Grupo internacional para la conservación del Diablotín

Comité international pour la conservation du Pétrel diablotin

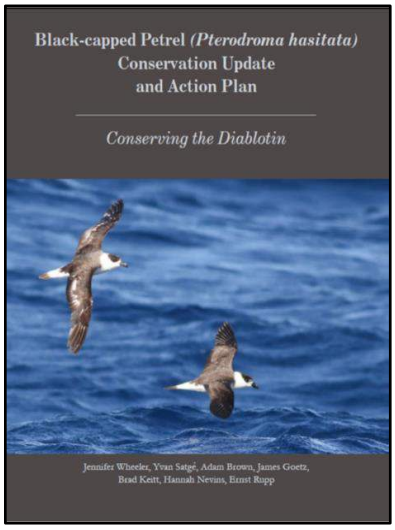
International Black-capped Petrel Conservation Group

ANNUAL UPDATE ON ACTIVITIES
August 2022

Another year of activity related to the Black-capped Petrel, *aka* Diablotin, has come and gone. It has been a year of ups and downs, with milestones reached and new challenges emerging in the conservation of the species.

One of the milestones reached was the release of the document **Conserving the Diablotin: Black-capped Petrel Conservation Update and Action Plan** in late 2021 (see the BirdsCaribbean press release here). The full formatted document is downloadable on the working group's website, as well as a four-page Executive Summary. The Executive Summary is also appended to this newsletter.

The conservation action plan calls for nine strategies to enable conservation and address threats. Six strategies apply throughout the petrel's range; three are focused on confirmed sites in Hispaniola. Analysis suggests that no single strategy can result in a population increase but, by pursuing a number of strategies in synergy, we can achieve a positive population trajectory into the future.



The strategies identified in the 2021 action plan to conserve the Diablotin:

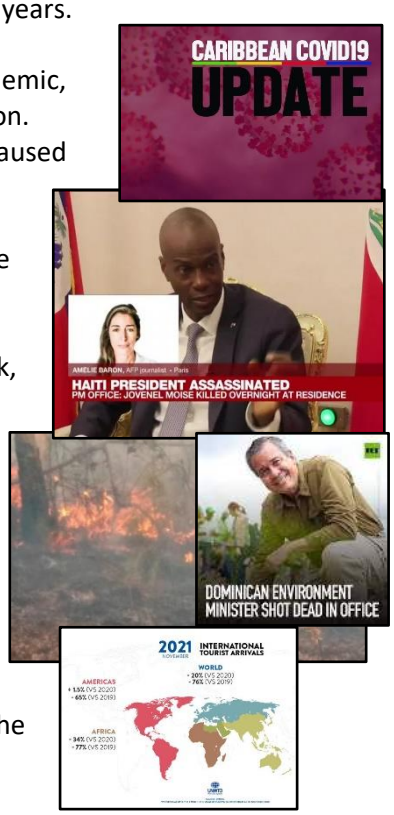
Strategy 1: Build local capacity
Strategy 2: Locate and characterize nest sites
Strategy 3: Explore restoration methods
Strategy 4: Reduce predator pressure
Strategy 5: Reduce collisions and groundings
Strategy 6: Support community development in Boukan Chat, Haiti
Strategy 7: Undertake study of socio-economic drivers of threats at La Visite, Haiti
Strategy 8: Engage Dominican government to plan and strengthen oversight of parks
Strategy 9: Address threats at sea through advocacy

Henceforth, this newsletter will be organized by reporting on these nine strategies, followed by sections on monitoring, research, and communications. Together, these allow us to assess and support the strategies and progress towards our **10- to 20-year goal: Ensuring the long-term survival of a stable population of Black-capped Petrel whose conservation status has improved from Endangered to Near Threatened on the IUCN Red List.**

STRATEGIES

Strategy 1: Build local capacity

Individuals and organizations located on the islands where the Black-capped Petrel is known or thought to breed are the backbone of Black-capped Petrel Conservation. These Caribbean partners should be recognized and commended for operating in extremely challenging and stressful conditions in recent years. Notably,



