

2021 Grant PUD / BPA Avian Monitoring Weekly Report 05/24 – 05/30/2021

WEEKLY ACTIVITIES & UPCOMING EVENTS

| ACTIVITIES | DATE |
|---|-------------|
| Survey of McNary NWR | 05/24 |
| Survey of Potholes Reservoir: Goose Island | 05/25 |
| Survey of Island 20 | 05/25 |
| Fixed-wing Aerial Survey: Columbia River upstream of The Dalles and Plateau | 05/25 |
| Survey of Sprague Lake | 05/26 |
| Survey of Lake Lenore | 05/26 |
| Drone Surveys: Potholes Res. (Goose Island), Lake Lenore (North Rock and Shoal islands), Sprague Lake (Harper Island), Island 20, and Badger Island | 05/25-05/28 |
| UPCOMING EVENTS | |
| Survey of Potholes Reservoir | 05/31-06/06 |
| Survey of McNary NWR and Foundation Island | 05/31-06/06 |
| Survey of Lake Lenore | 05/31-06/06 |
| Survey of Sprague Lake | 05/31-06/06 |
| Survey of Blalock islands | 05/31-06/06 |
| Drone Surveys: Blalock islands and north crib of Astoria-Megler Bridge | 05/31-06/06 |
| Fixed-wing Aerial Survey: Troutdale Towers to East Sand Island | 05/31-06/06 |
| Boat Survey: Astoria-Megler Bridge | 05/31-06/06 |

COLONY MONITORING & WATERBIRD SURVEYS

McNary NWR: McNary NWR was visited on May 24.

Burbank Slough:

28 Caspian terns were observed loafing on two land-bridged peninsulas during a shore-based survey. No nesting was observed.

1 double-crested cormorant and 12 gulls were observed loafing.

Potholes Reservoir: Potholes Reservoir was visited on May 25.

Goose Island:

Drone and fixed-wing surveys were conducted on May 25. Initial review of fixed-wing imagery found two incipient Caspian tern colonies on the historic colony nesting area on the main island. Both colonies are near the former blind location. A total of 33 Caspian terns and 18 attended nests were observed from fixed-wing aerial survey counts (see *Figure 1* below for nesting locations on historic colony area).



Figure 1. Incipient Caspian tern nesting areas confirmed from aerial survey of Goose Island on May 25, 2021.

During a boat survey, Caspian terns were counted in 11 different locations on Goose Island and its surrounding islets (see *Table 1* below). 19 Caspian terns and 2 attended tern nests were counted in a bare sand area along the southwestern shoreline of the island (i.e. Southwest Main). There was a significant decline in tern numbers and nesting at the Southwest Main compared to last week (see *Table 1*). The previously mentioned incipient nesting colonies on the historic colony area were not visible from the water.

Table 1. Caspian tern counts by location at Goose Island from 4/16 – 5/25, 2021.

| LOCATION | Caspian terns | | | | | | |
|-----------------|---------------|-----------|----------|-----------|-----------|------------|-----------|
| | 04/16 | 04/21 | 04/27 | 05/04 | 05/10 | 05/17 | 05/25 |
| Northwest Main | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Northeast Main | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Southeast Main | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Spit | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Beach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Southwest Main | 48 | 34 | 7 | 40 | 21* | 109 | 19 |
| West Main | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Beach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| East Rocks | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Northeast Rocks | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Northwest Rocks | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 48 | 34 | 7 | 40 | 21 | 109 | 19 |

* Nest dissuasion activities occurred during counts.

~3,540 nesting gulls were counted on Goose Island and the surrounding islets. Attended nest counts were unavailable. California and ring-billed gull chicks (1-3 weeks old) were observed on most areas of Goose Island and Northwest Rocks.

Northeastern Potholes (Historic Caspian Tern Colony):

Northeastern Potholes was not visited this week.

Solstice Island (Historic Caspian Tern Colony):

Solstice Island was not visited this week.

