

# NWSRI VIDEO SERIES

## VIDEO 2 - SPAWNING TO RELEASE STAGE

This video gives a general overview of the process of harvesting eggs and milt, the life cycle and the Sturgeon Release Event.

**Total Length: 10:31 minutes.** It is broken into several sections. Below are some key questions to think about in each section of the video.

**Spawn Timing and Testing:** 00:00 to 02:00

- Explain the process of testing eggs for maturity?
- What hormone gets given to females to induce spawning?

**Harvesting Eggs and Milt for Fertilization:** 02:00 to 04:14

- What is the process of harvesting eggs and milt?
- What happens to sturgeon eggs that are not released at spawning?
- What gets added to the eggs and milt to reduce stickiness? Why are sturgeon eggs sticky?

**Family:** 04:14 to 04:58

- What is a maternal family?
- Explain the typical genetic matrix used at the Conservation Centre?

**Life Cycle:** 04:58 to 07:22

- Why is a sturgeon egg black?
- Explain the life cycle of sturgeon and compare to that of a typical Pacific salmon species - what are the differences and similarities and why?

**Sturgeon Release Event:** 07:22 to 10:31

- Why is the Sturgeon Release Event an important event for students?
- Go to the [Where is My Fish](#) website and calculate the growth rate of the sturgeon that have been captured more than once. What does this information tell us?

## DEFINITIONS

Throughout the video, the narrator uses scientific language. Here are some definitions to many of the terms.

### INQUIRY OPPORTUNITY:

*Expand on these definitions to learn more about what they mean and how they relate to fisheries research.*

**Germinal Vesicle:** The enlarged nucleus of the egg before completion of meiosis.

**Meiosis:** The cellular process of separating genetic material.

**LHRHA:** Pituitary hormone that induces the release of eggs.

**Docile:** Calm.

**Vent:** The external opening of a fish that is used for both excretion and reproduction.

**Milt:** Sperm.

**Maternal Family:** Offspring related to one mother.

**More available at:**

[www.nechakowhitesturgeon.org](http://www.nechakowhitesturgeon.org)

[Facebook @NWSRI](#)

## INQUIRY ACTIVITY:

**Pick one of the topics that you found most interesting from the video, and do an Inquiry project to present to your class.**

**For example, you can:** delve deeper into gamete development and the scientific process of testing for maturity; draw the stages of a sturgeon's development from fertilization to larvae formation; do the math associated with having more maternal families and what size facility would be needed to house such a program; gather stories from students who have participated in the Sturgeon Release as a book, blog or video... the ideas are endless!

