



**THE PEGGY NOTEBAERT  
NATURE MUSEUM**

*The Museum of the Chicago Academy of Sciences*

**FOR IMMEDIATE RELEASE**

Media Contact:

Karyn Odway

312/263-2500

kodway@cushmanamberg.com

**Peggy Notebaert Nature Museum Brings More Muscle to Its Mussel Watch Project**

Chicago (Sept. 15, 2008) – One of the best indicators for water quality—the mussel—is getting a closer look in Illinois by Peggy Notebaert Nature Museum researchers and a growing number of citizen scientists. The Illinois Mussel Watch Program is only the second one of its kind initiated in the country and the first of its kind in Illinois. Nature Museum scientists plan to use the information generated on mussels to better understand how the river systems in the state are changing.

“The presence of mussels is a good indicator of a healthy river system,” said Stephanie Clark, PhD, Malacologist and Assistant Collections Manager for the Chicago Academy of Sciences, the research arm of the Nature Museum, who is leading the program. At the core of the project is the *Illinois Mussel Watch Identification Manual*, which is authored by Clark and includes color photographs of all 79 mussel species recorded from the state.

Freshwater mussels are mollusks, which includes snails, squid and clams. They are the second-largest group of animals in terms of described species after arthropods (e.g. shrimp, spiders and insects). Clark is organizing a group of people to observe and photograph them in order to get a better understanding on how they are fairing and what they can tell us about the health of the lakes, rivers and streams of Illinois. “This tracking effort will educate Illinoisans on the impact pollution and sedimentation has on the state’s aquatic ecosystems,” Clark added. “The field guide will give its readers a better appreciation of what we have and what we’ve lost.”

-MORE-

## Illinois Mussel Watch Project—page 2

Included in the identification manual are five extinct species, 24 either endangered or threatened and 11 thought to no longer occur in Illinois but are found elsewhere in the U.S. In general, the freshwater mussel populations of Illinois and the U.S. have been in serious decline since the late 1800s but particularly over the last 60 years, due to habitat destruction and pollution. Despite the loss, Illinois still has more species of freshwater mussels than are known in all of Australia or continental Europe.

Most mussels in Illinois are found in the Mississippi River and its major tributaries such as the Wabash and Ohio Rivers. A total of 39 mussel species are documented in the greater Chicago area. Mussels can be observed year-round in the Midwest, but the best time to look for them is in the spring and fall. Nature Museum researchers hope to generate interest in the Illinois Mussel Watch program from people who have a connection to their local area of the state, are interested in nature, spend time near rivers and have a keen eye for mussels. The project also is designed to collect empty shells to verify the record and the species identification.

In its first month of recruiting, the Illinois Mussel Watch program has already garnered 10 citizen scientists, most from suburban Chicago. Each citizen scientist is prepped with training so they can properly identify and document the mussels over a period of time. For more information, or to become a citizen scientist for the Illinois Mussel Watch program, call Dr. Stephanie Clark at (773) 477-4295 or email [sclark@naturemuseum.org](mailto:sclark@naturemuseum.org). For more information on the Chicago Academy of Sciences and the Notebaert Nature Museum's Illinois Mussel Watch program, visit [www.naturemuseum.org](http://www.naturemuseum.org).

### **About Mollusks and Mussels**

Mollusks are the second-largest group of animals in terms of described species after arthropods. There are an estimated 800+ species of freshwater mussels in the world—300+ are found in the U.S., 79 which have been recorded in Illinois. Freshwater mussels range in size from less than 25 mm to almost 30 cm in length and are found in virtually all aquatic habitats from small streams to large rivers and lakes. They typically bury or partially bury themselves in silt, mud, sand or gravel substrates. In Illinois, they are most populous in the Mississippi, Wabash and Ohio Rivers. In the Chicago area, they can be found in the Fox and Kankakee Rivers. Despite their prevalence, 65 species of mussels have been listed on the U.S. Federal Endangered Species Act of the total of 300 species of animals listed in North America.

## Illinois Mussel Watch Project—page 3

The lifecycle of the mussel begins when the male mussel fertilizes the female's eggs during an annual spawning period. The fertilized eggs then grow and develop in the mother's gills, and then the larvae attach to a host fish. The larvae live as parasites on the host fish for three to six months before undergoing metamorphosis and becoming juvenile mussels which then fall to the bottom. Mussels are filter feeders and eat algae and other particles suspended in the water column. Most mussels have a life expectancy of about ten years; however, some can live to be about 100 years old.

### **About the Illinois Mussel Watch Program**

The Peggy Notebaert Nature Museum is dedicated to teaching people about nature and the environment and the mollusk population. The Chicago Academy of Sciences, the research arm of the Nature Museum, has over 1,600 lots of freshwater mussels from North America representing about 170 species as part of its collections. Illinois has lost about 20 percent of its original mussel fauna and in an effort to help prevent any further loss, the Illinois Mussel Watch program was born in May 2008. With the aid of the *Illinois Mussel Watch Identification Manual*, prepared by the Academy's Malacologist and Assistant Collections Manager, Stephanie Clark, PhD, a team of citizen scientists throughout Illinois is being trained to monitor mussels in waterways statewide. Highlights from the project will be noted in a permanent exhibition at the Nature Museum starting in January 2009.

*Celebrating more than 150 years of science exploration and education, the Peggy Notebaert Nature Museum is the public face of the Chicago Academy of Sciences, founded in 1857 as Chicago's first museum dedicated to educating Chicagoans about nature and science through the preservation and display of native specimens, classroom activities, and dissemination of scientific knowledge.*

*Today the Museum continues the Academy's tradition of research, conservation and education about nature in the Midwest through participatory exhibits and programs, educational outreach and ongoing scientific activity. Its collections, due to their age and type, are among the most important in the region. The Museum distinguishes itself through extensive involvement in schools and the opportunities it provides for visitors to experience nature up close.*

*As one of the city's best examples of eco-friendly building technology with its lush outdoor nature trails and habitat, green roof, solar panels, and natural light sources, the Museum engages visitors, especially urban dwellers, in new ways to connect with and preserve the natural world. Since its opening in 1999, the Museum has welcomed more than 1.5 million visitors and provides hands-on exhibits and programs to 65,000 students annually and trains and provides resources for more than 2,000 Chicago teachers.*