OM 4.4.4

CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Environmental Awareness Group Inc. (EAG)
Project Title:	Offshore Islands Conservation Programme: Maintaining Rat-Free Islands for the Benefit of Antigua's Biodiversity and People
Date of Report:	31st October, 2014
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CEPF Region: Caribbean Islands

Strategic Direction: 1. Improved KBA management and protection

Grant Amount: $117,160

Project Dates: July 1, 2012-June 30, 2014 (extended to August 31, 2014)

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

During the funding period, the EAG was able to collaborate with several government bodies and local, regional and international civil society organisations who actively participated in the execution of project tasks. All government participation was in-kind support to the project.

1. **Ministry of Agriculture, Lands, Housing and the Environment (Government of Antigua & Barbuda) (MALHE).**The Offshore Islands Conservation Programme (OICP) worked closely with MALHE over the two years of the CEPF project. Specific agencies within MALHE with which the OICP worked were the Forestry Unit, the Environment Division, the Fisheries Division, the Plant Protection Unit, the Pesticides Control Board and the Development Control Authority. The Forestry Unit has responsibility for the terrestrial plant and animal life. The Fisheries Division has responsibility for the marine areas of Antigua and Barbuda, which includes the offshore island KBA in the North East Marine Management Area (NEMMA) (area in which this CEPF project was elaborated). The Environment Division is generally responsible for the environmental policies of Antigua and Barbuda. Development Control Authority (DCA) must grant authorization before any construction/development is undertaken anywhere in the country, and must ensure that all the correct protocols are followed, including the use of an Environmental Impact Assessment, when required. The Plant Protection Unit is responsible for safeguarding endemic and introduced plant species from diseases, and alien invasive plants and animals. The national Pesticides Control Board is responsible for authorizing the use of pesticides within the country, and monitoring the handling of such pesticides. This board was especially helpful in authorizing and monitoring the use of brodifacoum rodenticide for detecting and controlling alien invasive rats *(Rattus rattus)*.

   During the funding period all aforementioned MALHE agencies actively participated in different aspects of the project including attending training workshops, participating in project meetings, conducting fieldwork, authorizing permits, and representing the project on local and international levels. Environment Division staff presented the work that the

project has been doing to eradicate alien invasive species and safeguard local biodiversity at the Convention of Biological Diversity meeting in 2013 and GEF meetings in 2014, both in Canada. Through collaboration with this ministry, the EAG was able to garner the attention of the Minister of MALHE and the Prime Minister of Antigua & Barbuda, who both visited the project site in September, 2013.

2. **Ministry of Education (Government of Antigua & Barbuda).** Collaboration with this government body was crucial during the funding period as some of the project activities focused on educational campaigns focused on primary, secondary, and tertiary-aged children. During the funding period, many presentations were given to students allowing them to learn about the endemic (and in some cases, vulnerable or endangered) wildlife of Antigua and Barbuda, in addition to the factors affecting this wildlife's ability to survive. Complementing these presentations were field trips to the project site where students were allowed to interact with local wildlife (see here for further details). Students were also able to participate in training workshops and wildlife monitoring activities throughout the funding period.

3. **Fauna & Flora International (International Non-Profit Organisation) (FFI).** FFI managed the sister project to this EAG CEPF project, entitled Islands Without Aliens: Building Regional Civil Capacity to Eradicate Alien Invasive Species. This project assisted EAG to build up its conservation management competency in areas such as conducting restoration feasibility studies, conducting rat eradications, surveying wildlife and analyzing and presenting data. FFI was a constant presence throughout the funding period and gave technical guidance to the EAG. The project coordinator of the FFI – CEPF grant is Dr. Jenny Daltry. Dr. Daltry was a vital link to forging working partnerships and training opportunities between Antigua & Barbuda, Saint Lucia, Anguilla (at no cost to CEPF) and Barbados (at no cost to CEPF).

4. **Durrell Wildlife Conservation Trust (International Non-Profit Organisation) (DWCT).** DWCT were instrumental in providing technical assistance to the EAG, specifically for assisting in the recruitment of an eradication team leader for the Green Island emergency eradication in 2012 (please refer to the Pest Management Plan with Addendum and the Green Island Operational Plan for further details), provision of maps for the project site, guidance during the 2014 eradications and collaboration to submit a successful proposal of $17,000 to Net Trust.

Other organisations with which the EAG collaborated to execute CEPF targets were:

- **Anguilla National Trust** – Guidance during 2012 eradications
- **BirdsCaribbean** (formerly Society for the Conservation and Study of Caribbean Birds) – Dissemination of methods and lessons learnt during the funding period; provision of wildlife monitoring training to project coordinator and field officers.
- **Island Conservation** – reviewing feasibility studies
- **Island Resources Foundation** – General planning of the OICP

Conservation Impacts

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

The CEPF Ecosystem Profile for Caribbean Islands addresses major threats to Caribbean biodiversity. One of these threats, ranking highest at 3.7 on the Prioritized Threats in the Caribbean Islands Hotspot List (on a scale of 1-4), is that of **Invasive and Other Problematic Species and Infectious Diseases.** Of the species mentioned in the profile which inflict the most damage on Caribbean biodiversity, this CEPF project was able to address the threat of invasive

black rats *(Rattus rattus)* and (not mentioned in the profile) invasive **small Asian Mongoose *(Herpestes javanicus)*** on a total of 13 and 2 islands respectively in the offshore island KBA.

While undertaking conservation work on the offshore islands (biosecurity monitoring, wildlife surveys and monitoring, eradications) field officers, biologists and volunteers were afforded an excellent opportunity to address another threat highlighted in the Prioritized Threats List: **Human Disturbance**. This too, ranked relatively high with a score of 2.8. The interaction between the project team and visitors to offshore islands paved the way for information sharing where visitors could learn how seemingly innocuous acts can have swift and detrimental impacts on local wildlife.

Please summarize the overall results/impact of your project.

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

The long term Goal of this CEPF project is "Antigua's Offshore Islands effectively conserved for the benefit of indigenous biodiversity and local people".

Because this project's activities were undertaken in a 2-year period, it would too early to definitively state what the long-term impacts would be. However, based on targets achieved in the short-term, it can be confidently stated that we are on the correct path to effectively conserving our offshore island biodiversity.

Actual Progress Toward Long-term Impacts at Completion:

Progress will be highlighted below in the short-term impacts, but to highlight a few:

- The Environment Management Protection Bill, which EAG worked closely with the Environment Division and other stakeholders to elaborate, is soon to be passed (2015, expected). This is testament of the country's resolve to ensure that its biodiversity is properly conserved.
- The increase in the EAG's biosecurity management capacity successfully halted a reincursion of rats on one offshore island during the project period, and an incursion to another island, after the project period.
- Stabilized or increased populations of wildlife are strong indicators that the project has set the stage for the long-term impact to be achieved (see under Short-term Impact 5).

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

Actual Progress Toward Short-term Impacts at Completion:

Short-term impact 1:

At least two more islands cleared of alien invasive mammals, enlarging the country's rat-free area by as much as 22%, and enabling endemic and globally threatened species to recover.

Target Exceeded.

