

Distribution and Density of Sea Turtles in the Gulf of Mexico: GoMMAPPS First Field Season  
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Data gaps for marine turtles exist throughout the Gulf of Mexico; a paucity of information occurs in areas of heavy oil and gas use including BOEM's Central and Western Planning Areas. This project will focus significant turtle capture effort on those two regions, while analyzing broad-scale data from across the entire northern Gulf. We will focus on four primary tasks: broadscale aerial surveys, habitat modeling, satellite tracking and genetic analyses. Aerial surveys will be conducted by the National Marine Fisheries Service. We will partner with them to utilize survey data in habitat modeling efforts including combining historic survey data with historic satellite tracking data to help guide future survey efforts. So far, modeling of satellite tracking data has occurred using the Ensemble Ecological Niche Model. This model highlighted areas of overlap for Kemp's ridleys and loggerheads off the Yucatan Peninsula, Mexico and Northwest Florida. In July and August 2017, we deployed satellite tags on two green turtles that nested on Eglin AFB property on Santa Rosa Island, FL and on the St. Joseph Peninsula, FL. In addition, the National Park Service donated data from a nesting green turtle that was tracked from Gulf Islands National Seashore in 2002. So far, all three tracks are following a similar pattern; our next sampling opportunity will be the 2019 nesting season. Finally, we are in the process of transferring samples to partners at the University of Georgia and the University of South Alabama for genetic analyses.