2020 ANNUAL REPORT

During a year when a killer pandemic turned life as we knew it topsy turvy, we were able to continue core activities and make progress on three fronts:

- We secured the investment of public dollars in habitat restoration by beginning to tap donations to our stewardship fund for essential follow-up maintenance.
- We reconnected with other Seattle watersheds to improve communication and influence for the common good.
- We laid groundwork to ensure the continuation of our watershed council by being more purposeful about volunteer engagement.



HABITAT RESTORATION & STEWARDSHIP

NATIVE PLANT GARDEN. A grant from the West Seattle Garden Tour enabled forest stewards Peggy Cummings and Mike Arizona to work with elementary students, staff, and parents from Taproot School on a pocket garden to promote use of native plants. It is at the east end of the Kilbourne ravine, next to the



Students and helpers installed plants in the pocket garden to mirror native shrubs and groundcovers used to restore the Kilbourne ravine below.

Fauntleroy Schoolhouse. Judy Pickens coordinated signage that identifies and summarizes the benefits of each plant species. Seattle Parks provided temporary fencing to discourage vandalism.

The planting party was just a few days before the coronavirus pandemic closed in-person learning and the school had to relinquish its space in the building. In the absence of students as the primary stewards, Peggy, Mike, and schoolhouse property manager Denise Wallace kept an eye on the garden and replaced a few plants that did not survive.

KILBOURNE RAVINE RESTORATION. The close of 2019 brought an end to public funding (through a grant from the King Conservation District) for this six-year restoration project. We then began to maintain the investment along the middle reach of Fauntleroy Creek by using private donations to our Fauntleroy Watershed Stewardship Fund. In July, an EarthCorps crew did a sweep of 20,000 square feet of restored habitat to remove bindweed, poison hemlock, clematis, spurge laurel, English ivy, nightshade, Italian arum, and gallium - all invasive species that were attempting to re-establish in the approximately two-acre site. The pandemic made a fall sweep too difficult to schedule.

FOREST STEWARDS. Forest stewards volunteered approximately 340 hours this year, monitoring park trails, removing invasive species and planting natives, creating the native-plant garden, and keeping racks at major park entrances supplied with our watershed brochure. The Green Seattle Partnership trains and oversees forest stewards for just such activities. Mike Arizona was an experienced forest steward before volunteering here, so he knew how to assess which areas in Fauntleroy Park could benefit from work parties. Then the pandemic brought a temporary halt to such events.



A yellow ribbon identifies a western red cedar sapling, one of 60 native plants that Seattle Parks provided for Fauntleroy Park. Forest steward Mike Arizona and a friend got them in the ground in December.

CAMBRIDGE STREET ENTRANCE. After a detailed review of factors that have made keeping this east entrance to Fauntleroy Park safe, forest steward Mike Arizona recommended its closure. Seattle Parks expressed strong support for keeping it open, however, and assigned trails coordinator Jacobo Jimenez to work with Seattle Public Utilities to resolve erosion from street runoff. Mike is continuing as our point person to help design an entrance that is safe for park users and also avoids degrading the habitat.

REPLACEMENT OF CULVERTS. City planning continued to replace the creek culvert under 45th Ave. SW and the combined creek culvert under California Ave. SW and the Fauntleroy Church parking lot. Members of the planning team at Seattle Public Utilities briefed our council in January about efforts to fund construction of its proposed designs. Meeting state and federal fish-passage requirements for replacements would cost millions of dollars. We submitted a letter to the State Fish Passage Barrier Removal Board in support of replacing the 45th Ave. SW culvert. Council members Judy Pickens and Phil Sweetland

began coordinating the church's culvert committee and kept the topic on our agenda.

OPEN SPACE RESTORATION. This year was a time for continued growth at this city-owned cite adjacent to the fish ladder in the lower creek. A multi-year project of the Green Seattle Partnership, it aims to eradicate invasive species (primarily English laurel) and restore beneficial native habitat. Forest steward Peggy Cummings checked plant survival and communicated with the partnership on our behalf.

HABITAT REMINDERS. With many people working and learning from home during the

pandemic, park usage increased, including by adults and children not well acquainted with habitat stewardship. Instances of seeing dogs and children in the creek prompted us to coordinate with Seattle Parks and Fauntleroy Church on temporary signage at the release bridge in Fauntleroy Park and in the church's Fenton Glen. We replaced the signs as needed until the rainy season set in.



