July 2016 & October 2016

Reports by Grupo Jaragua

Activities from December 2015 to October 2016



July Report #709M

Black-capped Petrel Conservation 2015-2016

Ernst Rupp and Esteban Garrido







Funding from American Bird Conservancy was made possible by the U.S. Fish and Wildlife Service and private donors to ABC.



ACTIVITIES

1. Secure the necessary permits from Dominican authorities to conduct research on the Black-capped Petrel.

The necessary permits of the Ministry of Environment were secured.

2. Conduct on-the-ground surveys in the Cordillera Central, eastern Sierra de Bahoruco National Park, and, possibly, Sierra de Neiba to follow-up on previously conducted radar surveys.

On-the-ground surveys were conducted in the area of Zapoten and Loma Quemada of the Sierra de Bahoruco National Park.

In the area of Zapoten, a well developed secondary broad-leaf forest, we were able to do ground searches in February and July, but we found no nests. The locations revised all showed very thick undergrowth, which we assume is not very favorable for the birds, especially during "landing and take-off" of the birds. Based on typical nesting habitat at Loma del Toro and Loma Quemada, the undergrowth and ground vegetation should be sufficiently open to let the birds pass without being obstructed during flight procedures. In Zapoten we are planning to do direct listening at night for calls during the next breeding season to better locate possible nesting spots. Experience shows areas with high call rates are typically close to nesting areas.

In the area of Loma Quemada on-the-ground surveys were conducted in March, May and July to extend our knowledge on BCPE nesting in the broad-leave forest of this ravine. A total of 4 active nests were registered in Loma Quemada and a fifth nest with an abandoned egg was found. Camera traps were installed at two nests. Final monitoring results in July for the active nests showed that two fledglings had successfully left their nests. The third nest was possibly predated by an unidentified species. Camera trap photos revealed the presence of feral cats in the area, although no direct cat attack or a cat entering a nest could be documented. Also high presence of rats was registered. Sites with soil patches dug up by feral pigs are frequently seen in Loma Quemada, but no photos of animals of this species were taken by the cameras. The fate of the chick of the fourth active nest is unknown. Although the camera installed on this nest showed the presence of one adult, the chick never appeared in any photo.

3. Conduct limited monitoring of nests and nesting success on Loma del Toro and Morne Vincent, using infrared camera, song meters, and direct observation. Primary objectives will be to maintain contact with the Boukan Chat community on the Haitian side of the border.

The team continued to monitor nests and nesting success on Loma del Toro and Morne Vincent. On the Haitian side of the border, at Morne Vincent, the work was done by Rene Jeune and Tinio Louis, the team members from Anse-a-Pitres, in coordination with Titèt (Victor Renozier) from Boukan Chat. The "Haitian" part of the team has developed well and can now conduct monitoring tasks independently. Eleven nests were monitored at Morne Vincent. Of these nests 7 were considered successful. One additional nest still had a chick inside on the 16 of July. Two nests were abandoned and for one nest it was not possible to define if the chick had fledged successfully, although its presence in the nest had been registered the month before. Based on these numbers, nesting success for the monitored nests on Morne Vincent was 64%.

On Loma del Toro 14 nests were monitored. All chicks fledged successfully.

4. In collaboration with Conservation Metrics, conduct songmeter deployments in exploratory sites.

Seven songmeters were placed in Valle Nuevo, Cordillera Central in December 2015. Sites were chosen based on former radar data (2 valleys leading north from the radar point of 2013) and considering possible flight paths leading to possible nesting sites (see map 1).

The seven songmeters were retrieved at the end of February 2016 and their SD cards were replaced. Then the songmeters were newly placed along the valley leading south from the radar point of 2013 (see map 1). They were finally taken in July and the SD cards sent for analysis.