- A surprise incursion of rats on Green Island (45 hectares) in 2012 led to an emergency eradication, concluding the same year. This eradication maintained the original number of rat-free islands that were listed prior to the official start of the project. It also helped to **safeguard endemic species,** notably the **Critically Endangered Antiguan racer *(Alsophis antiguae)*** (largest population is found on Green Island), a **mixed colony of**

nesting Sooty, Bridled and Caribbean Roseate Terns *(Onychoprion fuscatus*, *Onychoprion anaethetus*, *Sterna dougallii dougallii***),** and colonies of **Red-billed Tropicbirds (*Phaethon aethereus*)**, among other important wildlife.

- Additionally, in 2014, the project was originally slated to eradicate two islands of invasive rats *(Rattus rattus)*, but were able to **successfully eradicate three islands of invasive black rats (Pelican, Codrington, and Guardhouse)** and **also of invasive mongooses *(Herpestes javanicus)* (Pelican and Codrington) (at no additional cost to CEPF). This eradication increased the rat-free area in the offshore islands KBA by 29% rather than the 22%** originally stated in the proposal.

Short-term impact 2:
10 of the country's most important islands (work area increased from 64.79 ha to between 70.49 and 79.37 ha) protected from rodent invasions, supporting globally significant populations of endemic and globally threatened species and sustaining a nature-based tourism industry worth many millions of dollars per year.

Target exceeded.

- Over the project period, biosecurity monitoring activities have been reviewed (by FFI and Wildlife Management International Ltd [WMIL]), adjusted and regularly scheduled to maintain early detection should any rats, mongooses or other alien invaders attempt to colonize rat-free offshore islands. **The field officers have since detected and stopped rats from invading** one offshore island during the project period, and one offshore island outside the project period.

- Following the eradication of Pelican, Codrington and Guardhouse Islands, an inspection of the islands one month later revealed regionally uncommon **Least Terns (*Sternula antillarum)* pairing off to nest** on a limestone plateau in healthy numbers. No nesting seabirds had been previously recorded on Pelican Island. Green Island, which was more recently restored (2006) than other islands (e.g. Great Bird Island in 1995) has a strong **population of Sooty, Bridled and Roseate Terns as well as the world's largest population of Antiguan racers.**

- Permanent rodent detection stations were installed on Guardhouse, Pelican, and Codrington Islands (**65 stations) and an additional 40 stations** on Green Island to aid in early detection of Alien Invasive Species (AIS). To complement the use of the stations, field officers are also using **camera traps, tracking tunnels, and chocolate flavored plastic cubes.**

- To date, **13 of the country's most important islands remain rat-free** (Codrington, Pelican, Guardhouse, Green, Great Bird, Rabbit, Redhead, Lobster, Lobster Extension, Galley Major, Galley Minor, Unnamed and York) to allow for the continual recovery of local wildlife. The newly restored islands have increased the **area of restored islands from 64.79 ha to 83.85 ha.**

- **Rising visitor numbers of >10%** (from approximately 50,000 to approximately 70,000 per annum) to the offshore islands during the project period (according to tour operator estimates) indicates that the offshore island KBA is **supporting nature-based tourism.** This increase in visitor numbers is also highly beneficial for the local economy.

Short-term impact 3:

Antigua's leading environmental NGO, the EAG, gains increased capacity to sustain and expand the alien invasive species control programme, and to meet other pressing conservation needs in Antigua and Barbuda, as assessed by the CEPF Civil Society Tracking Tool.

Target achieved.

- EAG, with technical assistance from FFI and DWCT, was able to **execute two sets of eradications (Green Island in 2012 and Pelican, Guardhouse and Codrington Islands in 2014)** and now have the internal capacity to undertake future eradications. EAG was recently **approached by a private offshore island land-owner to eradicate rats from his island** on the Western coast of Antigua. **EAG is also preparing for its largest eradication yet, on Redonda**, hopefully to be undertaken at the end of 2015, beginning of 2016. Both islands, one of which is located in the Offshore Islands KBA, are home to populations of birds and reptiles. Redonda is home to globally significant populations of birds and reptiles while more wildlife monitoring is needed on Maiden Island to determine the status of wildlife found there.

- EAG's capacity to expand AIS control programmes and to meet other pressing conservation needs has **increased as evidenced by the points scored on the Civil Society Tracking Tool** (from 67 at the beginning to 77.5 at the end) at the beginning, middle and end of the project. (See Dropbox for further information).

Short-term impact 4:
The general public, government decision-makers and other stakeholders gain greater knowledge, understanding and appreciation of the importance of the Offshore Islands KBA for biodiversity and livelihoods, and learn why and how they can help prevent the spread of alien invasive species.

Target achieved.

- The entire country was regularly exposed to education on our country's special biodiversity, and the threat that it faces**. Exposure was gained via regular postings on social networks, weekly newspaper columns, and frequent television and radio interviews**. (See Dropbox and YouTube page for a sample of media coverage).

- The **floating classroom** was a popular initiative, which allowed students to travel to the offshore island KBA and interact with wildlife found there. In many cases, it was the first time the students had been on a boat, much less to see an offshore island. Additionally, >90% of the students taken out had never been bird-watching, ever seen an Antiguan racer, or understood the threat of invasive species. This initiative transported **over 550 students** to the KBA during the project period.

- **Two Workshops** were carried out with tour-operators, highlighting the importance of keeping the offshore islands AIS free, to support their livelihood. They were also educated on some of the threatened or endangered species found in the KBA including but not limited to mangroves, Antiguan racers, and several species of birds.

- Local volunteer Ginny Fields carried out an in-class reading exercise where she would attach herself to a local government primary school and read to 3rd graders about environmental topics related to our country. Some **topics covered the mangroves, the Antiguan racer, and species of birds including West Indian Whistling-Ducks and Red-billed Tropicbirds.**

- Project coordinator, Natalya Lawrence made over **30 presentations to schools**, **community groups and government officials** during the project period, making reference to biodiversity found on the offshore islands and the threat of AIS. (See Dropbox for sample photos)

- **Meetings were held with the Ministry of Agriculture, Lands, Housing and Environment** several times throughout the project period and a special tour to the project site was done on the 20th September, 2013 with the country's **Prime Minister and Minister of Agriculture, Lands Housing and the Environment.**

- **Educational material printed – educational brochures and calendars (**distributed in 2013) – are used in schools and in tour-operator companies.

Short-term impact 5:
The continued, measurable, significant and sustainable recovery of wildlife populations in the Offshore Islands KBA, including a measurable increase in the following globally threatened, near-threatened and endemic species:- 1. Antiguan Racer Snake – Alsophis antiguae (national endemic, CR)* 2. Golden Talinum – Talinum cf. fruticosum (KBA endemic, meets criteria for VU)* 3. Hawksbill Turtle – Eretmochelys imbricata (CR) 4. Green Turtle – Chelonia mydas (EN) 5. Leatherback Turtle - Dermochelys coriacea (CR) 6. West Indian Whistling Duck - Dendrocygna arborea (regional endemic, VU) 7. White-Crowned Pigeon - Patagioenas leucocephala (regional endemic, NT)* 8. Antiguan Ground Dragon – Ameiva griswoldi (national endemic, qualifies as EN) 9. Antiguan Spotted Anole – Anolis leachii (national endemic)* 10. Caribbean Brown Pelican – Pelicanus occidentalis occidentalis (regional endemic, West Indian populations listed as EN) 11. Lignum Vitae – Guaiacum officinale (regional endemic, EN) * Indicate fast-breeding species for which we predict a 10% or greater increase in population size in the Offshore Islands KBA by project end (mid 2015).

