Interim Report #1715 C
Black-capped Petrel Conservation 2017

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Ministerio de Medio Ambiente y Recursos Naturales

AMERICAN BIRD CONSERVANCY

Grupo Jaragua, Inc.

1. **Conduct Nest Monitoring and Protection of the Black-capped Petrels at known nesting sites in 2017. Deploy and retrieve song meters, and provide data.**

a) Nest Monitoring in 2017:

In February we initiated the monitoring of nests at the location COLH at Morne Vincent, Haiti (see figure 1). 13 nests were visited, 12 had an adult bird within while one nest was found with an abandoned egg. On June 15, we counted 11 chicks, all with feathers on tail and wings.

On the Dominican side at the TTRO location on March 3 seven nests had adults inside and one nest only the BCPE smell was noticed, but it was not possible to detect the bird. On April 26 seven nests with healthy chicks with down feathers were encountered. The nests were checked again on June 17. The results were the following: Four chicks with mostly down feathers and feathers on wings and tail barely visible, while three chicks had feathers in advanced growth state.

On June 15 the site TRO three nests were encountered where the chicks had already fledged. Five nests had chicks inside with complete plumage. Four chicks still had thick downs. At one nest only BCPE smell could be scented, but it was impossible to verify the bird visually. One nest had caved in and did not present a bird.

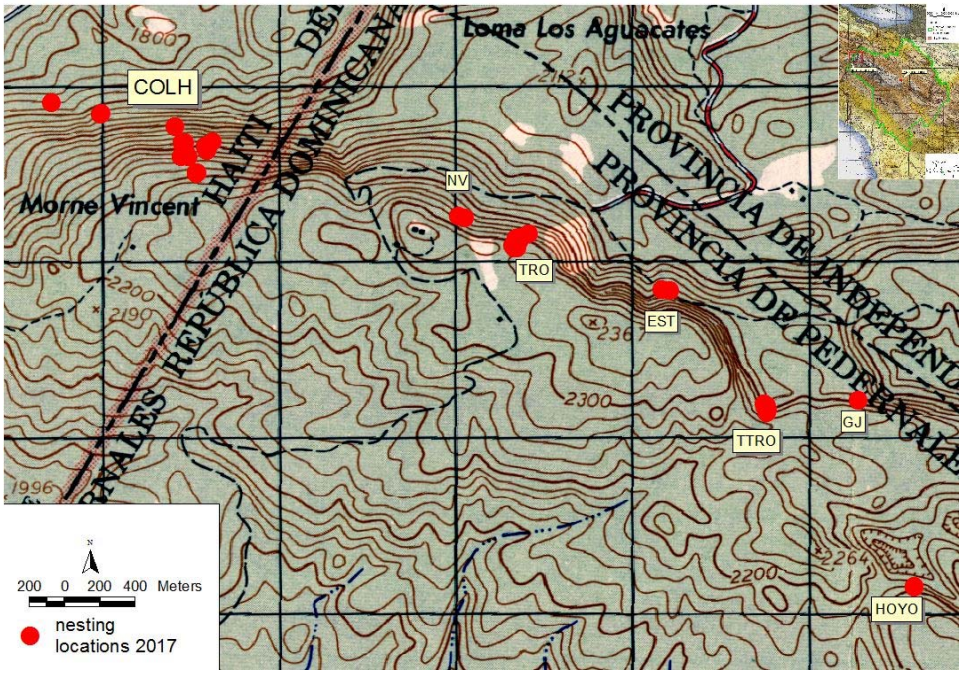

Figure 1: Nesting sites of BCPE at Loma del Toro and Morne Vincent

The smaller sites had exactly the same amount of birds as in 2016: NV with two chicks, EST with two chicks as well, and GJ with one chick. We did not monitor HOYO in 2017 due to difficult access.

The monitoring results for 2017 are similar to the results of former years. Most nests are revisited every year with a high percentage of fledging.

b) Nest search in Valle Nuevo

The song meters which had been deployed in Valle Nuevo (see table 2) were retrieved in March 2017. Abram Fleishman (2017) of Conservation Metrics, Inc. analyzed the sound recorder material. Black-capped Petrel calls were detected at three (Fresa 1b, Fresa 3b, and Fresa 4) of the ten exploratory survey sites in Valle Nuevo. Survey sites at Fresa 3b and Fresa 4 detected the highest number of calls - 69 and 69 calls, respectively. Activity at Fresa 3b and Fresa 4 was detected throughout the survey period, but at low rates suggesting that these locations were near breeding sites.

