Project Update: November 2016

Here is a small update on the project on carnivorous bat movement in Calakmul, in the south of Mexico. We went to the field in September 2016 and returned in October 2016. We equipped various individuals of *Chrotopterus auritus* with GPS trackers at two different sites. We were able to retrieve all the trackers and got movement data for a total of 23 days. Unfortunately, we had to change GPS trackers before we left for the field, we have been working with Vesper trackers from Israel, but they had various problems and most of the time they were not able to get a fix. We therefore decided to change to GiPSy trackers from the company Technosmart, Italy. They have been working very well until this moment. The results are very interesting, we thought that they would move solely in primary undisturbed forest, but several of them foraged in a mosaic of different types of land use; secondary vegetation, abandoned agricultural fields and primary undisturbed forest. We also saw that female individuals foraged nearer to the roosts, at about 2 km from their roost, males foraged at about 5 km from the roost. We believe that they keep near the roost, because they have a juvenile in the roost waiting for them. At that time there were eight individuals in the roost at the temple site; two adult females, four adult males and two juveniles one male and one female. Both female adults were still lactating, but they were probably starting to feed the juveniles directly with prey. The other roost of Chrotopterus is a cave with seven individuals; two female adults, three male adults and two juveniles, both male. I am sending a few images of bats with trackers and also an image of the movement of a few of the individuals of *Chrotopterus* in one of the sites.

As promised in our proposal, we tried to capture individuals of *Vampyrum spectrum* and equip them with trackers as well. Even though we have been capturing them with regularity near to the two roosts they use, this time we were unsuccessful of catching them. In the case of *Chrotopterus* it is fairly easy to capture them, we can enter the roosts and catch them using butterfly nets. The roosts where *Vampyrum* individuals reside are hollow trees but from the top down, and not open at the base of the tree. The only opening is high up in the tree. This makes it very difficult to catch them flying out, also because the roost tree is the highest tree in the vicinity, so that it is not possible to attach a mist net to surrounding trees. We are going to the field next week and we will keep on trying to catch them and equip them with GPS trackers.



