

## ACTIVITIES REPORT

### TCD FIELD RESEARCH GRANT 2017

**PROJECT TITLE** : Effects of climate and land management on a bird community of the dry forest of northwest Perú

**PROJECT TYPE** : Preliminary Fieldwork

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**DEGREE SOUGHT** : Ph.D.

**DEPARTMENT** : Wildlife Ecology and Conservation

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**DATES** : July 8<sup>th</sup> to August 15<sup>th</sup>

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### ACTIVITIES

For six weeks that lasted my preliminary field work in the Tropical Dry Forest of Northwestern Perú, I traveled over three provinces looking for suitable sites for my future research. I was interested in finding places with different state of conservation and management, where I can develop my dissertation ideas. Among the 11 sites that I visited (Fig. 1), six were in natural protected areas managed by the Peruvian Government. The other 5 were lands managed by local communities, where they develop productive activities, such as cattle raising, goat farming, selective logging, and low-scale agriculture.

In each site visited, I spent on average two days and made a comprehensive list of the birds present and took notes on its associated habitat and degree of anthropogenic disturbance. In addition, I took coordinates for each threatened species located, in order to identify its territory and doing intensive vegetation surveys in a future step of my research.

### RESULTS

#### Sites

After the evaluation of all the 11 tentative sites for my field research, I am more likely to work within the boundary of the Cerros de Amotape National Park, (points 1 to 3 shown in figure 1), and its buffer areas. The Cerros de Amotape National Park together with two adjacent protected areas, the Tumbes National Reserve, and El Angolo Hunting Preserve is part of the North-Western Biosphere Reserve (Fig. 2) Together they preserve 230 000 ha of dry, semideciduous, and deciduous forests, the largest tract of these forest types still remaining in

its whole distribution. The Cerros de Amotape National Park is a strictly protected area within which no direct use of natural resources is allowed. However, because of poorly implemented control policies the park is used for free-range cattle grazing, hunting and selective logging.

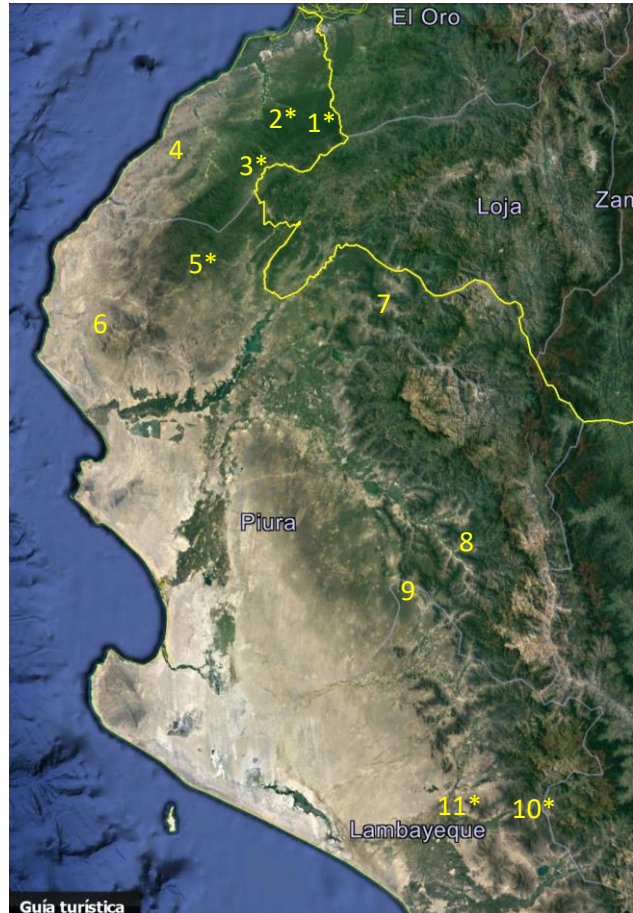
Besides the fact that I did not visit the Tumbes National reserve in this pilot fieldwork, I will include this protected area in my research. Direct use of natural resources is allowed there, as long as these uses are compatible with the objectives of the reserve and its management plans. These activities include low-intensity timber extraction, hunting, cattle grazing, and conversion of forest to pastures. However, Piana and Marsden (2014) found that human-induced activities in the areas ranged from forest clearing for agriculture and pastures, free-range cattle grazing, hunting, commercial and subsistence logging, and extraction of non-timber forest products (e.g., collection of fruits, parrots). Due to the above mentioned, this site becomes an excellent place where I can measure the effects of different land management on dry forest birds' communities of NW Peru.

