

## **An Evaluation Tool for Internal and External Assessments of Community-Based Conservation Projects**

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## **Abstract**

Community conservation projects must balance the complex interactions of culture, politics, economics and conservation. A new wave of criticism of how community conservation projects are evaluated has renewed the debate on who should be responsible for the creation, maintenance, management and evaluation of conservation initiatives. The scarcity of adequate project evaluation has often been at the center of this renewed debate and the lack of specific evaluation tools and their inconsistent employment has left a credibility gap between conservation practitioners and conservation evaluators. This has hindered communication across the various disciplines engaged in community conservation work and/or evaluation. We propose a simple criteria framework that can be used as a tool for community conservation project evaluation based on measurable objectives and outcome based products. The criteria framework is based on 26 criteria in three evaluation areas: conservation, community participation and sustainability. The framework is appropriate for internal and/or external evaluations.

**Keywords:** community, conservation, community-based, evaluation, sustainability

**Running Head:** Evaluating community conservation projects

## **Introduction**

Community-based conservation programs have been developed on a global scale over the past two decades and have been touted as important alternatives to the establishment of traditional, human-exclusion protected areas. There have been strong ethical, theoretical, and practical arguments put forth by conservation practitioners and scholars, social scientists, and rural development specialists for community participation in the conservation of lands and natural resources (Johnson, 1992; Gadgil and Guha, 1993; Ham et al., 1993; Shiva, 1993; Broad, 1994; Hitchcock, 1995; Borrini-Feyerabend, 1996; Furze et al., 1996; Brosius et al., 1998; Davey, 1998; Oates, 1999; Stolton, and Dudley, 1999). However, in recent years there has been a growing call for a renewal of top-down conservation models that once again stress the exclusion of local communities from protected areas and protected area management (Robinson, 1993; Kramer et al., 1997; Brandon et al., 1998; Terborgh, 1999). This new wave of criticism of community participation in conservation management has renewed the debate on who should be responsible for the creation, maintenance, management and evaluation of the conservation of protected areas. The lack of adequate project evaluation has often been at the center of this renewed debate and remains a key bone of contention in the deliberations on assessing the effectiveness of community-based conservation projects.

The diversity in scope and nature of community conservation projects, the complex spectrum of program successes and failures, and the lack of a consistent evaluative framework to assess these projects has left some communities, policy makers, conservation practitioners, government partners, and domestic and foreign NGO's confused about the factors and conditions that contribute to successful and effective community conservation. Many conservation practitioners also have not had access to a readily usable evaluation tool to evaluate in-progress projects. The lack of effective evaluation and robust and applicable evaluation tools has often resulted in a gulf between on-the-ground conservation practitioners and discipline-specific based evaluators. In many instances, implementation of the community conservation concept has been cited as the problem rather than any inherent flaw in the philosophy and

approach of community-based conservation (Brosius et al., 1998; Agrawal and Gibson, 1999; Belsky, 1999; Oates, 1999; Terborgh, 1999). Brechin et al., (2002) contend that this may have more to do with the lack of social science sophistication among conservation organizations than about the capabilities of many local communities. However, the lack of an interdisciplinary evaluation tool may be as much of a problem as the lack of effective implementation or discipline specific deficiencies of conservation practitioners. The fact that the critiques of community conservation efforts come from a spectrum of disciplines reflects the challenges that community conservationists are presented with in both implementing new projects and evaluating ongoing projects within the complex realities of life at the community level. The lack of specific and interdisciplinary evaluation tools for community conservation projects and their inconsistent employment has left a credibility gap between conservation practitioners and conservation evaluators and hindered communication across the various disciplines engaged in community conservation work and/or evaluation (Backhouse et al., 1996; Hughey et al., 2003). This gap is exacerbated by the fact that many community conservation programs, especially early in their implementation, aimed at balancing the complex interactions of culture, politics, economics and conservation, will likely be lacking in addressing all the substantive and process evaluation criteria that currently exist across the often narrow perspectives of specific disciplines (Dreschler and Watzold, 2001).