- Haiti's economic depression and social conflict has been exacerbated by the pandemic, and in July 2021, the country faced the upheaval of President Moïse's assassination.
- A significant earthquake in September 2021 spared the petrel nesting areas but caused severe property damage in the hometown of the Haitian project leads.
- The Dominican Republic's (DR's) socioeconomic context has improved since the start of the pandemic, but covid and a change in government in 2020 have left the national parks hosting petrels largely unstaffed.
- The 2021 installment of a Dominican Environmental Minister highly engaged in conservation brought much optimism to project partners, but to everyone's shock, Minister Mera was murdered early in June 2022.
- Huge fires in the DR's Sierra de Bahoruco, most likely tied to illegal clearing for agriculture, reached petrel nesting areas in April 2021 and January 2022.
- For the first time, dogs were observed in 2021 as predators of Diablotin, with severe losses of chicks and adults at two nesting sites.
- The pandemic caused economic hardship throughout the Caribbean, of course, but Cuba's experience has been particularly dire including shortages, blackouts, and political instability, and external factors limiting tourism's recovery.
- Covid continues to pose a severe and unpredictable health risk everywhere; for example, the disease prevented local partners in Dominica from participating in the expedition to their country in early 2022.

The resiliency and tenacity of conservationists in the petrel range states has been bolstered by the continuation of some international funding streams and acquisition of new support. For example, U.S. Fish and Wildlife Service continues to support core field work by local partners. Also, ACSEH [Action pour la Sauvegarde de l'Ecologie en Haïti (note the J for Jeunes has been dropped from the name in the past year]), received a grant from the Biodiversity and Protected Areas Management (BIOPAMA) Programme in 2021. On the other hand, some international support has been withdrawn. Grupo Jaragua reports that the Spanish Development Agency CESAL is withdrawing some support for environmental projects, pivoting to quicker-return humanitarian-focused work. Additionally, grant support often does not cover equipment, and there is an immediate and ongoing need for vehicles (trucks, motorbikes) to undertake the field work in the remote Hispaniola petrel breeding locations.

Building local capacity involves encouraging professional development of in-country conservationists, such as students, project managers, and field technicians. For example, we are gratified that Rosanna Guzman Perez, a biologist in the department of Biodiversity in the DR Ministry of Environment, is keen to integrate Black-capped Petrel conservation into her studies after having accompanied Grupo Jaragua to the field at various times. She is starting a Master's in natural resource management in Costa Rica.

Strategy 2: Locate and characterize nest sites

A goal of the action plan is that, by 2025, all suspected sites on Hispaniola have received comprehensive search and at least one island (Dominica, Cuba, Jamaica, or Guadeloupe) has been explored more thoroughly.

Hispaniola

We are pleased to report that in the last year a number of new nests were located in Haiti and the Dominican Republic, in both confirmed and probable nesting areas. For example, new nests have been found in the confirmed location of Tet Opak on Haiti's La Visite ridge and in Valle Nuevo in the Dominican Republic.

Most notably, in May 2022, members of the ACSEH team located nests on Pic La Selle, Haiti's tallest mountain. This area is where some of the first Black-capped Petrels were rediscovered in Haiti by David Wingate in 1961 and 1963. Specifically, on May 24, three of the expeditioners, Anderson, Maxon, and Renee, encountered a chick in a burrow on the steep forested slopes of Ka Jon. Later, another burrow with signs of active nesting was found. The discovery upgrades the status of this area from a Probable nesting location to a Confirmed one. More details are provided in the EPIC's press release on the discovery.

Building on historic information and community interviews, the Haitian field team ultimately discovered petrel nests on Pic La Selle through methodical searching of steep forested slopes. Credit: EPIC

Though nests have yet to be located on other islands, productive expeditions were conducted in Guadeloupe, Dominica, and Cuba.

Guadeloupe

With funding from Parc National de la Guadeloupe, Antoine Chabrolle of Muséum national d'Histoire naturelle hosted Gérard Millischer, of Parc National du Mercantour in France, in Guadeloupe for a week in January 2022. Gérard brought with him military-grade thermal binocular-camera equipment designed to detect, observe, and recognize objects that emit heat. He had successfully used this equipment to locate nesting areas of Mascarene and Barau's petrels on Reunion Island. The weather on Guadeloupe was not cooperative, and the field team had only three good nights to conduct observations, with fog preventing the thermal equipment's effectiveness on the other nights. No petrels were seen but one petrel was detected by ear. This observation elevates Guadeloupe from a Suspected to a Probable breeding location for the Black-capped Petrel. Antoine deployed autonomous recording units (ARUs) near La Soufrière to hopefully capture more detections; unfortunately, recent analysis of these recordings by Abram Fleishman at Conservation Metrics yielded no detections (nor did recordings collected in 2020 during the radar surveys on Guadeloupe). Contact Antoine Chabrolle.

