2022 BPA/GPUD Avian Monitoring Report 04/18 – 04/24/2022

WEEKLY ACTIVITIES & UPCOMING EVENTS

| ACTIVITIES | DATE |
|---|-------------|
| Survey of sites in Lake Lenore | 04/18 |
| Survey of sites in Potholes Reservoir | 04/18 |
| Survey of site in McNary NWR off the Columbia River | 04/19 |
| Survey of sites in McNary Pool below the Snake River confluence | 04/20 |
| Survey of sites in McNary Pool above the Snake River confluence | 04/21 |
| UPCOMING EVENTS | |
| Survey of site in The Dalles Pool | 04/25-05/01 |
| Survey of sites in John Day Pool | 04/25-05/01 |
| Survey of sites in McNary Pool below the Snake River confluence | 04/25-05/01 |
| Survey of sites in Potholes Reservoir | 04/25-05/01 |
| Survey of sites in Banks Lake | 04/25-05/01 |
| Survey of sites in Sprague Lake | 04/25-05/01 |

COLONY MONITORING & WATERBIRD SURVEYS

Monitoring of piscivorous waterbird colonies in the Columbia River basin in 2022 will be similar to 2021 (see *Figure 1* below from 2021 Annual Report).

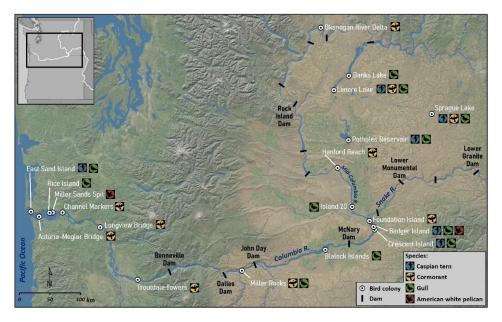


Figure 1. Sites of piscivorous waterbird colonies in 2021 (See Map 1 in 2021 Annual Report) to be monitored during the 2022 breeding season.

Every 1-3 weeks, a crew of at least two will monitor colony locations on the Columbia River from Miller Rocks upstream to Hanford Reach and on the Columbia Plateau Region within foraging distance of the Columbia River. The double-crested cormorant colony on the Astoria-Megler Bridge in the Columbia River estuary will be monitored on three occasions from early May – early June. All remaining sites will be monitored twice by fixed-wing aerial surveys during the breeding season.

Lake Lenore: Sites were visited on April 18.

Shoal Island

11 loafing Caspian terns were observed on the island, including one individual that was originally banded as a chick on Crescent Island in 2004 and re-banded as an adult on Goose Island (Potholes Reservoir) in 2012 (see *Figure 2* below).



Figure 2. Caspian terns and California gulls on Shoal Island on April 18, 2022.

~300 loafing California gulls were observed.

North Rock Island

No Caspian terns were observed.

~66 nesting double-crested cormorants and 28 attended cormorant nests were observed (see *Figure 3* below).

~350 loafing gulls were observed, most of which were California gulls. No active nests were observed, although gulls were seen carrying nesting material to the island.



Figure 3. Double-crested cormorants and California gulls on North Rock Island on April 18, 2022.

Potholes Reservoir: Sites were visited on April 18.

Goose Island

No Caspian terns were observed on Goose Island and its surrounding islets. Two Caspian terns were observed flying over the island. The historic Caspian tern colony area was not visible from our vantage on the boat.

One loafing double-crested cormorant and no American white pelicans were observed.

~2850 gulls were observed loafing amidst the dissuasion on Goose Island and surrounding islets.

Northern Potholes Reservoir

8 loafing Caspian terns were observed at the former colony site (2016; see *Figure 4* below). 12 loafing gulls were also observed.

No piscivorous waterbirds were observed at any other location in Northern Potholes Reservoir.



Figure 4. Caspian terns at the former colony site (2016) in Northern Potholes Reservoir on April 18, 2022.

McNary NWR off the Columbia River: Site was visited on April 19.

Burbank Slough

35 Caspian terns were observed loafing on a land-bridged peninsula during a shore-based survey. Banded terns were observed, and we are working to confirm band combinations at a closer vantage.

No American white pelicans, double-crested cormorants, or gulls were observed.

McNary Pool below the Snake River Confluence: Sites were visited on April 20.

Foundation Island

~360 double-crested cormorants and 147 attended cormorant nests were observed.

Three bald eagles were observed loafing in the trees just north of the cormorant nesting site. No eagle nesting or disturbances were observed.

Badger Island

72 Caspian Terns were observed on the shoreline on the northeastern side of the island, the same location as the 2021 shoreline-nesting Caspian tern colony (see *Figure 5* below). As mentioned in last week's report, no woody debris was placed at this shoreline nesting location due to concerns of impeding movements of pelican chicks from the interior nesting sites to the water. Several terns were observed flying to more interior nesting sites on the island, although these interior sites were obstructed from our vantage on the water.



Figure 5. Caspian terns and American white pelicans seen at the shoreline nesting site occupied by terns in 2021 on Badger Island on April 20, 2022.

126 American white pelicans were observed nesting and loafing along the eastern side of the island. Most interior nesting areas for pelicans and terns were obstructed from our view from the boat.

5 loafing double-crested cormorants were observed.

~590 gulls were observed. Most gulls were visible on the nesting colony on the western shoreline (~520 gulls). ~70 gulls were observed loafing on the eastern shoreline. Interior nesting colonies were obstructed from our view from the boat.

Crescent Island

6 Caspian terns were observed circling the island; none were observed landing. Our view of the historic colony from the boat was partially obstructed due to vegetation.

2 loafing double-crested cormorants were observed.

~560 loafing gulls (~70% ring-billed gulls and ~30% California gulls) were observed.

McNary Pool above the Snake River Confluence: Sites were visited on April 21.

Hanford Reach - Island A

~40 double-crested cormorants and 17 attended cormorant nests were observed.

Hanford Reach - Island B

No piscivorous waterbirds were observed.

Hanford Reach - Unnamed Island (downstream of Island B)

9 loafing Caspian terns and 8 gulls were observed.

Hanford Reach - Locke Island Complex

1 loafing American white pelican was observed.

Island 20

~3,220 nesting gulls were observed on the island. The colony was split into two distinct breeding areas on the south-central end of the island (~2,150 gulls) and the north-central end of the island (~1,070 gulls). Copulation behavior was observed during the survey. We estimate that approximately 90% of the colony was visible from our vantage.

PIT TAGGING OF STEELHEAD AT ROCK ISLAND DAM

Steelhead smolt tagging commenced at Rock Island Dam on April 8th. As of April 24th, a total of 110 hatchery and 25 wild steelhead smolts have been tagged. Steelhead are selected for tagging at random, regardless of fish size, condition, or rear-type (hatchery, wild) and tagged in proportion to and in-concert with the run at-large (tagged and untagged) passing Rock Island Dam. Following the 2022 breeding season (August-September), we will scan bird colonies for smolt PIT tags from tagging at Rock Island Dam and elsewhere to estimate predation rates on different groups of PIT-tagged fish.