The SD cards retrieved in February were analyzed by Matthew McKown. Two places, "Las Neblinas" and "cañon proximo La Nuez", registered petrel calls (see table 1). For the area "cañon proximo La Nuez" we also received information from park guards that they actually had heard petrels calling. The information from the songmeters and from the park guards give strong support to the assumption that nesting grounds should be close or are actually in these areas. This gives us the chance to investigate in depth and concentrate ground search on a defined and limited "most likely nesting area* (see map 1) instead of doing point search for "a needle in a haystack", which was the case the years before.

The first ground search attempts in July in "Las Neblinas" have not yet brought any positive results. Most of the area is covered by secondary growth tree ferns with thick undergrowth (see fig. 1) which does not seem very suitable as nesting grounds for petrels due to its impenetrability. But we have also encountered pockets of old growth stands of very tall tree ferns (see fig. 2) which are fairly open below the canopy without much such thick understory. These pockets appear more suitable for petrel landing and take-off.

We are confident that continuing a meticulous ground search as we did in Bahoruco will give positive results.

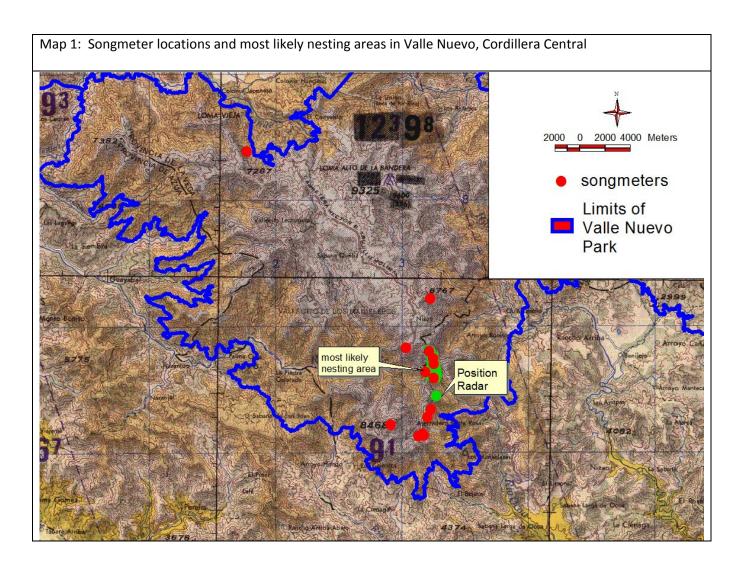


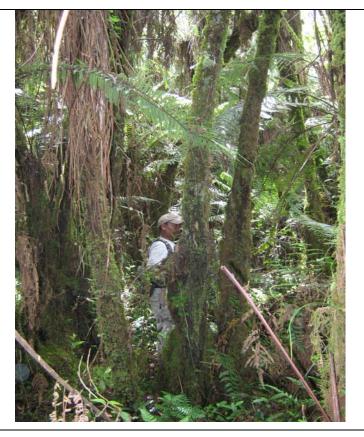
Table 1: Songmeter deployment sites, dates and vegetation cover

punto	grabadora	Lugar	altitud (m snm)	fecha	vegetacion
1	cm25	La Tetera	2600	03/12/15	bosque latifoliado
2	cm23	Curva del Yoyo	2226	04/12/15	bosque de helecho
3	cm27	Loma La Chorriosa	2670	04/12/15	Pinos dispersos intermixtos con arbustos
4	3693	carretera Pinar Parejo		04/12/15	Pino disperso sotobosque abierto
5	cm24	Mirador Piramide	2348	05/12/15	Bosque pinos jovenes con sotobosque
6	11207	Las Neblinas	2259	05/12/15	Pinos dispersos con helechos
7	cm26	cañon próximo La Nuez	2068	05/12/15	Bosque latifoliado
8	cm24	norte Piramide	2353	28/02/16	Pinos con helechos
9	cm27	loma de las fresas 1		28/02/16	bosque humedo con pinos dispersos
10	3693	arriba caseta las Espinas	2020	29/02/16	bosque húmedo latifoliado
11	cm25	camino de la fresa	1915	29/02/16	bosque húmedo latifoliado
12	cm26	camino de la fresa 2	1993	29/02/16	bosque húmedo latifoliado
13	cm23	camino de la fresa 3	2021	29/02/16	pino con latifoliado
14	11207	camino de la fresa 4	2010	29/02/16	pino disperso sotobosque abierto

