

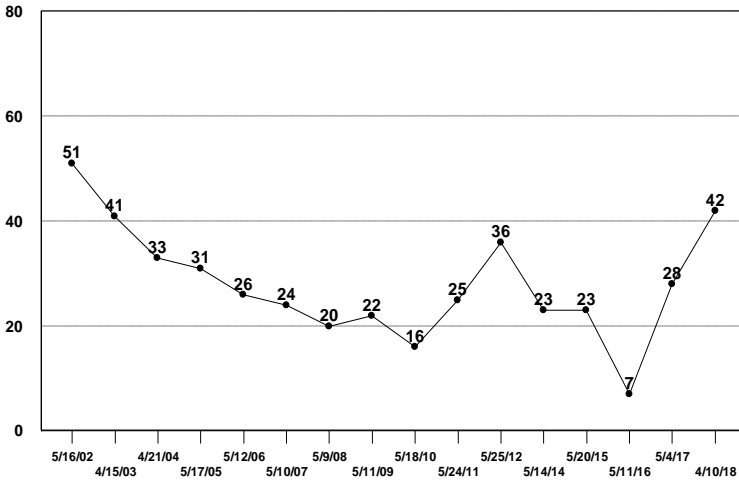
2018 STONEFLY EXOSKELETON COUNT

FAUNTLEROY CREEK

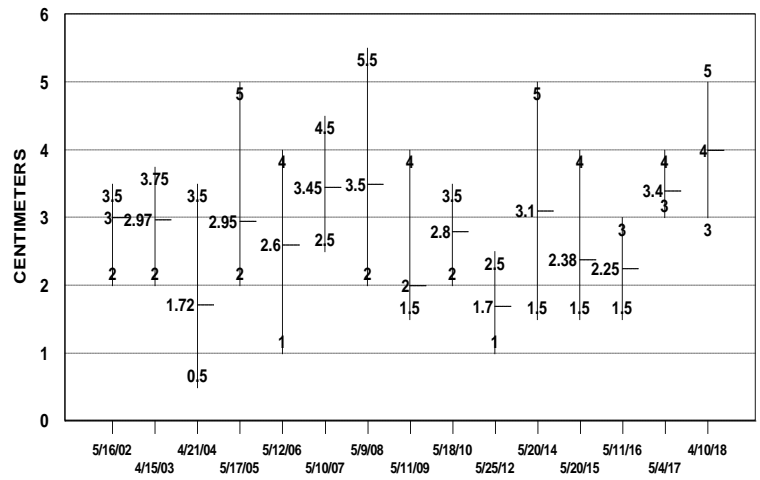
Sixth-grade science students from Our Lady of Guadalupe School followed established protocol to conduct the annual stonefly exoskeleton count in lower Fautleroy Creek on April 10, with teacher Jackie Ellis. Per the advice of last year's class, the count was nearly a month earlier than last year. Teams counted all stonefly exoskeletons they could find on trees, bridges, fences and bushes, and the ground by trees, bridges, and fences adjacent to the creek. A fifth team measured 10 torsos to find longest, shortest, and mean size.

FINDINGS

NUMBER OF STONEFLY EXOSKELETONS
FAUNTLEROY CREEK



LENGTH OF STONEFLY EXOSKELETONS
TORSO LENGTH & MEAN, FAUNTLEROY CREEK



In about 15 minutes of search time, students located 42 exoskeletons - 27 on trees, 6 on bridges, 5 on ferns, and 4 on the ground. Mean size of 4 cm was comparable to other years, with a range from 3 cm to 5 cm.

RELEVANT INFORMATION

- Only four coho spawners came into the lower creek in fall 2017. Nutrients from their carcasses would have been available to stonefly and other aquatic larva in the study area.
- Volunteers monitoring the out-migration of smolts began seeing exoskeletons in the study area on March 17.
- A brief but heavy downpour four days before this count may have knocked some exoskeletons from view.

OBSERVATIONS

- The uptick in exoskeletons may be more a factor of the earlier timing of the count than of the amount of nutrients from carcasses. This larger crop of stoneflies had access to nutrients from fewer spawners than last year's crop (seven in 2016 compared to four in 2017).
- Size range was typical of recent years, suggesting similar growth conditions.

SUGGESTIONS

- Advance the timing of this count to late March, when even more exoskeletons may be present.
- Continue, as possible, enhancing the count with information about other research going on in the creek.