Despite both the perceived and real problems in community conservation evaluation, there is an opportunity to make progress on both the practical implementation and evaluation sides of the issue and reduce the credibility and communication gap that exists. Given the conceptual wealth of information that has been generated on the problematic evaluation history of past community-based conservation initiatives, there is an opportunity to develop a new generation of evaluation procedures for community conservation projects. Interdisciplinary, enhanced and practical evaluation tools, techniques and approaches should help provide conservation practitioners, conservation entrepreneurs, evaluators and local communities (as well as NGO's and/or governments) with a common assessment tool to evaluate community-based conservation efforts. A practical evaluation tool that could be simultaneously used by

practitioners, communities and external evaluators would help validate (or refute) projects that heretofore may have been only evaluated in part, misinterpreted or received little evaluative attention. Developing a robust criteria-framework for such an evaluative tool also will help address the critical question of how conservationists can conduct effective and critical internal evaluations of ongoing projects. Often times, internally evaluating the scope and level of success of a project, as objectively as possible, is the only tool available to provide critical in progress information for conservation planners and implementers.

The main objective of this paper is to propose a robust, straight-forward, applied evaluation tool that can be used to measure the success of ongoing projects. We propose an evaluative template based on benchmark product goals that could be used as a tool for internal as well as external evaluations of community-based conservation efforts.

### **Understanding Community**

The first step in evaluating a community conservation project is some recognition of what is meant by community. Communities are not typically a monolithic group of individuals, but rather complex, heterogeneous assemblages of people - often with conflicting goals, aims, and desires. Communities rarely have simple, unified social structures or a shared set of norms and they are often fragmented and may have little built in momentum towards consensus (Koch, 1997). Intra-community differences exist based on gender, political affiliation, class, patronage, ethnicity, age, social standing and religion. These differences are often based on complex social histories that often include exploitation, marginalization, and conflict (DuPuis and Vandergeest, 1996). Western et al. (1994) noted that perhaps the greatest obstacle to community-conservation lies in the parochialism of communities and the difficulties they face in conceding the rights and interests of other communities. Focusing on the inherent complexity of many communities is not to suggest that communities are devoid of consensus or incapable of engaging in effective conservation projects, it simply means that conservation practitioners and evaluators need to

recognize these realities at the outset and evaluate the multiple interests, voices, and identities within any given community and be aware of how they change over time in response to conservation projects.

In addition to intra-community issues, conservation practitioners and project evaluators need to recognize the relationships between local politics and local collective decision making with non-local actors and larger social and political forces (Agrawal, 1997), especially as local communities are typically the least politically empowered. Recognizing the internal complexity of communities and understanding how they are influenced by external social, economic and political processes are all essential elements that need to be considered in community conservation projects (Furze et al., 1996; Kaufman, 1997). In addition, effective evaluation needs to be able to accommodate the unique dynamics of diverse arrays of communities and the corresponding community conservation project.

Practitioners and evaluators also must understand the evolutionary nature of community conservation projects. Community conservation projects are often started in response to immediate needs or crises and they evolve and adapt. In addition, many projects are by definition experimental and thus lack familiar reference points. It is crucial that project evaluation respect the fluid and unique nature of many community conservation projects and be applied and interpreted in a temporal context. Rossi and Wright (1986) note that experimental approaches that are constrained by fixed procedures and unchanging goals simply do not work in the 'real world' where both goals and procedures are continually changed in an effort to find something that works. Thus, evaluation should be more akin to decision making in that it should be a long-term process and commitment rather than a static occurrence or event.

Overall, while the need for conservation is rarely criticized, the objectives, methods, tactics, structures and systems employed to achieve conservation ends in community conservation projects finds itself vulnerable to criticism from a variety of discipline specific perspectives and across different timeframes. The calls for effective evaluation tools to assess the impacts and level of success of these

conservation efforts needs to be heeded, but it is essential that evaluation both reach across disciplines as well as be centered on the unique attributes and context of a given community. It is also critical to be able to delineate the inherent ‘background noise’ generated in any community from successful movement on any number of conservation fronts. Thus, efforts to evaluate the success or failure need to be tempered by the dynamic nature of many of these projects, the need for constructive and tempered criticism rather than blanket conclusions pro or con and clear enunciation of the multiple interests and identities within any given community. Any effective and thorough evaluation tool needs to move away from the potential traps of any particular discipline-based language and focus and embrace concepts from many disciplines. These multiple concepts and foci then need to be compiled and presented in a format that has practical value for a host of users ranging from on the ground practitioners to community members to academic evaluators.

