



## Measuring Success: The Parks in Peril Consolidation Scorecard Manual



## FOREWORD

In the decade since its inception, the Parks in Peril program has worked with partner organizations throughout Latin America and the Caribbean to build local capacity to conserve biologically significant parks and reserves. The process has been one of collaboration, creativity, and learning for all parties. Never before has such a broadly applied, yet unified effort to conserve protected areas been launched. The experience has allowed The Nature Conservancy, its Non-Governmental Organization partners, and other conservation partners to collaborate on a body of conservation tools and methodologies with broad application to conservation problems throughout the hemisphere. One of the central tools developed has been the Site Conservation Scorecard. It is the result of a multi-year effort on the part of TNC and its partners to develop a framework that would enable conservation managers to measure their successes, and that would help guide the cycle of program monitoring and management planning. The scorecard, which identifies 16 different areas that should be considered in any strategy to manage a protected area, is being applied directly at sites in the Parks in Peril program. However, it should also be useful to any organization charged with managing biologically important sites. Indeed, a number of public and private organizations have adopted it as a model on which to base similar instruments that structure their conservation management.

The Nature Conservancy is indebted to a great number of individuals and organizations for the insight and effort that the scorecard represents. Chief among these are partner staff who have worked tirelessly in remote wildlands, or who have succeeded where others have failed in forming local conservation coalitions. These are the individuals who have truly tested the usefulness of the Parks in Peril approach. Also, this work would have been impossible without the conscientious work of TNC's Regional conservation staff. Finally, without the efforts of Joe Keenan and Jerry Touval, this manual, which spells out the pragmatic philosophy and application of the scorecard, would not have been written.

Bradford C. Northrup, Director  
Conservation Operations  
International Program  
The Nature Conservancy  
March 1999



## **Measuring Success: The Parks in Peril Consolidation Scorecard**

### **Introduction**

The mission of The Nature Conservancy is to preserve plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Internationally, TNC's approach has been to assist countries in building functional systems of protected natural areas. The cornerstone of this effort is the Parks in Peril Program, a multi-year, multi-country program financed largely by the U.S. Agency for International Development (USAID). Through Parks in Peril, TNC provides training, technical assistance and financial resources to in-country conservation organizations to help make protected areas functional. These groups then continue the work of protecting these areas indefinitely, either directly as site managers or as support groups.

For the purpose of evaluating our success within Parks in Peril, and with broader applications for our work in protected areas, we have developed a measure of a "functional" protected area (i.e., one that has the installed capacity to conserve its biodiversity indefinitely) that enables us to recognize when we have achieved success. For our purposes, a functional or "consolidated" protected area will have reached certain pre-defined benchmarks on 16 key indicators of protected area functionality. These benchmarks and indicators are contained in the Parks in Peril Consolidation Scorecard, a description of which follows.

### **The Nature Conservancy's Parks in Peril Program**

The Parks in Peril program is a public-private partnership that seeks to bring long-term protection to the most threatened, biologically significant parks and reserves in Latin America and the Caribbean. It began in 1990 as an emergency effort to safeguard these parks and the imperiled natural ecosystems, communities, and species they contain. The program works by strengthening the ability of local conservationists, private organizations, and governments to develop functional, sustainable protected areas in their respective countries.

In the years since Parks in Peril began, it has become well known for its success in transforming what had formerly been "paper parks" into functional protected areas. In 29 protected areas covering 22 million acres in 12 countries, Parks in Peril has helped protect cloud forests, coral reefs, tropical forests, savannas, paramo and other endangered ecosystems. The program has constructed ranger stations, trained rangers and other park staff, engaged local communities, and provided financial support and technical assistance to local conservation organizations. Parks in Peril has also promoted and leveraged local, national, and international support for the conservation of these areas.

## **Measuring Success in the Parks in Peril Program: The Concept of Site Consolidation**

It became evident early on in the project that it would be necessary to measure success in the Parks in Peril Program. It was important to define what makes a protected area “functional,” and how long emergency assistance would be needed. A measurement system would accomplish two objectives: (1) set multi-year, life-of-project objectives for Parks in Peril support at a specific site, thereby keeping site-based conservation programs on course year after year, despite inevitable personnel changes; and (2) enable TNC and USAID to recognize when the objectives of the Parks in Peril Program have been met at a particular site -- that is, when sufficient progress has been achieved or, to the contrary, when insufficient progress had been made or was likely to be made. Both of these conclusions would be used to influence future funding decisions.

In order to define the conditions that were to be achieved at the end of Parks in Peril’s assistance to a protected area, TNC and USAID staff, together with partner organizations in Latin America and the Caribbean, developed the concept of “site consolidation.” A consolidated site is one that has the tools, infrastructure, and staff to deal with current threats and management challenges, as well as the capacity to respond to threats that arise in the future.

As a first step towards defining protected area functionality, four general standards of site consolidation were identified: (1) basic on-site protection activities; (2) long-term management capacity; (3) long-term financing for basic site management; and (4) a supportive local constituency for the site. Within these four categories, TNC, USAID, and partners identified 16 criteria that together permit a more accurate measurement of functionality.

