

2022 BPA/GPUD Avian Monitoring Report 04/11 – 04/17/2022

WEEKLY ACTIVITIES & UPCOMING EVENTS

ACTIVITIES	DATE
Spread PIT tags at historic nesting sites in the Columbia River Basin	03/07-03/10
Survey of site in McNary NWR off the Columbia River	04/11
Survey of site in McNary Pool above the Snake River confluence	04/11
Survey of sites in Potholes Reservoir	04/12
Survey of sites in McNary Pool below Snake River confluence	04/13
Survey of sites in John Day Pool	04/13
Survey of site in The Dalles Pool	04/13
UPCOMING EVENTS	
Survey of sites in Potholes Reservoir	04/18-04/24
Survey of sites in Lenore Lake	04/18-04/24
Survey of sites in McNary Pool below Snake River confluence	04/18-04/24
Survey of site in McNary NWR off the Columbia River	04/18-04/24
Survey of site in McNary Pool above Snake River confluence	04/18-04/24
Survey of site in The Dalles Pool	04/18-04/24

COLONY MONITORING & WATERBIRD SURVEYS

Columbia River Basin: Sites were visited March 7-10.

Detection efficiency PIT-tags were spread at the following sites in the Columbia Basin: Astoria-Megler Bridge, Miller Rocks, Blalock Islands – Straight Six and Anvil islands, Crescent Island, Badger Island, Foundation Island, Island 20, Hanford Reach – Island A, Potholes Reservoir – Goose Island, and Lenore Lake – Shoal and North Rock islands.

McNary NWR off the Columbia River: Site was visited on April 11.

Burbank Slough

2 Caspian terns and ~50 gulls were observed loafing on a land-bridged peninsula during a shore-based survey. No American white pelicans or double-crested cormorants were observed.

McNary Pool above Snake River Confluence: Site was visited on April 11.

Island 20

~1650 nesting gulls were observed. The colony was split into two distinct breeding areas on the south-central end of the island (~640 gulls) and the north-central end of the island (~1010 gulls).

We estimate that approximately 90% of the colony was visible from our vantage.

Potholes Reservoir: Sites were visited on April 12.

Goose Island

No Caspian terns were observed on Goose Island and its surrounding islets. The historic Caspian tern colony area was not visible from our vantage on the boat. During our first visit to Goose Island, most dissuasion flagging appeared to be properly spaced along the wire (see *Figure 1* below). Some missing dissuasion flagging was observed, primarily near rocky outcroppings on the island, although this habitat is likely unsuitable for tern nesting.



Figure 1. California and ring billed gulls observed amidst passive nest dissuasion on Goose Island on April 12, 2022.

~1200 gulls were observed loafing amidst the dissuasion flagging on Goose Island (see *Figure 1* above) and surrounding islets. More ring billed gulls were observed compared to California gulls. Three loafing double-crested cormorants and no American white pelicans were observed at the site.

North Potholes

No Caspian terns were observed on islands in North Potholes Reservoir. All former loafing and nesting colony sites were visited (i.e., 2016 colony site, Solstice Island, Equinox Island, Macaroni Island, and other islands in North Potholes).

McNary Pool below Snake River Confluence: Sites were visited on April 13.

Badger Island

No surveys were conducted of Badger Island this week. Management initiatives were implemented on Badger Island in 2022 based on recent Caspian tern breeding activity at the site in 2021 (See BPA/GPUD 2021 Annual Report for details). Prior to the 2022 breeding season in February, a coordinated effort by the US Army Corps of Engineers – Walla Walla District, USFWS – McNary NWR, and the Columbia River Inter-Tribal Fish Commission (CRITFC) was carried out to

discourage nesting by terns in open habitat in the interior of the island. This was accomplished by placing woody debris in two key inland areas of open habitat on Badger Island, including the area of the interior where Caspian terns successfully nested in 2021. The shoreline area used by terns for nesting in 2021 was not managed due to concerns that the placement on woody debris in this area might impede the movements of pelican chicks from interior nesting sites to the water. The effectiveness of these management efforts will be monitored by counting terns in aerial photos taken of the island in May and June.

Crescent Island

2 loafing Caspian terns and ~400 loafing gulls were observed on Crescent Island. Attendance by gulls significantly increased this week compared to last week when fewer than 50 loafing gulls were present. Large areas of open, bare ground habitat was observed at the location of the historic Caspian tern nesting colony where much of the planted vegetation was absent (*Figure 2*).



