



## New Teacher Packet

**Hey there!** We heard a rumor that you've got a field trip planned to Columbia Springs. Awesome. Wait, what? You've never been here before? Oohie, you are in for a treat! Read on for some frequently asked questions from teachers like you:

### **So, what is Columbia Springs?**

Columbia Springs is an environmental education center and an active trout hatchery. It was created in 1997 through the partnership of Clark Public Utilities, Evergreen School District, the Washington Department of Fish and Wildlife, City of Vancouver, Clark County, and Clark College and in 2001 became a 501(c)(3) non-profit. Since 1997, Columbia Springs has provided over 100,000 kids and adults with the opportunity to get outdoors and learn about the natural world through field studies, workshops, service-learning projects, summer day camps, community events, and more. The 100-acre urban natural area at Columbia Springs is open to the public daily, from dawn until dusk. It is located on the site of the historic Vancouver Trout Hatchery, which is still in use today. Visitors can enjoy over two miles of walking trails, picnic areas, historical and interpretive displays, wildlife viewing, and more. As a non-profit, the mission statement guides everything the organization does. Columbia Springs' mission is: "To provide our community a unique setting where educational experiences foster a greater awareness of the natural world, inspiring stewardship."



### **Where is Columbia Springs and where will we be throughout the day?**

See maps on page 4.

### **Can we have lunch on site?**

Yes, please do! We have three different outdoor picnic areas (one covered). Please note that we only have one public bathroom area on site and no drinking fountains. Advise students and chaperones to bring a water bottle. We have a pack it in, pack it out policy. Bring garbage bags for both trash and recycling to be disposed of off-site.

### **What should we wear?**

Dress for the weather! For every program at Columbia Springs we will be spending part of the day outside and part of the day hiking on our trails. Wearing layers, closed toed shoes and water resistant clothing is advised. Our hiking trails are partially built on board walks and are partially earthen. Be prepared to walk over roots, rocks and climb up and down stairs. Generally, the farthest we will hike on field trip is 1/4 mile.

### **Can you tell me more about the hatchery and what kinds of wildlife we might see?**

Pages 2 & 3 share details about hatchery operations and some of our resident wildlife.

# Hatchery Operations

## Facts

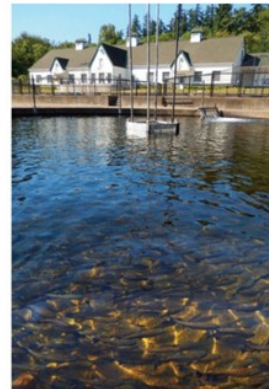
- The hatchery was built in 1938
- It is currently operated by the Washington State Department of Fish and Wildlife with funds from the State and from Clark Public Utilities
- The hatchery raises 70,000 half pound catchable Rainbow trout annually
- 20,000 half pound Brown trout are raised at the hatchery annually
- Steelhead are raised until they reach fingerling size and then are sent to Skamania Hatchery to acclimate to the river water before being introduced into local rivers.
- Chum eggs are hatched here as part of a program to restore local runs of this endangered salmon.
- Fish reared and released from this hatchery generate an estimated 70,191 angler trips and \$2.61—\$3.05 million annually in economic activity in Clark County.



