

NWSRI UPDATE - SPRING 2024

2024 JUVENILE STURGEON RELEASE

On June 7, 2024, the NWSRI along with School District 91, Freshwater Fisheries Society of BC, and the District of Vanderhoof, will host the Juvenile Sturgeon Release.

This year's event will be a celebration of the 10 year anniversary of the opening of the Nechako White Sturgeon Conservation Centre! The community is invited to come down and watch the large 2 year old sturgeon be released by students from across the Nechako Watershed. Free hot-dogs and drinks are courtesy of the District of Vanderhoof.

Last year, roughly 900 students from schools as far as Takla Nation and Burns Lake, enjoyed releasing their sturgeon into the Nechako River at Riverside Park. In total, 63 sturgeon are released that day by classes, volunteers and partner groups.

Along with releasing their sturgeon, students spend time visiting educational and interactive booths as part of a day of learning about fish, river habitat, the watershed, and stewardship. It is a very fun day, full of learning, community and hot dogs!

The businesses, agencies, and folks that make this event possible include School District 91, District of Vanderhoof, Rio Tinto, Integris Credit Union, Spruce City Wildlife Association, Department of Fisheries and Oceans, Carrier Sekani Tribal Council, Avison Management Services Ltd., FireSmart, UNBC Watershed Research Team, Conservation Officer Team, Wildfire BC, Nechako Valley Secondary School students and Enviro-Vikes Club.



A CLASS RELEASING A 2-YEAR OLD JUVENILE STURGEON NAMED 'RONALD' IN 2023. THE RELEASE EVENT THIS YEAR WILL BE ON JUNE 7. PHOTO NVSS.



FRASER LINZA, SENIOR FISH CULTURE TECHNICIAN, SEEN HERE IN THE HATCHERY AS HE GETS READY FOR THE MAIN TOUR SEASON. PHOTO MR.

10TH ANNIVERSARY OF THE NECHAKO WHITE STURGEON CONSERVATION CENTRE: 2014-2024

In the spring of 2014, the Nechako White Sturgeon Conservation Centre opened. Operated and staffed by Freshwater Fisheries Society of BC, the Conservation Centre (NWSCC) was created as a stop-gap measure to most effectively and quickly replenish the lost generation of sturgeon in the watershed.

The NWSCC was built to rear young sturgeon through a conservation-based aquaculture program from eggs and milt collected from Nechako White Sturgeon adults, and then released.

Funding for the NWSCC comes from the Nechako Environmental Enhancement Fund, Rio Tinto, and the Province of BC.

Tours are available year round, with daily tours from May-August (inside closed during early life stages). We invite you to come for a tour! Go to www.nechakowhitesturgeon.org for up-to-date tour information.

DISTRIBUTION & THE WATERSHED

- Road
- Watershed Boundary
- Rivers
- Lakes
- Course of water in the Nechako River
- Nechako Population
- Upper Fraser Population
- Middle Fraser Population
- Overlap Zone
- ▣ Reservation Lands
- Towns & Communities
- ✂ Dams & Water Release sites
- Tunnel
- Powerline
- ▲ Fixed Telemetry Station



MINISTRY STAFF SEEN WALKING ALONG A BANK OF THE NECHAKO RIVER LISTENING FOR STURGEON. PHOTO ZS.



About the Watershed - The Nechako Watershed is big (the orange outline in the map). Its area equals 52,000 km². The Nechako River is fed from the huge Stuart Lake system via the Stuart River, the Fraser and Francois lakes system via the Nadelh River, and from the Nechako Reservoir above Kenney Dam. If you didn't know, the water that flows from the Nechako Reservoir comes via the Cheslatta Lake system and over Cheslatta Falls (follow the dark blue line in the map). Prior to Kenney Dam, the Nechako River was fed directly from where Knewstubb Lake is now.

Sturgeon Distribution - Many adult and juvenile sturgeon have radio-tags implanted in them. The radio-tags allow us to track their movements in the watershed. There are five fixed telemetry stations in the watershed (black triangles on the map). Additionally, species managers and researchers conduct river bank, boat and aerial surveys during throughout the year to track movement.