Island 20: Island 20 was visited on May 25.

Island 20 was surveyed by fixed-wing aircraft and drone. Imagery is currently being processed. ~3,350 nesting gulls were observed. The colony was split into two distinct breeding areas on the south-central end of the island (~2,420 gulls) and the north end of the island (~930 gulls). 57 gull chicks were counted in the northern colony. Gull chicks were also observed on the southern colony, although chick counts were unavailable. This is the first week gull chicks were observed at Island 20. Copulations continue to be observed during surveys. ~40% of individuals in both breeding areas were in nesting posture, although total nest counts were unavailable. We estimate that approximately 90% of the colony was visible from our vantage.

Blalock Islands: The Blalock islands complex was surveyed on May 25 from a fixed-wing aircraft.

Straight Six:

No gulls or other nesting waterbirds observed. The gull nesting colony on Straight Six from earlier this season was abandoned. Cause of colony failure is unknown.

Anvil:

The nesting gull colony at Anvil Island remains active. Counts of gulls and nests were unavailable this week.

Long, Middle, and South islands:

All islands were underwater during the week of May 24 – May 30. The John Day Pool elevation remained above 265 ft all week. No colonial waterbirds were observed on the submerged islands.

Basketball Island:

Basketball Island, a previously unnamed island southwest of Big Blalock Island, was mostly underwater. No colonial waterbirds were observed.

Rock Island:

Most of Rock Island was also underwater from aerial imagery on May 25 (see *Figure 2* below). No colonial waterbirds were observed.



Figure 2. Rock Island from an aerial survey on May 25, 2021.

To provide clarity on location and naming of islands by RTR/OSU in the Blalock Islands, a key is provided below (see *Figure 3*).

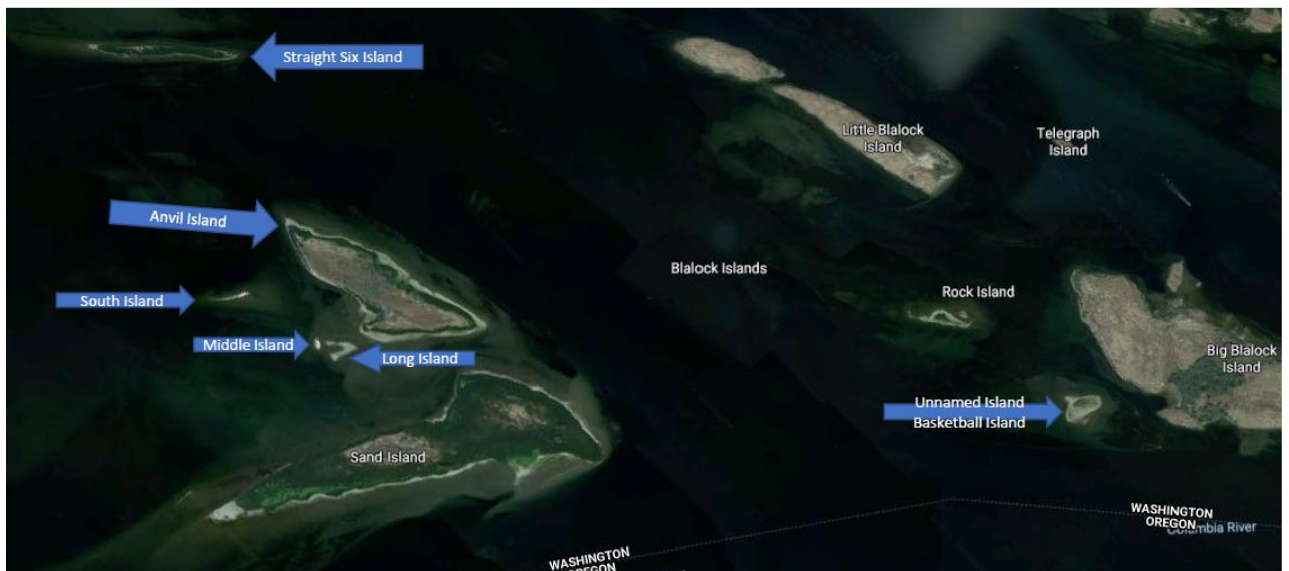


Figure 3. Key for name and location of Blalock Islands monitored by RTR in 2021 (credit: Dave Trachtenberg).

