Streamside Experience

About the Streamside Experience

The Streamside Experience introduces students to the natural habitat, food sources, and life cycle of trout and salmon, with an emphasis on kokanee salmon, and it provides students with an opportunity to observe naturally spawning kokanee salmon. The Streamside Experience is purposely scheduled to coincide with the kokanee salmon spawning period, which occurs near the end of September. If the fish spawn before or after the date set for the Streamside Experience, be prepared to explain to students that Mother Nature is unpredictable. Classrooms enrolled in Kokanee Karnival at the Comprehensive Level are required to participate in the Streamside Experience as part of their acceptance agreement.



Kokanee Karnival is adaptable to other fish species such as red band trout, bull trout, or chinook salmon, and to locations in your area.



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The Streamside and Hatchery Experiences are combined into a day-long field trip for students. Students travel to one location in the morning and to the second location in the afternoon, with two schools per day trading places after lunch. Students travel to Brown's Creek and the Fall River Fish Hatchery, which are within a few miles of each other. Two schools participate each day, with a total of eight schools experiencing this field trip over a four-day period.

Be prepared for anything: inclement weather, high winds that blow away equipment, overly enthusiastic students who fall into the stream, and the absence of spawning kokanee salmon.

If the program budget allows, consider reimbursing schools for the cost of transportation to the streamside location.

Insist that at least one parent volunteer is available for every six students.

If the Streamside
Experience is held in a remote or hard-to-find location, place one or more signs along the route to guide drivers and provide maps.

The Streamside Experience exposes students to an outdoor environment where they can engage all their senses while observing the natural habitat of kokanee salmon. The Streamside Experience consists of the following three stations:

1. Nature's Restaurant⁺ – Students learn about the food requirements of kokanee salmon during each stage of their development. The lesson at this station includes a discussion about aquatic entomology, food that insects and fish feed on in streams, and the food chain concept. This station uses a variety of visual aids, such as vials of preserved specimens, posters, and more.



⁺ Titles courtesy of *Discovering Salmon: A Learning and Activity Book*, by Nancy Field and Sally Machlis, Dog-Eared Publications, Middleton, WI, and used with permission.

- **2. Comforts of Home**⁺ Students learn about the five essential elements of salmonid fish habitat. This lesson includes a discussion about cold water and dissolved oxygen, food supply (including where fish find food), territory, shelter from fast current, and protection from predators. Students play the Comforts of Home game, which illustrates the importance of good fish habitat conservation.
- **3. Incredible Journe**y⁺ Students learn about the life history of the kokanee salmon. This station includes a discussion of spawning, life stages, and sockeye vs. kokanee salmon. Students play the Natural Survival game.

At each station, one or more trained volunteers follow a prepared script that engages the students and involves them in learning activities and games. For a description of the Comforts of Home game, see the **Appendices**. For samples of scripts used at each station, see **Chapter 9. Scripts**. Students spend exactly **25 minutes** at each station.

Preparing for the Streamside Experience

To prepare for the Streamside Experience:

- Prepare and distribute a daily schedule of events.
- Notify each school of the date and time you expect them to arrive. Ask teachers to divide their classes into three groups before arriving. Remind teachers that it is the school's responsibility to provide one parent volunteer for every six students.
- Obtain commitments from an adequate number of volunteers to conduct activities at each station. Remind volunteers of the day and time they are expected to arrive.
- Ensure that all equipment is available, in good working order, and on-site for the day's activities.
- If necessary, make arrangements for volunteer carpools, lunches for volunteers, beverages or bottled water for students, and portable toilets.

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A daily schedule of events, including schools and teachers that will participate, the approximate number of students per classroom, time the school is scheduled to arrive, and a contact number for the teacher should be available at the Streamside Experience location every day.

Equipment for the Streamside Experience is stored in the Kokanee Karnival trailer.

Schedule - Streamside Experience



Encourage volunteers, students, and teachers to point out wildlife observed so students realize they are visiting a place where animals normally live.

If students arrive late, reduce the amount of break time between rotations to stations.

- 8:00 Volunteers arrive and set up stations.
- 9:00 After students arrive, organize students into their three pre-assigned groups.
- 9:15 Welcome students, explain the process and expectations, safety considerations, and how students will rotate to each station. Using special dye, demonstrate water flow (optional).
- 9:30 Sound the duck call and have students walk to their first station.
- 9:35 Sound the duck call and begin presentations at each station.
- 10:00 Sound the duck call, allow a five-minute break, and have students walk to their second station.
- 10:05 Sound the duck call and begin presentations at each station.
- 10:30 Sound the duck call, allow a five-minute break, and have students walk to their third station.
- 10:35 Sound the duck call and begin presentations at each station.
- 11:00 Sound the duck call and have students board bus. Volunteers eat lunch while waiting for the next class to arrive.
- 11:45 As the next group of students arrives, organize them into their three pre-assigned groups and repeat the process of welcoming students, sounding the duck call, and having students rotate to stations for the afternoon session. The afternoon session should conclude at 1:45.

