

REINTRODUCING THE CARIBBEAN FLAMINGO TO FORMER HAUNTS:
A WORKSHOP TO SHARE EXPERIENCES, BEST PRACTICES, AND FUNDING
OPPORTUNITIES FOR REINTRODUCING THE CARIBBEAN FLAMINGO TO THE
CODRINGTON LAGOON NATIONAL PARK, BARBUDA

LUCIA MINGS

Environment Tourism Consulting Ltd., P.O. Box W375, St. John's, Antigua; e-mail: lucia_mings@yahoo.com

The Caribbean population of the American Flamingo (*Phoenicopterus ruber*) is one of the region's most recognizable natural icons. Unfortunately, the flamingo has historically suffered marked population declines due to hunting, habitat destruction, and disturbance. The overall population size is large, however, and thanks to conservation efforts seems to be increasing on some islands in recent years. The species has been extirpated, however, from several former haunts including Antigua, Barbuda, St. Kitts, and St. Martin. In this vein Environment Tourism Consulting Ltd. (ETC) collaborated with the Society for the Conservation and Study of Caribbean Birds (SCSCB) to facilitate a workshop to assess the feasibility of reintroducing the flamingo to Barbuda.

The purpose of the workshop was to bring regional experts and interested persons together to share best practices, challenges and possibilities for reintroducing the Caribbean Flamingo to some of its former haunts in the Caribbean Islands by focusing on the Codrington Lagoon, Barbuda, and to use this effort to help guide other native bird reintroductions and management in the region. Environment Tourism Consulting Ltd. (ETC) is a network of highly skilled and experienced environment and tourism experts. The guiding principle of the business is a belief that "long term financial success and the maintenance of cultural values can be achieved through the systematic application of best natural resource management practices." In working towards this goal, ETC is assessing the feasibility of reintroducing the Caribbean flamingo into one of its original habitats, the Codrington Lagoon National Park in Barbuda.

BARBUDA

Barbuda is a limestone island approximately 160 km² and located 45 miles north of Antigua, with a population of approximately 1,200 humans.

CODRINGTON LAGOON NATIONAL PARK

The geographic feature of Codrington Lagoon occupies the western third of the island. The lagoon itself averages about 2.5 km wide, and runs along most of the western side of the island. It is separated from the sea by a long, narrow sand spit often only a few m wide, with a winding entry in the north.

The Codrington Lagoon National Park is a sensitive and diverse ecosystem with a spectacularly diverse flora and fauna. National and international agencies designated it as a biological diversity hotspot that is under threat from pollution and a variety of man-made as well as natural disasters. The National Park was officially created in March 2005 and achieved Ramsar recognition in June 2006. It encompasses the entire west coast of the island of Barbuda and comprises both marine and terrestrial habitats. The approximate area of the park is 18 km² within which is located the largest breeding colony of Magnificent Frigatebirds (*Fregata magnificens*) in the Caribbean.

INTRODUCED AND ENDEMIC SPECIES

Game species were brought to Barbuda by the British in the early days of colonization. Not only were they introduced, but since the 1960s, livestock controls and paddocks have been closed and dismantled, allowing goats (*Capra aegagrus*), sheep (*Ovis aries*), donkeys (*Equus africanus*), horses (*Equus ferus*), and cattle (*Bos primigenius*) to roam freely and widely throughout the island. In the Codrington Lagoon National Park, these feral and free-roaming animals are found in almost all areas and ecosystems. They over-browse native vegetation, causing defoliation and denudation, and their movements and biological habits cause disruption in the ecology of native ecosystems and species. For the integrity of the lagoon's biodiversity to be restored, these feral livestock species will need to be carefully managed and controlled.

The Magnificent Frigatebird remains the pirate of the skies over Barbuda, as the males circle overhead guarding or searching for their mates. Along with this species are the regional endemic and globally threatened West Indian Whistling-Duck (*Dendrocygna arborea*), the endemic Barbuda Warbler (*Setophaga subita*), and many other species of waterbirds and landbirds on the island. The restoration of the flamingo would compliment Codrington Lagoon's spectacular birds that grace the environments of the park and landscape.

THE CARIBBEAN FLAMINGO

According to Coleridge (1826:280), "[T]he Lagoon is a magnificent piece of brackish water seven miles square and communicating on by a long flash..." New visitors to the Lagoon often repeat this refrain, though not in such terms. He mentions an unsuccessful trip to hunt flamingos at the mouth of the Lagoon, where they were said to often congregate. One can imagine the days when flamingos, with pink and red colors flashing brightly in the hot midday sun, walked gracefully in the mud of the flashes, or stood guard at the mouth of the "river."