TERMINAL RUNOFF. Thanks to an observant neighbor, we learned that vehicles getting on and exiting boats at the Fauntleroy Ferry Terminal have long been leaving fluids and particles (primarily from tires) on the wooden deck. Runoff from the deck enters nearshore habitat through slots along the sides. We then learned that terminal employees are sweeping the deck quarterly until a runoff-collection system can be installed when the facility is rebuilt. Late in the year, researchers reported results of a lengthy study, finding that a chemical used in manufacturing tires is a major contributor to pre-spawn mortality in salmon.

PUGET SOUND'S ORCAS. Council member Kersti Muul provided frequent updates on our region's orcas. She noted in her latest report that more vessel restrictions have been put in place to reduce noise and activity that interfere with feeding and that both resident and transient pods have newborn calves.

SALMON

<u>SALMON IN THE SCHOOLS</u>. Salmon-rearing season got off to the enthusiastic start we've come to expect for the dozen elementary and preschools that rear coho fry for release in Fauntleroy Creek. Because eggs started hatching on delivery day, early mortality was high, necessitating replacement eggs and fry. Then in mid March, the pandemic forced abrupt closure of school buildings across the city, causing teachers and



volunteers to scramble to keep fish alive. Most relocated tanks to garages or got permission to access closed school buildings until their fry were big enough to survive in the wild. Thanks to much creativity and coordination, scores of students had a virtual or actual release experience at the creek in May.

(Left) The salmon team at Arbor Heights Elementary scheduled releases by family groups. (Right) Releasing was also a family experience during Roxhill Elementary's first salmon release after the school enthusiastically rejoined the program.

A total of 2,069 fry had a chance to continue

growing in Fauntleroy Creek. They included fish from the schools, plus 500 reared by volunteer Jack Lawless to ensure that high mortality would not deprive any student from having fish to release. Most releases were as far upstream as possible; two were in the lower creek because we had not spotted any home hatch from fall 2019 spawning making use of that habitat.



Avowed "fish guy" Dennis Hinton worked with fellow fly fisher Pete Draughon to document coho smolts leaving the creek for saltwater.

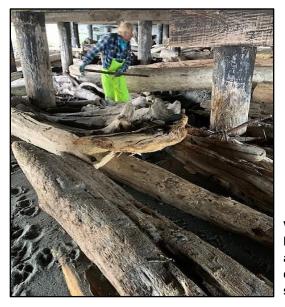
OUT-MIGRATION. On Feb. 29, volunteer Steev Ward installed soft net traps in the upper creek as flow exits Fauntleroy Park and in the lower trap due upstream of the fish ladder. The following day, long-time monitoring volunteers Dennis Hinton and Pete Draughon began checking the traps twice daily. They found the first coho smolt on March 24 and the last on May 13.

A total of 77 smolts - the highest number since 2013 survived their year in the creek to migrate to nearshore habitat in Fauntleroy Cove in central Puget Sound. Unlike 2019 when only 4 came out of the park, monitoring found that salmonids used the entire system without any apparent blockages. Smolt size was comparable to prior years. Dennis and Pete found 1 dead in the lower trap, likely smothered by debris during an overnight rain. They also found 87 fry in the upper trap and 85 in the lower trap, all presumed to have been from releases.

<u>SPAWNING SEASON</u>. We had high hopes for having coho spawners come into Fauntleroy Creek and having hundreds of people come to an "open creek" to see them. Channel conditions were excellent and we were able to ensure that spawners could navigate through drift logs on the beach. Timely publicity and word of mouth netted an exceptional number of people asking about being salmon watchers. The weather was exceptionally dry and warm when they started watching on Oct.18 and typically wet and cold when they stopped on Nov. 7.