- Biodiversity Monitoring has shown stabilization/increase in some populations, which is very encouraging:
    - **The Antiguan racer population has increased to approximately 1020 snakes, a >20%** increase since 2011.
    - **New colonies of birds** are being recorded on Green and Pelican Islands (Sooty, Roseate and Bridled Terns on Green, and Least Terns on Pelican) while the remaining islands show healthy populations of nesting sea and landbirds: Rabbit Island registered a **50% increase in Brown Noddies (*Anous stolidus).***
    - The beautiful **Golden Talinum *(Talinum cf. fruticosum)*** once thought extinct, is more evident, especially on Great Bird Island.
    - **Critically Endangered Hawksbill Turtles (*Eretmochelys imbricata)* showed a >11% increase in females and hatchlings** between 2011 and 2012. (Data for the current (2014) turtle nesting season are currently being collected by a collaborating agency, the Jumby Bay Hawksbill Project).
    - **Fixed-point photography** (refer to Daltry, J.C. (2014) Making pictures that speak a thousand words. Capacite, 9, 4-5) **shows that the vegetation biomass continues to increase on islands that have had rats and mongooses removed**.
    - Anecdotal evidence suggests that sightings of the Vulnerable West Indian Whistling-duck *(Dendrocyna arborea)* are more common now than at the start of the project funding period. Our field volunteers, who camp on the islands, are able observe the ducks more freely in the early morning and late afternoon.

The Offshore Island KBA in general is becoming increasingly more attractive to visitors because of the re-establishment of local biodiversity. Great Bird and Green Islands are popular because of the Antiguan racer, the Antiguan ground lizard (*Ameiva griswoldi)* and nesting birds such as

Red-billed Tropicbirds and a variety of terns. Rabbit Island has become popular a popular spot to view its seabirds, including nesting Brown Noddies, as has Maiden Island for White-crowned pigeons (*Patagioenas leucocephala)*. Rabbit and Redhead islands are a popular sail-by (for tour operators wanting to promote bird tourism) specifically to observe Caribbean brown pelicans (*Pelicanus occidentalis occidentalis)*, from a safe distance.

Short-term impact 6:
A further $100,000 secured to support the core operational costs of EAG and conservation actions in the Offshore Islands KBA after the CEPF project ends.

Target exceeded.

- Returning and new funders include (but not limited to) **Disney Worldwide Conservation Fund, Conservation Leadership Programme** (specifically for work on West Indian Whistling-Ducks)**, Mohammed bin Zayed Species Conservation Fund, Net Trust, and the Eastern Caribbean Marine Managed Areas Network**. This does not include in-kind support from the **local government, EAG, Syngenta and regional and international partners**. **Please see Additional Funding** for more funding details.

Short-term impact 7:
At least 10% of Antiguan general public, and at least 60% of regular visitors to the offshore islands are aware of the islands' rat-free status.

Target achieved

In addition to methods mentioned in Short-term impact 4, Natalya Lawrence was able to make presentations to the general public at the March, 2014 EAG monthly meeting.

Throughout the grant period, anecdotal reports proved that residents were becoming more aware of threats of invasive species. Taxi drivers would often greet AIS specialists who were passing through the island with comments about them observing a certain endangered animal recently. They would also ask the specialists questions such as "How are the racers doing on Great Bird Island"

The project coordinator constantly comes into contact with persons who inquire about the possibility of eradicating rats from the mainland.

Throughout the funding period, the project coordinator has received several emails, phone calls and visits from persons living outside of Antigua but became aware of the work that EAG carries out including on the Offshore Islands KBA. They normally want to find out how easy it is to spend time on the restored islands, and if there was any possibility of volunteering with the project during their time in Antigua. In the latter part of Year 2, the project coordinator was able to realize one such wish by having a volunteer, Freija Mendrik, work on the project for a few weeks.

It is encouraging to note that people are paying attention to the threats that invasive species pose on local wildlife.

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

Successes:

- **The rapid recovery of local wildlife** on newly restored offshore islands is instrumental in demonstrating the value of maintaining AIS-free islands to government decision-makers. This encourages advancement to achieve the project's long-term impact.

- **The continued support from the local government** was key to smooth running of the project. Because of the relationship that EAG has developed with the government, it has granted EAG the remit to conduct conservation work within the offshore island KBA. The relationship also eased the strain of **importing equipment and rodenticide** by granting permits, and waiving customs duties.

- **The continued support from Syngenta** (donation of rodenticide) tremendously **eased financial costs** that would have been incurred should EAG had been required to purchase the rodenticide. The supply of rodenticide **ensured that the project had enough bait to cover biosecurity monitoring and the rats eradications in 2012 and 2014.**

- **The commitment shown by project team,** including the project coordinator, project partners, field officers, field biologists, and EAG's administrative assistant ensured that the project activities ran smoothly and on-time as much as was possible.

- **The continued support from project partners** was instrumental in ensuring that project targets were delivered and to high standards. **FFI was the primary negotiator for the shipment of rodenticide from Syngenta. FFI also gave guidance throughout the entire project period**, especially during the feasibility and eradication stages. **DWCT was instrumental in recruitment of personnel for the emergency eradication, and was also the key link that allowed EAG access to Net Trust funds.**

- **Tour-operator training was well-received** both times, with tour-operators requesting future in-the-field training to aid in identifying endemic and invasive species.

- **The 2013 educational calendars, which CEPF supported, were again, well received on the local, regional and international level.** The calendar is an important educational tool which raises awareness of Antigua and Barbuda's local wildlife, and the current and in some cases, constant threats that they face. The calendar is now 100% locally financed, with local supporters in some cases exceeding support that was initially requested. These calendars will again be primarily distributed in schools and also in tourism centres as an important learning tool.

Challenges

- **Reincursion of black rats on Green Island.** Green Island, one of the larger offshore islands (45 ha) and home to the largest population of Antiguan racers, was reinvaded by rats at the start of the CEPF project. The eradication cost $50,000 and occurred during peak hurricane season with storms hampering some operations. This unexpected spending made a huge mark on the project's finances. However, in spite of the challenges, EAG reaped benefits as well:
    - Green Island remained rat-free
    - EAG volunteers and field officers honed their biosecurity monitoring skills
    - EAG quickly developed its institutional capacity since, though aided, it spearheaded the organization of restoration efforts.

- **Lack of clarity regarding the ownership of some offshore islands** resulted in wasted resources as Crump Island was initially earmarked for restoration in Year 2 of the funding period. An operational plan was developed for it after research and extensive

consultations were held with stakeholders including key government stakeholders. At the last moment, rumours that Crump could be developed prompted a switch to restore Pelican (with the owner's permission), Codrington and Guardhouse Islands (with MALHE's permission).