The large marine "lake" that the colonials described remains today; however, the flamingo has locally vanished. The flamingo disappeared in the 1800s due to overhunting and disturbance. The species was known to be hunted for food, especially the succulent young birds. In a letter written around 1715, Sir William Codrington, then owner of Barbuda under a long-term lease from the Crown, requested that his "agent" on the island "send me... what Wisling ducks, guinney hens or fillemingoes that can be got" (Pease 1965:63). Guinney hens refers to the Helmeted Guinea fowl (*Numida meleagris*), an introduced species from Africa. The fillemingoes refer to the Caribbean flamingo.

The Caribbean flamingo has the potential to be one of the region's most recognizable natural icons. With its bright pink plumage and its prehistoric outward impression, it evokes a time and period in the history of the islands when nature seemed indestructible. Unfortunately, the flamingo has historically suffered marked population declines due to hunting, habitat destruction, and disturbance. The overall population size is large, however, and thanks to conservation efforts appears to be increasing on some islands in recent years. Breeding populations occur in the Bahamas, Cuba, Hispaniola, and Turks and Caicos Islands. And in 2007, a new network of in-situ and ex-situ conservation initiatives was es-

tablished by the Caribbean Alliance for Flamingo Research and Conservation, to ensure the protection and conservation of the species. The flamingo has been extirpated, however, from several former haunts including Antigua, Barbuda, St. Kitts, and St. Martin. The loss is apparent but memories of this species are often celebrated in carnival costumes, folklore, and place names; a common one on Barbuda is the name "Filamingo."

For years, many have aspired to return the Caribbean flamingo to Antigua and Barbuda. Our people long to see these majestic birds command the wetlands of the islands once again, to allow our children to set their eyes and hearts on their lost avian heritage. Environment Tourism Consulting Ltd. (ETC), Antigua, has embarked on an effort to reintroduce the species to the island of Barbuda. This is a long-term effort that requires careful planning, resources and a commitment to ensure successful reestablishment.

PRESENTATION: REINTRODUCING THE CARIBBEAN FLAMINGO TO BARBUDA

Lucia Mings gave a PowerPoint presentation, which included information on the history of flamingos in Barbuda, the project's objectives, and approaches.

PROJECT OBJECTIVES

The project will bring regional experts and interested persons together to share practices, challenges, and possibilities for reintroducing the Caribbean flamingo to some of its former haunts in the Caribbean islands by focusing on the Codrington Lagoon, Barbuda, and to use this effort to help guide other native bird reintroductions and management in the region.

REGIONAL OBJECTIVES

1. Share the historical context of avian species reintroductions across the region.
2. Transfer knowledge on the technical aspects of reintroducing the flamingo.
3. Establish linkages and possible partnerships, regionally and elsewhere, to collaborate on reintroduction of the flamingo.
4. Identify possible sources of long-term funding and technical assistance.

OBJECTIVES SPECIFIC TO BARBUDA

1. Reestablish the biodiversity of the Codrington Lagoon National Park.

2. Increase the visibility of the Codrington Lagoon National Park.

3. Increase needed revenue flow into the management of the Codrington Lagoon National Park by increasing visitation and interest in the Park.

4. Reduce the impacts of feral livestock on the biodiversity of the Lagoon.

5. Restore the Caribbean flamingo to Codrington Lagoon.

METHODOLOGY

Phase I

1. Civil society research (primarily surveys and interviews) to determine local opinions towards flamingo reintroduction.

2. A detailed investigation of the possibility of reintroducing the Caribbean flamingo, including the pros and cons (cost / benefit analysis), the resources that are needed to accomplish reintroduction (financial, time, staff, and training), the long-term management and oversight of the programme, and the short, medium, and long-term impacts.

3. Baseline study of the issues surrounding feral livestock, their impacts, the barriers and difficulties in controlling and managing the animals.

Phase II (provided that the Barbudan community supports reintroduction)

1. Determine mechanisms for controlling and managing feral and free-roaming livestock.

2. Reintroduce the Caribbean flamingo and manage the population according to the management plan.

3. Provide the training needed for these efforts (e.g., wardens, tour guides, land managers).

4. Carry out an education and awareness program.

PRESENTATION: EXAMPLE OF THE BRITISH VIRGIN ISLANDS

Mr. Clive Petrovich gave a briefing on his experience building a flamingo population in Anegada in the British Virgin Islands (BVI). The BVI project began in 1990 with 20 birds and funding. Subsequently, the first breeding was in 1995, producing five young; 10 yr later, the population was 160. Today, the population is estimated to be 200, however, numbers are diminishing due to emigration. Birds disperse as the flock grows and do not return as they tend to form small family groups that stay together. Mr. Petrovich's presentation was very interactive and led to the following discussion with the workshop participants.

COMMUNITY INVOLVEMENT

Community involvement is an essential component in both ideological and practical terms. It was advised by Mr. Mussington and others in the workshop that for the project to work Barbudans must agree that flamingos will bring beneficial results to their country. The community has to be involved in project execution as opposed to a group of outside environmentalists pursuing the case; the latter would create apprehension. Mr. Petrovic shared the BVI experience of flamingo reintroduction to reiterate this point: the community must have a vested interest in the project or it will fail. It was felt that these community involvement goals are realistic and attainable for Barbuda due to its small population. Another recommendation was that more emphasis should be placed on the socioeconomic issues.

