**Current Status**
- Start of a three-year project

**Funding Sources and Partners**
- Endangered Species Grant Program (E16R1)
- Purdue University

**Project Personnel**
- Dr. Linda S. Prokopy, Purdue University
- Dr. Rod Williams, Purdue University
- Dr. Reuben Goforth, Purdue University
- Belyna Bentlage (Graduate Research Assistant)

**Background**
Water quality in North America has been declining due to human activities for the past 200 years. As a result, the continent has lost nearly 70% of its freshwater mussels. A primary cause was that native North American mussels were historically harvested by the thousands in the 19th and 20th centuries for commercial button and jewelry making, especially from Midwestern rivers.

Today, freshwater mussels are the Midwest's most imperiled animals. More than half of such species are federally listed as endangered, threatened, or as state species of special concern. The eight states of the Midwest (Iowa, Michigan, Minnesota, Wisconsin, Illinois, Ohio, Indiana, and Missouri) range from having three to 11 federally listed species of freshwater mussels. Indiana is home to 10 federally listed freshwater mussels.

Six of Indiana’s 10 species live in one river in north-central Indiana. Once found in virtually all rivers in Indiana, the clubshell (*Pleurobema clava*), fanshell (*Cyprogenia stegaria*), rayed bean (*Villosa fabalis*), rabbitsfoot (*Quadrula cylindrica cylindrica*), sheepnose (*Plethobasus cyphyus*), and snuffbox (*Epioblasma triqueta*) mussels now mainly reside in the Tippecanoe River. It has

*The outer layer of the federally endangered clubshell mussel is tan to yellowish-brown with dark green lines stemming from the beak.*
been illegal to remove any native mussel from Indiana waters since 1991. Despite federal listing and legal protection, native mussel populations continue to decline. Mussels are filter feeders. They can reside for many years in a river’s substrate. These features make mussels water-quality indicator species. Their health helps indicate the health of the river in which they live. Because of the benefits mussels provide to rivers and their endangered status, the Indiana Department of Natural Resources (DNR) and Purdue University are designing an outreach and education program to increase awareness of mussels and foster positive public engagement with mussels.

**Objectives**

The objectives of this project are to:

1) Develop and distribute informational messages and materials consistent with mussel/mussel habitat conservation based on experience and information gained from a related project (Developing an Outreach Campaign to Protect Six Federally Listed Mussels in the Tippecanoe River—T7R16),

2) Provide relevant mussel/mussel habitat conservation appropriate outreach signs and information at a minimum of three high-use areas,

3) Work with the Division of Fish & Wildlife, Fisheries Section regarding the placement of permanent information signs at Tippecanoe River access sites owned or managed by the DNR,

4) Distribute conservation-message-appropriate outreach materials and information to a minimum of three target audience concentrations and at two local community venues, and

5) Use a minimum of two media outlets to distribute a mussel/mussel habitat conservation message.

**Methods**

Outreach materials will be developed based on information received in surveys conducted in a related project (T7R16). Outreach materials will be carefully tested with the target audience before they are carried out.

**Progress**

This is the start of a three-year project. We are beginning to think about outreach messages and locations.

**Cost:** $75,128 for the complete three-year project.