**Trout being loaded into a truck for transport to Lacamas Lake.**



**Incubation Room**



**Rearing pond and raceways**

## Seasonal Activities

November—January: Eggs arrive

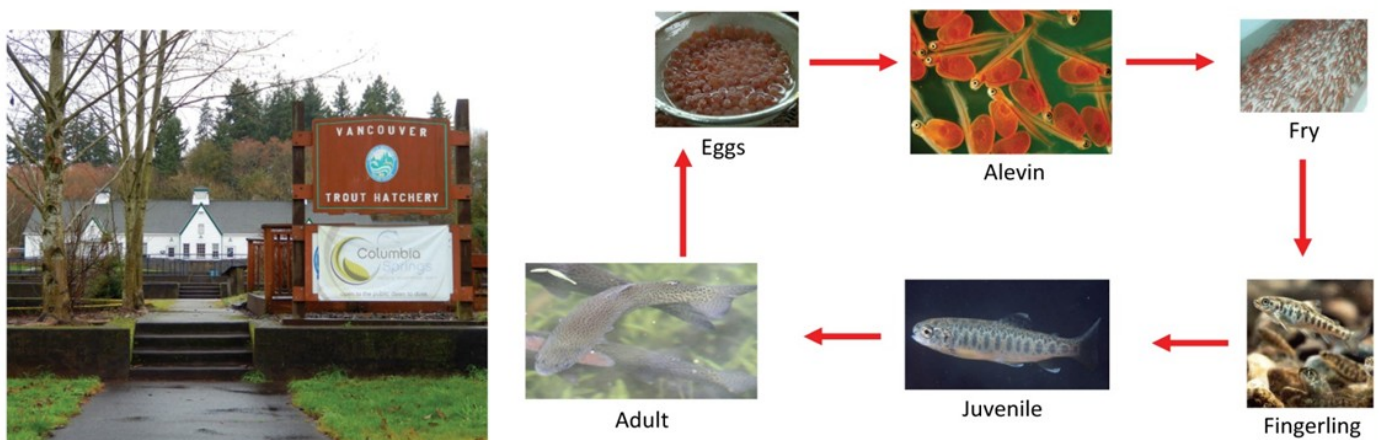
January—March: Eggs are raised in the incubation rooms until they reach the fry stage

March—May: Fry are released to outside rearing ponds

May—December: Fish are raised until they reach sizes that qualify them to be released or transferred to other facilities (i.e. steelhead to Skamania hatchery)

December—June: Fish are released into area lakes

## Trout Life Cycle





# Birds and Animals of Columbia Springs

**Great Blue Heron:** A large, solitary species with a wingspan of 6 feet. The call is a deep squawk. The Heron hunts by standing very still until it strikes quickly to capture its prey. They use specialized feathers on their chest to clean fish slime and other grime from their wings.



**Hummingbirds:** Commonly seen in Clark County is the Anna's Hummingbird. Hummingbirds can beat their wings nearly 200 times per second!



**Kinglets:** Golden-crowned and ruby-crowned kinglets are both commonly seen at Columbia Springs (pictured is a Ruby-crowned kinglet). The ruby crown stays hidden until an excited male begins his singing and colorful display to attract a mate.



**Sparrows:** While there are many types of sparrows in Clark County, the song sparrow is a frequent sight at Columbia Springs. The song is used by males to attract mates who listen to how well they "sing" and how well they learn a new song!



**Mallards:** Commonly seen ducks at Columbia Springs include mallards. Mallards feed by tipping and grazing on underwater plants. Male mallards don't quack!



**Steller's Jays:** These loud, mischievous birds use mud to build their nests, are frequent nest robbers, and can mimic many sounds including other birds, squirrels, cats, dogs, and some inanimate objects.



**Northern Flicker:** Despite woodpeckers being known for their habit of hammering on trees for their food, this species prefers to find food on the ground (like ants). Woodpeckers have tongues that wrap around their brains in order to absorb some of the shock from hammering with their heads.



**Belted Kingfisher:** These birds are excellent "fishers" of food from ponds and streams, and nest in tunnels they dig in stream banks. It is one of the few bird species in which the female is as brightly or more brightly colored than the male.



**Buffleheads:** Buffleheads dive to catch invertebrates. They nest in holes created by woodpeckers. It is one of the few duck species who are monogamous.



**Red-Winged Blackbird:** It's call sounds like "pump-kin-EAT-er."



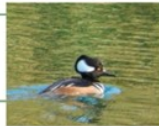
**Wood duck:** Unlike most ducks, the wood duck perches and nests in trees and are comfortable flying through the woods.



**American Wigeon:** Its short bill enables it to exert more force at the bill tip than other dabbling ducks (ducks who feed by tipping into the water to eat plants and insects) and has a higher proportion of plant matter in their diet than any other dabbling duck.