Several fruitless years of search of BCPE nests in different areas of Valle Nuevo in the Cordillera Central using radar and song meters, and doing intensive on the ground missions had not brought about positive results. The analysis of the Fresa 3b and Fresa 4 locations with high and consistent BCPE calling gave new hope to finally resolve the Cordillera Central nesting mystery.

In May 2017 an intensive on the ground search in the area of Fresa 3b and Fresa 4 was initiated. The area consists of steep hillsides at a height of aproximately 2000 m asl. The vegetation consists of secondary forest of dispersed pines intermingled with broadleave trees integrating mainly pioneer species like *Brunellia comocladifolia* surrounded by fern thickets.

The first day of the search it took only about three hours when the team José Luis Castillo and Gersón Feliz announced that they had found a nest with a chick inside (photo 1). The presence of the little creature was verified with a boroscope. The nest itself was built within leave litter and decomposed leave material and had a depth of more than 1,5 meters. The chick seemed to be healthy and well grown with a thick down coat and the first signs of sprouting feathers on the wings. A closer inspection was not possible since the chick started to retreat within its tunnel which gave us the clue to leave it alone and leave the nest.

The following days we intensified our search for additional nests. Extensive fern thickets made advancing on the steep slopes extremely difficult. Albeit our efforts no more nests were found. We hope to continue our search next season.

Photo 1: first nest ever found in the Cordillera Central

Table 1: sites of deployed song meters in Valle Nuevo

songmeter	E	N	site	elevation (m snm)	vegetation
cm24	330027	2070668	Las Pozas sitio Caamaño	2356	Open pine forest
15374	331698	2067641	Carretera 1	2216	Dispersed pine trees with ferns and broad-leave shrubs
cm25	332012	2067334	Carretera 2	2226	Open pine forest with ferns
cm23	332291	2067953	Las Neblinas	2270	Broad-leave forest with ferns and dispersed pine trees
15392	332167	2067202	Carretera 3	2159	Open pine forest with small ferns
cm27	331635	2061874	Fresa 3 b	2022	Dispersed pine trees with ferns and broad-leave shrubs
11207	331632	2061716	Fresa 4	2015	Dispersed pine trees with broad-leave shrubs and trees
3693	331186	2061622	Fresa 1 b	2047	Dispersed pine trees with broad-leave shrubs
15354	332972	2064893	Ajeno 1	1730	Remnant stand of pines with braod-leave undergrowth
cm26	332546	2066139	conuco Radhames	1942	Dispersed pine trees with undergrowth of broad-leave shrubs and ferns