### **Identifying the Community Participation Milieu**

Another key aspect of evaluating community conservation projects is the level of community participation that is being sought and accomplished through the project. The level of community participation in a Habitat Conservation Plan required under the Endangered Species Act is different than that in a collaborative wildlife management plan or than that in a habitat protection project on private lands. The community participation level sought needs to be clearly identified to avoid misinterpretation of outcomes and to identify the management scope of the project in relation to community stakeholders. In addition, it should be the goal of any community conservation project to have communities as strong and true partners in decision-making, project control and management.

Figure 1 represents a continuum of community participation/management arrangements that might be developed or sought for a given project. It is important to recognize that Figure 1 represents a continuum of participation possibilities for community projects; the levels noted are not exhaustive, but

rather provide a framework or outline for potential community participation scenarios. It is based, in part, on participatory continuums proposed by Arnstein (1969), Berkes (1994), Barrow (1996) and Stevens (1997). This participation continuum ranges from pure government control of a conservation project (A) to entirely indigenous control of the project independent of government (F). We contend that most projects should be moving in the direction of category (E) or co-management. Community-based co-management occurs at the community level and involves local management issues, local stakeholders, reconciliation of local conflicts, articulation of site-specific objectives, and various local level site tasks and issues. Locally-specific management tasks include recognizing stakeholders in and around the protected area, identifying specific benefits and rights granted to each stakeholder, agreeing to a set of management priorities and a co-management plan, developing procedures for enforcing co-managed decisions, and devising specific rules for monitoring, evaluating and reviewing the co-management agreement and the co-management plan as needed. More detailed discussions on community-based co-management can be found in several sources (Murphree, 1994; Western et al., 1994; Hudson, 1995; Borrini-Feyerabend, 1996; Baland and Platteau, 1996; Ghimire and Pimbert, 1996; Berkes, 1997; Stevens, 1997; Brosius et al., 1998; Carpenter, 1998; Singleton, 1998; Venter and Breen, 1998).

### **An Evaluation Tool in the Community Context**

Evaluation is a complex term with many approaches, ramifications and uses (Furze et al., 1996). By definition it is a process used to compare what was planned with what was accomplished (Fink and Kosecoff, 1978), comparing objectives and outcomes (Stufflebeam and Shinkfield, 1985). Choosing criteria is also essential. In addition to substantive/quantitative criteria (e.g., species populations, hectares of habitat in protection), other criteria may focus on process, methods, organizational structure, conflict resolution procedure, collaboration and stakeholder acceptance. Several authors have provided a thorough discussion of the scope of issues and components required for an effective evaluation (Wells and Brandon, 1992; Margoulis and Salafsky, 1998; Salafsky and Margoulis, 1999; Kleiman et al., 2000;

Roe et al., 2000). We build on these excellent conceptual papers and propose a specific set of interdisciplinary criteria in the form of a template that could be used as a tool, simultaneously, for both internal and external evaluations.

The criteria framework for community conservation project evaluations is presented in Table 1. The first category, *Community Participation Milieu*, is designed as more of a reference point than as a criterion but is an essential first step in clearly identifying the community participation boundaries for the project and allowing comparisons among different projects (see Figure 1). The remainder of the framework consists of three evaluation areas, each with specific criteria (26 total): *Conservation Aspects* (10 criteria), *Community Participation through Institution Building* (8 criteria) and *Project Sustainability* (8 criteria).

These evaluation foci and criteria have been derived from a variety of sources, including evaluations based on conservation objectives (Walker and Faith, 1995; Margoulis and Salafsky, 1998; Cullen et al., 1999; Kleiman et al., 2000), management (Wells and Brandon, 1992; Hockings et al., 2000), threat reduction assessment (Salafsky and Margoulis, 1999), community participation (Horwich, 1990; Borrini-Feyerabend, 1996; Margoulis and Salafsky, 1998; Roe et al., 2000), economic considerations (Hughey et al., 2003) and collaborations (Conley and Moote, 2003; Moseley, 2003). In addition, we have developed this criteria framework based on twenty years of work by the authors through the organization Community Conservation, Inc. (CC). CC staff have developed or assisted in the development of over 20 community conservation projects in 9 countries, working in 15 different cultural milieus. We focused on all our ongoing projects that have been in place from 7 to 20 years. Our main objective in focusing on our own organization's projects was to ensure that the evaluation criteria had a very practical dimension and could be used and understood by practitioners without a strong background in evaluation per se.

