Progress Report I Rufford Small Grant



PATAGONIAN WILD FOXES WARNING AGAINST POISONING BY CONDITIONED TASTE AVERSION

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1. Baits

Bait elaboration is our main activity since October 2009. We are preparing two different baits, according to our experimental design. Nevertheless we changed the composition of one of them. There were two main reasons for this. First, the original fish bait would suffer rapid decomposition during field trials, and second and most important, we recently learned that the aversive masked into the IRP-64 Amberlite resin would be liberated in humidity, so the fish bait would potentially not properly mask the aversive taste and odor, and foxes can detect it before consumption. We changed the fish bait for a completely dried one, based on dog food and raisins. We are now preparing a Spanish version of the bait elaboration protocol. After reviewing it, we will translate it to English and send you a copy in a future report. The other bait, which based on minced meat, will be the same as originally proposed. This is because it will not contain any aversive during the trial. Both baits do not share any single ingredient, an important requisite of our experimental design.

2. The experiment

The experiment, which was briefly presented in the application form, consists of one control and two treatment areas. The control area receives, sequentially both baits but without any aversive substance. Treatment I test the ability of levamisole to generate true aversion against repellency. Finally, Treatment II tests the ability of the IRP-64 Amberlite Resin to mask any taste or odor from the aversive (Levamisol). The complete experiment in a schematic form is also provided at the end of this report.

We have also prepared the field data sheet, which will contain all information derived from visit, consumption and any behavior of foxes at each bait station, each day. This field sheet will be tested again, before printing them.

3. Preliminary visit to the study area

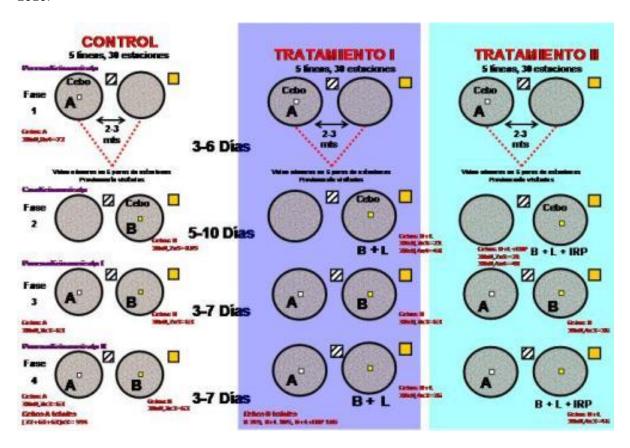
We have planned a short visit, of about three days and two persons to Monte Leon National Park. We want to visit each of the 180 bait stations we planned to use. We already have a map of the study area, with their internal secondary roads. This was done during a previous visit with the aid of a GPS, mapping software and the aid of Google Earth when necessary. The objective of this visit to the study area is to install the wood stakes at each sampling unit, consisting of two bait stations 2-3 m apart. This will allow us to know the exact sampling units we will have at the available secondary roads inside Monte León National Park, and will reduce the activation time during the complete trials during next March. We want also to evaluate the time required to activate and check each group of bait stations, that of the control and treatments. We will also pre-bait with one meat bait at each pair of bait stations, in order to familiarize foxes to these baits and increase fox visits during trials.

We have already sent all wood stacks and other field tools to the protected area. This was because we will not have enough space in our vehicle to carry all the baits, people and camp material in only one trip so we got advantage of another team traveling to the area about 1 month ago.

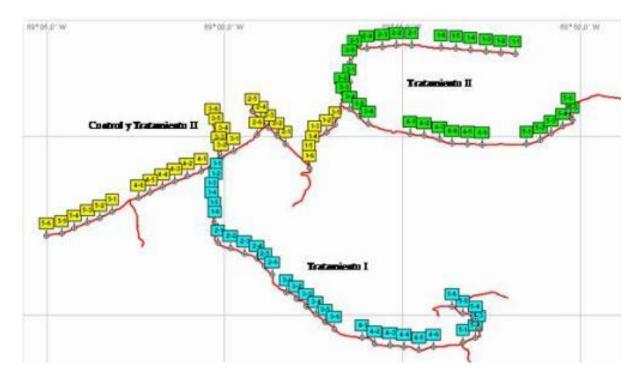
4. Planned activities

During February 2010 one biologist recently incorporated to the group will prepare the compound of the resin and Levamisol, in a chemistry laboratory at the Universidad de Mar del Plata. She will bring to Puerto Deseado the masked aversive and we will prepare those baits during the last days of February, and use them during the March 2010 field trials.

We have also offered the National Park guards to give some informal talks to neighbouring landowners, to inform them about the work we are doing with foxes. It is a very sensitive subject for sheep ranchers and we consider important to keep them well informed, so they do not need to imagine about our work and it's consequences on their activity. They usually react negatively to any research initiative because they consider them by default as contrary to their interests. These talks will be performed during March 2010, but we will discuss them during our short visit in January 2010.



Field experiment represented in a schematic form. Circles represent bait stations, A and B are the two bait types; L and IRP are the Levamisol and the IRP-64 Amberlite Resin, respectively. Baits required for the complete trial (red numbers) were evaluated from bait consumption rates, during monitoring programs at other protected area in the region.



Preliminary map showing secondary roads in red and bait stations in color. During the first 15 days we will develop the Control and Treatment II phases of the experiment. During the second 15 days period we will develop Treatment I and eventually repeat Treatment II using those bait stations previously used as Control. We believe that foxes will be highly pre baited to that area and they will respond better to the Treatment II. We selected to repeat this Treatment because we consider the masked aversive to be the possible generating true aversion.