

CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Pennsylvania State University
Project Title:	Ecosystem Threat Assessment and Protected Area Strategy for the Massif de la Hotte Key Biodiversity Area, Haiti (Phase 1)
Date of Report:	31 July 2014
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CEPF Region: HAITI

Strategic Direction: 1. Improve protection and management of priority key biodiversity area.

Grant Amount: \$94,932.15 awarded to Penn State as Phase 1, out of \$198,067. Remainder transferred to Temple University as Phase 2.

Project Dates: 1 June 2013 to 30 May 2014

Implementation Partners for this Project (please explain the level of involvement for each partner):

Société Audubon Haiti (SAH). This NGO in Haiti is the key partner who was engaged in almost all aspects of the project. A separate grant from CEPF covers all tasks specifically assigned to SAH. SAH provided logistical support for missions by PL Hedges, and helped translate conservation data into conservation action locally (La Hotte) and globally (governmental policy).

LARSE (Remote Sensing Laboratory) at Oregon State University (OSU), Corvallis, Oregon. This partner received a subgrant from the Penn State grant to provide high-resolution forest cover data for the La Hotte based on the most recent LANDSAT satellite imagery. This indicated, in map form, the current location of original forest, helping PSU and SAH project teams to best assess the current conservation threats and their precise locations.

Other partners involved, to a lesser degree, were Quisqueya University (UNIQ) who provided space for SAH, the Ministries of Agriculture and Environment of Haiti who provided permits, Philadelphia Zoo CEPF Project who assisted SAH on follow-up trips, and PANOS who assisted in multimedia outreach activities.

Conservation Impacts

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

The CEPF Ecosystem Profile is to "improve protection and management of priority key biodiversity areas." This project is accomplishing that goal by determining the remaining forest habitats and composition of key biodiversity groups present, and effectively distributing this knowledge to the persons, communities, and institutions where the knowledge will have a conservation impact. For one of the two target areas, Morne Grand Bois, this has already had a major affect in that the entire remaining critical ecosystem, with unique and critically endangered species, is well into the process of being purchased privately for creation of Haiti's first private nature preserve.

Please summarize the overall results/impact of your project.

Planned Long-term Impacts - 3+ years (as stated in the approved proposal):

The Massif de La Hotte key biodiversity area in Haiti is recognized locally, nationally, and globally for its intrinsic natural and cultural values, ecological services and endemic species. Some of the important sites are identified, and their biodiversity documented. In conjunction with a parallel project (Audubon Society of Haiti), a strategy and conservation action plan is developed by key stakeholders (guided by scientific, social and economic data) and implemented on the ground. The impact of this work over the long term is to slow or stop the loss of biodiversity in the Massif de La Hotte. The loss afforest ecosystems is so high and mainly in this region than elsewhere in the Americas, whole mountains have already lost everything in terms of forests and biodiversity, and other mountains are rapidly losing their biodiversity. The adoption and implementation of policy changes by the Haitian government will likely take several years, and we do not expect to see immediate results of this work on the rate of deforestation and loss of biodiversity. However, in case of success we expect an impact would be seen in five years.

Actual Progress Toward Long-term Impacts at Completion:

The impact of this work over the long term is to slow or stop the loss of biodiversity in the Massif de la La Hotte. There was no expectation to make any visible progress on the long-term impacts of this project during the first year (Phase 1), because that requires sustained, long-term work at the community and governmental levels, likely to be realized after the project. Nonetheless, Phase 1 had many successes in terms of data collection, public awareness and the initiation of private land purchase of Grand Bois. Combined this is more than we expected and could be considered significant progress towards the long-term impacts.

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):

By the end of this project, the following results will be implemented: (1) Important sites identified through forest cover analysis of remotely sensed data and on-the-ground observations. (2) Biodiversity assessed in two key sites, Grande Colline and Grand Bois, with lists as complete as possible of the diversity of vertebrates (species lists at observation sites) and of the plant communities. The first major trip was successful in that we reached both locations, identified species occurring there and made lists, discovered some new species, and met the local inhabitants. Information was obtained on the local communities at each site, which will be used later during the year by SAH. SAH will profile the socio-economic and political status of these communities, identify at least 1200 hectares of natural forests to be recommended for protected area management and begin conservation actions in participation with the community stakeholders in Morne Grand Bois and Grande Colline areas.

Actual Progress Toward Short-term Impacts at Completion:

Because Phase 1 was only 1 year, it was too short a time to have completed all of the short-term impact goals. Nonetheless, we have identified the most important sites for forest habitats in the two target areas, determined most of the vertebrate species occurring there (see below), and interviewed local inhabitants. If land is set aside soon for private reserves (in progress) there will be short-term impacts.

Please provide the following information where relevant:

Hectares Protected: (not relevant)

Species Conserved: (not relevant)

Corridors Created: (not relevant)

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

We are on track to realize both short- and long-term impacts by the end of Phase 2, as originally planned.

Were there any unexpected impacts (positive or negative)?

No.

Project Components

Project Components: *Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.*

Component 1 Planned (as stated in the approved proposal):

Ecosystem surveyed and threat assessed. Here, we determine the nature of the remaining forests, the key biodiversity they contain, and threats to their survival.