Gérard Millischer with the thermal binoculars used on Guadeloupe and Dominica to search for petrels. Credit: Y. Satgé

Dominica

After working in Guadeloupe, Gérard traveled to Dominica, where he was joined by Yvan Satgé for a week-long expedition. The team was invited by local petrel expert Stephen Durand and hosted by Dominica's Forestry, Wildlife & Parks Division of the Ministry of Environment, Rural Modernization & Kalinago Upliftment. On 25 January, 2022 Gérard and Yvan were able to record a video of a Black-capped Petrel in flight to the north of Mount Micotrin. The survey re-confirms the presence of the species in Dominica. Their findings were announced in an EPIC press release on the expedition and full details are given in the expedition report on the working group webpage.

Gérard and Yvan were not able to observe the petrel numbers reported from radar surveys in 2015 and 2020. The two different methods prevent direct comparisons of results, but a number of hypotheses have been developed to explain differences in number of detections. These hypotheses also shape recommendations for future work, already in the planning stage. Specifically, the IBCPG hopes to employ a petrel sniffing dog, such has been used to detect the Cape Verde petrel.

Of Interest: Funds for the follow-up expedition to Dominica were covered in part by funds raised through the sales of 4Ocean bracelets created to honor the Diablotin. Sales of this bracelet for a month raised $10K for the species, routed through the American Bird Conservancy. Ongoing bracelet sales will fund 4Ocean's plastics cleanup programs around the world.

Cuba

Biologists with Corredor Biologico en el Caribe (CBC) and Centro Oriental de Ecosistemas y Biodiversidad (BIOECO) have continued expeditions to La Bruja, Municipio Guama, Cuba to survey for Diablotin activity. Coastal surveys were conducted in January 2022, repeating work done in February 2020. (Covid prevented an expedition in 2021). In 2022, 12-hour listening sessions were conducted at the coastal point for three nights. A point 2 km further inland "La Bruja Arriba" was monitored throughout the night of January 12. Additionally, shorter listening sessions of 10 or 30 minutes conducted at 10 points along the coastline.

At the 12-hour counting points along the coast, 28 petrels were located visually in a group that was making zig-zag flights very close to the sea. No petrels were visually detected at the 12-hour counting point up the mountain, but vocalizations were detected. Two of the ten points with short listening sessions had vocalizations (those closest to La Bruja). Overall, 656 auditory detections were made over approximately 72 hours of sampling, with 99.5% being identified as groups. Contact Carmen Plasencia.

Visual and auditory surveys were conducted on the southeast coast of Cuba in January 22. Credit: BIOECO

Strategy 3: Explore restoration methods

Restoration methods such as social attraction and translocation to predator-free areas have benefited a number of seabird species around the world. Accordingly, the Black-capped Petrel action plan calls for a full feasibility study of restoration methods to be completed by 2025, with recommendations for pilot projects; and by 2030, any necessary restoration projects have started.

An important consideration in exploring possibilities of luring or moving petrels to threat-free areas is the degree to which the Diablotin will use human-made nest cavities. Wooden nest boxes are being tested in Loma del Toro, following up on a significant depredation event by dogs in January 2021 (see BirdsCaribbean blog post on the tragedy and see more under Strategy 4.)

In Loma del Toro, 10 burrows were created by placing wooden boxes into the hillside. The team also used rocks to shore up and protect the open and damaged nests. Using camera traps to observe petrel reaction to artificial and modified burrows. Very preliminary examination this breeding season (2021-2022) of camera traps suggests that almost all were visited by prospecting petrels, but some never occupied. Careful examination of camera trap images will be conducted once the breeding season has ended. Funds to construct artificial burrows were obtained from the Mohammed bin Zayed Foundation. Recently, grants from the Critical Ecosystem Partnership Fund (CEPF) and the USGS-USFWS Quick Response Program to research attraction and acceptance of artificial burrows were acquired.

Members of the DR field team pose near newly constructed (left) and newly installed (right) nest boxes. The boxes, also known as artificial burrows, were used to replace nests lost to dog depredations. Credit: Grupo Jaragua.