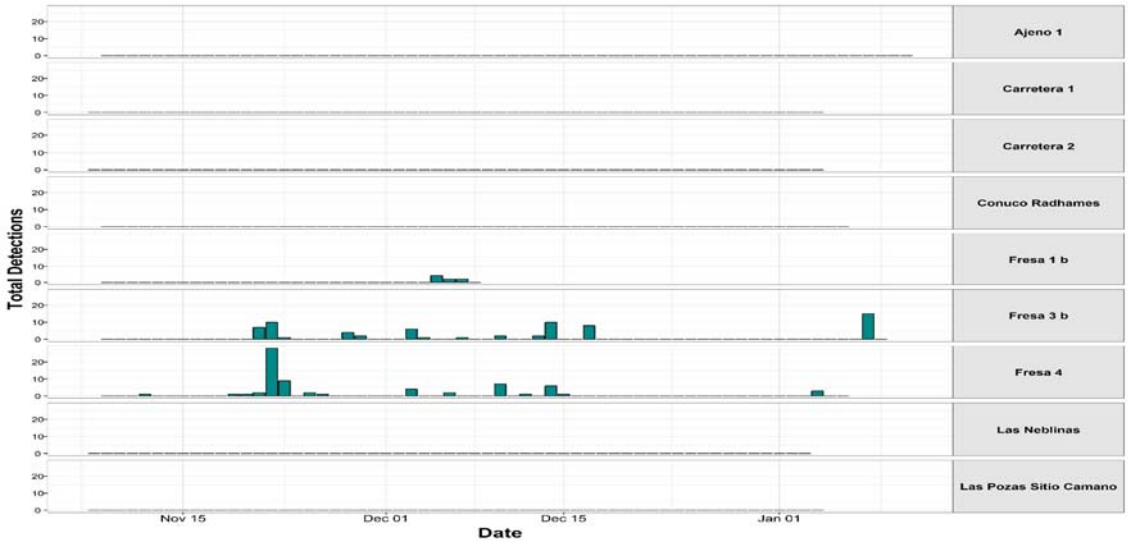

Figure 2: Total Black-capped Petrel calls detected by night and site in Valle Nuevo, Dom. Rep (copied from Fleishman 2017)

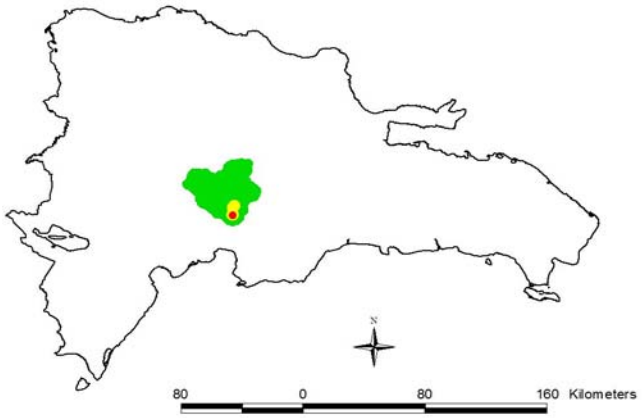

Figure 2: Location of Valle Nuevo in the DR

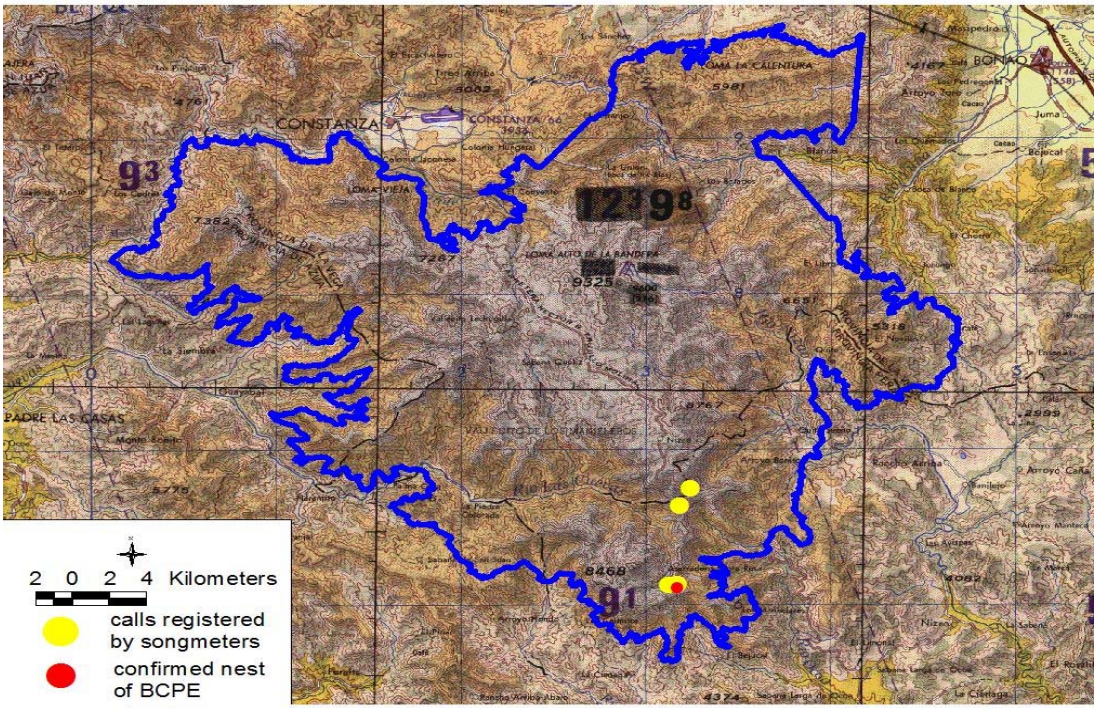

Figure 3: Location of first nest found in Valle Nuevo

2. Initiate study to determine impact of predators with 5-10 control and 5-10 treatment nests. Rodent trapping systems (GoodNature) provided by ABC.