Figure 1: Thick secondary growth stand of ferns



Figure 2: Old stand of tree ferns with open understory and better access to the ground



5. Work with local land-owners and community leaders on Haitian side of the border, principally in Boukan Chat, to support efforts to improve the community water supply and connecting petrel conservation to a positive economic development within the community.

With funds from EPIC three cisterns were repaired in the community of Boukan Chat during February and March in order to improve the community water situation. We were able to measure the water content of the three cisterns in July. The cistern at Mdme Nodsilys' house was half full with about 15,000 I (see figure 3). The community cistern in the lower part of Boukan Chat was completely full with about 120,000 l. Only the third cistern did not come up to its full retention potential due to some leaks in its catchment area. With a better cement finish on the catchment area this cistern will also fulfill its function. In a general sense, comparing 2015 and 2016 it was possible to improve the water situation in Boukan Chat significantly with only a small investment. Presently we are negotiating with GIZ (German Agency for International Cooperation) to get the funds to repair an additional cistern. Christiane Delfs, the Director of GIZ in Haiti showed great interest in the program of cistern repair and, there is a chance that GIZ will finance even more repair work. Our activities of community outreach as well as our endeavors to conserve the Diablotin fit well into CareBios, the GIZ cross-border program. GIZ has proposed to the Haitian Ministry of Environment to include the nesting area of the BCPE on Morne Vincent within the National Park "Foret de Pins" which in a legal sense will be a great advancement and will give the Diablotin at Morne Vincent special national attention. The German agency is also interested in promoting reforestation and restoration of degraded forest sites in this area.



Figure 3: Restored cistern at Titet's house

René and Tinio were approached by Marie Chantal, the president of the *Asociation de Jeunes pour le Developpement Boucan Chatte* – Fond Verettes (AJDBV), regarding the possible establishment of a nursery. With the improved water situation in the community and the interest of GIZ in reforestation, there would

be quite a bit of synergy. Christiane_Delfs was even mentioning the chance of GIZ buying planting material directly in Boukan Chat. We had a meeting with Marie Chantal in July. The youth group has interest in the production of seedlings for restoration purposes as well as agroforestry projects (Coffee, Avocados). With 29 men and 23 women as members it has quite strong backing within the community.

Regarding "Floresta" (Plant for Purpose), the religious development organization based in Fonds-Verettes, we have heard from Titet that they are active in the community with a credit program based on local resources and are also working with live material erosion control measures as well as compost. We have seen some examples of the latter, but we have had no further direct contact with Floresta representatives since the original meeting in March.

Educational activities were initiated with EPIC in one local school of Boukan Chat during the visit of Adam and Aaron in March. The Diablotin was then introduced to the school children. Two additional activities were realized by René and Tinio. During the 14th and 15th of April they treated the subject of the school, its importance and how to maintain it. The effects of erosion were shown. Support material prepared by Jennifer Wheeler was used. Forty-two children and six teachers participated.



A second event took place during the 26th and 27th of May. It was attended by 130 children the first day and by 135 the second. The children belonged to two schools: the Ecole mixte de Boucan Chatte and the Ecole Baptiste de Boucan Chatte. The first day the subject of *soil* was treated and practical demonstrations were shown. The second day was dedicated to the subject of *water* and it was emphasized how important forests and trees are for the conservation of this liquid. Follow-up activities are in planning.