Eradication of predators on the large island of Hispaniola is impossible, so the construction of predator exclosures, such as used for the Hawaiian Petrel, is being discussed. Of course, the methods of seabird restoration should be considered in the context of larger systems restoration, that is of the surrounding habitat. Forest restoration on Hispaniola, particularly of broadleaf forest, would have the myriad benefits, including habitat for petrels and other wildlife, decreased susceptibility to fire damage and erosion, and potentially lower predator density than found in more disturbed areas.

Strategy 4: Reduce predator pressure

Controlling predators will allow reproductive output and adult survival to increase. Eradication is impossible on Hispaniola so most effective methods will vary among locations and with predator-type to achieve a reduced predator abundance around nests.

Most confirmed breeding locations on Hispaniola are constantly monitored by camera traps throughout the season. In general, it can be stated that Rattus spp. are present at all locations, but to date, the species does not appear to have major negative effects on breeding Black-capped Petrels. Cats have also been observed near or in burrows; these are known to cause reproductive failure in the colonies of other petrel species.

Expeditions in 2021 revealed a devastating attack by dogs at two breeding locations. Nine dogs were documented at Loma del Toro and 22 nests were negatively affected. Camera traps confirmed that a minimum of 7 adults were killed. The Grupo Jaragua team reached out to the park authorities to explore ways of controlling dog depredations and made plans to rebuild or restore burrows. Likewise, La Visite also lost nests to dogs in 2020-2021: a single female dog was observed regularly in the colony and during June and July was observed to have taken 18 petrels from active nests, including chicks and adults. Dogs have been observed this season (2021-2022) in some locations, but fortunately, there have been no losses reported to date.

An image of a dog next to a dead petrel. A minimum of 9 dogs appeared at the Loma del Toro colony in late November 2020. By early March 2021, they were observed on camera traps depredating a minimum of 7 adult petrels. Credit: Grupo Jaragua

Mongoose have also been documented as presenting a significant predator risk. A mongoose was responsible for the loss of a chick at Tet Opak, Haiti breeding location in April 2021. In Valle Nuevo, the problem of mongoose predation is particularly severe. During the 2020-2021 breeding season, at least 7 chicks were killed (3 confirmed by camera trap) in Valle Nuevo. Mongoose depredations in Valle Nuevo in the 2021-2022 season are again reported as high.

Whether catastrophic or low-level, losses to introduced predators highlight the need for greater vigilance and protection of colonies. Accordingly, trapping efforts were intensified at the commencement of the 2021-2022 season. In the DR, various methods were employed over the last two seasons, with exploration into types of traps, and with a team staying on site for a longer interval to check live traps. To date, efforts to control the mongoose in Valle Nuevo have not been successful; analysis of camera trap data and exploration into alternative traps is planned to improve effectiveness. Predator trapping was also intensified in Haiti. At Morne Vincent, rat traps and live traps for larger mammals were deployed during the period when eggs and chicks are expected. Several dozen rats were taken, but no other mammals. In La Visite, Haiti, a trapper was contracted to work six days a week; reports of his effectiveness are pending. As in the DR, improved predator control at nesting sites is a priority and steps to increase effort and improve trapping effectiveness will be taken.

Full written reports on the 2020-2021 breeding season are available on the working group webpage. Reports on the 2021-2022 breeding season are forthcoming.

Strategy 5: Reduce collisions and groundings

The hazards of communication towers and other elevated structures to flying petrels – both adults and fledglings – have been documented. We believe that most tower owners and communities are unaware of the issue but would consider changes if they did not incur significant costs. The action plan recommends several actions to combat this threat: advocate to governments to regulate tower design; work with owners to integrate recommendations and tools to minimize collisions; and provide comprehensive outreach to communities with high levels of light pollution.

The communication tower array at Loma del Toro in Sierra de Bahoruco National Park presents the greatest hazard to colonies in the DR. The park remains largely unstaffed since the beginning of the pandemic, but Grupo Jaragua was able to coordinate with guards with two private telephone companies Claro and Altice about petrel strikes. Three grounded petrels were reported for the 2021-2022 season; two of these were healthy enough and could be released. Grupo Jaragua worked to involve national staff from the DR Ministry of the Environment in their investigations of the collision threat. Ministry biologist Rosanna Guzman Perez accompanied Grupo Jaragua on a visit to Loma del Toro to learn about the communication tower issue and investigate the use of diverters and recorders. Ms. Guzman subsequently introduced the subject to the head of the biodiversity department and Ernst Rupp was invited by the Ministry to give a presentation in January 2022. Recommendations about removing guy wires and adjusting lighting were made.