| Year | # Eggs | # Released Fry | % of Fry | # Live Smolts | # Live Smolts | # Smolts | # Spawners | |
|----------|--------------------|----------------|-----------|---------------|---------------|------------------|------------------|--|
| | | | From Eggs | Upper Trap | Lower Trap | to Salt | | |
| 2020 | 2,400 ² | 2,069 | 86 | 22 | 55 | 77 | 2 ³ | |
| 2019 | 2,400 | 2,006 | 83.5 | 4 | 18 | 22 | 19 | |
| 2018 | 2,400 | 1,955 | 81 | 26 | 19 | 45 | 18 | |
| 2017 | 2,400 | 1,817 | - | 18 | 14 | 32 | 4 | |
| 2016 | 2,900 | 1,795 | 62 | 14 | 5 | 19 | 7 | |
| 2015 | 2,700 | 1,700 | 63 | 2 | 33 | 35 | 0 | |
| 2014 | 3,450 | 2,409 | 70 | 8 | 11 | 19 | 19 | |
| 2013 | 2,800 | 1,987 | 71 | 65 | 76 | 141 | 3 | |
| 2012 | 3,100 | 2,615 | 84 | 145 | 85 | 230 ¹ | 274 | |
| 2011 | 2,900 | 2,027 | 70 | 147 | 36 | 183 ¹ | 14 | |
| 2010 | 2,500 | 2,298 | 92 | | 24 | 24 | 0 | |
| 2009 | 2,500 | 1,936 | 77 | | 18 | 18 | 18 | |
| 2008 | | 1,790 | | | 17 | 17 | 2 | |
| 2007 | | 2,276 | | | 24 | 42 | 89 | |
| 2006 | | 2,033 | | | 22 | 22 | 0 | |
| 2005 | | 1,138 | | | 10 | 10 | 48 | |
| 2004 | | 1,534 | | | 11 | 11 | 6 | |
| 2003 | | 1,254 | | | 37 | 37 | 4 | |
| 2002 | | 1,965 | | | | | 5 | |
| 2001 | | 1,050 | | | | | 167 | |
| 2000 | | 750 | | | | | 126 | |
| 1999 | | 875 | | | | | 100 ² | |
| 1998 | | unspecified | | | | | 200 ² | |
| 1997 | | unspecified | | | | | 2 ² | |
| 1996 | | unspecified | | | | | 6 | |
| 1995 | | unspecified | | | | | 11 ² | |
| 1994 | | unspecified | | | | | 2 | |
| 1993 | | unspecified | | | | | | |
| 1992 | | ? | | | | | | |
| 1991 | | unspecified | | | | | | |
| 1990 | | unspecified | | | | | | |
| orrected | | | | 1 | 1 | | | |

¹corrected ²approximate ³1 live/1 carcass at mouth



As watchful as we all were and as ready as the general public was to witness something positive during the pandemic, 2020 was a low year for coho in Puget Sound. For the first time since 2015, watchers found no fish in the spawning reach (immediately

upstream of the fish ladder). They found just one spawner breathing her last in a tidepool at the mouth of the creek and a partial carcass on the beach near the mouth.

Volunteer Mark Sears checked the beach throughout spawning season and organized two work parties to disperse logs under the ferry pier so spawners could access the creek.



MUSKRAT RAMBLE This little guy chowed down on vegetation growing in the channel near the beach, clearing it enough to give any spawners unimpeded access from Fauntleroy Cove.

OUTREACH

VOLUNTEER ENGAGEMENT. The enthusiasm of attendees at our salmon drumming and inquiries by prospective salmon watchers were much-needed boosts to those of us who have been holding together council programs and activities for years (and recently during a pandemic!). They were also reminders that we must be more intentional about cultivating new volunteers who will increase our capacity to get things done and ensure that newcomers will be there to ready the baton from long-time volunteers.

Priorities for 2021 are to detail what more our council might do if we had willing volunteers, identify who might potentially be interested, match them with projects, and support those matches in every way possible. First quarter 2021 will be a time to lay the groundwork for success once public-health restrictions lift.



SALMON DRUMMING. With no food fest in the spring and no festival or open creek in the fall, the annual drumming on Oct. 20 to call in spawners became our major outreach event to the community. A record 60 people of all ages spaced themselves around the Pickens/Sweetland parking area at creek level as troubadour Jamie Shilling again led the drumming and singing. Dennis Hinton and family collected and washed small river



rocks and attendees wrote words of welcome or hope on them before placing them near the creek channel.