Possible ways to motivate persons to support the project were discussed. Dr. Ann Sutton suggested facilitating visioning workshops and the establishment of community councils, but most of all it needs to be driven locally. Ms. Maureen Simon reiterated this point by stating "Barbudans are peculiar in that they will not buy into the project if it is perceived as coming from the outside." It was suggested that a part of the project should be to take some Barbudans to see flamingos elsewhere.

In addition to local support, it was pointed out that it is equally important to have the support and participation of the ecological groups from the northern Antillean islands such as Saba, St. Eustatius, Guadeloupe, Martinique, and St. Kitts (all have salt flats).

FUNDING

Mr. Petrovic recommended that funding could be sought from private groups, focusing on those interested in social issues such as tourism. "The Caribbean flamingo is appealing to many established groups for its marketable characteristics and definitive features, and these features are important in successful fundraising. However, substantial research must still be done before applying for funding to avoid rejection."

Mrs. Maynard also made the point that the Barbudan diaspora should not be overlooked as there are mechanisms in place to allow them to benefit from tax breaks for contributing to conservation. It also lends itself to giving a Barbudan family 'prestige' in the USA as they would have the opportunity to get acknowledgement. Additionally there are resorts on the island that are in the process of "re-tooling" and

this project could be a part of that process.

To attract international funding agencies there should be a strong focus on poverty alleviation and economic development. Private foundations, individuals and companies will be particularly interested in social development components. A possible funding source could be Visa's conservation fund. The point was also made that the project should develop a business plan.

TOURISM POTENTIAL

Mr. Petrovic emphasized the role of the tourism department as a likely body to get onboard, as there are substantial benefits for the country's economy. Mr. Mussington, another workshop attendee and leading expert in environmental issues on Barbuda, stated that flamingo reintroduction will boost the field in which Barbuda is very much operating under, i.e., ecotourism. This project would be "commercially interesting" as it could add value to the tourism product by providing an "ecotourism platter" for serious birders, as Barbuda would then have a cadre of attractions such as the frigatebird colony at the Bird Sanctuary, Barbuda Warbler, logwood honey, caves, deer, and interesting local history and culture, etc., which could be packaged into a week of activities. Mr. Mussington also made the point that ecotourism is much bigger in Barbuda than it is in Antigua and many persons are benefiting from it. He gave the Bird Sanctuary and Coco Point as examples.

CARIBBEAN POTENTIAL: MOVEMENT AND DISPERSAL

Mr. Petrovic made the point that movement and dispersal are key variables to consider. Flamingos are known to be extremely nomadic, flying hundreds of km to wetlands on other islands in response to local conditions and food resources, thus the availability of other appropriate wetlands in the region is very important. Sir Charles Branson brought 40 Flamingos to Necker Island (BVI) about 7 yr ago. In addition, Branson introduced 60 flamingos from Cuba to an area that was too confined and so some flew to neighboring islands. Moskito Island is also building an area for the flamingos. We need to learn what we can from these previous experiences as well as consult with flamingo experts (e.g., in the International Union for Conservation of Nature's Flamingo Specialist Group) in order to maximize the chances of a successful reintroduction in

Barbuda, should the project proceed. In Mr. Petrovic's view, building the mentioned populations in Aneгада, Necker Island, Moskito Island, and now Barbuda will benefit the Caribbean through the eventual reestablishment of flamingos throughout the region.

NEXT STEPS

1. Dr. Sutton offered the assistance of the SCSCB in setting up a Caribbean Flamingo Working Group and a Small Island Working Group to discuss issues specific to these smaller Caribbean islands via its website.

2. The representatives from Barbuda offered support to project, but reiterated that it must be done in the correct fashion.

3. Efforts to create awareness of the project and raise funds will continue.

RECENT PROGRESS

Since completing this report we have been:

1. Consulting with the government and the Barbuda Council to inform them of the project and its objectives in return for their endorsement.

2. Establishing relationships with the Codrington Lagoon National Park and the Barbuda Natural and Cultural and Heritage Society (BNCHS). We also facilitated introductions between the Gilbert's Agricultural and Rural Development Center and BNCHS, resulting in commitments to working with each other to improving the BNCHS's capacity to implement the project in the medium to long-term.

3. We are also interested in the cultural and economic benefits (e.g., ecotourism) the project could have on the community and are currently researching ways that this can be done.

4. We have prepared a concept note for the Global Environment Facility's Small Grants Programme. They are excited about it and would like to for us to start the project in May / June, which means that our main focus for the next few weeks will be to complete the full-size proposal.

LITERATURE CITED

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