These 16 criteria form the basis of an instrument known as the Parks in Peril Consolidation Scorecard. By measuring a protected area’s functionality, the Scorecard provides a means of tracking a site’s progress towards the goal of the Parks in Peril Program. Since the 16 criteria that are being evaluated remain the same throughout the entire life of the project, year-to-year and life-of-project progress can easily and inexpensively be assessed, both at individual sites and across the entire portfolio of sites. The Scorecard enables USAID, TNC and partner groups to evaluate progress and direct resources as necessary to achieve consolidation objectives.

The 16 indicators we use to measure if a protected area is functional are:

### **A. Basic Protection Activities**

1. Physical infrastructure
2. On-site personnel
3. Training
4. Land tenure issues
5. Threats analysis
6. Official declaration of protected area status

## B. Long-Term Management

1. Reserve zoning and buffer zone management
2. Site-based long-term management plan
3. Conservation science needs assessment
4. Monitoring plan development and implementation

## C. Long-Term Financing

1. NGO self-sufficiency plan
2. PiP site long-term financial plan

## D. Site Constituency

1. Broad-based management committee/technical advisory committee
2. Community involvement in compatible resource use
3. Development of policy agenda at national/regional/local levels
4. Environmental education programs

The Parks in Peril Scorecard was based on conservation experiences in Latin America and the Caribbean from 1990-1997. Other indicators might need to be developed for conservation projects conducted under different circumstances in different parts of the world. The Scorecard itself may need to be updated as we gain more experience.

### **How the Parks in Peril Consolidation Scorecard Works**

The Scorecard has been most effective when used as a self-assessment tool. Generally, the partner group that is implementing the project assesses a site's progress towards consolidation, often together with TNC staff. An initial "snapshot" assessment of conditions on site at the beginning of the project provides the baseline against which future progress is measured. Periodic follow-up self-assessments (on either a six-month or one-year basis) are then conducted.

The Scorecard measures changes in a site's consolidation status; it is not a measure of partner or TNC performance *per se*. The Scorecard should be a reflection of *all* conservation activities at a site, not just those that are financed through the Parks in Peril Program or carried out by any single group. In most cases, TNC is rarely the only source of funding for a particular site. The purpose of the Scorecard is to measure the degree of site consolidation -- regardless of who is providing funding for specific activities -- in order to identify actions still required for the site to become functional.

Each of the 16 Scorecard indicators is divided into five benchmarks. The Scorecard has been structured in such a manner as to make each of the five benchmarks reflect a similar level of progress across all the indicators. The levels can be summarized roughly as follows:

- 5 = Excellent (proper management of the protected area ensured)
- 4 = Adequate (protected area is functional)
- 3 = Progress made (protected area becoming functional, but isn't yet)
- 2 = Work begun (little actual progress towards making the protected area functional)
- 1 = No work has been done (protected area completely non-functional)

As a general rule, a site that has achieved “4’s” in all 16 indicators is considered consolidated -- that is, it is a functional protected area. The specific circumstances of individual sites will vary however, and it is the role of the TNC project manager and in-country partners to determine the level of achievement for each indicator that best represents the consolidation of a given site. On a case-by-case basis, TNC and the partners may decide that certain indicators do not apply to a given site; put another way, it may be possible to achieve consolidation at a given site without reaching a “4” in every indicator. Ideally, this should be established at the beginning of the project, when baseline conditions are being determined.

### **What the Scorecard Does and Doesn't Do**

The Scorecard functions as a project management tool for TNC, USAID, and partners. It allows site project managers to track progress at a specific site over time, and at the same time allows senior Parks in Peril program managers to track advances across the entire program portfolio.

At individual sites, the Scorecard enables site and project managers to measure advances towards multi-year goals. Equally important, it permits managers to identify areas that are *not* advancing as planned, and that may require an additional infusion of human, technical and/or financial resources. In that sense, it is a useful project management tool.

As a broader program evaluation methodology applied across all Parks in Peril sites, the Scorecard allows program managers to track progress at a suite of sites that, by nature of their diversity, require a general and flexible program monitoring instrument. The Scorecard also highlights programmatic areas that may require greater or lesser investment of financial resources. Using the Scorecard, senior program managers are able to track discrete program advances on a yearly basis and make informed resource-allocation decisions. The Scorecard has been designed to enable TNC, USAID, and in-country partners to focus technical and financial assistance where it is most needed in order to achieve site consolidation objectives.

The Scorecard is designed to do one thing: measure a site's progress towards consolidation. It is not designed to measure direct conservation impact or a site's success in reducing threats. It is an instrument that measures *processes* that lead to the consolidation of a protected area and the *capacity* of a given site to reduce threats.

Nor does it measure if biodiversity has actually been conserved. Instead, a monitoring plan included as one of the 16 indicators focuses on that. Properly done, a site-specific monitoring plan will provide an ongoing measure of threats and the conservation impact of management actions.

## **What Comes After Site Consolidation**

The Scorecard can be used as a road map to provide site managers with a clear vision of where the site and its conservation program are headed. It permits site managers to see what activities still need to be done to consolidate a site. Consolidation, clearly, is not the end of the road for a site. Rather, it is a first, critical step towards achieving the sustainable conservation of a given protected area.

