Nechako White Sturgeon Recovery Initiative



2024 YEAR-END UPDATE

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HIGH SCHOOL STUDENTS OUT HELPING WITH ADULT STURGEON CAPTURE. KG





STUDENTS EXPLORING THE EDUCATION BOOTHS AT THE RELEASE EVENT.



TESTING THE SUBSTRATE CLEANING DEVICE IN THE SPAWNING REACH.

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As 2024 comes to a close, it is a good time to reflect on the incredible work that happened this year in support of Nechako white sturgeon recovery. So much goes into sturgeon recovery, and here is a quick and fun snapshot of some of the key numbers from 2024 that recognize the work of the NWSRI...

535 is the most recent estimate of the number of adult Nechako white sturgeon that remain in the watershed.

82 adult sturgeon were caught by the Conservation Centre crew during the brood capture program in the spring. Of those 13 were brought back to the hatchery for breeding. The offspring from these fish will be released in 2026.

497 wild spawned sturgeon eggs were collected from egg mats placed in the spawning reach in Vanderhoof. Most were not fertilized or viable, however from those that hatched, 55 have survived and are growing!

300 juvenile sturgeon raised in the hatchery since 2022 were released into the Nechako River and Fraser Lake in May and June. 80 of those have radio-telemetry tags in them so that the TWG can follow their movements for the next 2-8 years.

800 students from across the Nechako watershed - with teachers and NWSRI partners - came together at Riverside Park on June 7 to celebrate, learn, and release 65 juvenile sturgeon into the Nechako River.

108 individual juvenile sturgeon were captured during the indexing program. Of those, 17 were from the 2024 release.

10 storm drains were painted with sturgeon images this year by 6 students from Fort St. James. This project reminds folks to keep chemicals out of storm drains to protect fish habitat.

216 detections of adult sturgeon were made during 6 radio-telemetry flights over the Nechako River from June to November. These detections help the TWG understand what areas of the watershed adult sturgeon inhabit at different times of the year.

2700 people from across BC, Canada and the world toured the Nechako White Sturgeon Conservation Centre in 2024!

2 days of testing a new substrate cleaning method for the main sturgeon spawning bed. In October, members of the TWG habitat restoration team met to plan for the larger scale cleaning that will happen before sturgeon spawn in April/May 2025.

2024 SPOTLIGHTS

Conservation Centre - The Nechako White Sturgeon Conservation Centre received a lot of attention from local media outlets and the public in 2024 because the hatchery celebrated its **10th year of operation!** To add to the celebration, the annual Juvenile Sturgeon Release event was made extra special - check out the CKPG article about the event: <u>2024 Release Event</u>.

In 2024, the Conservation Centre team spent part of their time outside the hatchery to do sturgeon outreach at the Vanderhoof Farmers' Market, at the Spruce City Wildlife Assoc. open house event, and the UNBC Career Fair. Although not technically related to sturgeon, Freshwater Fisheries Society of BC (that operates the hatchery) opened a trout fishing pond on the grounds, which has added a great asset to the community for folks to learn about fish and fishing.

Juvenile sturgeon were a big focus of 2024. Technical Working Group members and researchers from Carrier Sekani Tribal Council, Freshwater Fisheries Society of BC, University of Northern British Columbia, and the Ministry of Water, Land and Resource Stewardship conducted a number of projects to gain knowledge about juvenile sturgeon.

Fraser Lake Studies - 2024 was the final field season of a multi-year project exploring post-release survival and oxythermal habitat use of hatchery reared juvenile sturgeon in Fraser Lake. Preliminary findings are showing that sturgeon tend to remain in the lake and display interesting trends about seasonal lake habitat use. Final analysis and reporting will happen in 2025.

Sturgeon Responses to Temperature Changes - New research began in 2024 that is looking to understand what habitat sturgeon use (depth and location) during changing water temperatures. This is important work as the watershed changes over time due to climate change.

Indexing and Estimations - Like each year, several crews headed out onto the Nechako River, Upper Fraser River and Fraser Lake to sample for juvenile sturgeon. The fish they catch add to the growing body of markrecapture data that forms the foundation for estimating juvenile survival rates. These rates are getting added into a computer model to estimate sturgeon population numbers over the next 30 years. Exciting stuff! IGHUNUTE JUST AFTER RELEASE INTO THE NECHAKO RIVER AT THE JUNE 7, 2024 JUVENILE RELEASE EVENT AT RIVERSIDE PARK IN VANDERHOOF.

One White Sturgeon - Ighunute (*i-ghu-nu-te*), which means spirit brother or sister in the Dakelh language, stands out from the rest because it is nearly all white. Ighunute is one of the 300 juvenile sturgeon that was released in 2024. This fish is white because of a naturally occurring, although rare (1 in 15,000), genetic condition call leucism meaning partial loss of all types of pigmentation

Ighunute was released on the 7 of June 2024, by members from Saik'uz First Nation at the Juvenile Release Event. At release, Ighunute was 2 years old, 75.4 cm long, and weighed 3.09 kg.

Adding to the NWS Curriculum - The latter part of 2024 included local videographers joining research crews to do some filming from overhead (photo), and at the Conservation Centre. The footage will be used to create new videos for the Nechako white sturgeon school curriculum and outreach resources, available in the spring of 2025 from the NWSRI website and YouTube channel. Until then, use the QR Codes above to learn more about sturgeon and the curriculum!