Combined, the 26 proposed criteria represent an attempt at comprehensive, interdisciplinary evaluation of projects that is practical and easy to use by practitioners and communities, is robust and thorough enough to satisfy rigorous external reviewers and can be used across a wide spectrum of community conservation projects. We also propose that this evaluation tool can be used simultaneously by practitioners, communities and external evaluators. Such a triad approach might be the most beneficial application of the evaluation tool in that it could be used to assess any differences in the perceptions of the three groups. To aid in the tool's efficacy and ease of use, each criterion is designed to relate to an identifiable product that can be evaluated. Collectively, the occurrence of these products indicates some measure of project success and can be guides for evaluation for current and/or future project objectives. Of the 26 criteria, the vast majority focus on conservation aspects and community participation. An obvious and crucial part of this type of outcome based evaluation is how to define 'success' or some level of achievement or progress under each criterion. Ideally, the criteria might be quantified or at least ranked on some scale of success. Qualitative narratives can and should also be used to supplement this information.

### **The Criteria Framework in Practice: An Internal Evaluation**

Based on the criteria framework presented in Table 1, we have conducted an internal evaluation based on five long-term conservation projects in which the authors have been involved. Four of the five project examples in this paper have had external evaluations, the Community Baboon Sanctuary, the Kickapoo Valley Reserve, the Five Blues Lake Project and the Gales Point, Manatee Project. One project, the Blue Mounds Project, has not been externally reviewed. The overarching goal in each project was to provide community groups with the necessary tools and training to monitor their own local resources, to develop management plans, and to provide a foundation for future fund-raising efforts. The following descriptions provide an overview of the five projects and then describe the results of the internal evaluation of the five projects summarized in Table 2. Table 2 represents an internal application

of the proposed criteria framework (Table 1). The results of our summative internal evaluation are discussed, and where appropriate, compared to external evaluations by other investigators.

### **Internal – External Evaluation Comparisons**

**Community Baboon Sanctuary (CBS) (Belize)** – The Community Baboon Sanctuary (CBS) was initiated in 1985. It is a community based sanctuary for the black howler monkey (*Alouatta pigra*). Local protection of the howler monkey and its habitat through encouraging a stewardship ethic in landowners was the main goal of the CBS project. The sanctuary lands are privately owned by subsistence farmers whom have signed a voluntary pledge to abide by a howler conservation management plan for their lands. Details on the history and scope of the project can be found in Horwich (1990) and Horwich and Lyon (1988; 1990; 1995; 1998; 1999). In addition to the local protection of the howler, the CBS project has spread the interest in howler protection country wide. The CBS donated howlers for a reintroduction into the Cockscomb Basin of Belize (Horwich et al., 1993a; Koontz et al., 1994) and also contributed howlers for another small release in the Cayo District of Belize. The sanctuary is managed by a board of local citizens and also generated monies through ecotourism (Horwich et al., 1993b; Bruner, 2003). The project has been externally evaluated throughout its history (Hartup, 1989; Bruner, 1993; Hartup, 1994; Bruner Lash, 2003).

The CBS, the longest running project evaluated, had all but one of the benchmarks for a total of 96% of criteria met (Table 2). The project has encountered many problems in its history, yet it has endured and a new Women’s Conservation Group currently manages the CBS. The project has encouraged a great deal of research on howler behavior and ecology (Lyon and Horwich, 1996; Silver et al., 1999; Horwich et al., 2001), the endangered Central American river turtle (Polisar and Horwich, 1994; Polisar 1995), and bird communities (Bider, 1997). Its education initiative includes a museum, a

recently built education center and program and an educational text and guidebook (Horwich and Lyon, 1990).

The CBS's strongest success has been its influence on rural communities countrywide, due to major international publicity (ABC/Kane, 1991; National Audubon Society, 1991; Project Lighthawk, 1992; Lipske, 1992; Koontz, 1993; Wildlife, 1994). National publicity has stimulated, both directly and indirectly, dozens of community-based conservation and ecotourism programs (Bevis and Bevis 1991; Ministry of Tourism and Environment, 1994, 1995; Ketchi Council of Belize and Inuit Circumpolar Conference, 1997). It has attracted support from the Belize Audubon Society, World Wildlife Fund, the Milwaukee Zoo, the United Nations and a number of colleges and universities. Sustainability and economic benefits come from the 4-6000 yearly visitors (Hartup, 1989; Bruner, 1993). Overall, the results of the internal evaluation appear to confirm the views and results of external evaluators.

