

## Comparison of survey methods in Central Texas

Effective survey guidelines are vital in facilitating the collection of distribution and abundance data for freshwater mussels. The objective of this study was to evaluate the relative effort and effectiveness of different survey methods and to examine how the effectiveness varies in different habitats. Six sites in four Central Texas rivers were surveyed with three different survey methods (timed searches, transect, and adaptive cluster method). We found, as expected, that timed searches were the most effective method to detect the presence of species especially when densities were low and/or mussels were highly clustered. Our preliminary results also suggest that habitat condition and detectability may be an important driver for differences in the effectiveness of different survey methods. For example, the performance of the adaptive cluster method seemed to be enhanced by habitat conditions facilitating detectability of mussels, whereas the effectiveness of timed searches appeared to be hindered by low detectability.

Astrid N. Schwalb  
Assistant Professor  
Department of Biology/FAB  
Texas State University  
601 University Drive  
San Marcos, Texas 78666  
Phone: 512-245-8648  
Website: <http://streamecology.wp.txstate.edu/>