- **Threat of development.** In June 2014, with the installation of a new government, there was an almost immediate threat that offshore islands in the KBA would be developed. Several islands including Crump Island are earmarked for development by a Chinese development company – YIDA. Since this has become public knowledge, EAG has met with the new Minister of Environment and with the new Prime Minister and discussed collaboration with the new government to ensure that any development that does take place in the KBA is done in a sustainable way. This is to minimize or nullify any negative effects that would affect wildlife during and after development.

- **Security issues during Year 2 eradications.** Because of concerns about persons illegally cultivating marijuana on one of the offshore islands, it was deemed wiser to cancel camping on the offshore islands, and have the team ferried daily to and from the work-site. Tour-operators were willing to assist with transportation of the eradication team, but the two schedules didn't coincide and the tour-operators were not able to help in the end. This greatly increased transportation costs, but ensuring the safety of the eradication team was priority.

Were there any unexpected impacts (positive or negative)?

In Year 2 of the project period, tour-operators from Wadadli Cat Tours readily seized the opportunity to learn more about the local biodiversity and means of identifying invasive species (see activity 5.2). They were also keen to learn how they could incorporate anecdotal stories of the plants and animals into their interactions with their guests. This was especially encouraging because at the last moment, the group had to be split into two groups based on tours, and they all remained, listened, and participated even after a hard day of touring with guests. The enthusiasm was tangible and they have requested follow-up in-the-field training which is currently being arranged by the project coordinator.

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: Alien invasive rodents, which seriously threaten biodiversity and livelihoods, are successfully prevented from reinvading 8 islands in the KBA (Rabbit, Redhead, York, Green, Great Bird, Lobster, Galley Major and Minor Islands).

Component 1 Actual at Completion:

Exceeded. Please see activities for details.

Activity 1.1: Review and improve current rodent detection and monitoring procedures, giving refresher training to 2 present field officers, and train at least 5 more persons.

By October, 2012, biosecurity methods were reviewed by WMIL and FFI with new techniques being implemented before the end of Year 1. In addition to using rodenticide in the form of waxy blue blocks, field officers tested other techniques such as wax tags (peanut butter scented wax), chocolate flavoured wax (this wax melted quickly in the tropical heat and thus the formula was

later modified to chocolate flavoured polyurethane plastic, which was seemingly irresistible to rats but not as attractive to crabs), tracking tunnels (any animal walking through the tunnel would leave tracks to later be identified), camera traps, and pvc tubes lined with cellophane tape that rodent hairs could attach to should a rodent traverse the tubing. In 2013, the new methods were reviewed by Dr. Jenny Daltry of FFI with guidance from Elizabeth Bell of WMIL. Techniques were fine-tuned as necessary. One benefit derived from implementing these new techniques was that field officers were able to use less rodenticide. Some of these monitoring techniques were applied during the 2014 eradication in Year 2.

Another complement to the biosecurity monitoring activities was a guide produced by WMIL on behalf of FFI, which detailed detection of species by droppings, toothmarks, fur and footprints.

>25 persons were recipients of training in rodent detection and monitoring procedures throughout the 2-year funding period. This included colleagues from around the region: 3 persons from Saint Lucia, 1 person from Saint Kitts, 1 person from Saint Vincent, 1 person from Guyana and 1 person from Dominica.

Activity 1.2: Maintain 5-weekly bait station monitoring on at least 8 offshore islands in the Offshore island KBA.

This activity was done consistently throughout the project period, and was coupled, in many instances with biosecurity monitoring training (see activity 1.1), reviewing of biosecurity methods, and when possible, biodiversity monitoring. Several times during the project period, surprise checks for adherence to guidelines outlined in the Pest Management Plan (PMP) (see Dropbox link for details of the plan) were conducted. It was encouraging to note that by the end of the project period, adherence to the PMP became "second nature" to the field officers.

It is worthy to mention that by the beginning of year 2, field officers were able to stop an incursion of rats on York Island, proving that their AIS detection and control skills had been aptly honed.

By the end of Year 2, bait station monitoring was actively being carried out on 11 islands, bringing the total of restored islands to 13.

Activity 1.3: Hold 4 stakeholder meetings with project partners, landowners, and villagers to discuss the process and outcomes of the invasive species monitoring and control methods and sensitise them to why and how they can help prevent the spread of black rats and other alien invasives.

8 stakeholder meetings were held during the project period. Most notably, at the beginning of the project, meetings were held with landowners (for offshore islands), local government (Development Control Authority, Pest Control Board, Forestry, Fisheries, Environment) and with OICP partners at the beginning of the project (July 9 and 24th, 2012). This was followed with mid-term planning and evaluation meetings held with partners and government stakeholders in August 2013. Finally, project conclusion meetings were held with members of the new government in August (Minister of Health & Environment), September (Prime Minister) and October (Forestry Unit and Environment Division).

Additional informal meetings were held with tour-operators, and some fishers during the course of the project.

Please see progress reports for more details on stakeholder meetings held to discuss the process and outcomes of invasive species monitoring and control methods.

Activity 1.4: Project Coordinator liaise with FFI, Syngenta (bait manufacturer) and Environment Division to expedite the donation and importation of an emergency reserve

of bait. Semi-annual checks done by project coordinator to ensure adequate supply of rodenticide maintained by project.

Through FFI, EAG was able to secure a substantial donation of rodenticide from manufacturer, Syngenta. The rodenticide was authorized by the Pest Control Board, and duties were waived on its importation. This was all negotiated, received and stored months before the intended target deadline.

During recent meetings with FFI, Syngenta has indicated that they are happy to continue supporting the work to control invasive species in the Caribbean islands, and are more than willing to fund future eradication work on one of Antigua and Barbuda's largest offshore island (Redonda, measuring 210 acres)

Activity 1.5: Continue monitoring Antiguan Racers, Birds, Lizards, Vegetation and visitors to determine and publicly demonstrate the impacts and hence importance of keeping these islands rat-free.

Racers were monitored three times during the project period and numbers show that the snake population has remained steady with over 1,000 individuals, a marked increased from 824 in 2010. (Project reports will be made available at the Dropbox).

Birds were monitored several times during the course of the project period with specific monitoring of winter and summer nesting birds carried out twice. Birds continue to show a steady increase in population on the offshore islands. An excel file is available in the Dropbox.

Vegetation was monitored using fixed-point photography several times a year on the three largest islands, supplemented with updated GoogleEarth images for the others.

Component 2 Planned: Implementation and evaluation of Pest Management Plan throughout the life of the project in compliance with CEPF safeguard policy

Component 2 Actual at Completion:

Achieved. Please see activities for details.

Activity 2.1: Carry out detailed checks (once per quarter) to ensure that field officers are strictly adhering to the stipulations of the pest management plan. The checks will not be announced, and will be done by the Project Coordinator, or Project Partner with experience in handling brodifacoum.

This activity was executed at least once per quarter but in some instances, more than once. Field officers have done a great job at adhering to the PMP and behavioural improvements were noted by the end of the project period, e.g. The field officers are now completely comfortable wearing gloves to handle bait, and have even purchased new gloves they found to be less cumbersome but just as protective. Sample PMP spot-check forms can be viewed here.

The eradication team leader and all eradication volunteers for the 2014 eradication complied with the guidelines stipulated in the PMP, including the installation of visible signage indicating the application of bait on the islands, and the period of application.