This data is used to help plan habitat restoration and recovery initiative recommendations for the species.

RESEARCH, EDUCATION & OUTREACH

TWG Research

The **Technical Working Group** is made up of representatives, experts and managers from the provincial and federal governments, the University of British Columbia, University of Northern BC, Simon Fraser University, and Carrier Sekani Tribal Council. The TWG conducts a variety of ecological and habitat focused projects on Nechako White Sturgeon. The information gathered is used to help inform recovery recommendations the NWSRI provides the provincial decision makers for this species.

Studies also happen in lake environments! In Fraser Lake, students from UNBC have been exploring different habitats and species interactions to better understand sturgeon biology and habitat needs.

A great place to read up on the different projects of the NWSRI TWG, is to view the **Publications Pages** of the NWSRI website.



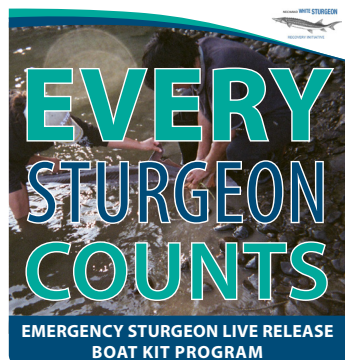
MONITORING ON FRASER LAKE. PHOTO N.G.

Every Sturgeon Counts

There are approximately 553 adults left in the wild and it is critical that no adults are lost from the population accidentally!

The Emergency Boat Kit Program promotes the safe release of sturgeon from gill nets used during the First Nation Food, Social and Ceremonial Fishery. Anyone active in the fishery are encouraged to participate in this program.

Fishers receive a free kit that contains the tools needed to safely release an entangled sturgeon. Net mending supplies are also available, with the hope to offer net mending classes in the future.



The Boat Kit Program directly supports harm reduction of the endangered Nechako White Sturgeon.

If you fish during the First Nation Food, Social and Ceremonial Salmon Fishery, we ask that you participate in this voluntary program. It is free, no risk, and helps research and recovery of this species. Go to the website for the background, to view the intro video, and get the data form.



This program is in partnership with Carrier Sekani Tribal Council. It is an effective harm reduction program to keep adult and juvenile sturgeon in the population to breed in the future.

To date, **89 of 100** sturgeon reported to the program have been released live.

To participate, please contact info@nechakowhitesturgeon.org.

Educate with Paint

One example of how the NWSRI supports education and learning about sturgeon is through the **Storm Drain Painting** program. Over the years, students have painted hundreds of storm drains with sturgeon and salmon images to remind residents to keep chemicals out of storm drains as they lead to fish habitat.



PROUD STUDENT PAINTERS!

Now, we have **Storm Drain Kits!** Teachers and students can head out whenever the weather is good to paint and re-paint storm drains!

Watch the video online to learn more!



HATCHERY YEAR AT A GLANCE

APRIL-MAY:

Catch mature sturgeon to harvest eggs and milt.

END MAY - EARLY JUNE:

Fertilize eggs in hatchery. Adult sturgeon returned to the river. Wild eggs collected from river.

EARLY JUNE:

Release 2-year old juvenile sturgeon at various locations in the watershed.

MID-JUNE:

Eggs hatch to yolk-sac larvae.



LATE-JUNE:

Larvae enter free-swimming stage.



MID-JULY:

Larvae grow into juvenile form.

JULY - APRIL:

Juvenile reared for next two years.

ALL YEAR:

Book a tour at the hatchery!



HOW TO SUPPORT STURGEON RECOVERY

The Federal Species at Risk Act lists Nechako White Sturgeon as an endangered species. The Nechako White Sturgeon Recovery Initiative, along with its partners, works toward sturgeon recovery.

When partner groups support the NWSRI, programs such as education and outreach for K-12 classes as well as research and work experience for secondary and post-secondary students become realized.

Here are some ideas on how you can support the recovery initiative!