If the Scorecard has been used to guide consolidation of the site, by the end of Parks in Peril support the site should have available to it a series of strategic tools, or consolidation products, that can guide future management. Among these tools are a training plan for on-site personnel, a land tenure map of the site and surrounding areas, an analysis of the specific threats to biodiversity at the site, a long-term management plan, a threats-related monitoring plan, a long-term financial plan, a science and information needs assessment and a plan for promoting government policies that support the conservation of the site. TNC and partners work together to ensure that these products are of high quality and thus reflect genuine progress towards consolidation.

The successful consolidation of a site will provide managers with a proven track record of conservation success. The completion of a rigorous, analysis-based planning process will be attractive to many donor organizations that search for solid foundations on which to base their conservation investment decisions. Consolidated sites will have a documented history of accomplishment to point to in their efforts to generate additional support for their site-based conservation efforts.

The process of site consolidation will move parks in peril closer to their ultimate goal of becoming parks in perpetuity. With the support of USAID and other donors, The Nature Conservancy and its partners have already begun helping globally important sites make this transformation. The Consolidation Scorecard provides us with a tool for accomplishing this goal systematically, efficiently and with maximum likelihood of success.

## PARKS IN PERIL CONSOLIDATION SCORECARD

### A. BASIC PROTECTION ACTIVITIES

#### Parks in Peril Indicator A1: Physical infrastructure

Indicator Summary: Physical infrastructure refers to on-site improvements (including ranger stations, radio systems, vehicles, boundary demarcation, educational and management-related signs, road and trail systems, etc.) necessary for effective management of a protected area. Infrastructure needed for basic reserve management will vary from site to site. Those groups participating in the management of the reserve are best suited to determine the specific infrastructure needs of the site. Where possible, the site management plan will provide an explicit description of what infrastructure is needed to ensure basic management. *At least the basic necessary infrastructure for park management must be in place for a site to be considered consolidated.*

Benchmarks:

5 =	All physical infrastructure necessary (as defined by PiP partner, may include ranger stations, radio systems, vehicles, boundary demarcation, educational and management-related signs, road and trail systems, etc.) for basic reserve management in place
4 =	Most physical infrastructure for basic reserve management in place
3 =	Some physical infrastructure for basic reserve management in place, but significant gaps exist
2 =	Little physical infrastructure for basic reserve management in place
1 =	No physical infrastructure for reserve management in place

Benchmark Guidelines: The site manager should assess whether the current infrastructure development reflects whether no, little, some, most, or all physical infrastructure is in place in light of the overall requirements for basic site management.



## **Parks in Peril Indicator A2: On-site personnel**

Indicator Summary: The on-site presence of reserve staff is generally essential to the effective management of a protected area. Site managers are best suited to determining what constitutes adequate on-site staffing levels. Managers should also assess to what extent off-site staff, such as technical staff based in a distant capital city office, should be considered “on-site personnel.” On-site personnel can be either governmental employees or non-governmental staff with the authority to carry out management actions. Often, management planning documents will state what staff levels are necessary to carry out planned protection activities. The financial plan for the reserve should identify sustainable funding sources to pay for personnel costs and other basic management costs after consolidation. *To be considered consolidated, a site should have the physical presence of on site sufficient personnel to carry out basic management activities.*

Benchmarks:

5 =	Number of on-site personnel sufficient to perform all planned management activities
4 =	Number of on-site personnel adequate to perform basic management activities
3 =	On-site personnel able to perform some management activities
2 =	Some on-site personnel, not enough to adequately perform management activities
1 =	No on-site personnel

Benchmark Guidelines: The benchmarks for this indicator refer to a simple numerical increase in on-site staff dedicated to reserve management activities. At benchmark 4, a site has sufficient staff for basic management activities, which could include patrolling, outreach and community relations, monitoring, etc. At benchmark 5, a site has additional staff to carry out more comprehensive management actions.

### **Parks in Peril Indicator A3: Training**

**Indicator Summary:** The presence of on-site personnel at a protected area is not sufficient in and of itself. Protected area staff should also have the skills necessary for carrying out their on-site management responsibilities. While most sites provide some training for their staff, the premise of this indicator is that training must be systematically provided to reserve personnel based on an analysis of the skills needed for each staff member to function effectively. A systematic training program also responds to new staff's needs and to the evolving needs of existing staff. *At a consolidated site, the specific training needs of on-site personnel have been identified, and some training to fulfill these needs is being provided.*

Benchmarks:

5 =	Training needs identified, systematic training program begun
4 =	Training needs identified, some basic courses provided
3 =	Training needs identified, no training yet initiated
2 =	Training needs being identified
1 =	No indication of personnel training needs

**Benchmark Guidelines:** This set of benchmarks refers to two distinct yet interrelated processes: (1) the identification of training needs for on-site personnel; and (2) the implementation of a systematic training program to address those needs. While individual training courses may be provided for on-site personnel from time to time as training opportunities arise, the focus of this indicator is to assess the status of a systematic identification of staff training needs (benchmarks 1 to 3), and then to provide training courses and programs to ensure that those needs are met (benchmarks 4 and 5). For the purposes of consolidation, this indicator refers specifically to on-site personnel involved in management activities at the site, regardless of their organizational affiliation. Training for off-site partner staff, as well as for community leaders and other non-management personnel, is often a valid goal but is not a requirement for consolidation.