Activity 2.2: All Rat Eradication Feasibility Plans, Operational Plans, Biosecurity Protocols and other technical outputs from this project are subject to peer-review by independent experts.

Organisations that assisted in reviewing the aforementioned documents are Food & Environment Research Agency (FERA), WMIL, DWCT, and Island Conservation.

Component 3 Planned: At least two more islands within the Offshore Islands KBA cleared of alien invasive rodents for the lasting benefit of biodiversity and livelihoods, and EAG gains the technical capacity to lead future eradications

Component 3 Actual at Completion:

Exceeded. Please see activities for details.

Activity 3.1: EAG staff conduct Feasibility Study for eradicating rats from Codrington, Smith, and Pelican Islands, with guidance and mentoring from FFI. (please refer to FFI proposal [60908] activity 5.1)

Feasibility studies were carried out for 4 offshore islands (Pelican, Crump, Smith and Codrington) which were more than what were originally planned. However, this was due to the fact that eradications plans had to be adjusted and moved to different location.

Methods outlined in the studies were influenced by the toolkit from the Pacific Invasives Initiative (supported by CEPF), but were adjusted to suit the local context of work.

Please visit Dropbox to review copies of the feasibility studies.

Activity 3.2: Rat eradication operational plan prepared by EAG and FFI, through further fieldwork and stakeholder consultations, and peer-reviewed by global Island Eradication Advisory Group (please refer to FFI proposal [60908] activity 5.2)

Karen Varnham, Elizabeth Bell and Dr. Jenny Daltry mentored EAG personnel in the preparation of operational plans for eradicating rats and mongooses from Green, Pelican, Smith, Codrington, Guardhouse and Crump Islands. Ultimately, the plan prepared for Crump Island was not used since eradication focus shifted to Pelican and its surrounding islands (Guardhouse and Codrington) which were eradicated of rats and mongooses before the end of Year 2. It was also decided to postpone eradication of rats from Smith Island during the project period due to funding and time constraints, but the project was still able to surpass its target of eradicating two islands of invasive rats.

Smith, Maiden Island West and Redonda are earmarked for future rat eradications.

Activity 3.3: Additional personnel appointed by EAG, and rat eradications carried out with training and supervision by FFI.

Following the procurement guidelines, EAG advertised the position of eradication team leader in December, 2013. FFI, DWCT, Island Resources Foundation (IRF) and many others assisted in disseminating information on the position. In January, 2014, after a careful review of 6 candidates, Sarah Havery was selected to lead the eradication team. Sarah then worked along with the project coordinator to select a team of core volunteers, for the eradication work which began on the 15th March, 2014.

Activity 3.4: Install permanent bait stations on the islands and incorporate them into the routine monitoring schedule as set out under Component 1.

After completion of rat and mongoose eradications field officers swiftly installed a total of 65 permanent bait stations on Pelican, Codrington and Guardhouse Islands, with an additional 40

installed on Green Island. The newly restored islands have since been incorporated into the biosecurity monitoring schedule.

Activity 3.5: Issue local press release to sensitize local stakeholders to the islands's rat-free status, and encourage their cooperation to maintain this.

Press releases in the local paper and in the CAPACITE newsletter, volume 9, complemented by radio interviews, and meetings with stakeholder ensure that the public is aware of the rat-free status of the islands. A recent press release informing residents of the conclusion of the CEPF project, and reiterating the work done by the project, will be published in the local paper in the very near future. A copy of the release is available in Dropbox and the scanned copy of the published article will be uploaded to Dropbox following publication.

Component 4 Planned: The institutional capacity of the EAG to address current and future biodiversity conservation needs in the Offshore Islands KBA is strengthened, with resources in place to continue this work after the CEPF project ends.

Component 4 Actual at Completion:

Achieved: See activities for details.

4.1: Assess EAG capacity via the CEPF tracking tool at the beginning, middle and end of the 2 years.

The CEPF tracking tool was an excellent means of tracking the EAG's growth over the project period. It identified weaknesses, opportunities, and tracked the EAG ultimate 10 point improvement over the funding period.

4.2: Revamp and launch the EAG Strategic Plan, in collaboration with the EAG board of Directors, members, core staff, and volunteers.

Facilitated by Sara Calcada of FFI, the EAG directors, staff, and key volunteers, in Year 1 were able to strategize and ultimate launch an updated strategic plan. During the sessions, the EAG learnt what we were strong at, areas for improvement, and decided on a way forward. This activity was further complemented by the Financial Sustainability Plan which followed in Year 2.

4.3: Revamp and launch the EAG business plan (financial sustainability plan), in collaboration with board of directors, members, core staff and volunteers.

Facilitated by Sara Calcada of FFI, the EAG directors, staff and key volunteers examined the EAG's financial situation and discussed the EAG's needs. The EAG learnt how to determine donor-dependency, and brainstormed ideas to bring down the figure. We also learnt how to determine our length of survival, should no external funding become available.

During the elaboration of this plan, Sara also covered fundraising topics including proposal writing, and had the participants break up into groups to conduct practical exercises.

Both the Strategic and Business Plan were discussed by the President at the EAG's recent Annual General Meeting.

Since launching both plans, EAG has since implemented several low-scale financing mechanism such as a corporate member drive and regular, paid bird-watching trips.

Activity 4.4: EAG staff and associates learn how to write and submit at least 5 grant proposals, with mentoring from INGO partner staff.

During the project period, the EAG received training in proposal-writing (ref. 4.3 and 4.5) from Sara Calcada and Dr. Jenny Daltry, both of FFI, and from the Conservation Leadership Programme. Armed with updated writing-skills, the EAG, during the project period, has submitted >15 proposals, including:
-Whitley Award for Nature (Twice) – Unsuccessful, but invited to try again.
-Future for Nature (Twice) – Unsuccessful, but invited to try again.
-Equator Initiative - Unsuccessful
-Zoos Victoria - Pending
-ECMMAN - Successful
-Net Trust - Successful
-Conservation Leadership Programme - Successful
-Mohamed bin Zayed Species Conservation Fund (Twice) – Successful both times
-Caribbean Marine Biodiversity Action Project (USAID) - unsuccessful
-Rufford Small Grants (Twice) – One successful and one pending

We are aware that conservation grants are highly competitive and are careful to write sound proposals that fit our conservation strategies.

Some successful grants are listed in the "Additional Funding" table.

Activity 4.5: EAG staff and associates learn how to write and submit at least one scientific paper on the methods and results of rodent control, with mentoring from partner staff.

At the end of Year 1 and the beginning of year 2, EAG directors, staff and volunteers were recipients of training delivered by Dr. Jenny Daltry of FFI covering scientific writing, with additional training in proposal writing, data analysis, and biodiversity monitoring and surveying techniques. The participants had practical and applicable exercises to strengthen training received.

During the project period, one scientific paper was published, with two authors from the EAG:

Daltry, J.C., James, K.J., Otto, A. & Ross, T.N. (2012) Evidence that eradicating black rats has boosted the recovery of rare reptiles and seabirds on Antiguan islands. In *Biodiversité Insulaire: la Flore, la Faune et l'Homme Dans les Petites Antilles* (eds J.L. Vernier & M. Burac), pp. 141-145. Direction de l'Environnement, de l'Aménagement et du Logement de Martinique et Université des Antilles et de la Guyane, France.