**Kickapoo Valley Reserve (Wisconsin)** -- In the 1960's, 144 Wisconsin farm families were displaced from their lands, covering 3468 ha, for the creation of a flood control dam by the U.S. Army Corps of Engineers who acquired the land in 1963 (Rich, 2001). Pressure from outside environmental groups stopped the dam initiative and the dam was never built. This resulted in over 20 years of social conflict and economic stagnancy while local citizens expressed their outrage at the removal of the farm families without the promised economic benefits (Van Wie, 2000). With the help of local politicians and government lawyers, in 1996, the federal government turned the lands over to the Wisconsin Department of Administration and created a predominantly local Kickapoo Valley Reserve Board to manage the lands. The legislation called for up to 485 ha to be given to the Ho-Chunk Nation under the Department of the Interior to be protected for cultural reasons. Since its creation, there have been at least five evaluations of the Reserve (Burger, 1994; Conzemius and Lyon, 1997; Davidson, 1994; McLain, 1997; Van Wie, 2000).

The internal evaluation (Table 2) shows that 85% of the criteria have been met. McLain (1997) noted that the KVR's success was linked to having a coordinator in place during its formation, a strong legal and financial support from the State and research linkages to the University of Wisconsin. In addition to the state's yearly budget of approximately \$170,000, the Reserve has acquired state grants and some user fees are also collected. Its main benchmark deficiencies include no conservation monitoring (thus no current data on any increase in flora or fauna) and no conflict resolution mechanisms in place. However, there are no indications of major poaching. There has some been slight economic benefit attributed to a few full and part time jobs; but no major increases in peripheral businesses have been noted. The construction of a new education center may provide future economic benefits from increased tourism. The Reserve is protected under Wisconsin State law with federal protection of 485 hectares for the Ho-Chunk Nation under the Bureau of Indian Affairs. Research on the Reserve included studies dating back to the original dam proposal in the 1970's and later research carried out by the University of Wisconsin with maps generated by the Ho-Chunk Nation.

A community opinion survey showed lack of support for the management of the Reserve by local communities (Conzemius and Lyon, 1997). While there has been community participation at public Reserve meeting, Reserve committee meetings and Reserve events, there has been some discouraging of selected individuals to participate. A more recent survey of adjacent landowners showed an even split of negative responses by older residents and more positive responses to the Reserve by newer residents, many who were not influenced directly by the history of the Reserve (Van Wie, 2000). The Kickapoo Reserve Managing Board consists of 4 local members and two additional valley residents; however all board members have been appointed by the Governor of Wisconsin and all advisors are from state agencies. This has led to the disregard of some expressed concerns of the community. The Reserve essentially, functions as a co-management system between the state and the Ho-Chunk Nation (McLain, 1997) with a locally dominated Managing Board.

**Five Blues Lake National Park (Belize)** -- In 1990, a group of villagers of St. Margaret's Village, petitioned the Government of Belize to create a protected area. This petition ultimately resulted in the establishment of Five Blues Lake National Park in 1991. Later, the Association of Friends of Five Blues, was created to co-manage lands of Five Blues Lake National Park for the benefit of local people (Horwich and Lyon, 1999). The Association signed a legal agreement with the Forest Department to manage the 1720 ha park (G.O.B., 1997). They have developed ecotourism (Werner, 1994) and there is a preliminary management plan for the Park (Gerlitz, 1994). There have been two external evaluations of the project (Ormsby, 1996; Michels, 2000).

The Five Blues project achieved 81% of the benchmark criteria (Table 2). The project was an innovative model in that it was the first community in Belize to sign a co-management agreement with the Government of Belize (GOB, 1997). There are now 13 other community co-management agreements signed in the country. Despite that the Association has been prone to turnover and has received insufficient training and government support, they have persisted and formed a Managing Board that has had tenacity and support from many domestic and foreign organizations, including the University College of Belize. With the help of foreign volunteers and grants, they have had been able to maintain a small staff to manage the Park. Their strongest potential has been in creating an education program with a student group from Princeton University. The project lacks a monitoring program and a conflict resolution mechanism. Although not financially sustainable, they have received entrance fees from the some 500 annual visitors to the park.

