

## Project Update: December 2021

The COVID-19 pandemic and the consequent sanitary restrictions implemented by the Mexican Government limited the field trips scheduled in the project proposal on *Agkistrodon russeolus*, so we were forced to reschedule the fieldwork for about 1 year. However, even with these restrictions, we were able to obtain a significant number of fecal and stomach samples from live and dead snakes for the analysis of the species' diet. Furthermore, thanks to the funding granted by The Rufford Foundation, we expanded the study of diet to include almost the entire known distribution range of the species instead of just analysing the diet of the coastal populations, as we initially proposed. Our results indicate that *A. russeolus* has a generalist diet, which includes various types of vertebrates such as reptiles, mammals, birds and amphibians. Interesting, is that we observe that there is a geographical variation in the diet of the species depending on the region, where snakes from coastal populations feed a large proportion of lizards, while snakes from central and southern regions of the Yucatan Peninsula mostly consume mammals. The results of this part of the research are under review in the journal *Herpetologica*.



A male *A. russeolus* (ID number \*303) located in situ equipped with a radio-transmitter.

On the other hand, we have implanted nine *A. russeolus* coastal snakes with radio transmitters: seven from an area impacted by humans and two from a conserved natural area. We have monitored the movements and collected information on the habitat used by these snakes, however, we hope to equip more snakes in the near future, and we are still in the fieldwork phase so we will continue to monitor the snakes for a few more months to be able to get more data to analysed.



An *Agkistrodon russeolus* individual collected on the northern coast of Yucatán to study the species' diet and spatial ecology.



A big road-killed specimen of *A. russeolus* found during the field surveys.