Progress Report II Rufford Small Grant



PATAGONIAN WILD FOXES WARNING AGAINST POISONING BY CONDITIONED TASTE AVERSION

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Alejandro Travaini Centro de Investigaciones Puerto Deseado Universidad Nacional de la Patagonia Austral Santa Cruz, Argentina This second report describes our first field work at the study area with the Ruffod funds. As in the previous report, I would greatly appreciate any comment and suggestion to be incorporated in future reports. This field work took only three days, and we traveled all internal roads, tracked them at a GPS file, and geo referenced all 90 sites which will contain a pair of bait stations each.

1. The study area

As mentioned at the initial proposal and the first report, our study area for this field experiment is the "Parque Nacional Monte León" (PNML 50, 35° S; 69, 10° W), southern Santa Cruz (Figure 1).



Figure 1. - Geographic position of the study area (PNML) at Santa Cruz province, argentine Patagonia.

Monte León National Park was created on November 2004. It has a total area of 62.700,00 ha. and belongs to the Patagonian shrub-steppe. It has an arid cold weather, with a mean annual temperature of 6, 8°C and a mean rain fall of 250 mm, mostly during fall and winter. Prevailing winds are from the west and southwest with a mean velocity of 15 to 20 Km/h, and wind gusts of up to 100 km/h. His name comes from a small coastal mountain with the shape of a lion's face (see picture below).



2. Field work

From 27 to 29 January 2010 Diego Procopio and Alejandro Travaini, from the Centro de Investigaciones Puerto Deseado, and Daniel Simoes, a Brazilian biologist who was visiting us traveled to the study area and performed the next field activities.

2.1 We have monument each bait station along the internal dirty roads and georeferenced them definitively. We also delimited three groups of 5 bait station lines each (30 bait stations), one for each experimental treatment and one for the control (Figure 2). As described before, each bait station consists of two one meter circle of soft soil, 2-3 meters apart. Bait stations are 500 meter from each other inside the line of 6 bait stations, while lines are 1000 meter apart, at least.

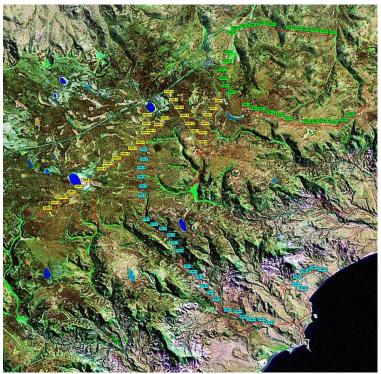


Figure 2. - Bait station lines identified by experimental treatments. Lines with green labels correspond to Treatment II, blue labels to Treatment I, and yellow labels to Control. Red line corresponds to the internal secondary roads of the protected area.

2.2 We have also prepared all bait stations pairs and activated one of them with minced meat bait (type A) (Figure 3). In spite of not checking for any fox visit the next morning, we are interested in promoting fox familiarity, both with the stations and the wood stack placed between them (Figure 4).



Figure 3. - Activation of a bait station with a minced meat bait buried at its centre.



Figure 4. - Wood stack identifying bait station and metal ring used to prepare circles with soft soil.

3. Stalking index evaluation. For every bait station pair we evaluated an index which intends to quantify the stalking condition for a predator approaching the station while any potential visitor is consuming the bait. For this, an observer quantify the time he can observe a piece of white paper that a second observer moves at a constant low speed in a 10 meter circle around him (Figure 5).



Figure 5. - Observer at bait station evaluating the time he can observe the white paper carried by person moving in a 10 meter diameter circle around him.

4. Next campaign setout

We have also commented with the guard in charge of the protected area all provided tasks for the complete aversion trial next march. For instance, we will take a few thousands of different bait types and we need a secure place where to store them, away from mice or any other possible predator, including their own dogs.

All this previous work will alleviate initial march activities so we will be starting our field experiments with baits shortly after arrival. We will follow the experimental design presented in the first report. Shortly, we will first try to generate aversion to baits with the aversive alone or masked into a resin, and secondly we will evaluate if our aversion is real (undetected aversive) or if it is repellency (detected aversion) for both situations.

During the March field work we will give a short talk to a small rancher group, those neighboring the protected area. The intention of this talk is to inform them about our project, its implications for wildlife conservation and formerly, the harmless of our results to their ranching activities. We also consider the possibility to invite single ranchers to accompany us any day while checking the stations. This way we want to prevent negative attitudes toward our fox research based on their ignorance of real work and objectives.

Acknowledgements

We want to thank personnel from the protected area, Pablo Rosso and Christian Vellido, for their help. Pablo authorized us to use park facilities while Christian strongly assisted us during field movements and bait station activation. We also want to thank Parques Nacionales Administration for their support and authorizations to develop our research inside protected areas.