**Product:** A training plan for on-site personnel should be a short, position-by-position analysis of the skills that site personnel need to carry out their management tasks effectively. These general needs should be matched against existing skills of personnel to determine what skills are lacking and need providing. These specific needs then need ranking in order of importance and urgency. The result, which can be presented in table form, describes the priority training needs for on-site personnel. This can be followed with a description of available training opportunities known to site managers and NGO support groups. TNC training staff are available to assist in identifying training opportunities.

## Parks in Peril Indicator A4: Land tenure issues

**Indicator Summary:** Good land tenure information is critical to effective protected area management, especially in cases where these protected areas include many different types of non-public landholdings. Reliable land tenure information can be extremely difficult to get in many countries. Site managers should determine what tenure information is critical to their management efforts. Generally, it is at least necessary to determine which lands are public, private and communal, and to obtain the names of the owners of large, private inholdings. Where possible, it is often helpful to reconstruct the title history of large inholdings and communally held lands. Ideally, complete land tenure information should be based on the most recent official sources, verified on the ground, and presented visually in a way that makes it easy to use. Site managers generally use this information to regulate changes in land tenure (such as new human settlements) inside the protected area's boundaries. *At a consolidated site, managers will have and use the land tenure information necessary for taking management actions affecting different types of landholdings.*

Benchmarks:

5 =	More complete land tenure information mapped and being used by site manager
4 =	Some land tenure information available and being used by site manager
3 =	Some land tenure information available but not being used by site manager
2 =	Inadequate access to land tenure information
1 =	Land tenure information not available from any source

**Benchmark Guidelines:** The benchmarks for this indicator reflect two conditions: availability of land tenure information, and use of this information by site managers. As a site nears consolidation (benchmark 3), tenure information may be generally available but is not being used to manage the reserve. In benchmarks 4 and 5, the information is being put to use by managers. The benchmarks reflect the difficulty of getting complete land tenure information in many countries. Use of the information is often reflected by management staff's participation in resolving agrarian issues. A protected area's tenure conflicts need not be resolved or even addressed by site managers for it to qualify for consolidation, but site managers should have basic information on these conflicts that will enable them to participate in tenure disputes.

**Product:** Usually land tenure information is best presented in map form. The map should distinguish between different types of landholdings, such as private, public and communal. Lands adjacent to the reserve as well as inholdings should be presented. Other tenure-related data, such as resource-use concessions, can be added as well. Where there are large privately or communally held lands in or adjacent to the reserve, a table providing the names of the individuals or communities that own the land is often very helpful.

## **Parks in Peril Indicator A5: Threats analysis**

**Indicator Summary:** A systematic analysis that identifies threats to a site’s conservation, pinpoints their origins and proposes strategies for overcoming them is an essential management tool for the conservation of a protected area. A threats analysis establishes priorities for management activity and helps to direct limited resources to actions of greatest conservation impact. Often, a threats analysis will serve as the basic building block for all management actions to be conducted in a given protected area. *For a site to be considered consolidated, the threats to its conservation must have been identified and prioritized, and management strategies developed to address specific, priority conservation threats.*

Benchmarks:

5 =	Threats identified, ranked, and being addressed through management actions
4 =	Threats identified and ranked; specific strategies drafted to address priority threats
3 =	Threats analysis done; no specific strategies yet drafted to address threats
2 =	Threats analysis under way
1 =	No analysis of threats

**Benchmark Guidelines:** The benchmarks for this indicator refer to two interrelated processes: the systematic analysis of threats to the conservation of a site, and the design of specific strategies to address priority threats. The Nature Conservancy has developed a useful methodology to identify and rank threats, but it is not required that this process be used. Any systematic analysis of conservation threats is adequate to reach benchmark 3 for this indicator. To reach benchmarks 4 and 5, strategies must be drafted and implemented to counteract the highest-priority threats identified in the analysis.

**Product:** The Nature Conservancy’s methodology for conducting threats analyses is a several-step process. The first step is to identify and rank the conservation “targets” of the protected area -- those biological/ecological features for which it was created and the reasons why its consolidation is important. Next, the immediate impacts or “stresses” affecting these targets are determined and ranked, and after that the specific “sources” of each stress are determined and ranked as well. This process enables site managers and others to identify priority threats, which are the sources that make the largest contribution of stresses that affect the highest-priority targets. Finally, strategies are developed to reduce the impact of the highest-ranking threats, and these strategies presumably form the basis of a site’s management plan. Whichever methodology is used, a threats analysis should rank threats in terms of importance and clearly justify this ranking.