The study was initiated deploying six camera traps (5 Reconyx and one Bushnell) at site TTRO (see figure 1) on March 31, 2017. The traps were retrieved on June 17. The site was chosen, because it consisted of sufficient nests. The site COLH in Haiti was discarded fearing possible human impact with loss of traps. In 2014 two traps disappeared at COLH and we were not able to retrieve them. The site TRO, which also has sufficient nests, was discarded because of its steep slope which has a high overlay of pine needle litter. Nests are found within the pine needle litter and too much impact by human presence may destabilize the whole fragile system.

One of the Reconyx camera traps did not function from the start. The five remaining ones worked well and produced plenty of photos as well as videos in the case of the Bushnell brand. In addition to BCPE movement (see photo 2) into and from the nests, the five remaining cameras captured action of possible predators as well as of non-target species.

Rats (*Rattus rattus*) were present at all five nests during the complete study period (see table 2 and photo 3). The rats were active from early night to early morning hours. Except for one occasion, when one individual rat entered a nest for a few seconds, no other one was ever captured bothering about nests or BCPE. This also held true for the first week of April, which is the most critical time with the chicks recently hatched. The findings about the rats confirms camera monitoring at nests of the site COLH which were done in former years.

No presence of mongooses, feral cats, or any other introduced predator species was captured at the site TTRO. Camera monitoring of nests at Loma Quemada during former years had revealed the presence of cats. Also marks of wild pigs were found, although no one was ever verified by a camera.

Photo 2: BCPE at the entrance of its nest

Photo 3: Rat passing by a nest

The TTRO area is also being visited by a number of non-target species. The presence of the Hutia (EN) was captured on video. Feedings marks on leaves of ferns and droppings of the species also confirm the presence of this endemic mammal.

Four bird species were observed on camera at the TTRO site. La Selle´s Thrush (EN), Western Chat-Tanager (VU) and Hispaniolan Highland-Tanager (VU) are endemic of Hispaniola and very much restricted to the mountain broad-leave forest (see table 3 and photos 4 to 7). Their foraging

habits on the ground or low vegetation may well bring them close to rat control trapping systems if installed.

Table 2: Presence of rats

Nest	period	Events of rat presence captured by camera	time of rat presence	Rat entering nest	Chick survival
2	2.4.17-14.6.17	51	19:21 – 4:52	Shortly entering once only	yes
3	6.4.17 – 3.5.17	14	20:58 – 4:55	no	yes
4	1.4.17-15.6.17	27	20:41 - 5:12	no	yes
5	27.4.17 – 28.5.17	9	22:28 – 4:41	no	yes
6	2.4.17-15.6.17	14	20:31 - 4:56	no	yes

Table 3: List of species captured by trail cameras

	English name	Spanish name	Scientific name	status	Redlist status	Presence and foraging
Mammals	Hispaniolan Hutía	Hutía	*Plagiodontia aedium*	endemic	EN	herbivorous (folivorous)
Birds	La Selle´s Thrush	Zorzal de la Selle	*Turdus swalesi*	endemic	EN	mainly forages on the ground for earthworms, insects and fruit
	Western Chat-Tanager	Chirrí	*Calyptophilus tertius*	endemic	*VU*	Insectivorous, fructivorous, largely terrestrial in broadleaf forest and dense thickets
	Hispaniolan Highland-Tanager	Ciquita aliblanca	*Xenoligea montana*	endemic	VU	forages for insects and seeds in low, dense vegetation
	Rufous-throated Solitaire	Jilguero	*Myadestes genibarbis montanus*	Subspecies endemic	LC	Most common in moist broadleaf forest
Reptiles	-	-	*Anolis sp.*		-	insectivorous

