

NWSRI VIDEO SERIES

VIDEO 1 - CONSERVATION CENTRE

This video gives a general overview of the purpose of the Nechako White Sturgeon Conservation Centre, why it was built, how it works, and the main work that happens at the hatchery.

Total Length: 9:03 minutes. It is broken into several sections. Below are some key questions to think about in each section of the video.

Overview of the Conservation Centre: 00:00 to 01:36

This section explains the concern with sturgeon in the Nechako River, and why the Conservation Centre was built.

- What other types of research does the NWSRI do in addition to the work they do at the hatchery? For an overview of all the NWSRI projects - view the most current [Annual Report](#).

Preservation of DNA: 01:36 to 02:54

This section gives the goals of the Conservation Centre.

- [Lesson 1-1 \(Introduction to Sturgeon\)](#) from the Sturgeon Curriculum provides more information about the why sturgeon are endangered.

Recirculating Aquaculture System: 02:54 to 04:50

This section talks about the water cleaning system at the hatchery. It is an elaborate and efficient system.

- To learn more about what a worker at the hatchery does in a day, check out this helpful resource about [Fish Culture](#).

Spawning Ground: 04:50 to 06:06

This section gives an overview of the characteristics of sturgeon spawning habitat. Pay attention to where the only known site for Nechako White Sturgeon spawning is located.

- To explore spawning further, view the [NWS Habitat and Food presentation](#) then try out [Lesson 3-3 \(Habitat\)](#) from the NWS curriculum.

Broodcapture and Release after Spawning: 06:06 to 09:02

The section shows how they catch sturgeon for the hatchery's brood program. What is a brood program? Brood is a general term used to explain the mature animals that are used to get eggs and milt from to make new sturgeon.

- To understand more about broodcapture and other types of sampling that is done by the NWSRI, go to the [Conservation Centre Research](#) page on the NWSRI website!

FURTHER EXPLORING:

Pick a different endangered species from Canada and research what measures are being taken to get them off the endangered species list.

[Start here](#) for the current list of endangered, extirpated, and threatened species in Canada.

DEFINITIONS

Throughout the video, the narrator uses scientific language. Here are some definitions to support your understanding.

Recruitment: The number of young fish that reach maturity. Maturity is when a fish is ready to spawn. Spawning is when fish release their eggs and milt (sperm) to make new fish.

Natural Recruitment: Fish spawned in the river (not in the hatchery) that survive to reproductive age (maturity).

Recruitment Failure: When fish do not reach maturity. These fish die at a life stage before they reach maturity. Think of the [Sturgeon Wheel of Life](#) and all the ways sturgeon can die!

Stop-Gap Measure: A temporary solution, while you find a better solution.

Founder Population: Starting a new population from a small group of individuals.

Genetic Diversity: Individuals in a population that have a wide range of characteristics that helps them survive harsh changes in the environment.

Imprint: Every water system has a set of chemicals that gives it a unique 'scent'. A fish will 'learn' or imprint this scent at an early age. This is how they instinctively return to spawn in the same river from which they were hatched.

Effort: Is a measure of the amount of work put into catching fish.

More available at:

www.nechakowhitesturgeon.org

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