## **Parks in Peril Indicator A6: Official declaration of protected area status**

Indicator Summary: An official decree is a fundamental part of most protected areas' long-term security, but many older decrees suffer from imprecisions that undermine their ability to protect an area. Also, what constitutes the “correct” boundaries of a protected area is often a matter of interpretation. Some decrees demarcate polygons that do not close or that do not accurately reflect the geographic area needing protection. *At consolidated sites, site managers and support groups will have done everything in their power to obtain a strong, accurate, legally binding decree.*

Benchmarks:

5 =	Official declaration of protected area obtained at appropriate level with reserve boundaries correctly demarcated
4 =	Proposal for official declaration with reserve boundaries correctly demarcated submitted to proper authorities, no declaration yet obtained
3 =	Proposal for declaration being prepared with reserve boundaries correctly demarcated
2 =	Protected area decree exists; boundaries incorrectly demarcated
1 =	No protected area decree exists

Benchmark Guidelines: This indicator presupposes that site managers have a clear idea of what the “correct” boundaries should be, and it measures their progress toward getting those boundaries officially sanctioned. In many cases, the protection agency or NGO will prepare a corrected decree (benchmark 3) and promote it with the authorities responsible for issuing decrees (benchmark 4). Benchmark 5 refers to protected areas that have official decrees that correctly describe the boundaries of the site.

Product: When the official decree is adequate, it is sufficient as the consolidation product. When the decree needs changing, the proposal for a new decree as it has been submitted to the proper authorities is the product.

## B. LONG-TERM MANAGEMENT

### Parks in Peril Indicator B1: Reserve zoning and buffer zone management

Indicator Summary: Protected areas that are based on the UNESCO biosphere reserve concept are customarily divided into zones that allow for different types and intensities of resource use. Typical zones found in these protected areas include off-limits “core” zones and multiple-use “buffer” zones. Generally, the livelihoods of people living in buffer zones are affected by the boundaries and restrictions of these different zones, and thus a participatory process by which local residents are encouraged to respect reserve zoning is often a necessary part of reserve management. A description of reserve zoning, including relevant boundaries and restrictions, is typically included in the site management plan. *A consolidated site will have clearly defined zones that have emerged from a process that includes local stakeholders, and actual land uses will conform, for the most part, to these zones.*

Benchmarks:

5 =	Reserve zones defined; land-use patterns conform to usage standards established for zones
4 =	Reserve zones defined; land-use patterns mostly conform to standards established for zones
3 =	Participatory process under way to make land-use patterns conform to standards established for zones
2 =	Studies under way to determine appropriate use zones
1 =	No division of use zones within the reserve

Benchmark Guidelines: The benchmarks for this indicator reflect the steps involved in establishing effective protected area and buffer area zoning by employing a process that includes the participation of local stakeholders. Benchmark 2 reflects an assessment of appropriate use zones based on biological considerations of the protected area, while benchmark 3 provides a “reality check” by including stakeholder participation in the process. Benchmark 4 reflects the completion of the zoning process, and indicates that zoning restrictions are, for the most part and as determined by site managers, being adhered to in the core and buffer zone areas. Benchmark 5 describes the point at which the boundaries and restrictions in these zones are completely respected, except for isolated transgressions.

Product: Generally land-use zoning is best presented in map form, and accompanied by an explanation of the restrictions governing each zone. Other relevant information, such as the location of boundary markers and signs, can be added. More advanced sites may want to overlay areas or zones known to have special biological significance.

## **Parks in Peril Indicator B2: Site-based long-term management plan**

Indicator Summary: A management plan is an explicit strategy for conserving a particular protected area into the future. Many types of management plans exist. Often resource management agencies have an official format already developed. In many cases, a management plan will include as components several of the indicators listed separately in this scorecard, including a financial plan, a threats analysis, a monitoring plan, etc. Too often, management plans exist as finished documents but are not used to guide the actual management process. An effective management plan guides the actions of other actors besides just the park management authority. *To be considered consolidated, a site should have a management plan that describes and justifies a protection strategy extending at least five years into the future.*

Benchmarks:

5 =	Long-term management plan that takes into account off-site threats completed, guiding reserve management
4 =	Long-term management plan completed, guiding reserve management
3 =	Long-term management plan completed but not yet implemented
2 =	Long-term management plan preparation in progress
1 =	Long term management plan not yet begun

Benchmark Guidelines: The benchmarks for this indicator reflect the process of drafting (benchmarks 2 and 3) and implementing (benchmark 4) a management plan. A management plan can be said to be guiding reserve management when it is being used as the basis for annual operating plans, infrastructure development, staffing decisions, fund-raising strategies and other shorter-term planning tools. More advanced management plans (benchmark 5) take into consideration all significant threats to the reserve that originate off-site or beyond the reserve's boundaries, including water-borne pollutants, policy issues, settlement activities and so on.

Product: A management plan that results from the consolidation process should contain (or compile) many of the products that are presented separately in the Scorecard. Like the threats analysis, the plan should describe the priority threats and the site managers' strategies for reducing them. Many management plans contain lengthy appendices, species lists, bibliographies and so on. This is less important than a concise, well-justified plan of action for managing the site in the medium-term (approximately five years).

