GoMMAPPS Seabird Vessel Trip Report 21 September - 6 October 2018 Fall Marine Mammal, Leg #3 R/V PISCES

Summary: The Gulf of Mexico (GoM) region is critical in affording key breeding, staging, and wintering habitats for North America's avifauna. Yet limited information is available to characterize the species composition, distribution, and abundance of birds Gulf wide, particularly given the large number of platforms (in the Central and Western Planning Areas), and cumulative level of oil and gas activity in the northern GoM region (2012, 2013). The Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS) Seabird Project anticipates being the most spatially and temporally extensive avian research effort ever conducted in the northern GoM. The GoMMAPPS Seabird Project will document the distribution, abundance, and diversity of birds so as to better inform regulatory decisions that influence the conservation of migratory avian resources (Seabird Science Plan 2016).

From 21 September – 6 October 2018, two GoMMAPPS seabird observers accompanied the GoMMAPPS marine mammal survey, Leg 3, aboard the *R/V Pisces* based at the NOAA National Marine Fisheries Service, Pascagoula, MS. Nick Metheny and Peter Blank conducted counts of all birds detected within a 300-m strip transect while the ship was underway (Balance and Force 2016) (*Figure 1*). Observers counted all seabirds for a total of ~149 hrs over 16 calendar days. Some brief interruptions due to inclement weather occurred on this cruise leg. Survey time was generally 9 - 11 hrs/day, with ~2 hrs of additional observation effort on the first afternoon while on transit from port (21 September) and 1 hr of effort on transit back to port (6 October).

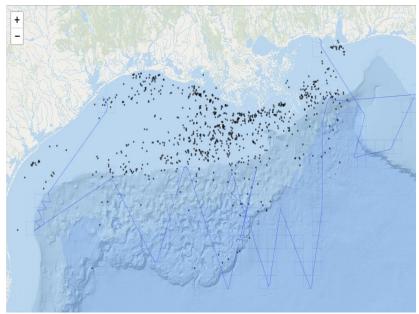


Figure 1. Map of marine mammal and seabird track lines on Leg 3 of the 2018 GoMMAPPS fall survey aboard the R/V *Pisces*. Observers conducted strip transect surveys during parts or all of the scheduled cruise dates, as well as on transit between track lines beginning on the afternoon of 21 September and ending by late morning on 6 October. <u>NOTE</u>: blue track lines were completed during Leg 3 of the survey which started at Galveston, TX, and worked progressively to the E-NE before ending at Pascagoula, MS. Black dots on the map indicate locations of oil and gas platforms.

This GoMMAPPS seabird survey will provide key information for decision-makers. In general, spatial coverage by the R/V *Pisces* during this leg of the fall 2018 GoMMAPPS survey was widely dispersed in offshore and pelagic waters of the Central and Western Planning Areas out to the EEZ (*Figure 1*). Several rare or casual species for the GoM were noted, including three red-billed tropicbirds and a sub-adult, white phase red-footed booby. On 22 September, observers tallied a remarkable 6 masked boobies, all following the ship in pelagic waters E-SE of Port Aransas, TX. Similarly, on 25 September, a mixture of 5 adult, sub-adult, and juvenile brown boobies approached the ship all at once. A total of 10 band-rumped

storm-petrels were seen on this leg, most near DeSoto Canyon off the west Florida shelf. Observed in groups of up to 5 individuals, GoMMAPPS now has compiled records that extend the known seasonal occurrence of band-rumped storm-petrels within the GoM from at least early March to early October. Compared to the earlier legs of the same *Pisces* MMC, Leg 3 of fall 2018 GoMMAPPS detected a greater number of migrating passerines, shorebirds, waterfowl, and wading birds. Observers detected 40 total species (22 species of pelagic, offshore, and coastal marine birds; see ¹ below). The total count and number of birds/day were in the mid-range relative to other GoMMAPPS surveys conducted to date. In total for this leg, sightings of ~2,888 total birds (~663 seabirds; see List below) were entered in the SEEBIRD database, a detection rate of ~181 birds/d or ~19 birds/hr. Only one sea turtle was detected, but a number of marine mammals were also observed.

BIRD SPECIES LIST

- Audubon's shearwater¹
- band-rumped storm-petrel¹
- black tern¹
- bridled tern¹
- brown booby¹
- brown pelican¹
- Cory's shearwater¹
- double-crested cormorant¹
- Forster's tern¹
- great shearwater¹
- herring gull¹
- laughing gull¹
- magnificent frigatebird¹
- masked booby¹
- parasitic jaeger¹
- pomarine jaeger¹
- red-billed tropicbird¹
- red-footed booby¹
- ring-billed gull¹
- royal tern¹
- sandwich tern¹
- sooty tern¹
- American redstart
- barn swallow
- blue-throated green warbler
- blue-winged teal
- cattle egret
- cliff swallow
- common nighthawk
- Chuck-will's-widow
- great blue heron
- great egret
- hooded warbler
- little blue heron
- osprey
- peregrine falcon
- ruby-throated hummingbird
- snowy egret
- tropical kingbird
- Wilson's warbler

¹ Both coastal and pelagic seabird representatives are included above the line and all other species (identified to species) are indicated below the line