Project Update: July 2014

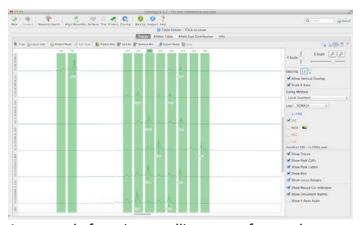
We designed 40 genetic markers (microsatellites) specifically for our study species, the scarlet macaw. In the last months we tested these markers on 107 blood samples with success: all the designed markers worked and they were also polymorphic. We also tested the same markers on some other parrot species and they also worked. This is a good prediction that our newly developed method will also work on other species.

The gene mapping results of the blood samples have already given us enough data to analyse the general population genetics of scarlet macaw populations in southeastern Peru. We are now analysing these data and writing up the results.

In the next months we will analyse our c. 800 feather samples collected in our study area to apply our new microsatellite markers on them and test this as a non-invasive method. The comparison between the feather data and the blood database will provide us extraordinary information on those macaw populations and hopefully give a new technique for conservation biology.



Setting up the polymerase chain reaction (PCR)



An example for microsatellite scores for one locus: partial result of the gene mapping

In the news at various home pages:

- Mongabay:

http://news.mongabay.com/2014/0617-devitt-macaws-olah.html

- Australian National University: http://fennerschool.anu.edu.au/news-events/using-artificial-nests-assist-and-study-macaw-parrots-lowland-peru

- Freshpreneur:

http://www.thefreshpreneur.com/thursday-recap-pop/the-macaw-project

If you can also add a video to your homepage, we just made a trailer of our research that you can see and embed from here: http://youtu.be/OxMyNkefHXQ