### **Species**

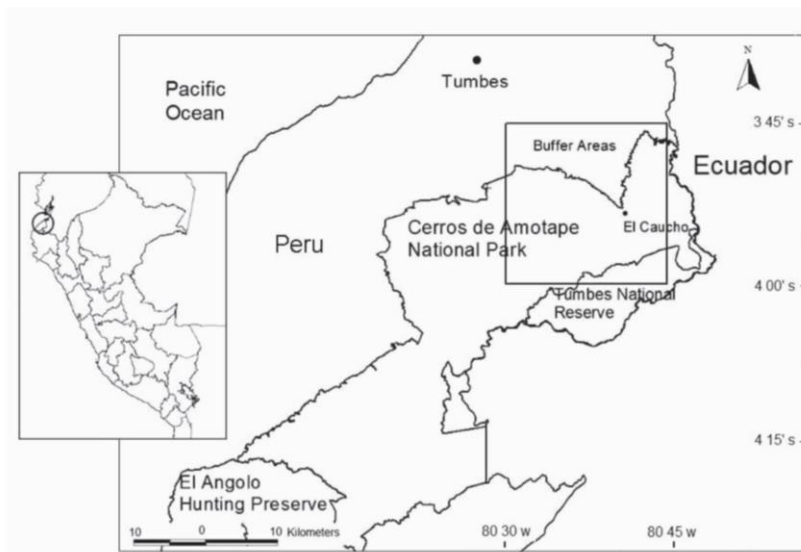
Among the 11 sites visited I found 14 threatened and 40 (out of 55) endemics species to the Dry Forest of northwestern Peru. I will focus my research on 10 endemic species that uses the understory of the dry forest as its primary habitat, because those species are the ones that are more negatively affected by human pressure.

### **DIFFICULTIES**

Although in my proposal I mention that part of my investigation will be carried on the El Angolo Hunting Reserve, it actually may be difficult to do research there. This area is an active hunting reserve, and another kind of activities during the hunting season is not allowed. Hunting season goes from May until October, where dozens of hunters arrive weekly and nobody else is allowed to get there. This situation makes it unsuitable for my research purpose, and that is the reason why I am selecting the Tumbes National Reserve (see above) as my site with a lot of anthropogenic disturbance.



**Figure 1:** Sites visited in the Dry forest of NW Peru during the preliminary fieldwork. Tumbes: 1) El Caucho, 2) Angostura, 3) Cabo Inga and 4) Cancas. Piura: 5) El Angolo, 6) Talara, 7) Suyo and 8) Huabal. Lambayeque: 9) Ñaupe, 10) Laquipampa and 11) Pomac. Sites with an asterisc are inside a natural protected area.



**Figure 2.** North Western Biosphere Reserve and its three protected areas: Tumbes National Reserve, Cerros de Amotape National Park, and El Angolo Hunting Preserve



**Figure 3.** Continue Dry Forest on the Peruvian-Ecuadorian border.



**Figure 4.** Cleaning of the Dry Forest for small-scale agriculture.



**Figure 5.** Pacific Royal Flycatcher, endemic to the Dry Forest of NW Peru. El Caucho, Tumbes.



**Figure 6.** Ecuadorian Piculet, endemic to the Dry Forest of NW Peru. Huabal, Piura.



**Figure 7.** Ph.D. student Diego García Olaechea, Dr. Scott Robinson and Dr. Bette Loiselle visiting one of the driest part of the Dry Forest in Talara, Piura.



**Figure 8.** Field crew visiting El Caucho in the Cerros de Amotape National Park, Tumbes.