Before the last group of students leaves at the end of each day, ask students to pick up litter and help carry equipment as they walk to their bus.

At the end of each day, volunteers dismantle each station. All equipment is stored in the Kokanee Karnival trailer. One volunteer tows the trailer to a safe location at the end of each day's session.



Equipment, Props, Teaching Tools

To conduct the Streamside Experience, consider the following items:

- Streamside location Must be easily and safely accessible to volunteers, students, and teachers. Choose a location that allows students to safely view spawning kokanee salmon. If permanent restroom facilities are not available, make arrangements to rent portable toilets.
- Scripts For samples of scripts used at each station, see
 Chapter 9. Scripts.
- Volunteers At least two volunteers are needed for each station. Depending on the experience of the volunteers, you might need more help for each station. One additional volunteer is needed to welcome students, discuss safety, and explain how students will rotate through the stations.
- Identification banners Have one available for each station.
- Name badges and Volunteer Record Form Volunteers should wear name badges and record hours volunteered and miles driven.
- Directional signs for Kokanee Karnival event.





Kokanee Karnival has at least three volunteers available for each station. Volunteers may rotate among stations, or stay at the same station the entire day. One volunteer is also available for each of the following tasks: sounding the duck call; arranging and delivering free lunch and beverages for volunteers; and towing the Kokanee Karnival equipment trailer to the site each day. Volunteers arrive about 8:00 AM to set up stations, and they leave by 2:30 PM.

Incredible Journey⁺

- Laminated posters: Salmon or Trout Life Cycle, Fish Building a Redd, and Two Fish On a Redd
- Display showing hazards fish face throughout their life cycle
- Natural Survival game
- Two hinged "A" frame easels to hold posters, displays, and game
- Two kokanee salmon models (male and female taxidermymounted specimens)
- Fish egg development display
- Canopy (10 feet X 10 feet) for protection from sun and rain
- Small table to hold supplies (optional)

Comforts of Home⁺

- Water thermometer
- Laminated 8 ¹/₂ X 11 inch cards with one essential element of salmonid habitat printed on each card (Shelter from current; Protection from predators; Cold water with lots of dissolved oxygen; Food supply; Territory large enough to call home)
- Laminated 8 1/2 X 11 inch cards with one predator (bear, osprey, eagle, fisherman) and one element of habitat (bushes, grasses, boulders, trees, overhanging bank) printed on each card; several laminated cards with "fish" printed on each card
- Tape or markers to identify "stream" boundaries for the game
- Hinged "A" frame easel
- Canopy (10 feet X 10 feet) for protection from sun and rain

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Nature's Restaurant+

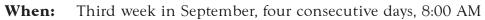
- Hinged "A" frame easels to attach flip charts
- Plankton net with collecting vial to demonstrate how to collect plankton (A fisheries biologist from the Deschutes National Forest supplies the plankton net with collecting vial and aqua viewers.)
- Flip charts or posters showing insects on rock, food pyramid, and pictures of fish predators and scavengers
- Flip charts or posters showing words such as Plankton, Alevin, Predator, Scavenger, etc.
- Vials of preserved insect specimens, plankton, and fish egg development display
- Large white pans for displaying insect specimens and live macroinvertebrates (Volunteer collects specimens before students arrive.)
- Large bristle brush to explain how kokanee filter plankton from the water



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- Net to collect dead fish used in illustrating the gill filament filtering system (Or, collect specimens from an established ODFW fish trap beforehand.)
- Portable table to hold specimens
- Aqua viewers
- Plastic bags for dead fish and other trash
- Soap and towel (useful after handling dead fish)
- Waders

Summary – Streamside Experience



to 2:30 PM

Where: Brown's Creek, near Wickiup Reservoir in Central Oregon

Who: Classrooms enrolled at the Comprehensive Level are required to participate in the Streamside Experience.

Things to Do in Advance:

- Notify Fish Biologist at Deschutes National Forest and ODFW-STEP Biologist of date and time of Streamside Experience.
- Contact the President of The Central Oregon Flyfishers and notify of dates and times so they can have volunteers available.
- Kokanee Karnival pays schools for the cost of transportation to the Streamside Experience. To ensure that classrooms have use of a bus for the **entire** day, get commitments from school superintendents and transportation heads well in advance of the date needed.
- Arrange to have lunches and beverages available for volunteers and bottled water for students. (A local vendor provides bottled water as an in-kind donation.)
- Arrange to have a volunteer tow the Kokanee Karnival trailer and portable toilets to the site. (A local vendor provides portable toilets as an in-kind donation.)

