

# 2021 STONEFLY EXOSKELETON COUNT FAUNTLEROY CREEK

Because of school-building closure and required physical distancing during the coronavirus pandemic, the annual count of stonefly exoskeletons in lower Fauntleroy Creek involved just four fourth-grade students from Louisa Boren STEM. Volunteer Judy Pickens led the session and volunteer Shannon Ninburg audited to learn the process. Dennis Hinton introduced the students to exoskeletons and showed them how he monitors coho smolts leaving for saltwater. Kersti Muul took photos and video. Teacher Christina Massimino and parents assisted.

After discussion about stonefly behavior and their exoskeletons, each student took one worksheet down to the study area. Three students counted exoskeletons - on (1) bridges; (2) trees; and (3) fences, bushes, and the ground. The fourth measured 9 torsos to determine longest, shortest, and average. Timing of the count was similar to recent years. After surveying the study area, students reported their findings, Shannon showed the updated charts, and all discussed exoskeleton locations, size, and other aspects of interest.

## FINDINGS

The total count was 34 - 14 on trees, 19 on bridges, 1 on a fence, and none on bushes or the ground. The shortest of the 10 counted was 3 cm and the longest was 5 cm, for an average of 4.2 cm.

## RELEVANT INFORMATION

- The weather was sunny and warm; no rain had fallen in recent days.
- No coho spawners came into the study area in fall 2020 but stonefly nymphs would have benefited from nutrients in the 19 spawner carcasses left in 2019.

## OBSERVATIONS

Most exoskeletons found on trees and on bridges were at the downstream end of the study area.

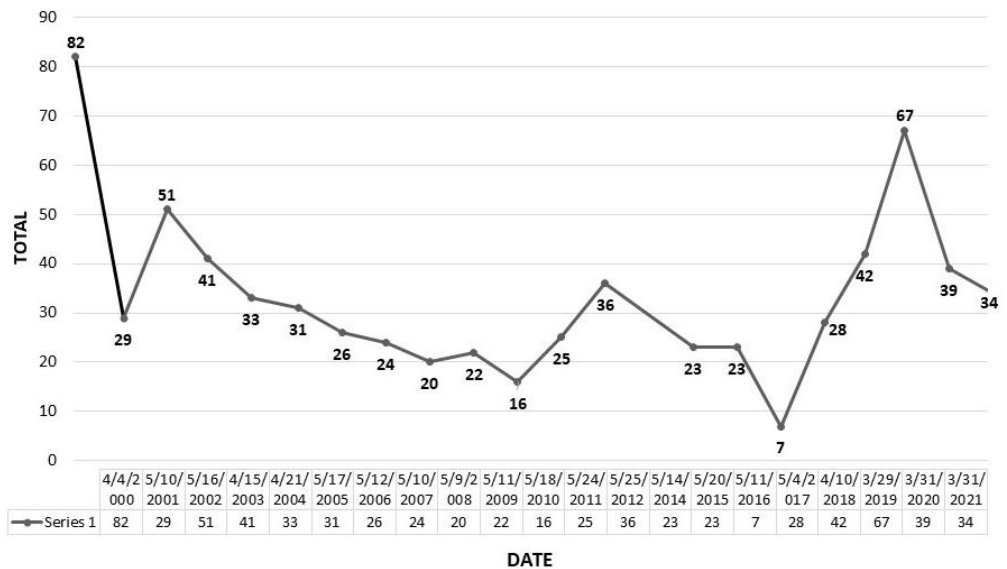
Students speculated that the split-rail wood used to build the fence may have made it unattractive to stoneflies. Also, any exoskeletons on bushes could have easily fallen off and any on the ground could have been stepped on.

Having a few students worked well, maybe better than a full class.

## RECOMMENDATIONS

- Allow more than an hour so students can be thorough.
- Consider doing the survey three times - at the beginning, middle, and end of exoskeleton season.

STONEFLY EXOSKELETON COUNT  
FAUNTLEROY CREEK



STONEFLY EXOSKELETON SIZE: LONGEST / SHORTEST / AVERAGE  
FAUNTLEROY CREEK