WEBSITE ACTIVITY. Our website (*www.fauntleroywatershed.org*) drew 878 new users during the year; approximately 40% came directly, a third via a search, and a third from another site. Webmaster Chris Nack reported the heaviest use late fall to late winter. The "About Fauntleroy Creek" page was the most often visited (50%), followed by the park map (10%). One third of visitors were from Seattle.

FERRY TERMINAL REBUILD. In December, Judy participated in an on-line stakeholder roundtable hosted by Washington State Ferries to further planning to rebuild the Fauntleroy Ferry Terminal.

| ABOUT THE WATERSHED | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| Fauntleroy Park, Fauntleroy Creek, and Fauntleroy Cove are the dominant natural features of the residential community in West Seattle for which they are named. | Proget | | | | | | | | |
| Fauntleroy Park is a 28-acre wooded ravine preserved as a natural space. Its network of well-maintained trails provides access to explore and enjoy a remnant of the coastal forest ecosystem that once blanketed this region. | Sound Contraction of the second secon | | | | | | | | |
| Fauntleroy Creek originates in the park and drops 300 feet over its one-mile course to Fauntleroy Cove in central Puget Sound. Springs and runoff from a 149-acre watershed sustain flow year round. Prior to the city's installation of a drainage system, the geologic watershed was about 493 acres. | Fauntleroy Creek System | | | | | | | | |
| | | | | | | | | | |

RESEARCH & EDUCATION



Pathfinder students did the math to find the total and mean size of stonefly exoskeletons they saw remotely in the study area.

MACROINVERTEBRATES. Despite the pandemic's closure of in-person classes, we were able to use technology to continue the spring count of stonefly exoskeletons in the lower creek and use masking and distancing to continue fall sampling for macroinvertebrates in the upper and lower creek.

Dennis arranged for his granddaughter's learning pod of young Pathfinder students to count **exoskeletons** on March 31 using FaceTime to show them the study area. They counted 39 exoskeletons - 13 on trees, 22 on bridges, 3 on fences and the

ground, and 1 on a bush, down from 67 in 2019. Of the 10 he measured for them, the longest was 4.0 cm and the shortest was 2.5 cm; they calculated the mean to be 3.0 cm a typical size.

For the first year, middle-school students from Louisa Boren STEM did the **annual benthic sampling** - a student project here since 2002. Led by volunteer salmon educator Shannon Ninburg and teacher Christina Massimino, the four students followed our standard protocol for



Shannon Ninburg (left) reviewed how to use the equipment before students collected their first sample for our ongoing benthic study.

this study, modified for two small teams. They found only two macroinvertebrates in the upper creek but those species are ones requiring excellent water quality. Macroinvertebrates were more abundant and diverse in the lower creek. Based on these findings, they concluded that juvenile salmon would find larva to eat in both locations. An on-line presentation to members of our watershed council capped their project.

| | 2015 | | 2016 | | 2018 | | 2019 | | 2020 | |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | Upper Creek | Lower Creek |
| Stonefly larvae | | 2 | | | 1 | | 2 | 2 | | 4 |
| Mayfly larvae | 1 | 5 | | | | 1 | | | 1 | |
| Caddis fly larvae | 1 | 19 | | | | | | | | |
| Aquatic worms | 1 | 5 | 1 | 7 | 1 | 2 | 2 | | | 2 |
| Black fly larvae | | | | | | | | | | 1 |
| Midge fly larvae | | | | | | | | | | |
| Water penny | | | | | | | | | 1 | |
| Beetle larvae | | | | | | | | | | |
| Riffle beetle | | | | | | | | | | |
| Snail | | 4 | | | | 1 | | | | |
| Too small to ID | 2 | | | | 1 | 3 | | | | 1 |
| TOTAL | 3 | 35 | 1 | 7 | 3 | 7 | 4 | 2 | 2 | 8 |

PROFESSIONAL MONITORING. After completing its conductivity study of city creeks in 2019, Seattle Public Utilities continued background monitoring here until the pandemic brought it to an end. The city added a third flow meter upstream of the California Ave. SW/Fauntleroy Church combined culvert to collect ongoing data about volume and velocity for the culverts replacement project.

<u>VIRTUAL WORKSHOP</u>. In October, Judy Pickens was a panelist for virtual workshop, one in the Green Seattle Partnership's Youth Ambassador series for teens in high-school environmental groups. Soil, water, and carbon were the topics de jour.