Photo 4: La Selle´s Thrush

photo 5: Western Chat-Tanager

photo 6: Rufous-throated Solitaire

photo 7: Hispaniolan Highland-Tanager

3. Outreach with communities in DR and Haiti regarding the conservation issues affecting Black-capped Petrels.

After the successful execution of the reparation of a total of nine water cisterns in Boukan Chat and an additional work by the German GIZ on 22 cisterns, outreach work concentrated on two aspects: education of school children on environmental and biodiversity issues with a special focus on the BCPE on one side and the production of plant material in the newly built nursery on the other.

a) Environmental Education in schools

On April 26, 2017 Tinio Louis and René Jeune gave lessons to about 120 school children on the importance of ecological factors like water, soil and vegetation, a program developed by Jennifer Wheeler and supported by EPIC.

A four day summer camp for school children was held from August 15 to August 18, 2017.

photo 8: Students learning about nature and the environment

On August 15 a documentary (The Blue Planet) was given in the morning for 125 children, where they learned of marine life. In the afternoon, the theme "We as living beings and other elements of nature" was treated where the students identified living elements and non-living elements. These activities were carried out in the Church La Voix du Salue of Boukan Chat.

On August 16 activities were taken place again in the Church "La Voix du Salue de Boukan Chat" and around the nursery. The students' attention was drawn to plastic waste lying on the ground and what should be done as not to pollute nature. They also learned about organic waste and its use to make organic fertilizer. A practical part followed for boys to learn to make their own organic fertilizer. 130 children participated.

On August 17, 130 children participated in Savann Bourik in a "Getting to know the BCPE" information activity. Rene talked about the work done by Grupo Jaragua preserving the BCPE. The children learned about the biology of the bird, its importance, threats and conservation of the species and how they themselves could participate in saving the bird.

On August 18, an environmental observation walk was done in Savann Bourik with the objective of teaching the children about reforestation and show them the area that was reforested by people from Boukan Chat with the help of Grupo Jaragua. 130 children participated in the activity. An important part of the walk was to show the children that they should not be frightened of nature and for them to get to know the beauty and importance of animals like little frogs, lizards, butterflies and other insects, which should not be killed and left in their places since they form part of the environment.

Photo 9: The environmental observation walk with children from Boukan Chat led by René Jeune

b) Nursery and Agroforestry

The structure of the nursery in Boukan Chat, Haiti was completed by the Grupo Jaragua agroforestry team in January 2017 in coordination with GIZ.

Since then the nursery is being managed by the local youth group "Association de Jeunes pour le Développement Boucan Chatte – Fond Verettes" (AJDBV) under the leadership of its president Marie Chantal (see photo 10)

Tinio Louis and Rene Jeune have been crucial as consultants in putting up operations. The present focus of the work is on supplying the farmers of Boukan Chat with planting material to establish sustainable perennial agroforestry systems and replace short-term cash crop production, which has a high input of pesticides and is very prone to heavy soil erosion. 750 avacado saplings have been produced up to date and 3000 coffee sapling are being presently in production.

Photo 10: Nursery of Boukan Chat

4. Continue to work with park administration on reducing petrel strikes at communication towers and on the adequate handling and release of downed birds

During the BCPE nesting season we were able to coordinate and work closely together with the park administration of the Sierra de Bahoruco National Park. Park guards at Loma del Toro were well instructed in the monitoring and revision of the area around the communication towers for downed birds. Three birds were detected by park guards. One of them was released successfully (see table 4).

The monitoring for downed birds is now also integrated into the community of Boukan Chat. Victor Renozier (Titet) serves as focal point for any information regarding BCPE appearances. A bird which had been found on the ground in the foot hills of Morne Vincent in March (see table 4) was brought to Titet, who informed Grupo Jaragua immediately. We were able to arrive quickly, and after revising the condition of the bird, it was successfully released (see photo 11).

In May René Jeune was able to distribute fliers on BCPE handling and release (see appendix 1) to participants of a workshop on water management in Jakmel, Haiti. Jakmel and the surrounding area is the coastal line towards the Caribbean Sea area lying below the BCPE nesting areas of the Massif de la Selle. Tinio Louis was informed about a stranded juvenile BCPE in July by a person of the town of Marigot, who had received a flyer (see table 4). Tinio was not able to go to Marigot immediately and when he finally arrived the bird -although it did not seem to be injured – was very weak and an intended release failed. Tinio was also informed that in the past other BCPEs had stranded around the town of Marigot.

