

During this field trip we will be stopping at four places along Stone Creek to collect data. We will be stopping at (1) a small streamlet that forms the headwaters of the creek, (2) two places along the creek and (3) a place near the mouth of Stone Creek.

Focus Question - How does the speed of the water in a stream (or river) change as the water moves from the head to the mouth?

At each location we will measure and mark off a fifteen foot section of the creek. A student will then throw a ping pong ball into the creek above the marked off section. We will use a stop watch to measure the time it takes for the ping pong ball to float past the ten foot section of creek starting at the up stream marker and stopping at the down stream marker. Each student must then record the time in the spaces provided below. If we take the distance the water has traveled (15 feet) and divide that by the time it took (the number of seconds) we will have the speed of the water (in feet per second).

Location 1 - Distance 15 ft / Time _____ = _____ feet/second

Location 2 - Distance 15 ft / Time _____ = _____ feet/second

Location 3 - Distance 15 ft / Time _____ = _____ feet/second

Location 4 - Distance 15 ft / Time _____ = _____ feet/second

Conclusion : How does the speed of the water in a stream (or river) change as the water moves from the head to the mouth?

Focus Question - How does the width of a stream (or river) change from the head to the mouth?

At each location students will measure the width of Stone Creek within the fifteen foot section marked off. To do this one student will throw a rope (with a weight attached to it) across the water to the other side. The rope will then be pulled until the weighted end is on the edge of the far side of the creek. The rope will be marked on the other side of the stream where the bank ends and the water begins. The rope will then be pulled back across the creek and the distance measured. Below record the width of the creek at each location.

Location 1 - _____ feet

Location 2 - _____ feet

Location 3 - _____ feet

Location 4 - _____ feet

Conclusion - How does the width of a stream (or river) change from the head to the mouth?