**Weather**

During the week of 6/10-6/16, the weather was generally cloudy with sunny weather early in the week and overcast conditions in the second half of the week. Total precipitation for the week was 0 inches and average wind speed was 8.1 knots, with maximum gusts of 31 knots on 6/10. The average temperature for the week was 62°F with a maximum of 86°F and a minimum of 47°F.

**Caspian Terns**

A drone flight to obtain aerial photography of the tern colony was conducted on 6/14 this week. The count of Caspian terns on the one-acre colony area from the photo mosaic taken during this flight was 5,767 individuals, which was a slight increase from the previous count of Caspian terns on-colony from a photo mosaic taken on 6/08 (5,499 individuals). Counts of the number of Caspian tern individuals nesting and/or prospecting at three apparent satellite tern colonies off of the main tern colony on East Sand Island were also obtained from the photo mosaic. The satellite colony on the upper beach just to the south of the one-acre colony area had a total of 233 tern individuals. The satellite colony on the upper beach to the southwest of the one-acre colony area had a total of 943 tern individuals. The potential satellite tern colony reported last week on the southeast tip of East Sand Island, located just inland from the passive dissuasion installed on the upper beach was photographed shortly after the area was dissuaded and did not have any tern individuals present on 6/14. Therefore, a combined total of about 1176 Caspian tern individuals were counted in the potential satellite colony locations from the 6/14 imagery.

Caspian terns continued to exhibit nesting behaviors on most of the one-acre colony area, with frequent observations of copulation, territorial disputes, and mate feedings throughout this week. Caspian terns continued to lay eggs and incubate throughout most of the one-acre colony area. Due to limited bald eagle disturbance to the tern colony this week, the number of tern eggs on-colony remained relatively stable, particularly in the eastern half of the colony area, but also just west of the center of the colony area. Western/glaucous-winged gulls continued to depredate tern eggs during disturbances to the tern colony that did occur. Caspian terns nesting on the westernmost portion of the one-acre colony area continued to flush more frequently than terns nesting in the central and eastern portions of the colony.

The number of tern nests with eggs on the one-acre colony decreased throughout the week. By the end of the week (6/16), there were an estimated 2,378 tern nests with eggs on the main colony, which is a decrease from last week’s estimate (2,917nests with eggs on 6/09). The number of tern nests containing eggs was estimated based on the assumption that the 20 study plots on the colony, each measuring 6 m x 6 m, are representative of the colony as a whole. The majority of these tern nests with eggs contained only a single egg; the number of tern nests containing two eggs increased from the previous week, and a very small percentage of tern nests contained three eggs.

The proportion of salmonids in the Caspian tern diet was 16.0% this week, which was less than the previous week (28.7%). Surfperch comprised 29.7% of tern bill-loads, followed by anchovies (23.0%) and clupeids (17.7%). Kleptoparasitism pressure by gulls declined this week with only around 6.0% of Caspian terns observed returning to the colony with fish in their bills being chased by gulls whereas 11.7% of terns observed returning with bill loads were chased during the previous week. We continued to observe adult bald eagles chasing Caspian terns with bill-load fish multiple times during the week, and adult bald eagles were repeatedly observed kleptoparasitizing fish from adult Caspian terns; both types of eagle behavior were observed at a lower rate compared to previous weeks.

**Pelicans**

Although a boat-based brown pelican survey was not conducted this week, we estimate that approximately 400-500 brown pelicans have been roosting on the south beach near the Caspian tern colony and on the edge of the upland grassy area just east of the one-acre tern colony. No adult brown pelicans in breeding plumage were observed this week, and pre-nesting and nesting behaviors by brown pelicans have not been observed on East Sand Island so far this season.

**Gulls**

Attendance by large numbers of ring-billed gulls at their breeding colony located on the upper section of the northeast beach on East Sand Island was consistent with the previous week, and individuals continued to sit tight on nests. An adult bald eagle was observed causing major disturbances to the ring-billed gull colony on 6/16, as it landed on the east tip to collect a carcass of an unidentified seabird species. A juvenile peregrine falcon was observed causing large disturbances to the ring-billed gull colony on 6/13 and 6/14, and it was observed depredating an adult ring-billed gull on 6/14.

Western/glaucous-winged gulls continued to occupy nesting territories over much of the island, including on the eastern portion of the one-acre tern colony area. There were at least 80 active gull nests in the eastern portion of the tern colony area this week. This part of the one-acre tern colony was used by nesting gulls last year, and not by Caspian terns. The high count of western/glaucous-winged gulls present on the one-acre tern colony area this week was 107 individuals. The western/glaucous-winged gull nests that can be seen from the observation blinds continued to incubate 3-4 eggs at each nest this week, and one nest with two chicks was observed just east of the northeast observation blind on 6/14. Western/glaucous-winged gulls continued to depredate Caspian tern eggs on-colony throughout the week, especially during flushes of the tern colony caused by bald eagles.

**Predators**

Bald eagle pressure on the Caspian tern colony this week was less than the previous week, with a total of 6 major disturbances to the tern colony observed this week, compared to 14 the previous week. The majority of these disturbances were caused by adult bald eagles chasing and kleptoparasitizing bill-load fish from Caspian terns. On 6/13, a large disturbance to the Caspian tern colony was caused by a juvenile peregrine falcon.

Three nocturnal disturbances to the western portion of the tern colony were detected by the Spypoint Link-S camera this week: on 6/10 from 21:54 to 21:59, on the morning of 6/12 from 04:39 to 04:44, and on the evening of 6/14 from 22:05 to 22:10. These disturbances were likely caused by a great horned owl attempting to depredate adult Caspian terns. A Caspian tern wing and feathers were found on the north beach on the morning of 6/11, which was likely depredated by the great horned owl the night before.

On 6/11, a ring-billed gull carcass was found on the northeast beach, and it appeared to have been depredated by an avian predator. An adult Caspian tern carcass was found on the southeast beach on the same day, but evidence of scavenging prevented the cause of depredation from being identified.

A western/glaucous-winged gull carcass (head and wings) were found on the southeast beach in the dissuasion on 6/11, indicating that it was depredated by an avian predator.

On 6/13, the head and wings of a ring-billed gull were found on the northeast beach, indicating that it was depredated by an avian predator. A double-crested cormorant carcass was found in the same area, and appeared to have been scavenged.