News

AN UPDATE ON THE COIBA HOWLER MONKEY, COIBA ISLAND, PANAMÁ

After visiting Coiba Island in the Gulf of Chiriqui in 1999, and in 2001 as field assistant of Liliana Cortés-Ortiz in her research on the phylogeny of the genus *Alouatta*, I found that I had left a piece of myself there. Its mystique—a cruel and fearsome island, a hideout for pirates, and later a penitentiary—was augmented by my fascination of its beauty, spectacular wildlife, and almost untouched forest, and it was inspirational for my early career as a primatologist in Panama. I felt I was Jim Hawkins, visiting the Treasure Island of Robert Louis Stevenson. Leaving the island in 2001, I resolved to return someday as a Panamanian primatologist, to study the population and ecology of the howler monkeys and capuchins there. When I returned from Coiba in 1999, I become interested in the Coiba howler monkey, and reviewed the literature concerning the island and its wildlife, visiting the libraries of University of Panama and the Smithsonian Tropical Research Institute. I did my first publication about Coiba primates as "The kun-kun howler; an endemic primate at extinction risk", published in 2002 in a special edition about Coiba, "Coiba; an unpublished world", in the magazine *Icaro* of the National Association for Conservation (ANCON). This article was read by Alvaro Espinel, who showed it to Anthony Rylands, who helped me with my first scientific note in *Neotropical Primates Journal*, also in 2002. I briefly described the geography and biodiversity of Coiba and the smaller island of Jicarón, explaining that Coiba Island passed from the status of high security prison (since 1919), incorporated a scientific station (1996), and eventually become a national park (2005), also recognized as Natural Heritage of Humanity, awarded by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Having achieved my Masters' degree in Primate Conservation from Oxford Brookes University, UK (2008), I returned to Panama and created an NGO called the Fundación Pro-Conservación de los Primates Panameños (FCPP) (fcprimatespanama.org), and in 2010 began the first primate population survey on Coiba Island. In 2010 I invited Timothy Bearder as volunteer of my project from Oxford BBC Radio Station and he made a film, a brief documentary, which he donated (https://www.youtube.com/watch?v=EvldLq-Tsn4). The project "Population and Conservation Status of Azuero Peninsula and Coiba Endemic Primates" was supported by the Rufford Foundation (2011), and fulfilled my wish to study the Coiba howlers and capuchins.

Recently, our efforts to conserve the primates and the biological diversity of Coiba have been greatly helped with the formal creation of a field station there, the "Estación Científica Coiba AIP" created by Panama's National Science and Technology Secretary (SENACYT), with the FCPP being part of the committee as associate investigators with the project "Population ecology and genetic characterization of two subspecies of primates endemic to Coiba Island and the Azuero peninsula, Republic of Panama", in collaboration with Edgardo Díaz-Ferguson, an expert geneticist, and Coiba AIP's director (Panamá, SENACYT, 2019). New observations have been carried out in Coiba Island also for arboreal and volant mammals using the Orion Camera System (OCS) (Méndez-Carvajal, 2014). OCS consists of an array of canopy camera traps at 12 m high level that will allow us to understand activity patterns, interactions with arboreal mammals, and habitat use. Other studies being led by FCPP include research on bats and on the mammalian diversity in the forest understory of Coiba. The capuchin monkeys of Coiba have been studied to understand their different techniques of survival. A recently published description of their feeding behavior included descriptions of their use of tools (Méndez-Carvajal and Valdes-Díaz, 2017).

As we know more about Coiba, however, its exuberance and beauty are drawing increasing attention from tourists, a trend which is potentially detrimental. By 2014, FCPP advised the government the problem that cows and buffalos were causing negative impact in the understory and increasing the hematophagous bats density. The Panamanian government finally achieved the removal of the feral cows and buffalos from the island. Being Coiba Island an important point for fishing and tourism, the activities has subsequently increased, and is now being promoted by the Panamanian Government. The building of an airport on Coiba Island has been polemic, with local people from Santa Catalina beach, Banco beach and Montijo Gulf, arguing strongly against it. Tourism and development are now putting the Coiba howler monkey at increasing risk, resulting in an IUCN Red List assessment that places it as Endangered. New research is availing Coiba with more arguments for its conservation, with such as Carlos Ramos from the University of Panama, and her student Yohanny Pineda, studying population genetics aspects of Coiba and Azuero monkeys, Pedro González (Biology student) from the University of Panama (CRU-Coclé), Karol Gutiérrez (Chemistry student) from the Autonomous University of Chiriqui (UNACHI), Margie Tejada and Kimberly McIntosh (Parasitology students), Yohanni Pineda (Genetics student) from the University of Panama linked to FCPP-Coiba AIP (Del Moral, 2018), helping to study and protect the Coiba howler monkeys, and its habitat. An update of Coiba research "Long-term monitoring of the Coiba howler monkey *Alouatta coibensis coibensis* and other mammals from Coiba Island, Coiba National Park, Republic of Panama", was presented recently during the IV Rufford Small Grant Conference South America Science for the Conservation of the Eastern Tropical Pacific Region, on January 21 to 26, 2019, in the Galapagos Islands, Ecuador. We continue monitoring and studying Coiba for the conservation of its biodiversity, and now endangered howler monkeys.

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ACTIVITIES OF THE MESOAMERICAN PRIMATOLOGY THEMATIC GROUP (GIT-PRIMATES MESO) IN THE MESOAMERICAN SOCIETY FOR BIOLOGY AND CONSERVATION (SMBC)

The VI Mesoamerican Primate Symposium was held at the Sheraton Hotel in Panama City, Republic of Panamá, as part of the program of the XXII Congreso de la Sociedad Mesoamericana para la Biología y la Conservación, 21–25 November 2018. Seven of the eight Mesoamerican countries were represented at this event, held since 2012 to promote the exchange of information and encourage collaboration among primatologists from the region to improve and inspire new efforts from national primatologists to conserve our primate species. The meetings organized to date were in Panama (2012 and 2018), Belize (2016), and Costa Rica (2017), all organized by the Fundación Pro-Conservación de los Primates Panameños (FCPP) and its director Pedro Mendez-Carvajal, who is also the coordinator of GIT Primates Meso. The attendance was up compared to previous meetings due to the huge support received from anonymous donors besides the regular supporters (see Acknowledgements). The Symposia are attracting attention in South America and Caribbean side, and we welcome people from those regions. There were 14 participating primatologists who presented papers on ethology (Pedro Méndez-Carvajal, Pedro González), parasitology and zoonosis (Adela Palma, Enos Juárez), plant chemistry and the howler diet (Karol Gutiérrez), social hierarchy (Juan José Fernández-Castro), distribution (Danilo Chiari), conservation (Daniela Solano-Rojas, Melissa Rodriguez, Jarinton García, Luz Loría, Roger Morales, and Mynor Sandoval). The Mesoamerican region and the Mesoamerican corridor are under threat from the narco-deforestation, putting the last Panamanian spider monkeys (*Ateles geoffroyi panamensis*) at risk, according to the 2018 report of *Primates in Peril: The World's 25 Most Endangered Primates*. Efforts to protect the corridor have taken the lives of several conservationists. The symposium included a session concerning the importance of art as a tool for conservation. The first non-human primate mural in acrylic was presented by Victor Aleksander Martínez, a Panamanian artist from the University of Panama, creating a link between visual