Ormsby (1996) in the first external evaluation focused on education and ecotourism. What became obvious was that most residents were refugees from Central America and had been in St. Margaret's village a short while, mainly spoke Spanish and had a low level of education. Thus Ormsby's recommendations was for more bilingual education and a publicity program aimed at increasing Association membership. A medicinal plant trail was highly regarded by most informants.

Both Ormsby (1996) and Michels (2000) noted a positive response of residents to tourism (75-77%). However, the tourism level at Five Blues is insufficient to maintain the park (Michels, 2000). Compounding the problem is intense competition between two bed and breakfast groups which restricts their ability to become recognized cooperatives and thus receive benefits of training.

**Gales Point, Manatee (Belize)** -- The Gales Point, Manatee area biodiversity project proposed to create an ecologically diverse conservation area based on the Biosphere Reserve concept (Horwich and Lyon, 1991). The Government of Belize (GOB) created the Manatee Special Development Area (SDA) in 1992 as interim protected area comprised of a matrix of private and public lands (McGill, 1994). In response, local villagers formed the Gales Point Progressive Cooperative (GPPC), which has been involved in ecotourism in the area. The ecotourism program, under the auspices of the Gales Point Progressive Cooperative (GPPC) and the Manatee Advisory Team (1992), included a number of local associations, including ecotourism, guide, crafts and farming (Horwich et al., 1993b, Horwich and Boardman, 1993). In 1998, the GOB created a Wildlife Sanctuary around the Southern Lagoon, a main area frequented by manatees (*Trichechus manatus*) and the area immediately adjacent to the main village in the region. The project has been externally evaluated (Belsky, 1999; 2000; in press; Boardman, 1993; Lindberg and Enriquez, 1994; McLain, 1997; Middleton, 1998).

The internal evaluation of the Gales Point project by the criteria presented in this paper, indicates a much lower score, 31% of criteria met, in comparison to the other four projects evaluated. The Gales Point project had a good start in 1992, with financing, government support and a number of expert volunteers working on the project. It had additional success during its first two years when it received external grant support including a government grant to build a hotel for the community. The project moved the Government of Belize to create the Manatee and Manatee West Special Development Areas (SDA) and the Manatee Wildlife Sanctuary around Southern Lagoon. Expert volunteers gathered data on

plants, mammals, hunting and fishing practices and created management recommendations and maps. During the early stages of the project, the GPPC was established as well as a number of economic and tourism related associations. After two years, lack of funding prevented further progress and continuity, leading to community discouragement. Thus, the project never gained many of the important benchmark criteria to develop momentum towards success. Grants received in later years built on the initial management plans, but in many instances the implementation was sporadic and further increased discontinuity in the project (Middleton, 1998).

External evaluations of the Manatee project noted positive community attitudes toward the project (Boardman ,1993; Lindberg and Enriquez, 1994; Mc Lain, 1997; Middleton, 1998). However, Belsky (1999; 2000; in press) noted that the project planners misrepresented the community and intensified human injustice within the community. Some of the disparity in the external evaluations may have been attributed to confusion in identifying the proper project planners in collecting evaluation data. Nonetheless, the Gales Point project exhibited many shortcomings that were revealed both through internal evaluations using the criteria in Table 1, and the results of external evaluations. Two of the key obstacles to greater success for the Gales Point Project were the lack of adequate funding and the changing national political climate when the project was in its infancy. Lack of grant support inhibited the hiring of a local project coordinator and detrimentally affected project continuity. McLain (1997) in comparing the Kickapoo Reserve and the Manatee Project, noted that a long term facilitator or coordinator made the difference between project success (Reserve) and failure (Gales Point). McLain (1997) noted that initial project plans were strong for both projects, but the follow through was quite different. McLain goes on to highlight four key aspects in conservation planning: 1) a need for economic, political and research support from government and academic agencies, 2) efficient information exchange between community members, 3) consideration of negative attitudes as well as positive ones, and 4) a long term facilitator or planner commitment. The proposed evaluation criteria provide a solid foundation for evaluating both existing and future conservation planning.

