# **NWSRI VIDEO SERIES**

# **VIDEO 7 - MONITORING PROGRAMS**

This video explains in more depth the four main monitoring programs of the NWSRI. Go to the <u>www.nechakowhitesturgeon.com</u> and click on the <u>Research and Outreach</u> tab to learn more about these projects.

The vocabulary in this video may be beyond that of primary students, however there are lots of quick facts and figures related to sturgeon life cycle, that would be interesting for the students. First, here is a breakdown of the video contents...

Total Length: 11:34 minutes. Below are some key questions to think about.

## Monitoring Programs - Introduction: 00:00 to 01:43

This section introduces who is involved in sturgeon monitoring programs, and lists the four main monitoring programs (1) Juvenile Monitoring, (2) PIT Tag Monitoring, (3) Spawn Monitoring, (4) Radiotelemetry, (5) Emergency Live Release Boat Kit Program.

### Juvenile Monitoring Program: 01:43 to 04:55

This section goes into a lot of detail about the Juvenile Monitoring Program. Use the following worksheets to help learners with the concepts.

#### Set-Line worksheet

PIT Tag worksheet

**Research and Recovery slideshow** 

### PIT Tag Monitoring: 04:55 to 06:35

This section gives a detailed explanation of how to use a PIT tag reader and why they use PIT tags. Students may have released a sturgeon during one of the release days at Riverside Park.

Go to the Where Is My Fish page to search for individual PIT tagged fish.

### Spawn Monitoring Program: 06:35 to 08:55

This section explains the methods used to track adult sturgeon leading to the spawning season, as well as how researchers catch eggs and larvae that are spawned naturally in the river. There is a quick demonstration of the egg mat and fyke net collection methods that may be fun to watch and talk about.

### Spawn Monitoring worksheet

### Radiotelemetry: 08:55 to 09:42

This section goes into more detail about the radiotelemetry equipment.

### Emergency Live Release Boat Kit Program: 09:42 to 11:34

This section explains the Boat Kit Program, what it is, why it is used with sturgeon and what it can tell us about sturgeon.

Other useful resources to use along with this section of the video are:

#### **Every Sturgeon Counts Video**

**Every Sturgeon Counts worksheet** 

## IN CLASS HANDS ON RESOURCE

Ask at SD91how to borrow the Sturgeon Classroom Kit

# DEFINITIONS

Throughout the video, the narrator uses scientific language.

**By-Catch:** The unwanted fish that are caught through either targeted commercial fisheries and ceremonial, social and sustenance fisheries.

# Technical Working Group: The

group of individuals that meet and make recommendations for helping the Nechako White Sturgeon. The Community Working Group does the public communication of the research work that is lead by the Technical Working Group.

# Mark-Recapture: A

mathematical modeling method to estimate the number of individuals in a population.

Abundance: Number.

# 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: ABOUT STURGEON MONITORING to help your students understand the Big Ideas!

# **BIG IDEAS:**

- ✓ Life cycle
- ✓ Adaptations

# ✓ How living things interact with their environment





# **About Sturgeon Monitoring**

# Egg Mats (07:08 minutes)

Egg mats are put in the river to collect wild sturgeon eggs. What is it about sturgeon eggs that would make them stay on the egg mats?

Draw an egg mat on the river bottom with sturgeon eggs on it - draw the adult sturgeon spawning too!

# Larval Sturgeon (07:33 minutes)

Sturgeon larvae are tiny!

# What is the net called that workers use to catch larvae in the river after sturgeon have spawned?

Put a small item that is the 'larvae' in a bucket of toys, paper, grass, and other items from around the classroom. Who can find the 'larvae' first? Draw a larval sturgeon in the river.