Project Update: September 2012

We finished the 2012 field season in Tambopata that was the third season of my PhD work. In the last 3 years we collected more than 700 scarlet macaw feathers from nests and clay-licks in the study area. We were able to collect feathers from both side of the new Inter-Oceanic highway and in the 2012 season we managed to enter to the Candamo Basin several times to collect more samples and we also re-sampled nests in TRC. With this we accomplished our plan for fieldwork and sample collection. Now it's time to move our base to the laboratory and start extracting the precious genetic materials that can answer many of our questions.

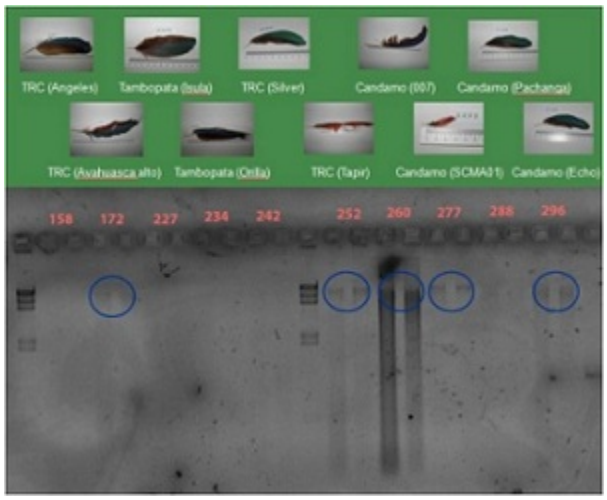
Map where samples were collected (both side of the highway)

Climbing an emergent canopy tree with macaw nest in the rainforest

We established collaboration with the Molecular Biotechnology Unit, Research and Development Laboratory, Universidad Peruana Cayetano Hereida in Lima, Peru. The

laboratory offered space and equipment to extract DNA from the feather and blood samples of scarlet macaws in the country of our research site.

From feathers we extracted the DNA using DNEasy Blood and Tissue kit from Qiagen with a modified protocol. For extracting DNA out of the blood samples stored on FTA cards we used FTA extraction kit. For the analysis we only used feathers that were preserved in a good quality. After working months in the laboratory we extracted a total of 471 feathers and 77 blood samples.



Evaluating the quality of extracted DNA from feathers