

CONSERVATION PLAN

December 10, 2002

PEREGRINE FALCON (*Falco peregrinus*)

POTENTIAL IMPACTS

from FAU 9105 (McKinley Bridge), ST. LOUIS, MO/VENICE, IL
by the Illinois Department of Transportation

BACKGROUND

The Illinois Department of Transportation (IDOT) proposes to reconstruct the existing approaches to the McKinley Bridge (SN 060-6002) and rehabilitate the main spans over the Mississippi River. IDOT also proposes to upgrade guardrail and bridge parapets to current safety standards. The project would extend from the western abutment (east of North Ninth Street) in St. Louis, Missouri to the eastern abutment (west of Main Street) in Venice, Illinois. The project study area is located within two counties; St. Louis in Missouri and Madison in Illinois. The State of Illinois is currently in the process of acquiring jurisdiction of the bridge from the current owner, the City of Venice. The proposed project would be designated as Federal Aid Urban Route (FAU 9105).

A search of the Illinois Department of Natural Resources (IDNR) Natural Heritage Database, performed during the project development phase, revealed records of a state-listed endangered species, the peregrine falcon (*Falco peregrinus*). Subsequently, the Illinois Natural History Survey performed a bird survey of the project area. It was found that peregrines have nested on or within the vicinity of the McKinley Bridge the last seven seasons (1996-2002).

Through coordination with the IDNR it has been determined that the construction of the bridge project could result in the injuring or killing (incidental taking) of peregrine falcon chicks and/or eggs should the breeding pair nest on the McKinley Bridge. This Conservation Plan (CP) describes the peregrine falcon, the potential impacts caused by the project, measures taken to minimize harm to this species, proposed mitigation, and alternatives considered. This document also includes an implementation agreement.

BIOLOGICAL DESCRIPTION

The peregrine falcon is a State-listed endangered species that is known to breed in two counties in Illinois, in downtown Chicago among the high-rise buildings (Cook County) and in the vicinity of the McKinley Bridge (Madison County). The male arrives first at the breeding site (February) and goes through a series of acrobatic displays to attract a mate. Courtship in peregrines includes these displays and nest site selection. In the eastern United States, pairs were on their breeding grounds and had reestablished territories by March. Peregrines will return to the same area year after year. It is unclear which sex chooses the nest site. A nest is usually

located on rock ledges or bluffs of vertical escarpment. Peregrines may use old nests of vultures, ravens or eagles. Two to five eggs are laid in late March or early April. A second clutch will often be laid if the first one is destroyed. Eggs are laid at two to three day intervals. As a rule, incubation begins with the second or third egg and done mostly by the female. The male has been known to assist from time to time. While incubating the eggs, the male brings food to the female. Incubation lasts approximately 28 to 29 days for each egg, or approximately 33 days for the entire clutch. Hatchlings are helpless, naked, and blind when hatched. Fledglings fly between 35 and 42 days after hatching and will remain in the vicinity, and depend on their parents, for approximately two months.

The peregrine falcon, once abundant in the United States, was found primarily east of the Mississippi River and in the Rocky Mountains. In the 1930s, there were approximately 1,000 nesting pairs of peregrines, 300 to 400 of which nested east of the Mississippi River. But during the 1950s, peregrines began to disappear.

Widespread use of the pesticide DDT, which was used to protect trees and crops from insects, nearly annihilated the bird in the U.S. Smaller birds, on which the peregrines fed, were being contaminated by eating insects sprayed with DDT. Feeding on the contaminated birds indirectly poisoned the peregrines.

The pesticide weakened the birds' reproductive capability, producing thin-shelled eggs too fragile to survive in the wild. By 1965, the peregrine population nearly vanished east of the Rockies. In the early 1970's, there were only 39 pairs of peregrines left in the entire lower 48 states - and none east of the Mississippi River. This represents less than 5 percent of historic numbers. The peregrine was so close to extinction that many of the remaining adult birds were brought into captivity to ensure breeding until they could be released into a safe environment.

Conservation groups began releasing peregrines into the wild and in urban areas during the late 1970s. In the Midwest, release sites have included Minneapolis, Minnesota; Chicago, Illinois; and St. Louis, Missouri. Tall buildings and bridges can substitute for the cliffs peregrine falcons prefer, although they may nest in hollow trees. Naturalists believe the Mississippi River bluffs remain the best potential habitat for peregrines in Illinois. Currently in Illinois there are six breeding pairs and two non-breeding pairs, as well as nine breeding pairs in Missouri.

A pair of peregrines has nested on the McKinley Bridge for the past six of seven seasons (1996-2002). In the year 2000, the peregrine falcons nested on a building adjacent to the McKinley Bridge on the Illinois side.

IDOT's TAKING ACTIVITIES OF THE PEREGRINE FALCON

IDOT may be changing the current, or future, state and condition of the area where the peregrines nest with reconstruction and rehabilitation of the bridge. The reconstruction and/or rehabilitation of the McKinley Bridge has the potential to result in "incidental takes" of peregrine falcon eggs and/or nestlings during the breeding portion of the falcon's life cycle. This would occur if the peregrines nest on the bridge and successfully lay eggs during the anticipated 2003-2005 construction seasons.

QUANTIFICATION OF TAKE

Monitoring efforts will help identify whether the peregrines use the bridge for nesting purposes in late winter 2003-2005. This species could be affected by the loss of up to three eggs per year during these years.