It should be noted, however, that even projects with low evaluation scores still may have positive impacts on a community. The impacts include, increasing community awareness of conservation issues, stimulating development of a protected area, increasing economic benefits and contributing to the development of a framework for community collaboration in protected area management. These positive impacts may still play out in future conservation efforts in the Gales Point community. Currently there is a manatee research program involving community members and a hawksbill turtle protection program which has continued since 1993. A recently formed local NGO has completed the hotel and has taken over the turtle protection project. The evaluation criteria proposed in this paper provide important information and guidance for future conservation work in the Gales Point project.

### **Sole Internal Evaluation**

**Blue Mounds Area Project (Wisconsin)** -- The Blue Mounds Area Project (BMAP) began in 1995. It now operates in an 18-township rural area of south-central Wisconsin. The project has established ecological extension services to private landowners in the area. Environmental education is a strong element of the project, including newspaper columns and public workshops on land use topics. The project manager (staff ecologist) serves as an ecological extension agent, does species inventories and encourages biodiversity and ecologically sensitive land use by private landowners. The manager also serves as a community-based conservation coordinator who assists landowners by providing conservation information, seeking economic benefits and coordinating community efforts to protect their natural resources. A Board of Directors that is composed primarily of local landowners oversees the manager activities.

The BMAP has attained 84% of the benchmark criteria for a successful project. Its major success has been in creating an education/conservation package to help private landowners manage their lands for

biodiversity. The project's Board of Directors is composed mainly of landowners and the project is partially sustainable through annual landowner memberships. The staff ecologist has collected data on biodiversity on over 100 land parcels, creates maps of the visited lands and makes simple management recommendations. The key criteria that have not been met include infrastructure, support in evaluations and a conflict resolution mechanism. The criteria framework clearly points out specific shortcomings in the project. A key result of this internal evaluation is that both the Board of Directors and the project manager can directly address shortcomings identified through the internal evaluation. In turn, future project evaluations can be compared to this original assessment.

## **Conclusion**

The proposed evaluation tool based on benchmark products is not a substitute for a full comprehensive evaluation. However, the evaluation criteria can be used as a guide to furthering community conservation programs. It provides for an interdisciplinary review of projects based on products produced that support the general goals of conservation of natural resources, institution building in local communities and project sustainability and robustness. This goals-oriented evaluation tool can be used to obtain a snapshot of an ongoing project, track project success over different time periods, guide discussions of long-term planning and guide future projects. Our application of the evaluation criteria involved simple binary responses to the criteria. Quantitative and/or qualitative scores could also be developed and used for each criteria to evaluate the relative level of achievement under the 26 criteria.

The interdisciplinary nature of the proposed evaluation criteria is essential. The proposed evaluation tool has a broader view than discipline-specific evaluations of community conservation projects that focus singularly on crucial, but limited aspects of projects. If sociological, economic, management or conservation biology evaluations are to have value to the conservation planners and practitioners they must strive for relevance and that means all these aspects of evaluation must be combined and evaluated simultaneously. In addition, evaluation tools must attempt to understand both

the community's and the planner's perspective and provide the opportunity through the evaluation process, to bring the two parties together under a common framework.

A major obstacle to long-term success of community conservation projects is lack of funding, especially startup funding. The initial stage of a project is the most risky, and funding agencies are hesitant to take funding risks on new or innovative projects. When funding is available, it is usually on a yearly basis. Since community projects typically take a long time to progress, lack of continual and/or consistent funding can lead to discouragement of the involved communities and practitioners. The evaluation tool proposed also involves assessment of outside funding and financial sustainability and results from such evaluations could and should be shared with funding agencies to ensure funding cycles and commitments match the need and dynamic on the ground. In addition, when working in other countries, funding and control often must go through an in-country organization that may not agree or be familiar with the original vision of the project or the specific dynamics in a given community.

We hope that this criteria framework will move the dialogue between conservation practitioners, local communities and evaluators forward. The framework is a tool that could be used as a template for either internal or external evaluations. While a single framework is by no means presented as a panacea, we contend that by developing a practical, interdisciplinary and widely useable valuation tool for community conservation projects, it will provide a common focus across the multi-disciplinary community conservation landscape and bridge the gap between the theoretical and academic communities and on-the-ground conservation practitioners.

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**Table 1.** A proposed criteria framework for evaluating community conservation projects.