An additional paper which focuses on the methods used and results obtained during the 2014 eradication is being prepared, to be submitted to *Oryx—the International Journal for Conservation*.

Two shortened pieces have been submitted to Oryx and should be featured in the 2015 issues of the journal.

Component 5 Planned: By the end of the 2 years, environmental outreach campaigns throughout the country serve to strengthen public understanding and cooperation in preventing the spread of alien invasive species.

Component 5 Actual at Completion:
Achieved. See Activities for details.

Activity 5.1: Organize and carry out 24 public outreach educational programmes by offering floating classrooms to students, community groups, and government agencies,

focusing on the importance of keeping the offshore islands free from alien invasive species.

Educational outreach programmes are fun means of learning serious issues. The floating classroom was hugely popular during the project period, and >24 of this slated activity was conducted. The project coordinator was often the recipient of many hugs, 'thank-yous', and phrases of 'this is the best field trip I have ever had' at the end of a long, but rewarding day out in the field with school children.

Church and social groups also participated in this activity.

It is worth mentioning that the Ministry of Education strongly supported this initiative throughout the project period and some Ministry officials and Principals (some of whom were initially afraid to go on a boat, or see/hold a snake) also participated in this activity.

2 secondary schools from Guadeloupe also participated in the Floating Classroom activity (at no cost to CEPF) by the end of Year 2.

Other fun but educational activities that engaged residents, encouraging them to learn more about wildlife and the threat of AIS were the celebration of International Migratory Bird Month, and the Caribbean Endemic Bird Festival. Activities included presentations, games, bird-watching activities, and television and radio interviews. Tokens for both these festivals were provided by BirdsCaribbean.

Finally, in September, 2013, the EAG had the privilege of hosting the Prime Minister and the Minister of Agriculture on a tour of the offshore islands. During this trip, both officials met their first Antiguan racer, toured the islands, observed birds, and were reminded of the threats that all the wildlife that surrounded them faced: AIS, human disturbance, and inappropriate forms of development.

Activity 5.2: Organize and implement 2 tour-operator workshops for local operators who use the Offshore Islands KBA to enable them to become better able to educate visitors and encourage environmentally responsible behaviour on the offshore islands.

In November 2012, the first tour-operator workshop was held and training sessions centred around wildlife found in the KBA, including seabirds, landbirds, and reptiles. The participants were given the history of conservation work on the offshore islands, so that they could understand/be reminded of/appreciate the recovery of the wildlife in the KBA. They were also made to reflect on the link between healthy ecosystems and their livelihood. Finally the threat of AIS was discussed, and linked to devastation of fragile ecosystems, which would in turn affect their livelihood. Operators from the 4 of the 5 most popular companies operating in the project work site plus one leading hotel employee benefitted from this training.

The next tour operator workshop was postponed to the latter half of Year 2 due to availability of tour-operators. This time, the project coordinator took a different approach and took the workshop to the operators. This particular workshop targeted specific companies, starting with Wadadli Cats. This workshop covered essentially the same topics as the previous one, but this was acceptable due to the high employee turn-over rate that these companies experience. The interaction was a learning experience for both parties, and at the end of the training, the operators requested field training as well. It is worth mentioning that 3 captains and all their crew were present at this training (split into two sessions at the last minute).

The other two companies slated to receive training are Treasure Island Cruises and Island Safari.

Activity 5.3: Produce popular educational material (1200 brochures, 1000 environmental calendars) portraying the wildlife of the offshore islands, and what impact invasive alien mammal eradication has had on the survival of such wildlife.

Educational brochures and calendars were printed at the beginning of Year 2 and have been used in schools, in government offices, and in tour-operator companies. Both the brochures and calendars raise awareness on local wildlife, the conservation work that was invested to ensure that local biodiversity flourished, and the serious, negative effect that AIS can wreak on local wildlife.

Due to their popularity, another edition of calendars has been produced by the EAG, and for the first time, that initiative was completed funded by local sponsors.

To complement the use of brochures, the EAG will also print educational posters to be used primarily in schools, community centres and in tour-operator companies. These will be printed under another grant obtained by the EAG.

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

All components of the project were realized. It should be mentioned that the EAG received a 2-month extension on the project period to ensure that all components were satisfactorily realized.

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

- Project Brochure
- Project Calendar
- EAG Calendar
- Feasibility Study – Crump Island
- Operational Plan – Green Island
- Operational Plan – Crump Island
- Technical Report – Pelican, Codrington and Guardhouse Islands
- Biosecurity Monitoring Data Sheet

Please find these and other reports located here.

Please note that in the case of the Feasibility Study, the Operational Plans and Technical Report, the use of the CEPF logo must be authorized before these documents can be circulated.

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)

Positive:

- **The collaborative and dedicated spirit of project partners** including the government partners allowed for the project to develop without major setbacks. The greatest setback encountered was during project implementation phase, when at the last moment the island earmarked for eradication had to be changed, due to possible development plans. This is explained further in Project implementation.

- The fact that **the project built upon previous work** in the Offshore Island KBA eased the complexity of the design process as the project team had previous experience working in the project site.

- There were **no major start-up costs** for the project because it was not an entirely new one, but one that had built upon previous work.

- **The methods and technology** used in this project to detect and eradicate rats were ones that have been tested worldwide. The project team benefitted from receiving mentorship from organisations (FFI, WMIL, DWCT) with staff that have led and/or participated in successful rat eradications across the world.

- The project team, and especially the core partner advisors had **prior professional experience with Alien Invasive Species Detection and Control methodologies.** Coming into the project with this experience was vital to the successful implementation of some project activities.

Negative:

- **Technical report preparation and review took a longer time than was estimated.** Should some compensation have been given to reviewers, this could have possibly sped of the review stage of report completion.

- **The line of communication between the grantee, donor and the Regional Implementation Team (RIT) was not clearly defined**. It was not clear to whom certain questions, concerns, or clarifications needed were to have been addressed. This was not a major issue in any way but the project coordinator was hesitant to trouble everyone, every time for each issue that may have arisen.

- **The 30-day limit to submit financial reports was quite challenging**, especially because in most cases, the bank statements arrived the day before (in some cases, the actual day) the report was due. In some instances, the project coordinator had to expend funds (at no cost to CEPF) to receive (not very comprehensive) copies of the finances. In spite of this, for the most part, the reports were submitted on time.

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

Positive:

- The **collaborative spirit of all persons** involved in the elaboration of this project created an atmosphere of positivity and constant motivation which promoted productivity, even under trying conditions.

- **Constant communication, guidance and information sharing** between project partners and stakeholders greatly assisted in achievement of targets. As can be noted, there were no major or unjustifiable delays in achieving any of the project deliverables.

- **Well-delineated tasks nullified duplication of/gaps in work**. Every member of the project team was completely aware of his/her particular responsibilities.

- **The project team was able to quickly adjust and adapt to inevitable changes** that would occur during project implementation. For example, the core eradication team was able to complete the 2014 eradication on time in spite of the fact there were unexpected reductions in the size of the core team, and also that camping had to be canceled due to safety concerns.

