

South Florida Deer Research Project Quarterly Update

October – December 2018

Survival Monitoring

- During the final quarter of the study, one male with a malfunctioning collar (i.e. collar no longer giving a GPS location) was harvested by hunter in North Addition Lands. No other collared deer died during the quarter.
- At the end of the quarter, we attempted to drop all functioning and malfunctioning collars. We successfully dropped and retrieved 33 collars while 6 collars (i.e. those no longer giving a signal or failed to receive the drop-off command) were not retrieved.
- During the quarter, we obtained 16,111 GPS locations of individual deer.

Camera Trapping

- We continued to continue to proof images for from camera data collected in 2015–2017 from the Florida Panther National Wildlife Refuge, Bear Island, and Addition Lands camera grids.

Additional Notes

- During the quarter we gave two presentations at the 10th Annual Big Cypress Research Symposium and one presentation at the Miccosukee Annual Meeting.
- The field portion of the study is now complete. We will continue to develop and refine deer resource selection, survival and population models and analyses methods. In addition, outreach efforts and presentations at stakeholder and professional meetings will continue into 2019. Final Report to FWC is due June 30, 2019.

Summary

- During the 3 capture season (2015, 2016 and 2017) of the study, 293 deer were captured of which 263 adult deer (172 females, 91 males) were fitted with GPS collars, while all subadults were ear-tagged only. The collared deer provided us a total of 733,774 locations.
- We deployed 180 cameras that were monitored continuously for over 3 years. By the end of 2018, 453,896 images were processed and catalogued by species or group. Additional 76,316 images were recorded using cameras associated with capturing behavioral data on both deer and their predators.
- During the 4 years of the study, the team gave over 50 presentations on the project ranging from presentations at international meetings to local organizations.
- To date, two master's students (Daniel Crawford, UGA and Kristin Engebretsen, UGA) have completed their research, while one MS student (Hunter Ellsworth, Virginia Tech) and two Ph.D. students (Heather Abernathy-Conners, Virginia Tech and Lydia Stiffler, UGA) continue their work on the project. In addition, the project recently welcomed a postdoc, Florent Bred, UGA to focus on further analyses of the survival data.

During December 2018, all remaining collars were sent a drop-off command, causing them to activate a detaching mechanism and fall off. The overall dry field conditions made for optimal collar-retrieval and collars were retrieved by foot, ATV and helicopter.