**Community Participation Milieu**

- See Figure 1 (A,B,C,D,E or F)

**I. Conservation Aspects**

- 1. Protected Area** - *Legal-based protection of lands recognized at local, regional and national level*
- 2. Community Scale** - *Project scale manageable for community*
- 3. Management Plan** - *Management plan written and functional*
- 4. Operations Plan** - *Daily operations plan written and functional*
- 5. Maps** - *Accurate and functional maps produced and available to all stakeholders*
- 6. Biological Data** - *Gathering biological/ sociological information about the site and its peoples*
- 7. Monitoring** - *Conservation target monitoring plan in place*
- 8. Increased Biota** - *Quantifiable improvement in conservation target*
- 9. Education** - *Effective local education initiatives*
- 10. Literature** - *Brochures/literature produced to educate or publicize the project*

**II. Community Participation Through Institution Building**

- 11. Stakeholders** - *Stakeholders identified and satisfied with participation*
- 12. Management Group** - *Community creation of a project management group*
- 13. Empowered Group** - *Representative and legitimate project management group*
- 14. Bylaws** - *Management group bylaws or modus*
- 15. Project Communication** - *Mechanisms for information sharing and communication*
- 16. Group Meetings** - *Regular, well attended management meetings*
- 17. External Communication** - *Project staff communication with non-local*
- 18. Economic Benefits** - *Equity in distribution of project benefits*

**III. Project Sustainability**

- 19. Conflict Resolution** – *Conflict resolution/arbitration mechanisms in place*
- 20. Financial Management** - *Strategy and system for local management of financial assets*
- 21. Agency Participation** - *Attraction of other funding sources*
- 22. Financial Sustainability** - *Project has achieved financial sustainability*
- 23. Project Coordinator** - *Project coordinator(s) act as agents of change*
- 24. Model Project** - *Project has stimulated other similar projects*
- 25. Infrastructure** - *Physical infrastructure improvements/changes consistent with community needs*
- 26. Evaluation Support** - *Access to researchers with knowledge of community conservation and/or project evaluation*

**Table 2.** Application of the evaluation criteria framework for five, community conservation projects. NA refers to not applicable; + and – refer to positive or negative occurrence of products, respectively. The percent of criteria met row at the bottom of the Table refers to the percent (5) of the 26 criteria that we satisfied for each project based on number of applicable products produced.

<b>EVALUATION CRITERIA</b>	<b>Project</b>				
	CBS	Kickapoo Reserve	Five Blues	Gales Point	Blue Mounds
<b>Community Participation Milieu</b> (From Figure 1: A,B,C,D,E or F)	<b>E</b>	<b>E</b>	<b>D</b>	<b>E</b>	<b>E</b>
<b>I. Conservation Aspects</b>					
1. Protected Area	NA	+	+	+	NA
2. Community Scale	+	+	+	+	+
3. Management Plan	+	+	+	-	+
4. Operations Plan	+	+	+	-	+
5. Maps	+	+	+	+	+
6. Biological Data	+	+	+	+	+
7. Conservation Monitoring	+	-	-	-	+
8. Increased Biota	+	-	-	-	+
9. Education	+	+	+	-	+
10. Literature	+	+	+	-	+
<b>II. Community Participation</b>					
11. Stakeholders	+	+	+	-	+
12. Management Group	+	+	+	+	+
13. Empowered Group	+	+	+	-	+
14. Bylaws	+	+	+	-	+
15. Project Communication	+	+	+	-	+
16. Group Meetings	+	+	+	-	+
17. External Communication	+	+	-	-	+
18. Economic Benefits	+	-	+	+	-
<b>III. Project Sustainability</b>					
19. Conflict resolution	-	-	-	-	-
20. Financial Management	+	+	+	+	+
21. Agency Participation	+	+	+	-	+
22. Financial Sustainability	+	+	-	-	+
23. Project coordinator	+	+	+	-	+
24. Model Project	+	+	+	-	+
25. Infrastructure	+	+	+	-	-
26. Evaluation Support	+	+	+	+	-
<b>PERCENT CRITERIA MET</b>	<b>96%</b>	<b>85%</b>	<b>81%</b>	<b>31%</b>	<b>84%</b>

**Figure 1.** The Continuum of Project Participation and/or Management