Negatives:

- Although much research and stakeholder collaboration were invested in selecting Crump Island for eradication, plans had to be abandoned based on news received of possible development. Unfortunately, this news had come as a surprise to even high-level, dependable staff within the government, and thus the whole situation could not be avoided. This meant that some effort was wasted as both a feasibility study and an operational plan were prepared for a planned eradication of rats, mongoose and goats from Crump Island. The efforts were not completely wasted as we now have a greater understanding of the biodiversity found on Crump Island. EAG has discussed working along with developers to ensure that risk to biodiversity is minimized, and Crump could possibly be used as a demonstration site to show how sustainable development and thriving ecosystems can co-exist.

- When one of the islands undergoing eradication was also earmarked by persons for **illegal marijuana cultivation**, security became an issue and camping during the eradication was canceled. This increased the travel budget line as the eradication team had to be ferried daily to and from the work site. Thankfully, though there was a dramatic increase in one budget line, EAG had been the recipient of much in-kind contributions throughout the project period, allowing for ease on some of the other budget lines. Donations of equipment, time, material and expertise can be reviewed in the progress reports submitted throughout the duration of the project.

Other lessons learned relevant to conservation community:

- A fact that was known before but was reinforced during this project is that **stakeholder engagement and support are key to successfully executing and completing projects**. It was important that the project effectively group stakeholders according to their interest, impact, influence, and power in order to identify those groups who needed to be monitored, reported to, kept informed, and kept satisfied.

- **Biodiversity on small offshore islands is able to quickly and visibly recover** once survival pressures (AIS, human disturbance, unsustainable development) are removed. This was observed a month after the 2014 eradications when Least Terns were observed nesting

- **Mongooses can be easily eradicated using live traps**. Mongooses were eradicated from both Pelican and Codrington Islands during Year 2 of the funding period, and this was the first case of such eradications being undertaken in the country. The methods were recorded to be used as a reference for future mongoose eradications on other offshore islands in Antigua and Barbuda and even in the wider Caribbean region.

- **The use of chocolate scented polyurethane plastic** blocks was a highly effective monitoring tool. The original tool was chocolate scented wax blocks, but these did not stand up well in Antigua and Barbuda's tropical climate. Eventually, plastic was used

and this was developed and fine-tuned over the course of the funding period. The end result was a product that was hardy, light-weight, easily made, and easy to handle and install. It is seemingly generally unattractive to non-target species, but has been found to be irresistible to rats and mice. This new product has become a permanent element used in biosecurity monitoring and rat eradications.

- **International volunteers** can be extremely important to assist in the execution of project activities that need constant supervision and attention. Though several Antiguans assisted in the Year 1 and Year 2 eradications, it was challenging to maintain a steady local workforce who could remain and participate in daily, intensive work for months or even weeks at a time, and especially without receiving some form of remuneration to cover their time. All the local volunteers who worked on the eradication had full-time jobs or were in school and gave as much of their time as they could, but the core team that ensured that the activities were carried out daily were international volunteers.

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
BBC Wildlife Fund (To FFI) (2012)	Project Co-Financing	$ 4,875	For project activities in Antigua, chiefly biosecurity and monitoring of Antiguan racers.
Conservation Leadership Programme (To EAG) (2014 – 2015)	Grantee and Partner leveraging	$15,000	For conservation actions for the West Indian whistling duck in Antigua (including biosecurity and monitoring on Offshore Islands KBA)
Disney Worldwide Conservation Fund (to FFI) (2014 - 2015)	Grantee and Partner Leveraging	$ 4,200 (Antigua's financing)	Total applied for and received was $25,000, to be shared across several different Caribbean countries. Funded wildlife monitoring and outreach, but not actions on alien species.
Durrell Wildlife Conservation Trust	Project co-financing	$8,900	Conservative estimate of the value of staff time, insurance, offices costs and travel not covered by other grants.
ECMMAN (2014 – 2016)	Regional/Portfolio Leveraging	$ 97,527.32 (specific to Antigua & Barbuda)	Focus is to strengthen the management of the North East Marine Management Area. This Marine Protected Area coincides with the location of the Offshore Islands KBA.
Environmental Awareness Group (2012–2014)	Project co-financing	$45,000	Conservative estimate of the value of staff time, insurance, offices costs and travel not covered by other grants.
Fauna & Flora International (2012–2014)	Project co-financing	$14,725	Conservative estimate of the value of staff time, insurance, offices costs and travel not covered by other grants.
Ministry of Agriculture, Lands, Housing and the Environment	Project co-financing	$ 17,800	Conservative estimate of the value of staff time, insurance, offices costs and travel not covered by other grants.
Mohamed bin Zayed Species Conservation Fund (2014 – 2015)	Grantee and partner leveraging	$10,000	To continue conservation work in the Offshore Islands KBA after completion of CEPF grant.
Net Trust (2014 –	Grantee and partner	$17,000	To continue conservation

2015)	leveraging		work in the Offshore Islands KBA after completion of CEPF grant.
Syngenta plc	Project co-financing	$ 8,000	Conservative estimate of the value of rodenticide (including shipping) provided gratis to the project.

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.

- Antigua & Barbuda continues to share rat-eradication and rat-invasion prevention methods with our colleagues in other countries. Colleagues from Saint Lucia were able to participate in rat eradication feasibility studies in Antigua. They were also able to participate in the execution of an actual rat eradication on Pelican, Codrington and Guardhouse islands. They also worked along with EAG field officers as they conducted updated biosecurity monitoring procedures.

- The use of polyurethane plastic as an invasive predator indicator has been successfully implemented in Antigua and has since also been used in other countries including Saint Lucia and Anguilla.

- During the funding period, several opportunities presented themselves, where the Antiguan CEPF project team was able to share methods and benefits of rat eradications with colleagues from other countries. Some of these opportunities were as follows:
  - 2012 in San Salvador Bahamas, at a BirdsCaribbean workshop – Natalya Lawrence
  - 2013 in Grenada at the BirdsCaribbean conference – Natalya Lawrence and Dr. Jenny Daltry
  - 2014 in Saint Lucia – Field officers Sean Lee and Tahambay Smith, and Field Biologist, Andrea Otto (Saint Lucia National Trust and Forestry)
  - 2014 in Tobago – Natalya - At the Caribbean Emerging Wildlife Conservation Leaders Training Conference
  - 2014 in Canada – Natalya - At the Conservation Leadership Programme Training
  - 2014 in Anguilla – Tahambay Smith – at a workshop funded by the Royal Society for the Protection of Birds.

- Several newspaper articles, television and radio interviews, and social media updates were released as well in order to ensure that work to eradicate invasive rats was well known locally, regionally and internationally.

- FFI was successful in securing a donation of rodenticide from Syngenta which was able to cover the needs of the eradications in Year 1 and Year 2 as well as the regular biosecurity needs over the project period.

- Syngenta has recently expressed its desire to continue supporting the work in Antigua and Barbuda's Offshore Islands KBA, and in other islands with which FFI work.

- The elaboration of the EAG's strategic and financial plan ensured that we understood how and were able to forecast and prioritise recurrent cost of the organization. The EAG has since taken steps to improve its ability to sustain the organization's strategic goals including conducting birding tours, selling of merchandise and currently, a corporate membership drive.

