

## **South Florida Deer Research Project Quarterly Update October - December 2015**

### **Survival Monitoring**

- During this quarter, we investigated 10 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 8 female and 2 male white-tailed deer. The 8 female deer mortalities are categorized as follows: 5 panther predation events, 1 alligator predation, 1 bear predation event and 1 unknown. The 2 male deer mortalities were categorized as 1 panther predation event and 1 unknown. 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.

### **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).

### **Captures, Telemetry and Other Activities**

- We restarted capture efforts in late December, with 2 deer captured with rocket-nets and 2 were darted. Full capture efforts will resume in January 2016 with helicopter captures and rocket-netting.
- We continued to compile and process photo data, to date over 150,000 images have been processed and catalogued by species.
- We also continue to compile and process GPS collar data. To date, approximately 200,000 deer locations have been acquired via GPS-telemetry. We've developed home range and core area estimation using the dynamic Brownian-bridge movement model. We've begun to analyze temporal activity patterns utilizing step length, or the distance between sequential relocation records, in order to compare activity patterns seasonally and in relation to influences such as predation, hydrology, fire, and hunting. In addition, we are developing models that examine what habitat types are preferred and avoided and estimating the effects of predation, hydrology, fire, and hunting on habitat selection.
- We presented at 22nd Annual Meeting of The Wildlife Society and the 69th Annual Conference of the Southeastern Association of Fish & Wildlife Agencies.

### **Next Quarter**

- All monitoring, camera survey efforts and other activities will continue into the next quarter. We are also preparing for the helicopter and rocket-netting captures that will resume in January with the goal of capturing 70-80 additional deer.