Lenore Lake: Lenore Lake was surveyed on May 25 (fixed-wing) and May 26 (boat and drone).

North Rock Island:

5 Caspian terns were observed loafing on the middle ridgeline between the two double-crested cormorant colonies on May 26. No nesting was observed.

~110 double-crested cormorants and 86 attended nests were observed on May 26. We observed the first double-crested cormorant chicks at North Rock Island this season (~1-2 weeks old).

~262 nesting gulls were observed. No chicks have been observed. Nest counts were unavailable.

Shoal Island:

~79 Caspian terns and 36 attended nests were observed from aerial imagery on May 25. No tern chicks have been observed.

~119 nesting gulls were observed. Nest and chick counts were unavailable. The first gull chick was observed this week (~1-2 weeks old).

Sprague Lake: Sprague Lake was visited on May 26.

Harper Island:

The interior Caspian tern colony was best observed from aerial imagery, as there were obstructions of this colony from our boat survey vantage this week. During initial review of aerial imagery from May 25, we observed 103 Caspian terns and 72 attended nests (see [Figure 4](#) below). Copulations were also observed. A drone survey was also conducted on May 25, and imagery is currently being processed.



Figure 4. Caspian tern colony on Harper Island from an aerial survey on May 25, 2021.

During a boat survey, three active cormorant nesting colonies were observed on Harper Island. On the northwestern cove/ridge, 464 double-crested cormorants and 123 active cormorant nests were observed in two distinct, ground-nesting areas. Cormorant chicks were observed and estimated to be 1-2 weeks old. On the southeastern bank, an incipient double-crested cormorant colony was observed in a large tree with 21 cormorants and 10 attended nests.

153 American white pelicans were observed loafing and foraging on or near the island.

~580 nesting gulls were observed on the northern end of the island. Nest counts were unavailable this week.

McNary Pool: McNary Pool was surveyed on May 25 and May 28.

Badger Island:

234 Caspian terns and 167 attended nests were counted from aerial survey imagery taken on May 25 (see *Figure 5* below). An additional 142 nesting Caspian terns were also observed on a sandy shoreline on the northeast side of Badger Island, a site where Caspian terns have nested before. A total of 67 tern nests were counted from aerial imagery. This northeastern colony on the shoreline has been prone to failure due to pelicans walking through the colony. During a boat and drone survey on May 28, ~50 Caspian terns were also loafing on the north spit of Badger Island.



Figure 5. Caspian tern colony on Badger Island from an aerial survey on May 25, 2021.

Counts of American white pelicans and gulls were unavailable this week and will be counted from aerial and drone imagery which is currently being processed.

Crescent Island:

2 Caspian terns and 1 attended nest were observed from aerial survey on May 25. No other breeding pairs of Caspian terns have been observed nesting at Crescent Island while the Badger Island colony has increased in size over the past several weeks.

Counts of gulls and gull nests were unavailable this week. Gull chicks were observed from aerial imagery and estimated to be 1 week old.

Foundation Island:

~403 double crested cormorants and ~187 attended nests were observed during a boat survey on May 28. ~40% of attended nests had visible chicks with age estimates of 3-4 weeks.

PIT TAGGING OF STEELHEAD AT ROCK ISLAND DAM

Steelhead smolt tagging began at Rock Island Dam on 04/09. As of 06/03, 5,397 hatchery and 1,538 wild steelhead have been tagged. Combined, the total to date is 6,935 tagged steelhead smolts this year (99% of our target of 7,000).