

2009 SALMON WATCH REPORT

FAUNTLEROY CREEK

Dates and Location: The 2009 salmon watch on Fauntleroy Creek began on **October 26**, the day after our annual drumming to call in the spawners, and closed **November 21** after several days without fish. The watch area in the lower creek encompassed the fish ladder and the reach above it, directly upstream of the culvert under Fauntleroy Way S.W. Our survey for carcasses extended to 45th Ave. S.W., where a barrier impedes upstream access.

Count: Watchers documented **18 coho spawners**. Most came on **November 8 and 9**, with one or two fish per day after that. The last came in on **November 12** and lingered in the fish ladder for another day. We saw no cutthroat trout.

Volunteers: Fourteen volunteers participated in the watch. They were a combination of veterans and new recruits. They used our standard recording form and methodology, both having proved themselves over several years.

Live Condition: All the fish were vigorous and, except for the last, they quickly moved upstream beyond the watch area. Many had more red coloring than usual; one was the most brilliant we have seen since our first formal watch in 1999. Their skin was clean and intact. We noted two with a pronounced hook to their noses.

Carcass Condition: Steev Ward, our volunteer fish biologist, visited the creek daily to try to find and check carcasses before predators took them away. He was able to locate and examine only three - two females and one male. One female was located near 45th and the other carcasses were on the bank close to the fish ladder. All had been chewed on. The pattern of chewing on the females suggested that predators had not gone for the belly first, which they would have had it been full of eggs. This observation suggests that the females had spawned.

Tissue samples were taken from the gill and kidney of each of the carcasses. Examination with light microscopy revealed no noticeable abnormalities.

Carcass examination and photos of live fish provided evidence that our spawners included hatchery-release fish (no adipose fin) and others that could have originated here as home hatch or Salmon in the Classroom release fish.

Spawner Access: Prior to the watch, logs and sand trapped by ferry-pier piling had forced the creek to flow parallel to the shoreline and under the pier before discharging into Fauntleroy Cove. The logjam was especially tight this year, so on the advice of Larry Fish, area habitat biologist with State Fish and Wildlife, we secured a five-year HPA from the state and a shoreline exemption from the city to relocate logs above the higher mean high waterline. Washington State Ferries was unable to fund removal, necessitating a volunteer work party, which occurred two days before the watch started.

Although high tides deposited more logs in the channel, it appeared to stay open enough for spawner access throughout the watch. A volunteer spotted three or four fish circling near the mouth late in the watch and we again checked access. However, watchers never saw those fish in the spawning area.

Redds: Watchers recorded strong evidence of spawning in the upper fish ladder. We didn't have the expertise necessary to identify possible redds elsewhere in the reach. Given that the bulk of our spawners came in two batches, we could assume the possibility of spawning above the watch area. Those that came in individually were far less likely to find a mate.

Visitors: Watchers recorded a total of 68 visitors to the creek during the active days of the watch. They included several children who came after school while the light held and others who wandered down during the Veterans Day school holiday. In addition, we hosted 20 youngsters from the Mt. St. Vincent Intergenerational Preschool. While they didn't see live fish, we made sure they saw a carcass and had a good look around the habitat.

Publicity: We reached out for new volunteers through a watch preview posted on the *West Seattle Blog*, in conjunction with its excellent coverage of the drumming. We did no other publicity to recruit watchers, other than word of mouth. Seattle Public Utilities included the opportunity to watch here in its citywide training in October. The *West Seattle Herald* published a spawner article in its print and web editions. The *Blog* announced the first spawners within three hours of their coming in and returned for more coverage when the preschoolers visited.

Identification Debate: A fly-fishing expert (owner of a guide business) visited when the preschoolers were here and, after examining the male carcass they were viewing, pronounced it a blackmouth (a small chinook), not a coho. He noted the black tongue and gums, plus spots extending to the tail. Steev Ward had another look and held to his opinion that it was a coho, based on the pattern of spots and full articulation of the tail. After viewing a photo of the carcass on the Blog, a reader declared it a Chinook jack. We forwarded a photo of the carcass to Bill McMillan, salmon expert with the Wild Fish Conservancy, for his opinion (see addendum). He thought it a coho but one with both male and female characteristics, likely caused by chemicals in the water.

FAUNTLEROY 2009 SALMON WATCH ADDENDUM

Comments of Bill McMillan, Wild Fish Conservancy

Our primary means of telling chinook from coho in the field is the spotting on the tail, size of the spots (chinook particularly large), and the size differences (most creek coho 8 lbs or less and most adult chinook 10 lbs or more - although jack chinook remain problematic). The tail is not dependable if the carcass is really deteriorated, which is especially true of females from digging redds.

I was not able to blow the photo up on the website, but it appeared the spotting may be mostly, if not all, limited to the upper 1/3 to 1/4 of the tail. That is the typical tip-off to a coho. Coloration can vary, but most commonly the Puget Sound jack-sized chinook (smaller males of 2.5 lbs to 8 lbs, or 15"-26") are dusky bronze color with not much, if any, red coloration. Both the head and the entire fish shown have typical male coho coloring with a prominence of pink or red.

However, the head shape is not as classically hook-jawed as most male coho at spawning stage. Male coho typically have a very curled kipe to the lower jaw tip.

Regarding mouth coloration, it is common for male coho at spawning time to have very black coloration around the mouths, so that is not unusual. The one shot of the whole coho does have relatively large spots, but they still remain within the range for coho as well.

On the whole I would call it a coho, at least from what I can gather from the photos without blowing them up more to especially examine the tail spotting, but it is not a clear case. This fish does have some features of each.

Over the years we have found a few confusing specimens that could fall into the category of being hybrids - in this case chinook/coho. There was one especially prominent carcass we came on at Piper's Creek that we had to conclude was a chum/coho cross for its mixed features, and we have found coho males in apparent company with a chum female or two on the spawning grounds there. This particular fish appears to have no adipose that I can see, so a female coho potentially got fertilized by a chinook jack at a hatchery operation where the hurry of the operations can cause a mistake, albeit rarely. So a hybrid is one possibility.

Another possibility is that it is purely a coho but the male sexual features are diluted with that of female characteristics. This is something that is increasingly happening with many chemical and pharmaceutical effluents in our waters - and not just in fish. I am inclined to lean in this direction rather than toward a hybrid, but both are possible.