Grupo Jaragua also intensified their outreach program to coastal communities drawing on funds acquired from SPAW Protocol Regional Activity Centre (SPAW-RAC) by EPIC. In spring 2022, a team conducted almost 200 interviews in the coastal DR city of Perdenales and nearby small communities in the hills north of Pedernales. These communities lie within a petrel flight path, but interviewers discovered that very few community members had any knowledge or experience with petrels. This presents an important educational opportunity. Ongoing outreach focuses on the collection and rescue of stranded birds. No strikes were reported in any coastal community over the last two breeding seasons.

There are communication towers near the known petrel colonies in Haiti, and the installation of diverters and recorders was intended for two sites last year. However, based on the risk of theft, this equipment was either not deployed or deployed at such a distance from towers as not to produce useful results. (During the 2020-2021 season, there was theft of numerous monitoring devices including camera traps, batteries and SD cards from camera traps, a songmeter and snap traps.)

Hispaniola at night, as viewed from space. Light pollution from towns and cities may disorient petrels on their flights to and from the sea, causing collisions or groundings. Fledgling juveniles are more likely to become disoriented as they leave the nesting area for the first time. Credit: NASA

Strategy 6: Support community development in Boukan Chat, Haiti

The town of Boukan Chat lies to the north of the Morne Vincent nesting site and expanding agriculture is an imminent threat. Agroecological programs are underway to improve existing farm yields and foster tree crops as a long-term farming option, in order to slow or stop expansion into forests.

Environmental education programs for youth continue in Boukan Chat, complementing the technical assistance in agroecological approaches provided to adults. Credit: EPIC

There have been some positive developments over the past year:

The farmers cooperatives remain engaged in the agroecological programs conducted in partnership with Plant With Purpose. Tree crops are encouraged in these programs, though sourcing seedlings has been an issue. Environmental education is built into the agroecology curriculum as well as programs for youth. Support for the Boukan Chat soccer team – named the Diablotins – has continued, and as a result, the captain of the team has embraced a campaign to advance athletics and environmentalism together.

Of Interest: EPIC partners with the Haiti Coffee Company, a company that imports its coffee from a cooperative in eastern Haiti. Though not exclusively from growers in Boucan Chat, the Dondon coffee label does provide a market for coffee farmers in buffer areas near petrel nesting sites. Farmers are encouraged to grow tree crops such as coffee, as they are more sustainable than row crops, reducing pressure on adjacent forest.

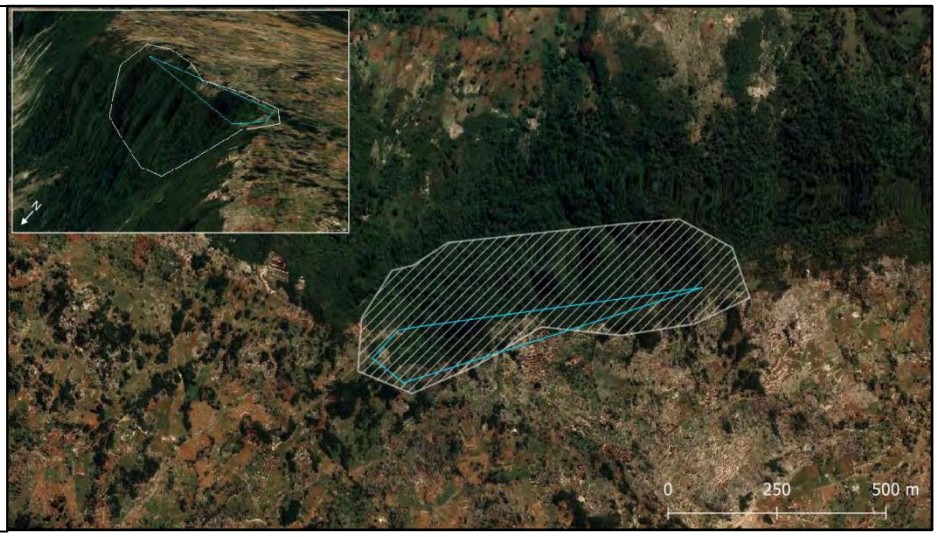
There have also been some negative developments in the recent year:

