

South Florida Deer Research Project Quarterly Update April - June 2015

Deer Capture

- During 01 May – 26 June, 2015, 20 white-tailed deer were captured using rocket-nets on the Florida Panther National Wildlife Refuge (Figure 1).
- We targeted males in hard antler and adult females, however, the majority of males were still in velvet.
- Thirteen adult females and 3 adult males were fitted with GPS collars.
- Three fawns/yearlings that were too small for collars were ear-tagged only and 1 yearling male that was injured during capture was euthanized.

Survival Monitoring

- During this quarter, we investigated 12 mortality events.
- At each mortality event, we searched the site for sign providing evidence of the predation or scavenging event.
- We documented mortality events for 7 female and 5 male white-tailed deer. The 7 female deer mortalities are categorized as follows: 1 bobcat predation event, 5 panther predation events and 1 panther predation event confounded with capture (mortality occurred within 12 days of capture). The 5 male deer mortalities were categorized as panther predation events. In some instances we cannot definitively eliminate the possibility of scavenging, and the causes of all mortality data should be considered preliminary until all reviews are completed.
- No animals were lost due to the Mud Lake Fires.
- To summarize, the total number of deer that have been collared/monitored since the beginning of the study is 116 deer. Of those, 28 deer have died and 2 deer dropped their collars, bringing the total number of deer being monitored at the end of the 2nd quarter to 86.

Camera Trapping

- We continued to monitor the 180 cameras in the Florida Panther National Wildlife Refuge and Big Cypress National Preserve.
- Each camera trap was visited at least twice, but typically three times, during the quarter to download data and to maintain the trap site (i.e., clear vegetation, replace batteries, and exchange any malfunctioning cameras).
- Due to the Mud Lake Fires in Big Cypress National Preserve, we removed 31 camera traps from the Bear Island Grid for approximately 2 weeks during late May. No cameras were damaged during the fire.

Other Activities

- We hired 2 technicians to assist with ongoing field efforts.
- We compiled and processed photo data from the previous service period and began photo interpretation.

- We continued development of spatial capture-recapture models to accommodate the data that will arise from this study.
- We conducted aerial surveys to estimate detection probabilities of known-location marked deer (GPS collared deer). The goal of this project is to improve the future FWC aerial deer survey protocol and to aid with the interpretation of previous aerial survey results.

Outreach

- We developed the South Florida Deer Research Project web page that was launched in June of 2015.
- We held a research symposium at the May meeting of the Everglades Coordinating Council in Davie, Florida. In addition to the South FL Deer project introduction and update, topics included an overview of UGA Deer Lab white-tailed deer research projects, fawn survival in a multiple predator system, and investigation of ungulate kill sites.

Next Quarter

- All monitoring and camera survey efforts will continue into the next quarter. We also began preparations for the winter capture efforts. Rocket netting captures will continue in the Panther Refuge as collars become available. In addition, helicopter captures will resume in January.

Figure 1



Rocket netting at the Panther Refuge. With this capture method, deer are attracted to a specific area with bait (soybeans) and the team triggers a set of small rockets that pull a net over the deer very quickly. Deer are then physically restrained rather than anesthetized with drugs, allowing the team to immediately release the deer after collaring and ear-tagging.