### **Parks in Peril Indicator B3: Science and information needs assessment**

Indicator Summary: Management of protected areas should be based on the best scientific information available. At times, however, sufficient information is not available. Since the possibilities for conducting scientific research in the biologically diverse protected areas of Latin America and the Caribbean are virtually limitless, science and research needs must be prioritized so that research focuses on what reserve managers genuinely need to know. A first need at all sites is the identification of a site’s conservation “targets,” or vulnerable species and natural communities. *At a consolidated site, both conservation targets and the science and information needs required for effective management have been systematically identified, and contacts have been initiated with appropriate organizations capable of addressing those needs.*

Benchmarks:

5 =	Scientific/research organizations and individuals are coordinating with reserve management to address reserve’s science/information needs
4 =	Conservation targets and science/information needs identified, ranked, and distributed; contact made with science/research organizations to address these needs
3 =	Conservation targets and science/information needs being identified and ranked
2 =	Conservation targets and science/information needs generally known
1 =	Conservation targets and science/information needs essentially unknown

Benchmark Guidelines: A basic knowledge of the current status of a reserve’s conservation targets is needed to prioritize threats, and additional research is often required to determine the precise nature (e.g., the extent, severity, source, etc.) of the threats, as well as their relation to and impact on targets. Science needs should be construed to include social sciences as well as natural sciences. Benchmark 3 reflects ongoing identification of key species and natural communities as well as an ongoing assessment of the specific science and information needs of a site. Benchmarks 4 and 5 reflect the completion of a systematic identification of both targets and science and information needs, as well as varying degrees of involvement of scientific and research organizations to address the gaps in scientific information needed for effective site management.

Product: A science and information needs assessment should be a summary document, based on the threats analysis, that identifies and ranks the major areas where scientific research is needed to improve reserve management. It should be useful for directing potential researchers towards the reserve’s highest priorities for research. While it is usually helpful to compile a bibliography of existing studies on the protected area, not all subjects that have yet to be studied qualify automatically as needs. True conservation science needs are only those subjects that have yet to be studied sufficiently *and* that will provide relevant information for effective site management.



## **Parks in Peril Indicator B4: Monitoring plan development and implementation**

Indicator Summary: Effective monitoring tracks the impact of threats on biodiversity values or “targets” and thus enables site managers to measure the effectiveness of management actions. Different types of monitoring can be carried out at a protected areas. Monitoring can focus on biodiversity targets (populations of vulnerable species and natural communities, for example), on threats to targets, or on management capacity (this scorecard, for example). For the purposes of achieving consolidation, monitoring should focus on those threats to biodiversity that have been identified and ranked in the threats analysis process. Monitoring should track major threats as directly as possible, choosing variables and monitoring techniques that are within the means of site managers or support groups to track continually and at a relatively low cost. Once variables are identified, initial data-collection is required to establish a baseline against which future data can be compared. *To be considered consolidated, a site should be monitoring the principal threats to its biodiversity targets.*

Benchmarks:

5 =	Timely monitoring information and analysis in site managers' hands, being used for management purposes
4 =	Monitoring plan completed; accurate, threat-related monitoring variables being monitored
3 =	Accurate, threat-related monitoring variables identified, baseline information being collected and classified
2 =	Some baseline information being gathered, but with no clear relation to principal threats
1 =	No environmental monitoring of any significance being carried out

Benchmark Guidelines: Monitoring in this scorecard refers to data that is collected at predetermined intervals to assess changes over time. Sometimes inventories are needed to set baselines in a monitoring program, but not all inventories qualify as monitoring. In general, benchmark 2 refers to a stage in which information is being gathered without any analysis of its potential relevance to the monitoring of threats. In benchmark 3, the relevance of different data has been determined, and relevant data are being collected; in benchmark 4, these data are being collected at predetermined intervals and compared to baseline levels. Socioeconomic variables as well as biological ones should be considered, as they relate to threats.

Product: A monitoring plan should propose, priority threat by priority threat, the most appropriate variables to measure, the best ways of measuring them, and the frequency with which they should be measured. In many cases, information that is already being collected by other groups or agencies can be used to provide information on threats; these cases should be noted in the plan. The key to an effective monitoring plan is the selection of variables that are faithful indicators of the threats being measured. Also important is designing a monitoring strategy that is feasible given expected financial resource levels in the medium-term.

## C. LONG-TERM FINANCING

### Parks in Peril Indicator C1: NGO self-sufficiency plan

Indicator Summary: One of the underlying principles of the Parks in Peril Program is that effective protected area conservation is based on cooperation between the public and private sectors. For that reason, one of the goals of Parks in Peril is to help local non-governmental organizations (NGOs) attain a degree of financial self-sufficiency that will allow them to continue functioning indefinitely as advocates for reserve protection, be it as site manager, as partner to the responsible government agency, or in some other capacity. *A consolidated site will have the support of a local NGO that has developed, begun to implement and is monitoring a strategy for attaining its own financial self-sufficiency.*

Benchmarks:

5 =	NGO fully implementing plan for achieving operational self-sufficiency, results corresponding approximately to goals set
4 =	NGO has completed plan for operational self-sufficiency and has begun implementation and monitoring of results
3 =	NGO completing plan for operational self-sufficiency
2 =	NGO beginning plan for operational self-sufficiency
1 =	NGO has no plan for achieving operational self-sufficiency

Benchmark Guidelines: The benchmarks for this indicator reflect the sequential steps in the process of developing a self-sufficiency plan for the NGO involved in the conservation of the site. Benchmarks 2 and 3 reflect specific stages in the development of a self-sufficiency plan. By benchmark 4, groups will have completed a plan and begun to implement it; they will also have begun tracking results, to see if these correspond to the financial goals stated in the plan. In benchmark 5, these goals are being met.