In mid-2021, the Haitian monitoring team noted the removal of trees and bushes in an area adjacent to one of the Morne Vincent sub-colony areas. This incursion into the nest area is a direct threat to the success of nesting petrels in this area. This is the first incursion into a petrel nesting area that we have witnessed in several years. Perhaps this is due to the effect that COVID-19 has had on the Haitian economy and in turn increased pressures on families to find additional income through enlarging family farms. Additionally, Grupo Jaragua reports that the Spanish aid organization, CESAL, has withdrawn funding for monitoring and reforestation activities in the Haiti-DR border area. CESAL is now focused solely on immediate food security, which unfortunately emphasizes row crops in areas that could be used for tree crops.

Strategy 7: Undertake study of socio-economic drivers of threats at La Visite, Haiti

La Visite ridge hosts the greatest density of petrels but the socio-economic and political situation encourages the unsustainable use of natural resources by local communities. A scoping study would help understand the specificities of this area and better inform socioeconomic and environmental interventions needed to reduce the impacts of poverty and preserve natural resources.

A formal study of users on the ridge has not been initiated; however, ACSEH has been building connections through churches and other community groups, and conservationist Jim Goetz maintains his relationships in Sequin. They report a desperate situation, made worse by global price increases, crime, and government and NGO instability. Income-producing food production has expanded into the pine forest and likely the ridge area, resulting in habitat clearing and degradation. Collection of forest products – specifically tree ferns for market – resulted in the loss of 14 petrel nesting burrows prior to the start of the 2020-2021 nesting season. Removal of tree ferns caused the collapse of petrel burrows among their roots; additional impacts from tree fern harvest is loss of vegetative cover and structure holding soil on steep slopes.



Aerial view of the Tet Opak nesting site on the La Visite Escarpment. The blue polygon outlines the extent of known nests; the white lines indicate search area. This confirmed site has the greatest numbers and density of petrel nests, but is highly threatened by unsustainable resource use by local communities. Credit: Y. Satgé

Strategy 8: Engage Dominican government to plan and strengthen oversight of parks

All confirmed and suspected nesting sites in the Dominican Republic fall within national parks. Local partners will foster collaboration with park administrators for expertise on petrels and petrel habitat; seek public engagement to gain public backing; and showcase habitat restoration projects to park administrators.

Grupo Jaragua has ongoing engagement with the Ministry of Environment, persevering despite the tragedy of Minister Mera's murder and frequent turnover in staff. Grupo Jaragua seeks participation of Ministry staff in proactive conservation and raises issues of conservation concern to authorities. At the end of 2021, the Ministry was informed that the Dominican petrel field team discovered illegal cash-crop (strawberries) fields plowed within 300 m of known nests. As a result, the Ministry of the Environment committed to halt all agriculture within the park (although enforcement is not scheduled until late 2022).

Strategy 9: Address threats at sea through advocacy

Given the scope of marine threats (reduced prey availability, plastics and other pollutants, oil spills), the most effective and feasible interventions will be to advocate for the species' interest in the realm of marine policies, by highlighting the Black-capped Petrel in science/policy forums and contributing data to regulatory agencies.

In the past year, research relevant to the Black-capped Petrel's marine range was shared in the following publications: "Revising the marine range of the endangered black-capped petrel Pterodroma hasitata: occurrence in the northern Gulf of Mexico and exposure to conservation threats" in Endangered Species Research, and "Temporal and spatial segregations between phenotypes of the Diablotin Black-capped Petrel Pterodroma hasitata during the breeding and non-breeding periodstudy on non-breeding marine distribution, breeding distribution, and exposure to threats at sea"in BioRxiv.

These studies were communicated to the U.S. Bureau of Ocean Energy Management in a call for public comment on proposed wind energy lease areas along the Atlantic (see https://www.regulations.gov/document/BOEM-2022-0023-0001). Representatives of the International Black-capped Petrel Conservation Group submitted a letter to BOEM to share specific concerns about the call areas and its overlap with Black-capped Petrel habitat, and to provide recommendations for a better integration of the species in development plans.

The authors of these studies also worked with USFWS to ensure that this newer information was available for the revision of the Species Status Assessment for the Black-capped Petrel, a step towards revisiting the proposed listing under the U.S. Endangered Species Act.

