Salmon Migration Games

Location: we do this in a place where we can walk through the woods while doing the scent activity, and then reach a clearing where we do the journey and the tag games. You may need to adapt this to your location.

Prep: 12 ziplock baggies with cotton balls in them that will be soaked with a scent… vanilla, mint, balsamic vinegar, lemon juice, or whatever. Need 5 of whatever scent you decide is their "home" scent, and then some decoys. Set up a path through the woods, where each time a path forks and they have to decide which way to go, you plant two baggies – one with their home smell and one with another smell.
In the clearing, map out (with ropes or cones or signs) where the stream, lake and ocean are. In the stream, have something to symbolize a waterfall, and a jump rope to be a dam.

Map

I show them a map of salmon migration. We talk about where they live (Issaquah? Bellevue?) and point that out on the map, then talks about how the babies hatch in Issaquah Creek, go out into Lake Sammamish, then through the Sammamish slough to Lake Washington, then Lake Union, through the Ballard Locks, into the Puget Sound, then into the Pacific Ocean – maybe south to Oregon coast, or north as far as Alaska.

Scent Activity

Then, we tell them to pretend that they are salmon out in the ocean. And fall is coming, and they realized they don't want to eat any more, they just want to swim home. But they have to figure out which way to go home. Tell them they've swum through the Ballard Locks and Lake Union into Lake Washington and through to Lake Sammamish, and now they have to find their way to Issaquah Creek. Tell them there will be different paths they could take, so they have to remember what their home creek smells like. Have them smell one of their "home" containers. Then other containers for them to sniff. Tell them that whenever they have to make a choice about which way to turn, they should always follow their "home" smell till till they reach their spawning grounds.

The Journey

Now, you'll walk them through the tag game / obstacle course area the first time so they know the path. (You're basically telling a short story of the migration pattern before we add in all the predators and barriers of the game.)
Kids start in their home stream, as little eggs hiding in the gravel for 3 months. Have the kids sit on the ground. There's a stormy day with lots of water rushing through the river – they sway back and forth a you say "hopefully you don't get washed away!!"
Tell them that then the eggs hatch into alevin and stay in the gravel for three weeks eating their yolk sacs – have the kids crouch low to the ground and stay still to pretend to be alevin, pretending to eat.
At 4 months, they become fry and start to swim downstream, eating bugs – fry can swim… the kids can walk crouched down low to the ground as you move downstream.
They reach a lake, and then will spend about a year in the rivers and lakes on the way to the ocean. They are growing bigger, so have them bend down just partway and walk slowly through the lake area.
As they move out into the ocean, they get bigger, becoming smolt (stand all the way up), then adult salmon (reach arms up high to show how big they are. They eat plankton, shrimp, and small fish. In the ocean, they can walk fast. Tell the kids they all need to touch "Alaska" to turn into spawning salmon.
Spawning salmon are in a hurry. They can only survive in fresh water for a few weeks, so they run back toward their creek. Remember to jump up the waterfall!
Hurray, we all made it home!!!

