Workshop Information

If you choose to participate in the workshops, please note that the \$15 registration fee covers the cost of attendance at both. Each will be approximately two hours in length beginning Friday morning at 8:00 am and wrapping up around 12:00 pm. Depending on attendance, workshops may run concurrently (i.e. both workshops available during the 8:00 am and 10:00 am time slots). Signup sheets will be at the registration table.

Conservation, Ecology and Identification of Atlantic Slope and threatened and endangered freshwater mussels of Pennsylvania.

Instructors:

Nevin Welte (<u>c-nwelte@pa.gov</u>) Western Pennsylvania Conservancy Rick Spear (<u>rspear@pa.gov</u>) Department of Environmental Protection Jordan Allison (<u>Jorallison@pa.gov</u>) Pennsylvania Fish and Boat Commission

There are nearly 300 species of freshwater mussels in North America with around 75% currently threatened with population decline or extinction. Historically 67 species occurred within Pennsylvania. Currently only 53 of the original 67 remain with 11 of the extant species listed as threatened or endangered by the state of Pennsylvania and/or the United States Fish and Wildlife Service. This workshop will review freshwater mussel biology, ecology, identification and distribution specific to the Atlantic slope drainages (i.e. the Susquehanna, Potomac and Delaware River Basins) and the Pennsylvania listed species. Focus will be placed on the major anatomical characteristics used to identify species and key concepts associated with their taxonomy. A mussel identification guide will be made available during the workshop and will be available electronically for download and printing after. No special equipment will be required to participate in the identification portion of the workshop.

Fish Kills, an overview of practices and procedures for identifying, reporting and sampling

Instructors:

John Coll (<u>john_coll@fws.gov</u>) U.S. Fish and Wildlife Service Coja Yamashita (<u>cyamashita@pa.gov</u>) Pennsylvania Fish and Boat Commission

Fish kills are tangible evidence of a serious problem in a waterway. The general public viewpoint is that any loss of fish, whether a result of natural or other causes, can be an early warning of impending environmental problems. In addition to harm to natural resources, if related to toxins, there may also be human health concerns. Determination of the cause of fish kills relies on quick response (requiring preparedness) and knowledge of what to look for, what information to record, and what samples to collect and how to collect them. Because fish kills can be caused by a wide array of factors, determination of the cause can sometimes be very difficult. During this workshop, topics to be covered will include: types of fish kills, clues to diagnosing cause, what type of supporting documentation to collect and how to handle samples properly.