BUSINESSES

- > aid in transportation of students from remote First Nation schools to the Juvenile Sturgeon Event
- > purchase of equipment and monitoring supplies for adult and juvenile sturgeon research
- > support for the continuation of the Emergency Boat Kit program and Storm Drain Painting

GOVERNMENTS

- > introduce by-laws that protect riparian zones and stream habitat
- > remove or replace culverts that impact fish passage
- > protect and enhance wetland habitat
- > remove creosote bridges and supports from streams
- > attend a sturgeon event or visit the Conservation Centre

EDUCATORS

- > use the Nechako White Sturgeon Curriculum resources with your students
- > paint storm drains
- > take a tour of the Nechako White Sturgeon Conservation Centre
- > visit a local stream or lake and talk about water and the watershed
- > bring the Classroom Kit and large sturgeon stuffie to your classroom
- > bring a sturgeon specialist into the classroom to talk to your class

CITIZENS

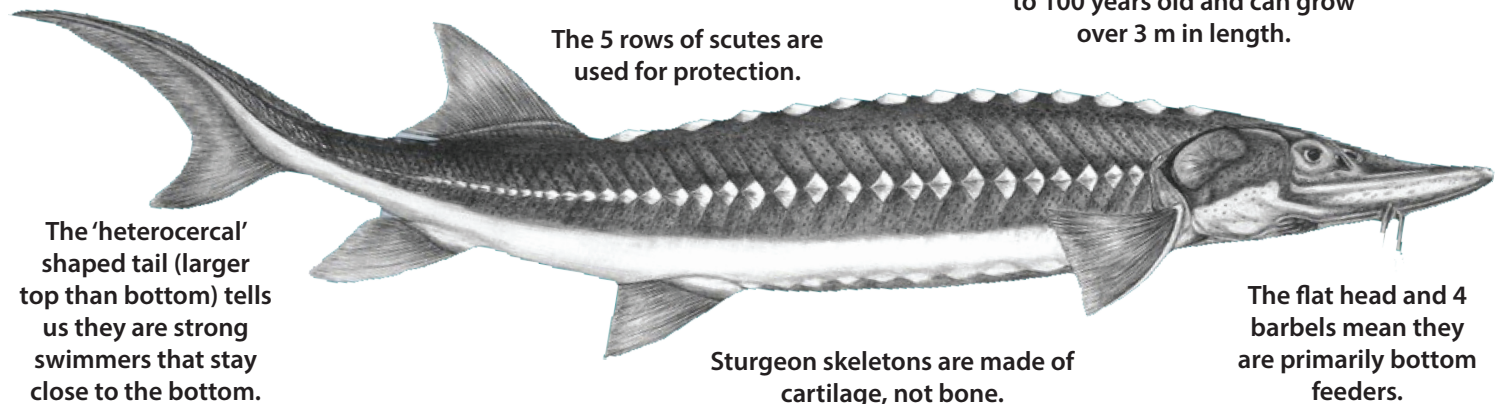
- > attend a sturgeon event or visit the Nechako White Sturgeon Conservation Centre in Vanderhoof
- > purchase NWS merchandise
- > donate to the NWSRI!

LAND OWNERS

- > develop a Farm Stewardship Plan
- > develop a manure and fertilizer program to ensure streams and lakes are not polluted
- > ensure riparian zones on all farm and crown land are intact and protected
- > develop off channel watering practices for livestock
- > purchase farm products from farms and ranches that practice stewardship values
- > keep chemicals and garbage out of storm drains in urban settings
- > conserve water / reduce water use at home and around the property

Questions about the NWSRI or sturgeon recovery? Email us at info@nechakowhitesturgeon.org

QUICK FACTS ABOUT STURGEON



The 5 rows of scutes are used for protection.

Nechako White Sturgeon live to 100 years old and can grow over 3 m in length.

The 'heterocercal' shaped tail (larger top than bottom) tells us they are strong swimmers that stay close to the bottom.

Sturgeon skeletons are made of cartilage, not bone.

The flat head and 4 barbels mean they are primarily bottom feeders.