

2020 STONEFLY EXOSKELETON COUNT

FAUNTLEROY CREEK

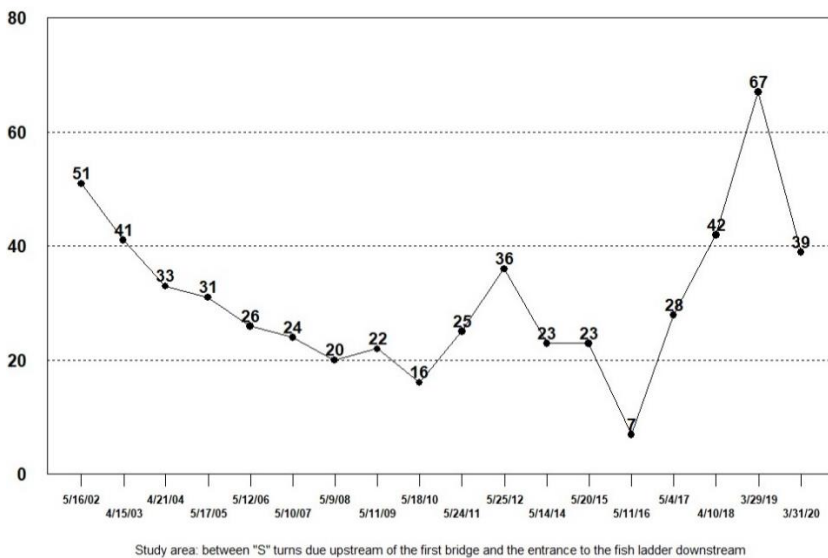
Because of school closures and required physical distancing during the novel coronavirus pandemic, our annual count of stonefly exoskeletons in lower Fauntleroy Creek was done quite differently this year. Volunteer Dennis Hinton did the official count on March 31 and then a few minutes later retraced his steps using his smart phone to broadcast his actions using FaceTime to three first- and sixth-grade students being home schooled. Each student had a form to record the number and location of the exoskeletons they saw on their iPad during the broadcast. He also demonstrated how to measure torso length in centimeters.

Volunteer Judy Pickens opened the broadcast by showing the fry from Gatewood and West Seattle elementaries that volunteer Phil Sweetland was caring for in two tanks in their carport. She emphasized that stonefly larva are a principal food source for fry during their year-plus in the creek. Dennis then did the video count with the students, after which Judy defined “data” and held up charts to show the students how abundance and size are depicted. She and Dennis then responded to questions before terminating the session.

Timing of the count was similar to recent years. Dennis counted all stonefly exoskeletons he could find on trees, bridges, fences, and bushes adjacent to the channel and counted what he could distinguish on the ground below wooden structures. He also measured 10 torsos to find longest, shortest, and mean size.

FINDINGS

**NUMBER OF STONEFLY EXOSKELETONS
FAUNTLEROY CREEK**



The official count was 39 exoskeletons - 13 on trees, 22 on bridges, 3 on fences and the ground, and 1 on a bush. The shortest of the 10 counted was 2.5 cm and the longest was 4.0 cm, for a mean of 3.0 cm.

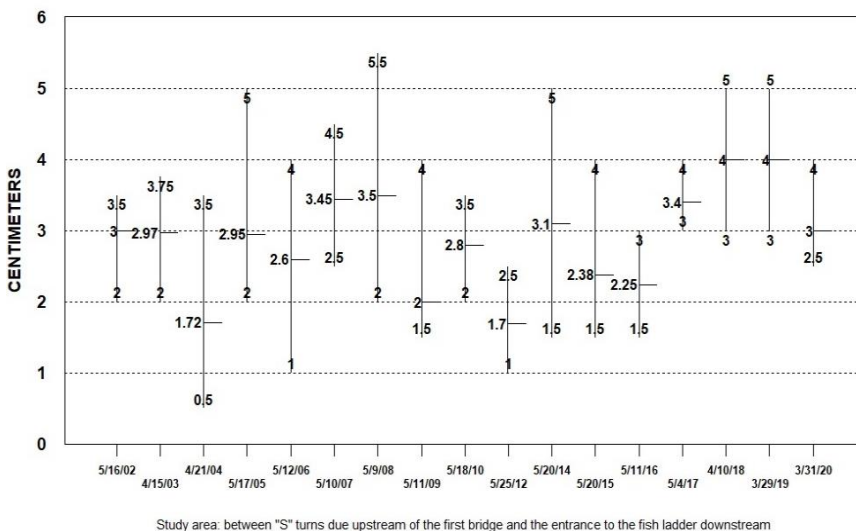
RELEVANT INFORMATION

- On March 30, Dennis observed several clusters of exoskeletons on bridges and the horse chestnut tree (a popular location). Shortly thereafter, we experienced several minutes of wind-propelled sleet/small hail sufficient to blanket the ground. The pellets knocked down and pummeled many exoskeletons such that they could not be found or distinguished the following day. Comparing what Dennis observed before the storm and counted after it, the number would likely have been much higher had the storm not occurred.

- Nineteen coho spawners came into the lower creek in fall 2019. Nutrients from their carcasses would have been available to stonefly and other aquatic larva in the study area.

- Although salmon watchers identified one possible redd, volunteer monitoring since February found no home hatch that might have been feeding on larva.

**LENGTH OF STONEFLY EXOSKELETONS
TORSO LENGTH & MEAN, FAUNTLEROY CREEK**



OBSERVATION

Compelled by the necessity to avoid close physical contact, we were able to continue this research project and at the same time introduce scientific principles to young students.