Product: A self-sufficiency plan should analyze an organization's fixed operational costs over a five-year horizon and compare them with expected income sources for operations over the same period. Within the income sources, an action plan for implementing specific income-generation strategies should be included. The action plan should set numerical goals for income from the different strategies to enable the organization to monitor its success.

## Parks in Peril Indicator C2: PiP site long-term financial plan

**Indicator Summary:** A long-term financial plan is an indispensable component of a successful long-term conservation strategy. The plan should identify a diverse funding base to pay for basic reserve management activities. Each site's access to sustainable and/or recurrent sources will vary. For some sites, no viable options for sustainable or recurrent funding may be apparent. These sites should be analyzed to see if they are in fact viable protected areas. The financial planning process should identify a site's best available options and should outline a strategy for pursuing them. Sources could include host-country budget allocations, entrance fees or visitor donations, user fees, concessions, capitalized endowments, multiple and multi-year sources of foreign funding, and many more. Generally, bringing these sources on-line will require months or even years of preparatory work by site managers and support groups. *To be considered consolidated, a site should have begun to implement measures to achieve recurrent and/or sustainable sources of financing.*

Benchmarks:

5 =	Long-term financial plan completed; diversified portfolio of funding sources and mechanisms in place to cover basic reserve management costs
4 =	Long-term financial plan completed; recurrent and/or sustainable sources and mechanisms to cover basic reserve management costs are being implemented
3 =	Draft financial plan completed; recurrent and/or sustainable sources and mechanisms identified to cover basic reserve management costs
2 =	Financial planning under way
1 =	No financial planning or diversification of funding sources in evidence

**Benchmark Guidelines:** The benchmarks for this indicator reflect the process of financial planning to cover basic reserve management costs. In benchmark 2 this process has begun. In benchmark 3, a draft document has been finished that identifies the best potential options for the site's financial security. In benchmark 4, site managers and support groups have begun implementing some of these funding options, although they are not necessarily receiving revenue from all of them yet. By benchmark 5, these optional sources are providing enough income to pay for basic, recurrent reserve costs.

**Product:** A PiP site long-term financial plan contains projections of the protected area's operational costs and income sources and should answer the following questions: How much will the basic management of the reserve cost over the next 3-5 years? Where will the funds come from to cover these costs? What actions need to be carried out, when, and by whom, to ensure that there is sufficient funding available to pay for basic reserve management? These actions together constitute the financial plan for the reserve.

## D. SITE CONSTITUENCY

### Parks in Peril Indicator D1: Broad-based management committee/technical advisory committee

Indicator Summary: Management or technical advisory committees allow reserve-area stakeholders, including but not necessarily limited to local communities, to participate in the reserve management process. The presence of such a committee indicates an openness on the part of site managers to incorporate and address the concerns of these stakeholders. Many types of management and advisory committees exist, ranging from support committees (“Friends of the Park”) to formal representative councils designed to ensure broad participation. The authority invested in these committees varies widely as well; some are strictly advisory, whereas others have decision-making authority on many issues affecting reserve security and management. Generally, a committee’s involvement in reserve management is a gradual -- and at times conflictive -- process. Site managers and local laws will usually determine the exact role of the committee at a given site. *To be considered consolidated, a site should have formed a management or advisory committee, made up of key stakeholders, that participates in reserve management decisions.*

Benchmarks:

5 =	Advisory committee an active participant in reserve management decisions
4 =	Advisory committee includes key stakeholders, occasionally participates in reserve management decisions
3 =	Key stakeholders identified; advisory committee formed
2 =	Advisory committee being formed; analysis of stakeholders in reserve under way
1 =	Advisory committee non-existent

Benchmark Guidelines: For the sake of this scorecard, representation and participation are viewed as two integral features of all effective management or advisory committees. A functioning committee as described in benchmark 4 is both representative of key stakeholders and participatory. Stakeholders generally include reserve-area communities as well as government agencies and businesses, universities and other entities as well. A careful assessment of these stakeholders is recommended to enable the formation of an effective advisory committee. Measures of participation could include instances of committee members being consulted on management plans, operating plans, spending plans, etc. More active participation (benchmark 5) might include committee involvement in the actual planning and/or budgeting of management activities, a clearly defined legal role in management, a frequent and systematic participation, or all of these.

## **Parks in Peril Indicator D2: Community involvement in compatible resource use**

Indicator Summary: In those protected areas where communities are located either within the site boundaries or immediately adjacent to the site, biodiversity conservation depends on these communities' using the site's biological resources in a manner that is compatible with the biodiversity conservation goals of the protected area. A local constituency for a site can be built when community organizations are encouraged to develop programs that promote the compatible use of resources the site has to offer, and upon which these communities depend for their livelihoods. *At consolidated sites, the reserve area's principal community groups (or other key stakeholders) are involved in pilot projects for the compatible use of local resources, and these pilot projects are being documented in a such a way that they can be replicated elsewhere.*

Benchmarks:

5 =	Well-documented pilot projects for compatible resource use undertaken in cooperation with major community organizations
4 =	Well-documented pilot projects for compatible resource use involve community organizations (or other key stakeholders)
3 =	Pilot projects for compatible resource use involve individual communities or residents; documentation of project results under way
2 =	Pilot projects for compatible resource use under way but don't involve communities
1 =	No pilot projects for compatible resource use under way

Benchmark Guidelines: The benchmarks for this indicator list differing levels of engagement by individuals and by community organizations (e.g., farm groups, fishing cooperatives, indigenous organizations, etc.) and differing levels of documentation that would allow for compatible resource use projects to be replicated in other locations. Benchmark 3 is attained when communities are engaged in pilot projects, and project results are being documented. Benchmark 4 describes the engagement of organized community or civic groups on compatible resource use projects and the documentation of these; benchmark 5 describes projects involving the major regional organizations and/or associations present in the area. The assumption underlying this indicator is that only by working in collaboration with community organizations (or in some cases, other key stakeholders) will a pilot project be able to influence enough resource-users to bring about a significant reduction of threats to biodiversity.

