

LESSON ONE-ACTIVITY FOUR: Migration of Alaska's Salmon

Content Objectives: The students will explore the concept of migration. The students will learn about the ocean migration patterns of the five species of Pacific salmon.

Key Vocabulary: limiting factors, population degradation, migration routes

Supplementary Materials: DVD No Boundaries-Yukon River Panel, DVD Being Caribou, Caribou Migration Game-ADFG, DVD Winged Migration, migration basics worksheet, The Migration Game-Sea Grant Alaska, Hooks and Ladders Activity-Project Wild (rope, string, traffic cones, 2 cardboard boxes, 100 tokens, jump rope, whistle), Long Journey of the Pacific Salmon- National Geographic: Volume 178, Number 1 (July 1990)

Resources: ADFG-Alaska Department of Fish and Game, USFWS-United States Fish and Wildlife Service, 4-H Fisheries, Pacific Salmon Foundation

Books: Sammy Goes Home by Chris Jenness, Fish and Fisheries Alaska Sea Week, Project Wild Aquatic

Website Wandering:

1. <http://www.nps.gov/akso/parkwise/Students/StudentResources.htm>
2. <http://www.oneworldjourneys.com/salmon/low/index.html> (related site)
3. <http://www.nps.gov/akso/parkwise/Students/ReferenceLibrary/general/MigrationBasics.htm> (related site)

Activity Sequence:

Part One-“No Boundaries”

In order to get students thinking about the concept of salmon migration, show the Yukon River Panel film called “No Boundaries”.

It's a film that will open up good discussion on salmon migration and how the preservation of salmon fisheries depends upon the stewardship and partnership of people along the entire migration route from ocean to source. These issues may also come into discussion further on in the unit when the students are asked to choose a “critical issue” for a research topic.

Preface the film with a brief brainstorm or web of words on the board having to do with migration. Also, point out on a map the areas along the Yukon in the U.S. and Canada where salmon migration takes place.

Before beginning the film, ask the students to take notes in their notebooks. Ask them to use a stream of consciousness approach and write down any words, thoughts, feelings or ideas that arise while they are viewing the film. Use these notes to open up further discussion after the film.

Extensions: Show another excellent film pertaining to the concept of migration and stewardship called “Being Caribou”.

OR Read aloud the companion book to the movie Being Caribou by Karsten Heuer.

OR Play the Caribou Migration Game. There are two age variations included.

OR Show another excellent film on migration called “Winged Migration”.

Part Two-Sammy Goes Home

After the movie, throw in some comic relief and read aloud to the students the book Sammy Goes Home by Chris Jenness. It’s brief and gives a comical view of the perils encountered by a migrating sockeye salmon named Sammy.

Part Three-Why Migrate?

Have the students open the first listed website. They will need to go to the link called Reference Library on the left side. Under that link they will need to scroll down to the link called Migration Basics. Hand out to each student the migration basics worksheet provided. Have the students work independently to answer the questions on the worksheet. (It could be a homework assignment.)

Part Four-The Migration Game

Have students break up into small groups and play The Migration Game (a board game available from Sea Grant Alaska).

This game is really short. If you wanted to spend the time, it might be more fun and meaningful to have the students use this and the Salmon Countdown activity from Activity Three as a guide to make a room size salmon migration activity for younger grades similar to the one described above in the Caribou Migration Game. (Variation for Younger Students, Grade 4-6)

Part Five-Ocean Migration Patterns

Use an overhead projector to look at the ocean migration patterns of Alaska salmon found in Fish and Fisheries Alaska Sea Week (pages 32-33).

Part Six-Hooks and Ladders

Have the students do the outdoor activity in Project Wild Aquatic called Hooks and Ladders. In the activity, students become Pacific salmon during their life cycle. During their migration from habitat to habitat they encounter many limiting factors.

Students should have a good working knowledge of the life cycle of Pacific salmon by this time and should catch on easily.

After the activity is over, discuss with students the limiting factors that affected their migration from habitat to habitat.

Extension: Have the students lead the activity with the younger students they worked with on the Migration Game in Part Four.

Part Seven-Migration Headache

Have the students do the activity in Project Wild Aquatic called Migration Headache.

Wrap-up Discussion:

Compare and contrast the migration of caribou and salmon. What are some obvious similarities and differences? What are the main limiting factors of both caribou and salmon? Compare and contrast how these issues are dealt with politically.

SIOP FEATURES:

Preparation

- Adaptation of Content
- Links to Background
- Links to Past Learning
- Strategies incorporated

Scaffolding

- Modeling
- Guided practice
- Independent practice
- Comprehensible input

Grouping Options

- Whole class
- Small groups
- Partners
- Independent

Integration of Processes

- Reading
- Writing
- Speaking
- Listening

Application

- Hands on
- Meaningful
- Linked to objectives
- Promotes engagement

Assessment

- Individual
- Group
- Written
- Oral