Other research that pertains to petrel exposures to at-sea threats:

- Diet study: Fecal samples collected at petrel burrows by Yvan Satgé in early 2018 finally underwent analyses for prey DNA. Only six samples were analyzed, but the results were very interesting. It was assumed that the Diablotin feeds extensively on cephalopods (based on similar species of petrel), but only two of the six samples contained squid DNA. The samples showed high prey diversity, comprising more fish species, some primarily found in deep ocean. Contact Yvan Satgé.

- Mercury study: The results from the analysis of breast feathers collected from petrels captured at burrows (2018) and at sea (2019) were reported in the June 2022 Newsletter of the Seabird Group. The mean Total Mercury concentration was 30.3 ppm dry weight, which is in top-tier of mercury levels for Pterodroma globally. Contact Yvan Satgé.

- A distribution note: Birder Robert Gundy observed two Black-capped Petrels foraging ~2 miles off of Isla Ajuga, less than 5 miles from the Colombia mainland. Black-capped Petrels have rarely been reported offshore Colombia since the 1980's. This record has been submitted to eBird.

MONITORING

The 2021 **Conserving the Diablotin: Black-capped Petrel Conservation Update and Action Plan** relies on Key Ecological Attributes (KEAs) to comprise the basic elements of a monitoring plan for the species. KEAs are aspects of the speciess biology or ecology that define the health of the species. Conversely, a missing or diminished KEA would lead to the outright loss or extreme degradation of its associated target over time. The Black-capped Petrel KEAs relate to demographic parameters (i.e., population size, productivity, survival) and to its nesting habitat (i.e., distribution, intactness and management).

A 2022 monitoring report for the Diablotin KEAs is forthcoming from the IBPCG. Full or partial data are available for some KEAs; for others, a baseline has yet to be developed:

- Flyway Population Index
  - Have baseline but need to repeat radar surveys.
- Breeding Vocal Activity
  - Yet to develop baseline. To date, acoustic data used for nest searching and collisions assessment. Still challenges of acoustic data collection and transfer, but improving.
- Colony Occupancy
  - Yet to develop baseline. Data quality improving in recent years. Of particular interest is before and after dog depredations.
- Reproductive Success
  - Comprehensive dataset. Will assess.
- Breeder Return Rate
  - Yet to develop baseline. Requires marking birds.
- Habitat Intactness
  - Have visual observations. Will assess.
- Breeding Distribution
  - Additional evidence to upgrade two breeding areas. Will assess.

Of Interest: Abundance at sea could potentially serve as a species population index for the Black-capped Petrel if data were available. Dr. Todd Hass at University of Washington has been examining patterns in the relative abundance of endangered Black-capped Petrels as revealed by at-sea surveys off Cape Hatteras since the 1990s. Hass and Brian Patteson conducted many dozens of at-sea surveys that used consistent counting methods in the early to mid-1990s. Subsequently, Patteson and Kate Sutherland added the use of chum to their methods and continued similar practices until 2005; thereafter, they adopted slower vessel speeds and additional emphasis on chumming. Changes in methods complicates analysis, but Hass was able to examine trends in the years prior to 2006. (In a 2019 thesis, Sutherland examined variations in abundance from 2006 to 2018.) However, for researchers to draw more definitive conclusions about intra- and inter-decadal population/use trends from at-sea surveys off Cape Hatteras, Hass suggests that future surveys that use counting methods that very closely match those employed in the 1990s. Contact Todd Hass.

COMMUNICATIONS

Working Group Tools

Listserv: Visit BirdsCaribbean.groups.io/g/Diablotin to subscribe to our discussion group for the people interested in *Pterodroma hasitata* conservation. We use the Groups.IO platform provided by BirdsCaribbean to take advantage of the regional organization's reach, influence and administrative support.

Website: The website for the working group is hosted by BirdsCaribbean and includes a library of unpublished documents related to the Black-capped Petrel project. The website library includes the new conservation action plan, the unpublished reports noted in this newsletter, links to open access educational materials, and copies of presentations (slides, posters) to communicate to the conservation community.

Please visit www.BirdsCaribbean.org, and search under "Petrel" or go directly to https://www.birdscaribbean.org/our-work/black-capped-petrel-working-group/

This newsletter prepared by Jennifer Wheeler (Jennifer.Wheeler@BirdsCaribbean.org), with contributions from Yvan Satgé, Adam Brown, Tabitha Stadler, Ernst Rupp and Todd Hass.