REPORT TO THE MINISTRY OF AGRICULTURE, PLANNING AND THE ENVIRONMENT
FORESTRY AND WILDLIFE DIVISION
COMMONWEALTH OF DOMINICA

RESULTS OF SEARCH FOR NESTING BLACK-CAPPED PETRELS (*Pterodroma hasitata*) IN DOMININCA

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Introduction

Evidence shows the Black-capped Petrel was abundant in Dominica during the last half of the 19th century (Bent 1922, Lawrence 1878). Studies done in the early 20th century continued to show the bird was seen "not infrequently" off the coast of Dominica in the vicinity of Roseau (Verrill 1905, Hobley 1932, Wetmore 1932). As late as the 1980s, the Black-capped Petrel was observed in southern Dominica at Petit Coulibri near Morne Fous. Most recently, surveys for the petrel on Morne Diablotin and coastal mountains of southeast Dominica have ended unsuccessfully (P.G.H. Evans *in litt*. 1992). It is believed, however, that a small population exists on the island. "Small numbers" of the species have been seeing flying into the southeast part of Dominica at night (P.G.H. Evans 1989, Evans and James, 1997). Given the steep and heavily forested terrain of the island, a small colony could easily be overlooked.

Black-capped Petrels nest in burrows on steep, forested mountains and will opportunistically use crevices in rocks as well (Wingate 1964). On Hispaniola, birds use forested cliffs 500 meters or more in height and above 1300 meters in altitude. Most burrows are found where either sufficient soil cover exists for excavating their 1-3 meter deep burrows or where rock crevices on the faces of cliffs can be used (Wingate 1964, Woods 1987). The petrels are most often found breeding between November and May but birds have been found at the breeding colonies on Hispaniola year-round. However, they only return to their nests at night (Woods 1987).

Methods

Three methods of detection were used in searches for Black-capped Petrels:

Method One
The first method involves "call-playback" where a loop tape of the call of the species is played in suspected breeding areas. The recording will often lure breeding birds into the area. This method has been used successfully with other nocturnal burrowing seabird species (pers. obs.). The tape was played at full volume on a Sony CFD-980 portable stereo from one hour after sunset until midnight. The recording was obtained from George Reynard.

Method Two
The second method used is call-playback using a hand-held mini-cassette recorder at the mouth of burrows. The chick or incubating adult will often respond to the call from within the burrow (James and Robertson 1985). .

Method Three
The third method requires a burrow camera. The burrow camera is on the end of a 3-meter flexible tube, which can be used to snake through burrows. It uses infrared lights to illuminate objects in its path and the scene is viewed through a handheld Watchman television. (Dyer and Aldworth 1998)

Results

No Black-capped Petrels were found to be breeding on Morne Fous, above Petit Coulibri.

On the night of January 29, Adam Brown, Natalia Collier, and Tony Burnett played a loop tape of the call of the Black-capped Petrel from 1930 to 2400. Three sites on Morne Fous were used to play the call, allowing all directions to be covered by the sound. Each site was used for 1-½ hours. (see Figure 1)

On January 30 a daytime survey was done of the area below Morne Fous on the seaward side called "des Sav", UTM coordinates 678860 and 1682886. Due to the large number of animals, such as land crabs, which create burrows in the area, there are many holes covering the mountainsides. Using a hand-held tape player, the call was played at the mouth of 31 burrows. Seven burrows were checked visually using a burrow camera. No evidence of nesting Black-capped Petrels was found. (see Figure 1)

Figure 1.

DATE	Location Surveyed	Hours Surveying using Method 1	Birds Observed using Method 1	Burrows Surveyed using Method 2	Birds Observed using Method 2	Burrows Surveyed using Method 3	Birds Observed using Method 3
1/29/01	Morne Fous	1930-2400 (4 hours)	0	0	0	0	0
1/30/01	"des Sav" UTM coordinates 678860 1682886	0	0	31	0	7	0

We played the recording for the groundskeeper at Petit Coulibri Estate, located several hundred feet below Morne Fous, and he reported that he had not heard the call of the Black-capped Petrel in the area during the 40 years he had worked, lived, and hunted there. However, a fisherman in the area reported that he had heard the call while fishing at night. Two other individuals, upon seeing drawings of the bird, reported that the bird is seen in the mountains of the Grand Bay area.

Threats to Conservation

It is not clear what has caused the decline and often the extirpation of breeding colonies of Black-capped Petrels throughout their range. Hunting and land clearing may be involved. Areas of steep mountainside had been cleared in many areas to grow marijuana plants and one man reported seeing people using ropes to access their marijuana crops because the terrain was so steep. Another individual, after seeing a drawing of the Black-capped Petrel, reported that the bird used to be sold as food on the side of the road in Grand Bay but that this is no longer practiced.

Burning of crops or the making of charcoal may also pose a problem if it is done at night. Black-capped Petrels are caught in Haiti using fires at high elevations on dark and foggy or rainy nights. The birds are disoriented by the fire and fly into the flames or the nearby brush (Wingate 1964).

Recommendations

The Tete Morne region should not be surveyed unless security against violent individuals in that area can be assured. It is unsafe for people who are not from the Grand Bay area. Due to repeated acts and threats of violence against us, our search for Black-capped Petrels was severely restricted and eventually forced to end due to safety reasons.

Areas that should be surveyed in the future include:

- The sea cliffs and coastal hills between Point Tanama and Point Des Fous.
- The sea cliffs and coastal hills between Point Des Fous and Morne Rouge Estate.
- The south and southeast slopes of Morne Verte, from Petit Coulibri Estate to the summit ridge.
- The small hills within the confines of Petit Coulibri Estate.
- The west slopes of Tete Morne, with special attention given to the cliff faces.
- The south slope of the Soufriere Ridge on Morne Plat Pays, with special attention given to the cliff faces.
- The west slopes below Palmiste Estate.

All of the areas listed above can be initially surveyed using method one (see Methods). Surveys should be done monthly during the new moon phase, between the months of November and March, although year round surveys shouldn't be discouraged.

In addition, public relations including television, radio, and newspaper should be used to educate the public about the Diablotin bird and the efforts to locate its colonies. Through this exposure and subsequent input from the public, biologists might gain vital information as to the bird's location.

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