

## Conservation Plan for the Slippershell (*Alasmidonta Viridis*) inhabiting the Sangamon River under IL 47 in Champaign County

### 1. Description of the impact likely to result from the proposed taking

#### A. Legal description of the project area

This project is located in Champaign County on IL 47, 1.7 miles south of the Ford County Line. It is located in Township 22 North, Range 7 East, Section 11 in the 3<sup>rd</sup> Principal Meridian, as shown on the attached location map.

#### B. Biological Data

##### Slippershell Biological Data

The historical range of this small species is from southern Ontario south to Alabama and from South Dakota east to New York, including the Great Lakes Basin and the Mississippi, Ohio, and Tennessee River Systems. Their usual habitat is substrate of sand, mud, or fine gravel. Currently, the Slippershell is rarely found in its range and is now restricted to a limited number of clean, clear creeks and headwaters of rivers. The life span of this species is not known. Slippershell larvae (*Glochidia*) are known to primarily parasitize two species of fish: Johnny Darters (*Etheostoma nigrum*) and Mottled Sculpin (*Cottus bairdi*).

#### C. Habitat description of activities that will result in take.

The Sangamon River at the IL 47 bridge is approximately 45 feet in width, with depths ranging from 0.3 feet to 3 feet. The Slippershell are typically found in small to medium sized streams in sand or gravel. The substrate of the Sangamon, at this location, is predominately sand, gravel and mud. The activities associated with the replacement of this bridge will likely result in the take of any Slippershell located in the area of the construction.

#### D. Explanation of the anticipated adverse effects on the listed species.

If not relocated, mussels would likely be buried or otherwise crushed or killed by construction activities. It will be impossible to relocate all mussels in the area so some take will likely occur.

2. **Measures the applicant will take to minimize and mitigate that impact**

- A. Plans to minimize the area affected by the proposed action, the number of individuals of an endangered or threatened species that will be taken, and the amount of habitat affected.**

Before construction begins, INHS representatives should relocate any Slippershell mussels located in the immediate vicinity of the structure (existing right-of-way) to a suitable habitat elsewhere in the Sangamon River. Construction activity will be limited to existing right-of-way.

- B. Plans for management of the area affected by the proposed action that will allow continued use of the area by the species.**

If measures are taken to minimize substrate disturbance in the area around the bridge, mussels should move back into the area over time.

- C. Description of all measures to be implemented to minimize or mitigate the effects of the proposed action on the endangered or threatened species.**

The Slippershell mussels will be moved from their locations within existing right-of-way to a suitable habitat within the Sangamon River. This will prevent the mussels from being affected by construction activity involved in the structure replacement.

- D. Plans for monitoring the effects of the measures implemented.**

It is the recommendation of the Illinois Department of Natural Resources (Department), that IDOT conduct, or cause to be conducted, a thorough survey of the construction area (within existing right-of-way) for freshwater mussels in the second and fifth year following completion of bridge construction. "Completion" shall be defined as the date the bridge is officially open for public use. Freshwater mussels located within the construction right-of-way shall be identified to species and enumerated and the length of each mussel shall be measured to the nearest millimeter. Handling of mussels shall be in compliance with any and all conditions and/or protocols included in the State and/or Federal authorizations for this work. A report on the species, numbers, and sizes of mussels found shall be provided to the Department within 60 days of the completion of each survey. Each report shall also include a qualitative evaluation of the habitat for freshwater mussels being provided by the construction right-of-way area and the manner in which that habitat has changed since the previous survey.

- E. Projected cost of each measure that will minimize or mitigate the effects of proposed action on endangered or threatened species.**

The estimated cost of the preferred bridge replacement alternative is

\$1,470,000.

- F. Adaptive management practices that will be used to deal with changed or unforeseen circumstances that affect the effectiveness of measures instituted to minimize or mitigate the effects of the proposed action on endangered or threatened species.**

Due to the nature of the project, IDOT does not anticipate any changed or unforeseen circumstances. The bridge replacement will be completed and no additional work will be necessary afterwards.

- G. Verification that funding to support mitigation activities will be available for the life of conservation plan.**

The Illinois Department of Transportation has contractual obligation with the Illinois Natural History Survey.

**3. Alternative actions that would not result in the take**

The only alternative that would not result in the take of listed freshwater mussels is the "do nothing" alternative, which means that the bridge would not be replaced. This alternative is unacceptable because in its current condition, this bridge endangers the traveling public and does not fulfill the purpose and need of the project.

**4. Data and information to assure that the proposed taking will not reduce the likelihood of the survival of the species.**

The slippershell is fairly widespread in Illinois. The reason for inclusion on the list of threatened species in Illinois is because of its severe reduction in range in the state. It still occurs in many localities in Illinois and the fox River drainage including: Somonauk Creek, Little Rock Creek, East Branch Big Rock Creek, Blackberry Creek, Waubensee Creek, Nippersink Creek, Rob Roy Creek, and an additional location in Tyler Creek at Eagle Heights Park (a population that incidentally was under a threat from an IDNR C-2000 project).