In April we met with Egido Sanz, the new local coordinator of GIZ´s CareBios program in Thiotte. Egido has years of experience working on a grass-root level in the DR and also in Haiti. The last few years she actually spent in nearby Fonds-Verettes. She has an excellent knowledge of the region of Foret de Pins including Boukan Chat and Chapotin. Egido is working towards building a platform which will include a local organizations and authorities. One of the problems that actually slows down "development" within Haiti is the lack of coordination and cooperation between the many different institutional and local actors and in this field. Too often, groups work on their own areas of focus, without informing others or integration activities. A platform in the sense of everybody being informed of the other one´s doing and a close cooperation between the entities should improve the situation significantly. Grupo Jaragua is eager to participate in the process.



Figure 5: René demonstrating the effects of erosion

6. Continue interchange with park administration on reducing or preventing fires in petrel nesting areas.

Under the leadership of Yolanda Leon and Sixto Inchaustegui Grupo Jaragua reached an agreement with the Ministry of Environment to develop an "open standard" process for a strategic plan of the Sierra de Bahoruco. In February three workshops were held (one in Pedernales, one in Duvergé and one in Barahona) with the major stakeholders. The process was lead by Oscar Maldonado, an experienced certified open standards facilitator, who was assisted by Jim Goetz. Positive results and changes for Bahoruco we nearly immediately visible after the start of activities. The most noticeable one was a change in the administration of the park, where the two subunits (North and South) were combined to a single one directed by one sole administrator. The incumbent, Cesar Peralta, has been able to get grips on the difficult situation. While during 2015 the Sierra de Bahoruco suffered one of its worst years of outbreaks of fires, in 2016 no major incidents were registered up to date.

The open standard process has presently come to a hold due to the political situation in the Dominican Republic. Although elections in May confirmed Danilo Medina as incumbent of the Presidency, a major change in the lead of the Ministry of Environment is expected. The 16th of August will finally bring certainty who will be the next Minister, when the new administration will be announced.

Grupo Jaragua was able to enter into two agreements of cooperation with the park administration during the last months:

One is on improving the situation of stranded birds due to disorientation by lights. In 2015 several related cases were not handled properly due to lack of information by park guards receiving the birds. The situation had to be improved. A release protocol developed by Jennifer Wheeler and Hannah Nevins was translated into Spanish (a Haitian Kreyol version is in preparation) and presented to the park administrations of Sierra de Bahoruco and Valle Nuevo. It was distributed in the different park stations and explanations were given to the guards. So far this year no additional cases of stranded birds have been reported. The project will continue in 2017.

The other area of cooperation is initiated regarding the most threatened ecosystem which is the Humid Mountain Forest of Bahoruco. Only little patches remain. A huge task lies ahead to restore at least part of the already degraded areas and bring back the humid forest. This would be of great importance for birds like the Bicknell's Thrush, La Selle's Thrush, Western Chat-Tanager; all of them depending on the mentioned ecosystem. Based on our data we also consider that nesting habitat of the BCPE lies within moist forest or pockets of it.

The Ministry of Environment has recently bought from the Agricultural Bank 5,000 tareas (approx. 350 ha) of land which formerly was used for agriculture. The goal is to bring it back to a state most closely resembling its original natural one when it still used to be humid forest. The park administration of Sierra de Bahoruco maintains a well managed nursery a Los Arroyos close to the area proposed for restoration with the intention of supplying planting material and saplings. The administration is lacking is a good basis of knowledge of the functioning of the ecosystem. They are also deficient in the collection of seeds of native and endemic species typical for this area. Here Grupo Jaragua steps in and offers it services and experience.





POR FAVOR AYUDE A ESTA AVE



Esta ave se llama **Diablotín**. Tiene patas palmeadas como un pato y un pico curvado con un tubito en sus fosas nasales Es un ave rara que pasa la mayor parte de su vida en el aire o en el mar. Puede encontrarse en el suelo si se desorienta por luces brillantes y/o choca con objetos no esperados. Es posible que esté herido por la colisión.

