# **NWSRI VIDEO SERIES**

### **VIDEO 9 - LIFE-CYCLE**

This video is about the sturgeon life-cycle and uses animation to reinforce the concepts related to each life-cycle stage.

**Total Length: 7:42 minutes.** The video includes a few topics. Below are some key questions to think about for each topic of the video.

Biggest Challenge - Recruitment Failure: 00:00 to 01:15

This section explains some of the main reasons why the Nechako white sturgeon are failing in the Nechako Watershed.

- What is recruitment failure? Refer to Life Cycle presentation for additional information about recruitment failure.
- What is one way to help sturgeon in the Nechako River survive into the future?

### Nechako White Sturgeon Conservation Centre: 01:15 to 01:40

This section goes into some details about the why the hatchery is growing sturgeon to 2 years old.

• Why would releasing a bigger sturgeon into the river be better?

#### Sturgeon Life-cycle (detailed): 01:40-07:26

This section goes into detail about each life-cycle stage.

- How many eggs can be released by a female sturgeon?
- Sturgeon eggs are sticky. Give one good and one bad reason for being sticky.
- What are 'baby' sturgeon called?
- How old is a sturgeon when it becomes a juvenile sturgeon?
- How long does a sturgeon have to be to be called a 'sub-adult'?

#### Sturgeon Life-cycle (review): 07:26 to 07:42

- Refer to <u>Lesson 3-2 (Life-Cycle)</u> for further learning and a worksheet activity of the life-cycle.
- Watch <u>Video 2: Spawning, Life Cycle, and Sturgeon Release</u> for additional learning.
- Use the <u>Video 2 Resource Sheet</u> for additional questions about the sturgeon life-cycle.

## UNDERSTANDING 0.1% (05:55-06:23)

The video lists several reasons why only 1 in 1000 baby sturgeon survive to 1-year old - that is 0.1% of young sturgeon. Encourage conversation in the class about the treats to young sturgeon. Suggested activity is to use rice, plastic chips etc. represent what 1% or 1 in 100 looks like, and then transfering that to 0.1%. Throughout the video, the narrator uses scientific language. Here are some definitions to many of the terms.

**Recruitment Failure:** When there aren't enough young animals surviving to maturity.

Aquatic Insects: Invertebrates that live in the water. Juvenile sturgeon eat aquatic insects.

## WORKING WITH YOUR STUDENTS:

We recommend:

- Watch the video first and note key spots in the video that may be of interest to your students.
- Use the accompanying activity sheet: TADPOLES to help your students understand the Big Ideas!

### **BIG IDEAS:**

- Life cycle
- Adaptations
- How living things interact with their environment





# **Tadpole Comparison**

### Larval Sturgeon - Tadpole Life Stage (03:52-4:35 minutes)

Sturgeon look like tadpoles for about 12 days only!

### Compare a sturgeon larvae to a frog tadpole.

Draw a picture of a larval 'tadpole' stage sturgeon and a frog tadpole.

Sturgeon 'Tadpole'	Frog Tadpole

# Name something that makes them the <u>same</u>, and something that makes them <u>different</u>.

Sturgeon and frog tadpoles are the **same** because...

Sturgeon and frog tadpoles are different because...

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