- All equipment acquired for the project has been properly maintained, stored and used for project activities only. The EAG has sole ownership of this equipment. Proper care given to the equipment ensures their longevity.

- EAG, MALHE and Saint Lucian, Vincentian, Kittitian, Dominican, and Guyanese colleagues were able to benefit from training in AIS detection and eradication, through mentoring and guidance from FFI. This training ensures that EAG can expand its restoration activities and also that need future international expertise for this type of conservation work is minimized as residents and neighbouring islands will be equipped with the relevant expertise.

- EAG has produced educational brochures and calendars which promote the conservation of endemic species and teach readers the necessity of keeping offshore islands free of rats. The EAG was able to garner 100% local support to produce another edition of the calendars, which an excellent educational tool and keeps the message of the importance of AIS free islands fresh in the minds of those who own copies.

- The recent ECMMAN grant of which EAG was a recipient allows the organization to work closely with the Fisheries Division to enhance the management of the North East Marine Management Area (location of the KBA). In 2015, a user-fee system will be implemented, and wardens should be installed within the KBA.

- Excitement is building across the region regarding the implementation of mainland islands to safeguard wildlife. During recent discussions with staff from the Forestry Unit and the Environment Division it was determined that Antigua and Barbuda should look into investing in a mainland island as well. This is timely since many of the remaining offshore islands are small and can only support small wildlife populations. Adriel Thibou of Forestry has eagerly suggested a site in the middle of the mainland as a possible location for this potential project.

- Upon completion of the Year 2 eradications, permanent bait stations have been installed on the three newly restored islands. This along with regularly scheduled biosecurity monitoring will significantly minimize the risk of reinvasions on the islands.

- As outlined in the original proposal, training will be given to EAG staff, board members, field staff, and loyal volunteers as follows:

  -Dr. Karron James: EAG President
  -Natalya Lawrence: OICP Coordinator
  -Farrah Cheong: EAG Board
  -Nicola Nash: EAG Board
  -Dr. Brian Cooper: EAG Board
  -Tahambay Smith: EAG Board, Field Officer
  -Ashton Williams: EAG Board
  -Ruby Tang Maginley: EAG Board
  -Mari Gramling: EAG Board
  -Bernadette Adams: EAG Board

-Andrea Otto: EAG Field Officer
-Sean Peters: EAG Field Officer
-Joseph Prosper: EAG Volunteer and Field Biologist
-Victor Joseph: EAG Volunteer and Bird Specialist
-Ruleo Camacho: EAG Volunteer

This selection of trainees ensured that the need to receive professional help from outside the country is greatly reduced. All of the above were indeed recipients of various training courses (Please refer to the activities in this and past progress reports) during the course of the project.

Many other persons received training (also see progress reports) during the project period including, but not limited to:

- Daryl George – EAG Board
- Alica Thomas – OICP Volunteer
- Freija Mendrik – OICP Volunteer
- Marc Benjamin – EAG Staff
- Sophia Steele – EAG Staff
- Adriel Thibou – MALHE (Forestry)
- Camelia Wallace - MALHE (Forestry)
- Jameel Ambrose - MALHE (Forestry)
- Thomas Aveling – OICP Volunteer

Summarize any unplanned sustainability or replicability achieved.

- The **eradication of mongooses** was not included in the proposal to CEPF but became a necessity during the execution of eradication activities in Year 2. Mongooses, in addition to rats, are considered AIS in this region and are also responsible for the decline in local wildlife. Outputs of this project include technical guidance on the detection and humane eradication of mongooses, which have already been replicated in other conservation projects on mainland Antigua. This documentation can also be replicated by other Caribbean countries facing problems with mongooses and who require guidance on handling and safely euthanizing these animals.

- The fact that **more land area was restored** than was originally planned means that local biodiversity has a greater area on which they can safely recover.

Safeguard Policy Assessment

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

- The eradication of rats and also the prevention of reinvasions necessitated the use of rodenticide during the project period. As required by CEPF, a Pest Management Plan (PMP) was prepared at the beginning of the funding period.

- An addendum was included in the PMP after an emergency eradication was conducted on Green Island. This addendum outlined all PMP guidelines followed during the execution and then conclusion of the eradication.

- Spot checks were carried out during the course of the funding period as outlined in Activity 2.1.

- Spot checks were carried out by persons who had experience/were trained in handling rodenticide. These were Dr. Jenny Daltry, Elizabeth Bell, Natalya Lawrence and Sophia Steele. Copies of spot-check forms have been uploaded to Dropbox.

- Spot checks were done during scheduled biosecurity monitoring exercises as well as during eradications. Some things monitored included the correct storage of rodenticide, the security of bait stations, the use of gloves by those handling the rodenticide, and the installation of clear signage on islands where eradications were being conducted.

- Loiza Rauzduel of CANARI conducted a site visit in Antigua in Year 1. During the site visit, she verified that rodenticide was adequately stored in a locked storage room in the original containers, with clear labels. She also verified that bait boxes on Great Bird Island were locked and not easily broken into.

During the grant period, non-target species were closely monitored for possible negative effects of their interaction with/consumption of the bait, and there was no indication that these species were negatively impacted.

Additional Comments/Recommendations

- EAG sincererly thanks both CEPF and CANARI for your supporting our project, and for your consistent presence and guidance throughout the project's implementation.

- EAG thanks all international local and international volunteers who ensured that Antigua and Barbuda's biodiversity was safeguarded by removing the threat of AIS.

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.

Please include your full contact details below:

Name: Natalya Lawrence
Organization name: Environmental Awareness Group
Mailing address: P. O. Box 2103, Museum of Antigua & Barbuda, Long Street, Saint John's, Antigua
Tel: 268 – 462 – 6236
Fax: 268 – 463 - 7740
E-mail: eagantigua@gmail.com; skn_h@yahoo.com

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, 2007 to June 30, 2008. (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.	Yes	245		Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one. North East Marine Management Area (NEMMA). Several OICP activities, such as rodent control and local capacity building are in accordance with the NEMMA management plan. Both these activities were achieved in this period.
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.	Yes	245		In addition to core conservation work on 8 offshore islands, the entire NEMMA has benefitted from biodiversity research, monitoring, environmental education and training and rodent control in this reporting period.
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 1below.	Yes	10		Villa Wilikies Freetown Seatons Glanvilles Bethesda Pares Parham Coolidge Hodges Bay

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

Table 1. Socioeconomic Benefits to Target Communities

Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.

Name of Community	Community Characteristics								Nature of Socioeconomic Benefit													
									Increased Income due to:													
	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities	Communities falling below the poverty rate	Other	Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices	More secure access to water resources	Improved tenure in land or other natural resource due to titling, reduction of colonization, etc.	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure sources of energy	Increased access to public services, such as education, health, or credit	Improved use of traditional knowledge for environmental management	More participatory decision-making due to strengthened civil society and governance.	Other
Bethesda	X	X								X												
Glanvilles	X	X								X												
Seatons	X	X								X												
Pares	X	X								X												
Wilikies	X	X								X												
Freetown	X	X								X												
Parham	X	x								X												
Coolidge								x		X												
Hodges Bay								X		X												
Villa						x					x	x										
Total																						

If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit: