

Freshwater Mussel Projects

Freshwater mussels are an important part of river ecosystems because they remove particulate matter from the water column and are excellent indicators of water quality. In this project, two students from Fayetteville High School looked into the question of how much water each mussel filters. EIOG board member Dennis Chase worked with the students on this project.

Populations of our native freshwater mussels are very low or non-existent in some streams. Over the last 30-plus years, a number of species have disappeared, plus three more that are currently listed as Federally endangered. General searches of Fayette County streams has documented several streams that have modest populations, one area with a relatively large population and several streams or portions of streams with no surviving mussels.

A number of questions related to the population numbers and the general population dynamics still exist. This is especially true for this area of the Georgia Piedmont where very little research work has been done related to native mussels.

One early study, preformed by two students from the Fayetteville High School looked into the question of how much water each mussel filters each hour or day.

Determining the filtration rates of the freshwater mussel - *Elliptio complanata*

Fayetteville High School, 2006

By: Sarah Hall and Samantha Carson

The following year, based on another similar question related to the exotic clam; Asian Clam, a group of students from Fayetteville High School produced a report:

Filtration rate of *Corbicula fluminea*

Fayetteville High School, 2007

By: S. Snyder, P. Johnson, S. Khakuqduba, J. Lee and A. Stinchcomb