Tag Game

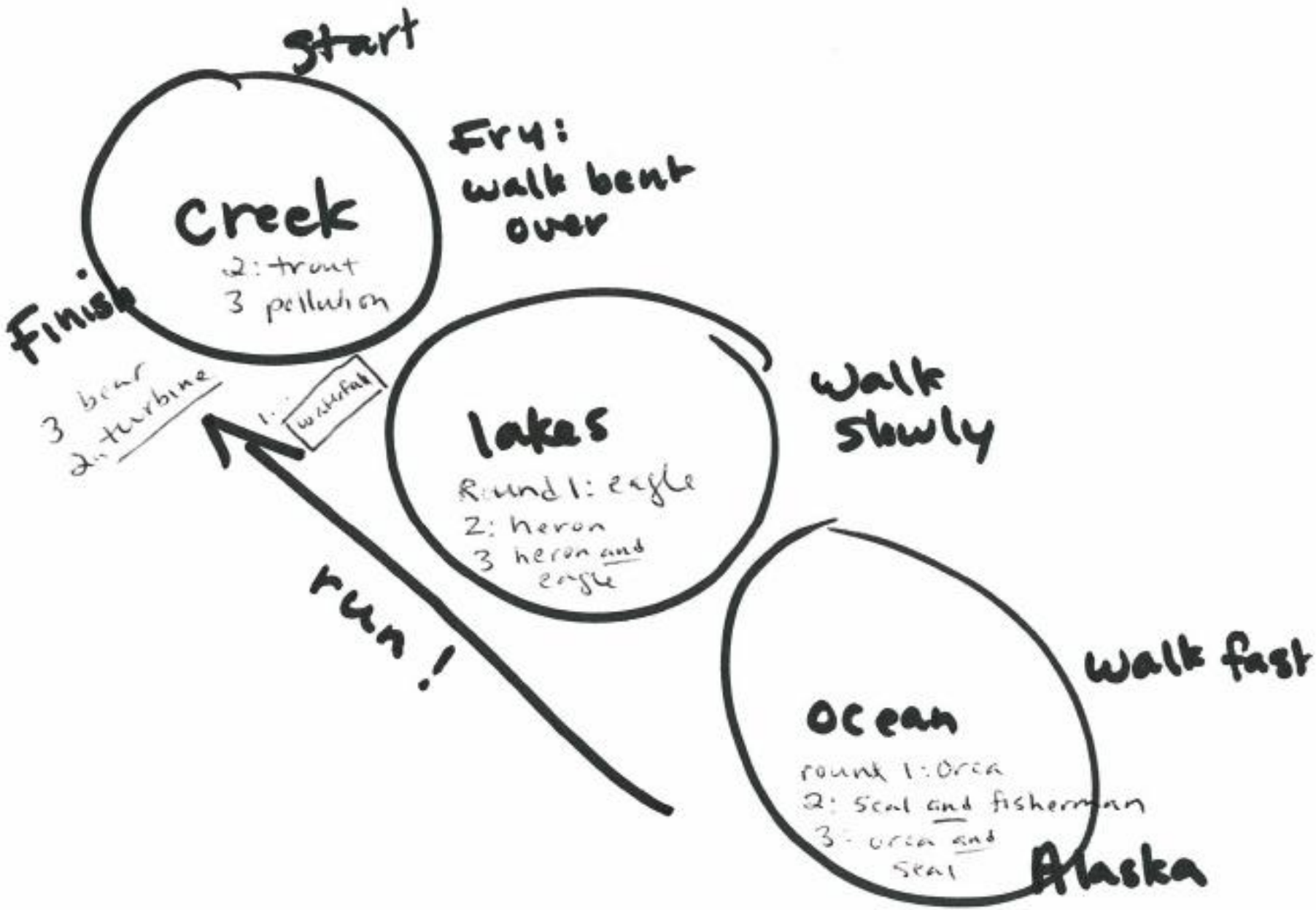
Then tell them the salmon's journey isn't always that easy. Because there are lots of predators who like to eat salmon!! We'll play a tag game to see what that's like. And there are natural barriers, like waterfalls they have to get past.

First round of tag game: Ask two kids to be predators. Explain to everyone that one is an eagle on the lake who can eat them by tagging them – *but only when they're in the lake*. One is an orca whale on the ocean who can catch them by tagging them – but *only when they're in the ocean*.
Then play the round of tag, with all the kids starting by crouching in the stream till you say go, then walking bent over down the stream, walking slowly through the lake, walking quickly across the ocean to touch Alaska, and running home. Count how many kids survive.

Second round of tag: Ask 4 kids to be predators. And adults to be the dam. Explain to everyone that one is a trout in the stream – it can tag the baby fry swimming downstream, but it can't tag the spawning adult. One is a heron who can tag them on the lake. In the ocean: one is a seal and one is a human fisherman. When they're swimming upstream, the dam volunteers wiggle a jumprope to be a dam turbine the kids have to get past. (Note: if you have kids be the dam, they need to know they need to be very careful not to trip running kids with the jumprope!)
Then play the round of tag. Now how many kids make it back up?

Third round: Ask 6 kids to be obstacles: Pollution in the stream – can tag a baby fry OR a spawning salmon. Heron and eagle in the lake. Orca and seal in the ocean. Bear in the stream. Plus the dam is still there.
Now play the round of tag. How many kids make it back up?

Explain that in the real world, a chinook lays 4000 eggs. But only about 600 of those will ever hatch – the rest just were never fertilized, or got washed out of the gravel, or got eaten. Once they're fry, then can get eaten or can't get to the ocean. Of the 600 fry, only about 300 survive to be smolt. In the sea, more get eaten or caught. Then the journey back upstream is treacherous. Only about 1% of eggs end up as adult salmon who have come home to spawn.


start
Creek
2: trout
3 pollution
Fry:
walk bent over
Finish
3 bear
2: turbine
1: waterfall
lakes
Round 1: eagle
2: heron
3 heron and eagle
Walk slowly
run!
Ocean
round 1: Orca
2: seal and fisherman
3: orca and seal
Walk fast
Alaska