



# Activity 21: When Do Salmon Use Our Streams

## Audience:

Adult Presentations. Highschool presentations.

## Time:

50 minutes

## Setting:

Indoors

## State Essential Learning Requirements

Science: 1.2, 1.3

Geography: 2.1, 2.2, 2.3, 3.1

## Materials:

You prepare large fish and egg cutouts according to instructions.



## Overview:

Each member of the audience receives cutouts and places the fish stage on the wall under the month it uses the stream. The facilitator will talk about each run important to their region and lead a discussion on stream stewardship.

## Objectives:

- To determine which months salmon use streams in your area.
- To relate community salmon management to when and how salmon use local streams.

## Critical Questions Addressed:

1. Value
2. Endangered
3. Recovery



# When Do Salmon Use Our Streams

## Salmon Life Cycle Activity

**Audiences:**

Ideal for adult audiences and Grades 8-12

**Time:**

One hour

**Setting:**

Indoors



### Explanation of Activity

The main objective of this activity is to explain visually how the life cycle of the salmon fit into a calendar year. The main message conveyed through this activity is that streams which have salmon spawning in them are being utilized by the salmon all year long. This leads directly into discussion on why good habitat is critical for the recovery of the salmon.

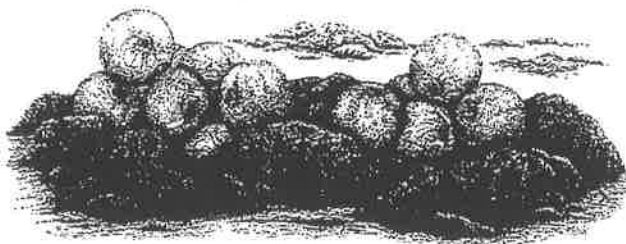
### Key points about this activity:

This activity should be tailored to the local area - return timing, amount of time eggs and alevins spend in gravel, timing of juvenile rearing in freshwater, and out-migrant timing will be slightly different depending on the locality. So this activity can definitely be adapted to your audience and the locality. Adapt this activity to the species you wish to consider in your locality.

This activity involves creating large sized salmon models from craft paper. We recommend the life stages for one species be made in one color.

This activity probably works best with two to three species and/or stocks, however at least one should have year round rearing (such as spring chinook, coho, or steelhead) to get the intended message through. More than two or three species might be too much to fit on a wall.

Each template has the name of one month of the year written on the back. This is used by the participants to tape the template on the wall under the appropriate month.



ACKNOWLEDGMENT: \*\*Created by Lisa Harlan, Fish Biologist, WDFW, Vancouver, Washington

### List of Templates:

Create the following wall display. (Use example at the end of this activity which illustrates this description)

12 signs about the size of a bumper sticker with the months of the year in large letters.

3 adult spring chinook on blue posterboard, labeled on front with "Spring Chinook", labeled on back with April, May, June - one month per fish.

4 adult fall chinook on green posterboard, labeled on front with "Fall Chinook", labeled on back with August, September, October, November - one month per fish.

4 adult coho, on red posterboard, labeled on front with "Coho", labeled on back with September, October, November, December - one month per fish.

5 spring chinook eggs, on green posterboard, labeled on front with "Spring Chinook Eggs", labeled on back with August, September, October, November, December - one month per cutout.

8 fall chinook eggs, on blue posterboard, labeled on front with "Fall Chinook Eggs", labeled on back with October, November, December, January, February, March, April, May - one month per cutout.

9 coho eggs, on red posterboard, labeled on front with "Coho Eggs", labeled on back with October, November, December, January, February, March, April, May, June.

12 spring chinook juveniles, on green posterboard, labeled on front with "Spring Chinook Juveniles", labeled on back with January, February, March, April, May, June, July, August, September, October, November, December. On the fronts of March - June put one large arrow pointing in the same direction fish are pointing. These indicate when the juvenile fish are migrating out to the ocean.

6 fall chinook juveniles, on blue posterboard, labeled on front with "Fall Chinook Juveniles", labeled on back with February, March, April, May, June, July. On the fronts of March - July put one large arrow pointing the same direction the fish are pointing. These arrows indicate when the juveniles fish are migrating to the ocean.

12 coho juveniles, on red posterboard, labeled on front with "Coho Juveniles", labeled on back with January, February, March, April, May, June, July, August, September, October, November, December. On the fronts of March - June put one large arrow pointing the same direction the fish are pointing. These arrows indicate when the juvenile fish are migrating to the ocean.

## The activity follows this general outline:

**1. Introduction** - Explain that we are going to learn about the salmon life cycle and that everybody is going to help. Then pass out all the cut outs - individuals may get more than one. Have someone help you pass them out. It is important that all cutouts are put on the wall. If you don't want to pass them all out put them up yourself. You will also need someone to help pass around masking tape since all the cutouts will be put on the wall. While they are being passed out talk about what species of salmon return to your river system. Take questions throughout the activity. The questions will direct the flow of discussion.

**2. Adults** - At the start of the activity begin with adult salmonids returning to the river. Have people with adult cutouts "migrate" to the front and put their fish on the wall under the appropriate month indicated on the back of the cutout. Talk a little about when the adults spawn versus when they return to the river, where in the streams the fish spawn, what kind of habitat they like to spawn in, what redds are and how they are made, and what happens to the adults after they spawn.

**3. Eggs in Gravel** - Next the people with the eggs come up and put the eggs under the appropriate month. Talk a little about how long the eggs and alevins stay in the gravel. Bring up ideas about water conditions that are best for survival of the eggs and alevins.

**4. Juveniles** - Next have people with juvenile fish cutouts put their fish under the appropriate month. Talk about what they need to thrive during the freshwater stage. What they eat, their need for cold, clean water, what kind of habitat they prefer. Then talk about the timing of out-migration noting that all the species out-migrate during the spring and early summer months.

**5. Summary and Conclusion** - Ask what conclusions they can draw about when the fish are utilizing the stream. (It will be very obvious by now that throughout the entire year the salmon are living in the streams.) This is a natural lead in to talking about freshwater habitat.

**6. Habitat** - Discuss need for clean, cold water. How does the water temperature stay cold, what causes it to warm up? Etc.

**7. Changes in Lifestyle** - Conclude the activity with discussions on what changes need to happen to help the salmon recover. Discuss what individuals can do to help improve salmon habitat. Use WDFW's "Your Impact on Salmon: A Self Assessment" as a guide.