5. **An implementing agreement, which shall include, but not be limited to:**

**A. Names of all participants in the execution of the conservation plan, including public bodies, corporations, organizations, and private individuals.**

Michael L. Hine, P.E.  
Bureau Chief of Design and Environment  
Illinois Department of Transportation

Joseph E. Crowe, P.E.  
Deputy Director of Highways, Region 3 Engineer  
Illinois Department of Transportation

Glen Kruse  
Program Manager  
Illinois Department of Natural Resources

Christopher A. Phillips, Ph.D.  
Director of the Center for Biodiversity  
Illinois Natural History Survey

Scott Marlow  
Ecological Resource Specialist  
Illinois Department of Transportation

Kelly Fender  
Environmental Coordinator  
Illinois Department of Transportation

**B. The obligations and responsibilities of each of the identified participants with schedules and deadlines for completion of activities in the conversation plan and a schedule for preparation of progress report to be provided to the Department.**

The Illinois Department of Natural Resources is responsible for the review of this Conservation Plan and for subsequent issuance of the Incidental Take Authorization.

The Illinois Natural History Survey will have duties of surveying for threatened or endangered mussels and moving the Slippershell away from the project location. Post construction the INHS will examine the Sangamon River for colonization by Slippershell mussels.

The Illinois Department of Transportation is responsible for all biological clearance coordination and recommendations related to the project and addresses those items listed under the Incidental Take Notice.



- C. Assurances that each participant in the execution of the conservation plan has the legal authority to carry out their respective obligations and responsibilities under the conservation plan.**

This project is authorized by the Illinois Department of Transportation, which receives funding from Illinois General Assembly and the Federal government in carrying out its programs.

- D. Assurances of compliance with all other federal, state, and local regulations pertinent to the proposed action and to execution of the conservation plans.**

The Illinois Department of Transportation exclusively abides by the National Environmental Policy Act and all associated state and federal environmental laws in carrying out its mission of performing the most environmentally sensitive methods of transportation planning and engineering.

- E. Copies of any federal authorizations for taking already issues to the applicant.**

Not applicable since the Slippershell mussel (*Alasimidonta viridis*) are not federally threatened or endangered.

- F. For projects that will result in the taking of endangered or threatened species of plants, copies of expressed written permission of the landowner.**

Not applicable since the Slippershell mussel (*Alasimidonta viridis*) are considered an animal under the Illinois Endangered Species Act (ILCS 10/2)

### PUBLIC NOTICE

The Illinois Department of Transportation (IDOT) has applied for Incidental Take authorizations from the Illinois Department of Natural Resources, Office of Resource Conservation, concerning an Illinois threatened mussel species, the Slippershell (*Alasmidonta viridis*).

IDOT mailing address is:

Illinois Department of Transportation  
Attn: Mr. Dennis Markwell  
13473 IL HWY 133 / P.O. Box 610  
Paris, IL 61944-0610

The location of the site that, through IDOT bridge replacement, may impact Slippershells inhabiting the Sangamon River in Champaign County at the Illinois Route 47 (FAP 326) bridge, 3<sup>rd</sup> Principal Meridian, Township 22 North, Range 7 East, Section 11.

The activity of removing and replacing the bridge over the Sangamon River may take an undetermined amount of Slippershells that could still be under or downstream of the bridge.

In addition, in accordance with the IDOT Conservation Plan, Illinois Natural History Survey scientists will visit the site after bridge replacement to determine if Slippershells have re-colonized the area.

In order to avoid impact to the species, any Slippershells that are discovered by Illinois Natural History Survey personnel prior to construction will be relocated to other suitable habitat within the Sangamon River. The structure design that represents the least impact to aquatic resources and has the greatest public safety will be chosen.

A copy of the Conservation Plan is available for inspection at (1) The Illinois Department of Transportation, 13473 IL HWY 133, Paris, Illinois 61944-0610; 2) Illinois Department of Natural Resources, Division of Habitat Resources, Illinois State Fairgrounds, 1 Natural Resources Way, Springfield, Illinois 62702-1272; 3) Moyer District Library, 307 E. Sangamon, Gibson City, Illinois 60936.

Comments on this proposal should be directed to the Illinois Department of Natural Resources, Division of Habitat Resources, Illinois State Fairgrounds, 1 Natural Resources Way, Springfield, Illinois 62702-1272 or e-mail to [endspec@dnrmail.state.il.us](mailto:endspec@dnrmail.state.il.us)

The comment period closes thirty (30) days after the final publication of this notice that first appears in The Champaign News-Gazette and the Edwardsville Intelligencer (Official State Newspaper) on Tuesday December 27, 2005. The final publication is

scheduled for Wednesday January 10, 2006. Therefore, the comment period closes on Friday February 10, 2006.