**Hooded Mergansers:** They can change the refractive properties of their eyes to improve underwater vision!



**Black-capped Chickadee:** This small bird hides seeds and other food items to eat later. Each item is placed in a different spot and the chickadee can remember thousands of hiding places!



**Cedar Waxwings:** These fascinating fruit eaters eat so much fruit, they can occasionally become intoxicated or die when they eat too many overripe berries that have started to ferment and produce alcohol. Eating different fruit can change the color of newly growing tail feathers.



## Native Fauna:

**Mammals:** Native species of Clark County include beavers, river otters, raccoon, deer, squirrels, rodents (mice, voles, moles), hares, cottontails, bats, and coyote. River otter "slides" can be found around the West Biddle Lake pond at Columbia Springs. River otters often cause issues at the hatchery as they find clever ways to hunt the fish being raised. There is also abundant evidence of beaver.

**Amphibians, reptiles, and fish:** This area is home to several native frog species and many fish. Common frogs include the tailed frog and the Pacific tree frog. Salamanders and rough-skinned newts are regular sights at Columbia Springs. When threatened the rough-skinned newt secretes poisons through its skin and ensatinas can "drop" their tails to escape predators. Garter snakes are found throughout Clark County in the summer months. Columbia Springs includes areas of sensitive habitat including springs that empty into the Columbia River at one of the last remaining chum salmon spawning sites.

**Fun Fact:** Native animal species can be used in environmental restoration projects! On the north Oregon coast beavers are used to restore horse farms back into wetlands. Research suggests that beavers do a better job at restoring natural wetlands than humans do (where they are a native species). They are not only more effective, but cheaper than having humans complete the restoration project.



Rough-skinned newt



Ensatina



## Site Map & Directions

When you come to Columbia Springs for your field trip please have busses and parent chaperones park in the public parking lot on the west side of the site. One of our staff will meet your group at the "Welcome & Intro" area, marked below with a green star.

Depending on the program you scheduled you and your class will be in the Swift Classroom, Cordwood Classroom and/or hiking on the Heron Loop Trail (behind the Cordwood Classroom).

Please note that the bathrooms by Swift Classroom are the only public bathrooms on site.

### Coming west of I-205:

From WA-14, take exit 5 for SE Ellsworth Rd.  
Turn right onto SE Ellsworth Rd.  
Turn left onto SE Evergreen Hwy.  
After passing under 205 look for our parking on the left.

### Coming from east of I-205:

From WA-14 take exit 8 for SE 164th Ave.  
Turn left onto SE 164th Ave  
Turn right onto SE Evergreen Hwy.  
Parking is in the third entrance on your right

### Detail Site Map



### Full Site Map





## **COLUMBIA SPRINGS SAFETY POLICY—FIELD TRIPS**

Columbia Springs is committed to ensuring that all students are safe during their time on-site. Help us keep students safe by enforcing the following rules:

1. No running.
2. No climbing on or jumping off cement or wooden structures.
3. Stay with your group throughout the day.

Please bring to our awareness any aspects of our facilities that you feel present a danger to students.

### **EXPECTATIONS OF SCHOOLS AND TEACHERS**

The teacher is responsible for having each student's emergency contact information and parent permission forms per school/district requirements. Teachers should be aware of any relevant medical issues, such as allergies to bee stings.

It is the responsibility of the school to supervise students and to provide the supervisory adult to student ratio required by the school district.

### **IN THE EVENT OF AN INCIDENT**

The role of Columbia Springs Staff and Educators is to assist the school personnel in the event of an incident. The management of the incident is the responsibility of the school district personnel.

Teachers have the authority to call an ambulance and teachers should be trained in the appropriate “next step” during student injury situations.

It is the responsibility of the teacher to report the incident immediately to the school. Next actions (beyond immediate first-aid/emergency action) are the school’s responsibility.

*Thank you for helping us keep students happy, healthy and learning!*