COMMUNICATION

IN THE MEDIA. Despite the pandemic and a near shut-out during spawning season, we continued to catch the public's eye, including posting timely news for passersby at the fish-ladder viewpoint and on the opening page of our website.

The *West Seattle Blog* was an effective medium to disseminate what news we had to the entire Duwamish peninsula. Articles during the year (most with photos) were as follows:

- January Salmon in the Schools egg delivery; posting of a link to our 1919 Annual Report
- May video and photos of Louisa Boren STEM's salmon release; summary of releases
- October call for salmon watchers and salmon drumming
- November summary of spawning season

Neighbors, the newsletter of the Fauntleroy Community Association, featured watershed news as follows:

- March new forest steward; culvert replacement project
- June culvert replacement project; release summary; smolt-monitoring experiences; native pocket garden
- September EarthCorps work in the Kilbourne ravine, culverts replacement project, and our call for salmon watchers
- December history of drainage systems in the watershed; breaking up logjam for spawner access

In May, the Washington Education Association's e-newsletter ran an article about the para-educator who was home schooling a pod of Pathfinder students and referenced our annual exoskeleton count.

SEATTLE WATERSHED ALLIANCE. Efforts to restore communication among Seattle's watersheds bore fruit early this year when representatives of five watersheds (including Phil Sweetland and Judy Pickens from Fauntleroy) met to form what became known as the Seattle Watershed Alliance. Our council soon became a



member. The initial group grew throughout the year as advocates for additional watersheds and representatives of allied groups joined the roster.

The alliance's first advocacy was a letter asking Seattle Public Utilities to continue its investment in the city's watersheds. A second letter advocated for humane treatment of homeless people camping in parks and natural areas and guidance for habitat volunteers who encounter encampments. As important were opportunities to foster better communication among watersheds about specific projects and resources.



WEST SEATTLE BLOG

NEWS 24/7

HONORABLE MENTION

Many community volunteers, teachers, and agency partners contributed to the achievements summarized in this report. We thank the following people in particular for exceptional support:

Mike Arizona for serving a year on our executive committee before deciding that his best contribution was being an on-the-ground forest steward.

Mark Sears for monitoring the log jam under the ferry pier during several 11'+ tides and coordinating two break-up work parties to ensure that spawners could navigate to the mouth of the creek.

Mark Tomkiewicz, owner of Seattle Native Plants, for donating extra plants for our native plant garden.

Sarah Griffins, owner of Treo Organic Salon in Fauntleroy's Endolyne business area, for selecting our stewardship fund to receive a percentage of the salon's 2020 revenue as a charitable donation.

Stewardship fund donors during the year who helped ensure continued stewardship of natural areas in the watershed, especially the Kilbourne ravine.

COUNCIL BUSINESS

According to council treasurer Dennis Hinton, we opened the year with \$822.35 in our **checking account** at Washington Federal and closed it with \$915.35. During the year, Judy Pickens donated an honorarium in the amount of \$150. We spent \$57 for photocopies of our annual report and watershed brochure.

The Fauntleroy Watershed Stewardship Fund opened 2020 with a balance of \$16,752.59 and received \$3,767.10 in additional donations. Expenditures (including a 15% administrative fee) were \$2,683.17 for one EarthCorps crew day doing vegetation maintenance in the Kilbourne ravine. The balance at year's end was \$17,836.52.

The council met on the second Thursday in January, March, September, and November. Because of the pandemic, we circulated an email summary of activities in lieu of meeting in May, met outdoors in September, and began meeting on Zoom in November. All meetings are open to any interested watershed resident.

Members of the executive committee planned the agenda and took care of business between meetings. Contact them anytime with observations you've made in the watershed, concerns, or project opportunities.

Peggy CummingsDennis HintonJudy Pickenspeggyc@seanet.comdenhinton@msn.comjudy_pickens@msn.com

For more about the watershed and what we do to restore and steward Fauntleroy Park, Fauntleroy Creek, and other natural areas, visit *www.fauntleroywatershed.org*.

Photos by Mike Dey, Dennis Hinton, Judy Pickens, Mike Arizona, Nancie Hernandez, Connie Hinton, Eric Bell