

2011 STONEFLY EXOSKELETON COUNT

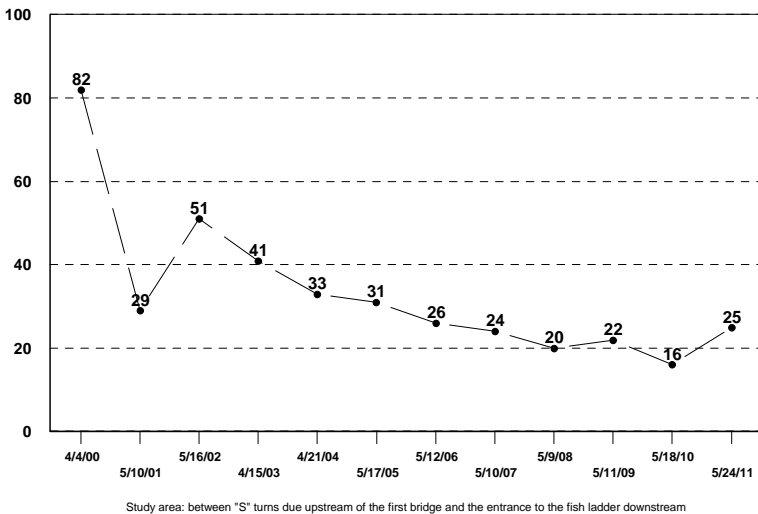
FAUNTLEROY CREEK

Fifth-grade students and their kindergarten reading buddies from Arbor Heights Elementary School conducted the annual stonefly exoskeleton count on May 24. The survey was the later than the mid-April to mid-May window established for this study.

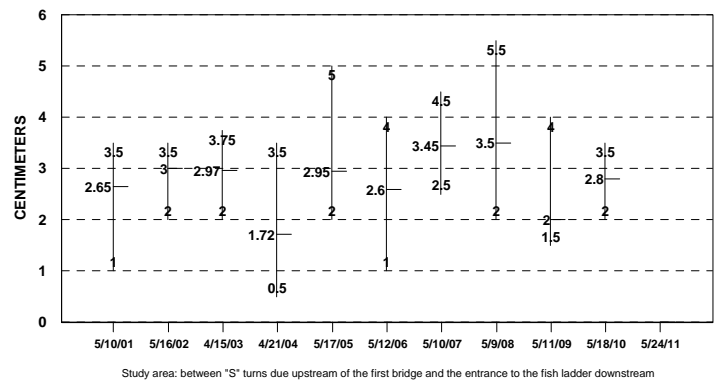
Research teams followed established protocol by counting all exoskeletons they could find on trees, bushes, bridges, and fences in the study area. The measuring team failed to understand the protocol, reporting lengths that were impossibly long (9 cm to 15 cm), likely including antenna or tails. As a consequence, range and average torso length could not be included this year.

FINDINGS

NUMBER OF STONEFLY EXOSKELETONS
FAUNTLEROY CREEK



LENGTH OF STONEFLY EXOSKELETONS
TORSO RANGE AND AVERAGE
FAUNTLEROY CREEK



Despite the late timing of the annual count, students were able to locate 25 exoskeletons, giving an upward direction to the abundance line for first time in many years.

In 2009, only 18 spawner carcasses were left to boost the food supply for recently hatched stonefly nymphs. No carcasses were left in 2010 to nourish second-year growth and abundance.

OBSERVATIONS

Exoskeletons were evenly distributed this year on bridges and bushes throughout the study area (9 each). A similar number (7) were on the horse chestnut tree at the downstream end of the study area but on no other trees.

Factors that may have contributed to this year's abundance include

- the relatively late date of this year's count.
- No "home hatch" fry present in the study area to eat the nymphs.
- a lack of close adult monitoring of the measuring team.