2024 STONEFLY EXOSKELETON COUNT
Fauntleroy Creek

This year, both 4th grade classes from Louisa Boren STEM participated in the annual exoskeleton study. 52 students arrived via school bus at 10:00 am to the Fauntleroy Church parking lot. Students were separated into two groups, A and B. Group A walked to Judy and Phil's house on lower Fauntleroy Creek to do the exoskeleton study first, while group B did a separate activity in Fauntleroy Park with their teacher. When group A was finished with the study, they switched places, so each had an opportunity to participate.

Volunteers Shannon Ninburg led the study, Judy Pickens assisted, Dennis Hinton helped students find and identify exoskeletons, and Tom Trulin took photos. Teachers Elizabeth Mahrt and Zach Elway assisted, as did parent chaperones.

Shannon led a discussion about stonefly behavior and the molting process, then students counted off into four groups, and each group took a worksheet down to the study area. One group counted exoskeletons on bridges, one group counted them on trees, and one group counted them on fences, bushes, the ground, and dark places. (This year, the fences/bushes/ground group was given flashlights to aid in searching in dark places, such as under bridges.) The fourth group measured 10 exoskeleton torsos to determine the longest, shortest, and average length. Shannon then gathered the group to share data and observations. Students were very engaged and contributed interesting observations and theories.

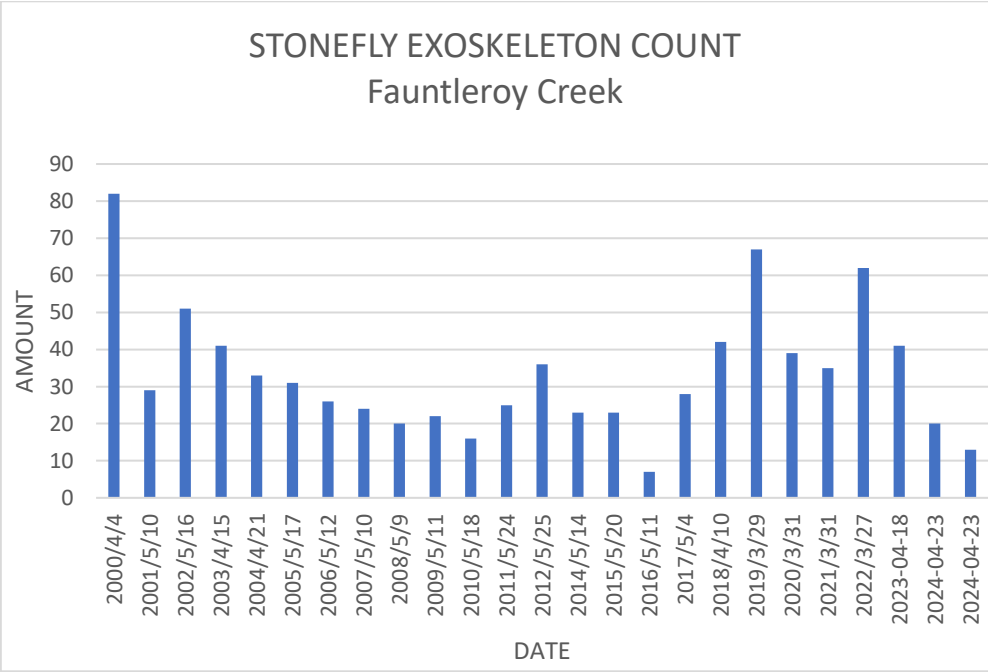
RELEVANT INFORMATION

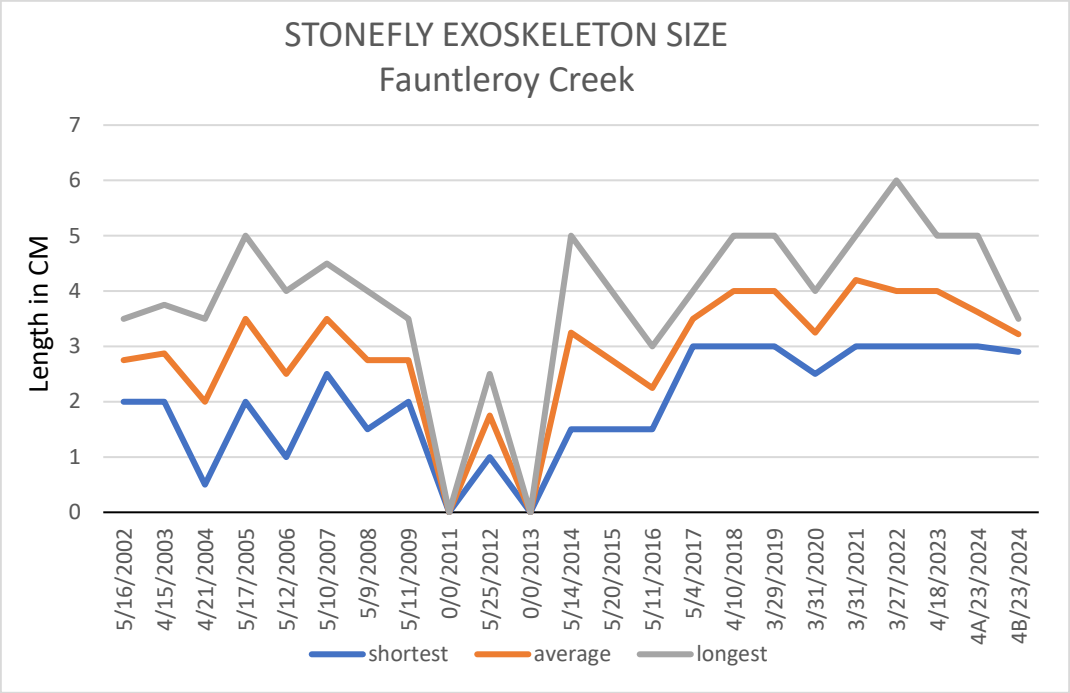
The weather was cloudy with no rain. Air temperature was 48 degrees F.

FINDINGS

Group A got a total count of 16: 7 found on trees, 4 on bridges, and 5 on fences/bushes/ground. The shortest torso of the 10 counted was 3 cm and the longest was 5 cm, for an average of 3.62 cm.

Group B got a total count of 13: 7 found on trees, 6 on bridges, and 3 on fences/bushes/ground. The shortest torso of the 10 counted was 2.9 cm and the longest was 3.5 cm, for an average of 3.22 cm.





OBSERVATIONS

- Most exos found on trees and bridges were at the downstream end of the study area. All of the exos found on trees were on the large horse chestnut tree.
- A higher percentage of this year's exos was found on bridges and fences/bushes/ground than the previous year.
- This year's study took place later than the previous year, creating the possibility that rain or wind might have knocked some down during storms.

RECOMMENDATIONS

- Although splitting all the 4th graders into two groups was more manageable than trying to accommodate everyone at once, it took a lot of coordinating and walking between sites. One class (around 25 students) would be ideal for this field trip.
- Having flashlights is worth repeating for the "fences/bushes/ground/dark places" group, enabling those students to find more exos and had more fun doing it.
- Try to schedule this study for mid March in order to improve the potential for finding more exoskeletons.