	2	3	4	5	6	7
The facilitation of the workshop	1	2	3	4	5	6	7
What I "got" personally from the workshop	1	2	3	4	5	6	7
What I "got" professionally from the workshop	1	2	3	4	5	6	7
What I'm taking home with me from the workshop	1	2	3	4	5	6	7
Opportunities for networking	1	2	3	4	5	6	7
Opportunities for reflection	1	2	3	4	5	6	7
I would be willing to commit more time to attending this type of workshop	1	2	3	4	5	6	7

There was a lot to cover on the agenda. For each of the following, please tell us the degree to which you agree or disagree with how well the group moved each of these goals of the workshop.

I think the workshop moved the field ahead by: Strongly Disagree   Strongly Agree

Identifying key strategies for **developing** conservation-related   1   2   3   4   5   6   7
PPSR initiatives

Sharing success stories linking PPSR and biodiversity   1   2   3   4   5   6   7
conservation

Identifying strategies for expanding PPSR to new audiences   1   2   3   4   5   6   7

Generating ideas for promoting **communication** among   1   2   3   4   5   6   7
individuals and organizations working in PPSR

Generating ideas for promoting **networking** among individuals   1   2   3   4   5   6   7
and organizations working in PPSR

Generating ideas for promoting **partnerships** among   1   2   3   4   5   6   7
individuals and organizations working in PPSR

Think about the time in the workshop. Was it appropriately divided? Was too much or too little time spent on key aspects of the workshop? Put a check in the blank that shows how balanced you think the workshop was for each of the following components.

Time spent in case analysis   Too little __ __ __ __ __ __ __ Too much

Time spent in presentations   Too little __ __ __ __ __ __ __ Too much

Time spent in project designs   Too little __ __ __ __ __ __ __ Too much

Time spent in next steps discussions   Too little __ __ __ __ __ __ __ Too much

The length of the workshop   Too little __ __ __ __ __ __ __ Too much

As you go home, what is one (or more) new audience(s) you think you would like to engage in PPSR?

As you go home, what is one (or more) new approach(es) you think you would like to try in your PPSR efforts?

What do you see yourself doing differently, if anything, in the next six weeks?

In the next six months?

And about you:

Name:

Are you: Male   Female

How long have you been with your current institution?   _____ years

How long have you been doing PPSR in your programs?   _____ years

THANK YOU and travel safely home!