Figure 2. Bare habitat observed at historic Caspian tern nesting colony on Crescent Island on April 13, 2022.

John Day Pool: Sites were visited on April 13.

Anvil Island

No Caspian terns, double-crested cormorants, or American white pelicans were observed. Gulls were observed flying into the interior nesting colony, which remains unaffected by management of John Day Pool elevations. Counts were unavailable this week.

Straight Six Island

No colonial waterbird activity was observed. The most interior habitat on Straight Six remains unaffected by current management of John Day Pool elevations.

Long, Middle, and Southern Islands

No Caspian terns, double crested cormorants, or American white pelicans were observed. ~300 gulls were observed loafing on the submerged islands. When John Day Pool elevations are above 264 ft, all available breeding habitat for the historic Caspian tern colonies at Long, Middle, and Southern islands are submerged (*Figure 3*). During our survey on April 13, 2022, pool elevation was 265.3 ft.

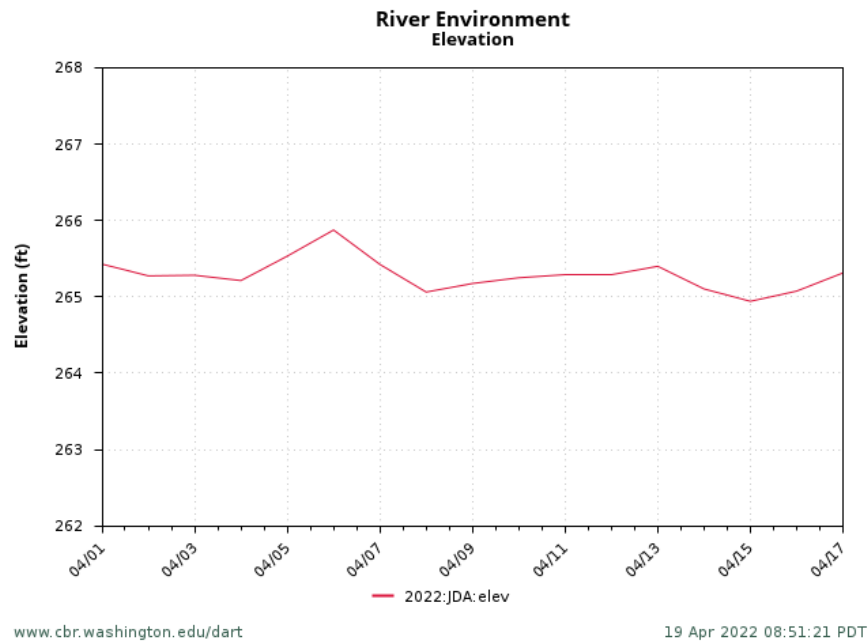


Figure 3: John Day Pool Elevation from 04/01 - 04/17, 2022.

Rock Island

No colonial waterbird activity was observed. All available breeding habitat and loafing habitat was submerged with pool elevations at 265.3 ft.

Basketball Island

No colonial waterbird activity was observed. All available breeding and loafing habitat was submerged with pool elevations at 265.3 ft.

The Dalles Pool: Sites were visited on April 13.

Miller Rocks Islands

No gulls were observed on the historic nesting islands at Miller Rocks (Upstream, Middle, Downstream, and Southern islands) presumably due to new management initiatives implemented at this site by Yakama Nation in 2022 (*Figure 4*). Management on Miller Rocks, beginning on March 30, 2022, and continuing to mid-April, included a variety of dissuasion techniques (pyrotechnics, cracker shells, air-cannons, laser, dog, human presence, and falconry) to eliminate gull nesting on Miller Rocks in 2022. Subsequent visits to Miller Rocks to count birds will evaluate

the effectiveness of these management efforts and if gulls habituate to management or establish new breeding colonies elsewhere. Yakama Nation and CRITFC are also assisting in the monitoring of other potential nest sites in the vicinity of Miller Rocks to determine where terns dissuaded from nesting at this site might reneest; no such incipient colonies have been identified thus far.



Figure 4. Satellite photo of the Miller Rocks Island complex (top panel). No gulls observed at Miller Rocks on April 13, 2022 (bottom panel).

PIT TAGGING OF STEELHEAD AT ROCK ISLAND DAM

Steelhead smolt tagging commenced at Rock Island Dam on April 8th. In total, 0 hatchery and 3 wild steelhead smolts were tagged. As the run continues, steelhead will be 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 in 2022. Following the 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 tagged fish.