Component 1 Actual at Completion:

Visits to the two target ecosystems in 2013, as planned, were successful in that the large combined team of Penn State and SAH personnel (Haitians and Americans) explored both areas, characterized the forests and biodiversity, and interviewed local inhabitant and farmers. We determined the population centers and routes of access, and found abundant evidence of ongoing habitat destruction. Because Morne Grand Bois is much smaller than Chaîne de la Grande Colline, we were able to characterize the biodiversity of Grand Bois much better during Phase 1. It has cloud forest on the highest elevations, above 1200 m, and a large population of Sierran Palm. There is also a population of the rare and endangered magnolia tree, *Magnolia ekmanii*. We identified 19 species of frogs, including 3 new to science. We encountered 10 species of lizards and 2 of snakes on Grand Bois, and 36 species of birds were observed (species lists are in the Grand Bois Fact Sheet). The forests are being cut for building materials, slash-and-burn agriculture, and charcoal. We are continuing to learn more about the specific threats, methods used, and types of foods grown, so that we can help educate local inhabitants in better land use practices. SAH collected socio-economic data during 2013 to determine livelihood profiles and specific threats to the forest ecosystems. Traps were set to capture invasive rats and further efforts will be made to assess the invasive species problems, including feral dogs and cats, that are a particular threat to the native vertebrate species.

Component 2 Planned (as stated in the approved proposal):

Public education and awareness activities conducted. Here, we inform several audiences of the rich biodiversity that exists in Haiti and existing threats, through lectures, radio, and multimedia programs: (1) the general public and local communities in Haiti, (2) the general public internationally, (3) Haitian authorities, and (4) the Donor's community.

Component 2 Actual at Completion: A 2014 biodiversity poster-calendar was produced (1000 copies) and distributed throughout Haiti. In Creole, it emphasized the importance of keeping forest to protect water. Design was made for the 2015 calendar. A lecture was given by PL Hedges to the Director-General of Agriculture and his staff at Damien in June 2013, about the results of the project. A news article on the project was published in Terre Sauvage (leading French magazine, thus reaching donor's community). One-hour movie was produced by PL Hedges and filmmaker Hoppe on the work in Haiti, acknowledging CEPF funding. The movie continues to invited to film festivals in the U.S. and other counties and receives positive reviews and accolades. Viewership at festivals numbers in the thousands. The video essays for Caribnature.org were translated to Creole for use in Haiti. A "Fact Sheet" series was launched for Haitian critical ecosystems, starting with Grand Bois. The Grand Bois Fact Sheet was distributed to stakeholders and potential donors. All of these public awareness activities have catalyzed interest in protecting the unique ecosystems encountered during the project, with the result being current interest by several parties in purchasing Morne Grand Bois (essentially the entire mountain above 1000 meters, or about 200 hectares) and creating Haiti's first private nature reserve. The land purchase is being organized by Philippe Bayard, president of SAH.

Component 3 Planned (as stated in the approved proposal):

Creation of a map of actual forests in the KBA Massif de la Hotte.

Component 3 Actual at Completion: A map of closed, original forest in the KBA was produced from satellite imagery by OSU foresters (subgrant).

Were any components unrealized? If so, how has this affected the overall impact of the project?

No components were unrealized.

Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.

The products were the 2014 Haiti biodiversity calendar (mailed to CEPF staff at Conservation International), Grand Bois Brochure and Fact Sheet (emailed to CEPF staff) and movie Extinction in Progress (at www.extinctioninprogress.net).

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

The complementary partnering with Haitian NGO SAH was a success, because the same conservation goals were shared by the two teams, and they worked effectively.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

The Penn State team was always working closely with the Haitian NGO SAH while in Haiti, and this was a successful strategy because we ended up learning from each other. For example we were able to see how SAH was able to obtain information (of conservation value) from local farmers and how our work was explained to them. In turn, SAH was able to learn our field methods for locating and identifying species.

Other lessons learned relevant to conservation community:

We learned that the approach of doing ecosystem threat assessment in extremely remote areas using a helicopter was feasible, and could be successfully linked to on-the-ground efforts by a local NGO, together providing conservation action exactly where it is needed, and quickly. And we learned that speed is crucial in countries like Haiti, where the last forests exist in small patches that can disappear in one season, placing greater importance on the use of helicopters in these unusual cases.

Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.

Donor	Type of Funding*	Amount	Notes
National Science Foundation	A	\$94,500	Co-funded first expedition and especially helicopter costs

**Additional funding should be reported using the following categories:*

- A Project co-financing (Other donors or your organization contribute to the direct costs of this project)*
- B Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project.)*
- C Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

This initial phase of the project (PHASE 1) was not designed to achieve this goal. It will be reported in the Final Report of Phase 2.

Summarize any unplanned sustainability or replicability achieved.

Not applicable.

Safeguard Policy Assessment

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

Not applicable.

Additional Comments/Recommendations

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

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*****If your grant has an end date other than JUNE 30, please complete the tables on the following pages*****

Performance Tracking Report Addendum

CEPF Global Targets

(Enter Grant Term)

Provide a numerical amount and brief description of the results achieved by your grant.
Please respond to only those questions that are relevant to your project.

Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from July 1, 2013 to May 30, 2014. (Attach annexes if necessary)
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.				Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?				Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.				
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.				
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.				

If you answered yes to question 5, please complete the following table