Product: Documentation for pilot projects can take many forms, but should at a minimum describe the types of projects being carried out with community organizations, the goals and methods of the projects, and the overall results to date. This documentation can take the form of a brief "case study" or similar documentation that can be shared with other groups seeking to promote compatible development alternatives at the same site or at other, distant sites. In general, well-documented pilot projects are easier to replicate, thus multiplying the impact of each individual project.

### **Parks in Peril Indicator D3: Policy agenda development at national/regional/local levels**

Indicator Summary: Protected areas can support the conservation of biological diversity insofar as local, regional, national, and international policies that promote biodiversity conservation allow these sites to function effectively and to thrive. For that reason, one of the objectives of the Parks in Peril Program is to work with NGO and government partners to ensure that appropriate policies supporting the conservation of protected areas are in place at the appropriate levels. *At consolidated sites, the policies needed to support the site's long-term security have been identified, and a plan to promote these policies is being implemented.*

Benchmarks:

5 =	Conservation policies that promote park security being actively pursued at all appropriate levels
4 =	Plan for conservation policies that promote park security has been completed; policies being actively pursued at some levels
3 =	Plan for securing appropriate conservation policies completed
2 =	No formal plan developed for promoting appropriate conservation policies; however, action being taken on as-needed basis to develop policies that promote park security
1 =	No action being taken to develop or promote conservation policies for park security

Benchmark Guidelines: Benchmark 2 describes an opportunistic strategy for pursuing conservation policies on a case-by-case basis and as the need arises for specific policy work in support of the site. Benchmark 3 refers to a more systematic and proactive approach to analyzing policies required to support site conservation. Benchmark 4 is achieved when the analysis conducted in benchmark 3 has been completed, and appropriate policies are being pursued, although not necessarily at all of the levels necessary; benchmark 5 indicates the promotion of relevant conservation policy reforms at all appropriate levels.

Product: A policy agenda is simply a written strategy that describes the policy-related activities that must be addressed to ensure the long-term security of the protected area. Often, the threats analysis can serve as a guide to this strategy; site managers and support groups can analyze the site's priority threats and determine what actions in the policy arena are needed to reduce or mitigate those threats. An inventory of policies that affect the reserve can also be a useful analytical tool. Likewise, a policy agenda can examine the roles of the different government agencies with jurisdiction over issues that affect the reserve.

## **Parks in Peril Indicator D4: Environmental education programs**

Indicator Summary: Environmental education, or “outreach,” is a necessary part of protected-area management. The support of local stakeholders for the reserve’s conservation objectives will depend on their understanding of these objectives. Environmental education covers a broad range of activities and approaches. A common denominator is often a systematic explanation to local residents of the importance of the protected area and of the rules and regulations relating to it. Some education programs focus on schoolchildren; others target adult populations. Site managers should determine the appropriate target audience for outreach programs and design or guide these programs accordingly. *To be considered consolidated, a site should have well-established education or outreach programs in place.*

Benchmarks:

5 =	Measurable positive impact of environmental education programs
4 =	Environmental education programs well-established but formal assessment of impact not completed
3 =	Environmental education programs being conducted
2 =	Environmental education programs being developed
1 =	No environmental education programs under development

Benchmark Guidelines: A well-established environmental education program (benchmark 4) refers to one that has been in effect for more than a year and that has made multiple attempts to communicate its basic message to local residents and other protected-area stakeholders, including public and private ones. Shorter-term or more sporadic programs would fit under benchmark 3. This scorecard does not attempt to judge the effectiveness of different approaches, though clearly an outreach program that is specifically targeted at reducing the threat-related behavior of key actors or communities stands a better chance of contributing to reserve goals; more advanced programs will carry out a formal assessment of their impact (benchmark 5).

This publication was made possible through the support provided by the Office of Regional Sustainable Development, Bureau for Latin America and the Caribbean, U.S. Agency for International Development under the terms of the Grants Nos. LAG-A-00-95-00026-00 and EDG-A-00-01-00023-00 for the Parks in Peril program. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.



Worldwide Office  
4245 North Fairfax Drive  
Suite 100  
Arlington, Virginia  
22203-1606

Photo Credit: Ocelot, Peru, Amazon  
Connie Gelb/TNC

**WORLD  
PARKS**  
CONGRESS 2003  
D U R B A N  
BENEFITS BEYOND  
BOUNDARIES

The Nature Conservancy  
is a proud supporter of the  
2003 World Parks Congress.

For additional copies, please visit:  
[conserveonline.org](http://conserveonline.org)