Si usted encuentra un diablotín:

- 1. Manéjelo y atiéndalo con cuidado y sin ruido. Envuélvalo en tela limpia (toalla o camiseta) en una manera que mantiene sus alas pegadas a su cuerpo y no le permite aletear. Si es posible tome unas fotos de sus lados y su parte superior.
 - 2. Póngalo en una caja con una toalla o trapo limpio en la parte inferior. Coloque la caja en un lugar fresco, oscuro y tranquilo para reducir el estrés. Cubra la caja con una tapa.
 - 3. No le dé ni comida ni agua al ave.
 - 4. Contacte a unos de los biólogos del Grupo Jaragua para informarles sobre el ave:

Ernst Rupp 829-776-6510 Andrea Thomen 809-851-0168 Esteban Garrido 809-224-0683 José Luis Castillo 849-626-1464

Anibal Volguez 809-708-7247

- 5. Haga gestiones para liberar el ave tan pronto como sea posible. Si el ave no está alerta y activa, no está lista para ser liberada.
- 6. Un ave que está despierta y alerta está lista para su liberación. Si usted se encuentra cerca a la costa, libere el ave en una playa donde el agua esté en calma. Si el mar está a horas de distancia, la liberación se puede hacer desde la parte superior de un edificio, torre o colina. Levante suavemente el ave, sosténgala con ambos manos sin apretarla, con la cabeza mirando hacia adelante y hacia el viento. Libere el ave con un movimiento suave hacia arriba; no la tire en el agua o el aire. Si no tiene éxito, deje que el ave se tranquilice y descanse un poquito en la caja. Después, vuelva a intentar su liberación de nuevo.
- 7. Si la liberación no tiene éxito o el ave está demasiado herida o enferma para liberarla, manténgala en la caja para ser recogida por los biólogos del Grupo Jaragua.

¡Gracias por ayudarnos a rescatar, conservar y estudiar al Diablotín!









October Report #709M

Black-capped Petrel Conservation 2016

Ernst Rupp







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The following activities were undertaken from July to October 2016:

1. Conduct on-the-ground surveys in the Cordillera Central and Sierra de Bahoruco National Park to followup on previously conducted radar surveys.

On-the-ground surveys were continued in Valle Nuevo (Cordillera Central) in September based on the songmeter results of February which had indicated petrel calls in the sites of "Las Neblinas" and "Cañon proximo La Nuez".

The area of Las Neblinas is dominated by fern trees in different stages of succession. An initial partial revision in July did not bring to light any signs of petrel nesting, but still a lot of ground has to be covered in this area.

Cañon próximo La Nuez has a completely different vegetation structure. It is covered by secondary broadleaved forest. During the visit in September we started revising it. The ground was of loose gravel not apt for digging with very little crevices or holes. This type of ground condition according to our experience did not seem to be suitable as a nesting ground for petrels. In the case of Cañon próximo La Nuez still more terrain has to be revised and we hope to find ground conditions which are favorable for nesting.

2. In collaboration with Conservation Metrics, conduct songmeter deployments in exploratory sites.

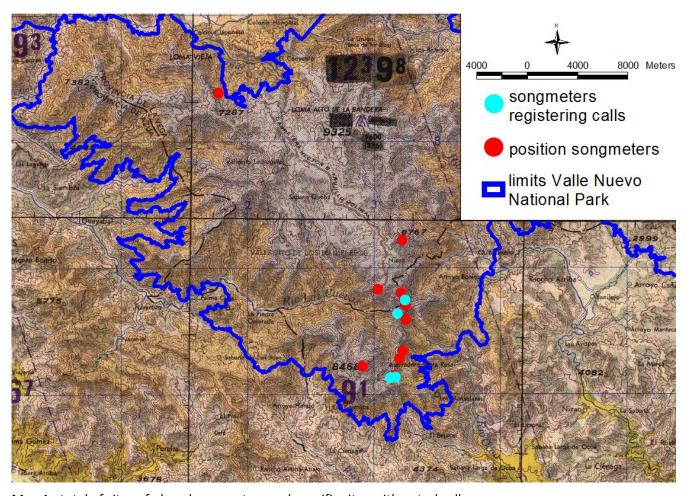
All songmeters (ARU-s) deployed in Valle Nuevo were retrieved in July and sent to Matthew McKown of Conservation Metrics for analysis.