Photo 11: Release of downed BCPE in Boukan Chat

Table 4: BCPE-s encountered on the ground

date	**location**	**type of bird**	**condition of bird**	**reason for forced down of bird**	**follow-up actions**
13/01/17	Loma del Toro	adult	damaged wing	guy wire hit	taken to office of park administration in Puerto Escondido; bird unable to fly; died of injuries
20/02/17	Loma del Toro	adult	damaged wing	guy wire hit	taken to office of park administration in Puerto Escondido, bird unable to fly; liberation unsuccessful; bird died of injuries
19/03/17	Loma del Toro	adult	slight wing injury	guy wire hit	bird successfully liberated by park guard from top of communication tower at Loma del Toro
28/03/17	Morne Vincent	adult	no injury noticed	not known	bird brought to Titet, Grupo Jaragua´s representative in Boukan Chat and successfully liberated
20/07/17	Marigot (Haiti)	juvenile	very weak, no injury noticed	possible disorientation	bird found on rock in the sea; Tinio Louis was informed and went to Marigot to revise and lieberate bird; liberation of bird failed due to weakness of bird

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Appendix 1: Flyer in Haitian Creole on handling and release of stranded BCPEs

SILVOUPLÈ
EDE ZWAZO SAA

Zwazo sa rele Dyabloten, pye li yo palme tankou kana, bèk li koube anfòm yon tib nan zòn nen li. Se yon zwazo ki pase pifò tan li nan lanmè epi anlè tou.

Ou ka jwenn ni atè tou lè li pèdi Kontwòl akòz limyè kap briye nan nwit oubyen lè yo fwape ak kèk bagay san zatann pandan yap vole.

Si ou ta jwenn yon zwazo konsa

1.) Trete l avèk anpil atansyon e san briz. Vlope l avèk yon moso twal pwòp oubyen yon sèvyèt oswa yon chemizèt. Vlope l yon jan pou 2 zèl zwazo a kole nan kò li komsi li pat malad .Pa pèmèt li ouvè epi fèmen zèl li pou zwazo a pa pi grav. Si li posib ,tire yon foto nan fas zwazo a epi nan pati siperyè zwazo a.

2.) Mete zwazo a nan yon bwat avèk yon twal pwòp oubyen yon moso sèvyèt beny nan pati enferyè zwazo a.Mete bwat la yon kote ki fre e ki fenwa ki pa gen bri ditou pou retire estrès nan li.Kouvri bwat la ak yon kouvèti.

3.) Pa bali ni manje ni dlo.

4.) Kontakte youn nan byològ Grupo Jaragua yo pou enfòme sa rapid rapid. Men non yo ak nimewo telefon yo:

René Jeune 3678-0489, Tinio Louis 4499-9824 , Victor Renozier 4848-1228, Ernst Rupp 4850-7417

5.) Fè tout sa w ka fè pou libere zwazo a pi vit posib .Si zwazo a pa nan kondisyon pou l vole, pa libere l , fè yon ti kite l toujou. Kou nou wè li aktif epi li motive sa vledi li prè pou w eseye libere li. Si ou nan zòn kòt, ou ka libere zwazo a nan yon plaj kote lanmè poze. Si lanmè a lwen w ou ka libere l sou do yon edifis oubyen nan yon kolin oswa sou nenpòt bagay ki wo.

6.) Pou w libere zwazo a men sa pou fè :leve zwazo a anlè dousman, soutni li ak 2 men w san w pa peze li. Bat pou tèt li gade dwat devan kote van pran direksyon. Voye zwazo a anlè dousman, si li pa ta vole pa al lage nan dlo konsa ni pa voye l anlè tou swit ,kite li poze epi eseye anko.

7.) Si w wè zwazo a pa ka vole aprè tout esèy ou fè, oubyen w wè zwazo a blese anpil e anplis ou wè zwazo a malas anpil; rele byològ Grupo Jaragua yo pou vin rekipere li epi fè entèvasyon pou libere li.

Mesi paske wap ede nou sove e konsève epi etidye zwazo ki rele DYABLOTEN