

RUFFORD FOUNDATION
SECOND PROGRESS REPORT

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Project title: Marine otter (*Lontra felina*) monitoring along the Peruvian coast and population genetics using mitochondrial DNA markers

RSG reference: 20079-1

Here I present my second report on this project conducted in collaboration with the NGO Pro Delphinus and BioAl laboratories, both Peruvian institutions. The reporting period covered is between October 1st 2016 and February 28th 2017.

During this period, 15 locations have been visited from three regions in Centre and South Peru. Locations visited were Tres hermanas, San Juanito, San Nicolas and Paracas in Ica; Ancón, Pucusana, Punta Corrientes, Cerro Azul and Playa Lobos in Lima; and Vesique, Caleta Colorada, Puerto Casma, Gramita, Puerto Huarmey and Puerto Culebra in Ancash. Monitoring surveys were conducted in each location, covering a total of approximately 50 km of coastline.

Fifty-three scat samples have been collected from the 15 locations. Including this samples, BioAl has 100 scat samples as planned. DNA extractions and primers amplification success had varied depending on the samples quality and specific characteristics however, acceptable amplicons have been obtain using primers for the control region. The most problematic region has been the cytochrome b, however based on literature, a new pair of specific primers have been ordered to be tested. At the end of March we expect to send all amplicons to be sequenced to Macrogen, USA.

Regarding the project's educational component, at the end of January 2017 I travelled to Misiones, Argentina to participated at the International Course of Conservation Genetics from January 28th to February 12th. My participation was partially covered by the scholarship provided by the Conservation Genetic Network (Regenec) which are also the organizers of the event. This course is conducted annually and target Latin Americans which are currently conducting conservation genetic projects in their home countries. All professors provided good advices and knowledge regarding data analysis for each project presented by the participants. During November 2 talks were held at the elementary school "Caritas Graciosas", in Lima having an attendance of 20 children, the talk topic was marine fauna, their biological characteristics and threats. During the second half of February, four talks have been conducted for industrial fishers from the company TASA, having an attendance of 54 participants, which work at different locations along the Peruvian coast. The talk topic was top predators, covering information about: biological characteristics, main threats, bycatch mitigation actions and first aid to entangled animals. Finally, during the field trips conducted in Lima, two biologist were train on marine otter scat recognition and sampling.



Figure 1. Marine Biodiversity talks conducted at the elementary school Caritas Graciosas, Lima and to industrial fishers, Callao.



Figure 2. Presentation at the International Course of Conservation Genetic in Misiones, Argentina.



Figure 3. Marine otter (*Lontra felina*) spotted in San Nicola, Ica.



Figure 5. Scat sample collection in a cave in Punta Corrientes, Lima