The following positive results were obtained:

A total of four sites with petrel calls were registered (see table 1 and map 1). These results are very encouraging. We assume that around these sites petrels should be nesting. Due to the distance between the different sites it is well probable that several nesting colonies may exist in distinct places. We are presently discussing with Adam Brown the possibility to do radar surveys again in Valle Nuevo next season, based on the findings of the songmeters. Different flight routes may exist to the more southern points where calls were registered in regard to the more northern points. Different valleys are leading up to these points. These valleys may well serve as flight paths.

Table 1: sites of deployed songmeters where petrel calls were registered

songmeter	E	N	site	elevation (m asl)	date of placement	vegetation
11207			Las Neblinas	2259	U2/12/12	Dispersed pine trees with ferns
cm26	331781	2066894	cañon próximo La Nuez	2068	05/12/15	Broadleaved forest
cm27	331203	2061819	loma de las fresas 1		28/02/16	Humid forest with dispersed trees
cm23	331637	2061870	camino de la fresa 3	2021	/9/UZ/ ID	Mixed pines with broadleaved forest



Map 1: total of sites of placed songmeters and specific sites with petrel calls

3. Work with local land-owners and community leaders on Haitian side of the border, principally in Boukan Chat, to support efforts to improve the community water supply and connecting petrel conservation to a positive economic development within the community.

After talks with Christiane Delfs, the Director of GIZ in Haiti, who showed great interest in the program of cistern repair, there is a chance that GIZ will finance additional repair work of cisterns. Our activities of community outreach as well as our endeavors to conserve the Diablotin fit well into CareBios, the GIZ cross-border program. We visited Boukan Chat again in September to initiate the process of evaluation of where and how to repair additional cisterns. Hurricane Matthew impeded more visits to the community of Boukan Chat, since the international road on the Dominican side of the border was in very bad condition after the passage of the hurricane and could not be transited. Communication was not cut and we were able to receive information on the situation in Boukan chat. The hurricane did some major damage to several houses and other structures (including the catholic church, one of the main buildings) in the community. It did also excessive damage to the cash crops grown in the area. Luckily no human lives were lost, but the destruction of the harvest will affect live in the community strongly in a negative sense in the very near future.

We are presently working on the proposal for additional cistern repair for GIZ as well as the proposal for a nursery in Boukan Chat.



Foto 1: Destroyed Catholic Church in Boukan Chat with a tent as a temporary solution. On the right its cistern which resisted the onslaught of the hurricane

4. Continue interchange with park administration on reducing or preventing fires in petrel nesting areas.

Grupo Jaragua was able to enter into two agreements of cooperation with the park administration during the last months, one is on the reporting and rescue of stranded petrels; the other one is on the restoration of degraded mountain broadleaved forests. Based on our data we consider that nesting habitat of the BCPE lies within this ecosystem. Broadleaved forests are much less prone to forest fires than pure pine stands and in our opinion are therefore much more preferable as habitat.

During the reporting period we have been able to collect and supply seeds of several native and endemic plant species to the park administration of Sierra de Bahoruco which maintains a nursery in Los Arroyos intended to produce saplings for the restoration process of broadleaved forests in Bahoruco. The seeds supplied include the species like Sangre de Gallo, Guanito de Bahoruco, Palo amargo.



Foto 2: Pirrin collecting seeds de Sangre de Gallo, a native pioneer species of the broadleaf mountain forest