Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS)

Seabird Surveys -- February 2018

Summary Report: Prepared by Randy Wilson, USFWS Migratory Bird Program

From January 31, 2018 – February 27, 2018, staff from USFWS completed the largest, most comprehensive winter seabird survey ever undertaken in the northern Gulf of Mexico. The survey covered the entirety of the northern Gulf of Mexico from the USA-Mexico border near Brownsville, TX to the Florida Keys; out to 50 nautical miles offshore (see Figure 1). Each sample point represents ~30 miles of transect survey; resulting in circa 5,400NM of transects. Weather (fog) was a persistent problem along the Louisiana and Texas coast. Nevertheless, all but one sample point was surveyed (179 of 180 completed) during the February flights. A combination of weather and logistics prevented the one data point from being surveyed.



Figure 1. Schematic depicting the selection of sample points (n=180) to be flown during the February 2018 GoMMAPPS winter seabird survey along the northern Gulf of Mexico.

Surveys were completed using two USFWS Kodiak amphibious aircraft, two USFWS-Migratory Bird pilots (Jim Wortham and Steve Earsom), and four USFWS biologists (Randy Wilson and Dean Demarest – Migratory Bird Program; and Pat Stinson and Nick Wirwa – National Wildlife Refuge System). To ensure each aircraft surveyed approximately the same number of samples with platforms and without platforms (e.g., there are no platforms in the BOEM Eastern Planning Area – area east of Pensacola, FL), the Gulf was divided into four sectors: Brownsville, TX-Lafayette, LA [sector 1]; Lafayette-Pensacola, FL [sector2]; Pensacola-Cedar Key, FL [sector 3]; Cedar Key- Key West, FL [sector 4]. Crew #1 covered

sectors 1 & 3 whereas Crew #2 covered sectors 2 and 4. Both Crews started in Pensacola, FL and worked outwards to prevent any gaps in surveys given weather or logistical issues. Additionally, an unreconciled double observer protocol was used, whereby each observer recorded birds seen independently from each other and no attempt was made to reconcile between specific individual observations. Because the pilot was an observer, the two biologists rotated seats daily (from back to front, as well as behind the pilot) to obtain information that will facilitate understanding observer bias and any bias associated with seat assignment (front seat v. rear seat).

Overall, a variety of bird species were detected: Northern Gannets, Herring Gulls and Laughing Gulls dominated the observations offshore, while a variety of waterfowl species (Redheads, Scaup spp., Red Breasted Mergansers, Common Loons) along with Brown Pelicans, Royal Terns, and Brown Noddies were observed in the nearshore environments.

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Future Surveys:

- Summer (July) 2018
- Winter (February) 2019
- Summer (July) 2019
- Winter (February) 2020