EFFORTS TO AVOID OR MINIMIZE HARM

Thirty-six million dollars of Federal and State funding (BRRP funds and HPP funds) has been programmed for this bridge rehabilitation project. Measures have been taken during the Phase I portion of the project to minimize the impacts to the peregrine falcons. Specifically to discourage the peregrines from nesting on the McKinley Bridge. IDOT, in cooperation with the World Bird Sanctuary, the Illinois Natural History Survey (INHS), and Ameren UE, has placed a nesting box on the northern section of the Ameren UE power plant's roof, located adjacent to the bridge. A second nesting box was already in place at the southern end of the Ameren UE building. It is hoped that the peregrine pair will use either nesting box instead of the bridge. Continual monitoring of the nesting boxes will take place to record any falcon activity. These efforts would avoid any adverse effect on the falcons should the pair nest within either nesting box instead of on the bridge.

COMPENSATION MEASURES

In the event that a peregrine falcon nest is discovered on the bridge during the 2003, 2004, or 2005 nesting season or during construction activity, the contractor will notify the Resident Engineer (RE). The RE will then contact IDOT, District 8's Environmental Manager. An INHS biologist will be called by IDOT to supervise the moving of the eggs and/or nestlings to a safe location. The World Bird Sanctuary will do the actual transfer of eggs and/or nestlings from the bridge to the sanctuary for incubation, rearing and release.

ALTERNATIVES CONSIDERED

No-Action - The No-Action Alternative is defined as no construction whatsoever since the McKinley Bridge is currently closed due to the result of recent structural inspections and the concerns regarding public safety. The bridge would be permanently closed. This alternative does not meet the project's purpose and need.

Build - This is the preferred alternative. This alternative would incorporate all reconstruction and rehabilitation necessary to reopen the McKinley Bridge without any weight restrictions. An eight ton limit was imposed on 15 March 2001 due to the deterioration of the bridge.

Relocation Alternatives - The relocation of the McKinley Bridge was not considered because, 1) a new eight-lane Mississippi River bridge crossing is planned just north of downtown St. Louis between the MLK Bridge and the McKinley Bridge and 2) the impacts due to the disruption to local commerce and commuters were not acceptable.

EFFECTS ON SPECIES, BIOTIC COMMUNITY AND ESSENTIAL HABITAT

A pair of Peregrine Falcons has nested on or at the McKinley Bridge since 1996. From 1996 to 1999 the birds nested on the bridge itself and in 2000 they nested on a power plant on the Illinois shore near the bridge. In 2001 they again nested on the bridge. Three nestling Falcons were marked with U. S. Fish and Wildlife Service leg bands in 2000 by the World Bird Sanctuary. All three birds survived to fledging.

There are many potential nesting sites for the Peregrine Falcon in the area of the McKinley Bridge. If construction does cause the birds to relocate, it is likely that they will return to the power plant where they nested in 2000. IDOT augmented the attractiveness of this building by placing a custom designed Peregrine nesting box on the southwest of the building. There will be no long-term loss of Peregrine habitat due to the renovation of the McKinley Bridge. The birds have nested in the past on the stone pylons, which rise from the river. These structures will remain and other parts of the renovated bridge below the roadway will also provide many potential nesting sites.

The construction will pose no threat to the breeding pair. The worst case scenario is that the pair will fail to reproduce during the construction period. A bird will reproduce for on average 10 years, therefore, the loss of one year's reproduction, which occurs naturally, would not greatly affect the reproductive potential of the pair. However, Peregrines usually re-nest when disturbed early in the season. Therefore, it is likely that if the does abandon a bridge nest during construction they will move to another site in the area. Most likely on the power plant on the Illinois side, but possibly to a new site in the St. Louis or E. St. Louis area. The birds may also tolerate the construction disturbance and successfully nest on the bridge. Finally, the birds may nest away from the bridge as they did in 2000.

There were four pairs of Peregrine Falcons in the greater St. Louis metropolitan area in 2001. The population of Peregrines in the area has been rising since the first introductions of falcons to St. Louis in the early 1990's. There is also a growing population of Peregrine Falcons in the Chicago metropolitan area. Both populations nest on man made structures and feed mainly on pigeons.

SUMMARY

The Illinois Department of Transportation will continue to coordinate with the Illinois Department of Natural Resources concerning the possible nesting of peregrine falcons on the McKinley Bridge and the subsequent moving of eggs and/or nestlings, if necessary, to the satisfaction of the IDNR. The IDNR agrees to accept this Conservation Plan and has agreed that consultation is closed on this project based on conversations with IDOT and IDOT's letter of commitment to obtain an Incidental Take Authorization for the peregrine falcon.

IMPLEMENTING AGREEMENT

Bruce A. Dinkheller, Illinois Department of Transportation - District Engineer for IDOT District 8 office will endorse the Final Conservation Plan approved by IDNR.

Bridgett Calhoun, Illinois Department of Transportation - District 8, Environmental Studies Section, will be the primary contact.

James E. Reichel Jr., Louis Berger & Associates, Inc., - Environmental Project Manager, is the author of this CP.

Steve Hamer, Illinois Department of Natural Resources - Transportation Review Program, is the liaison between IDOT and IDNR.

The contractor (still to be determined) will be responsible for the monitoring of nest activity on the bridge during the length of the project.

Jeff Church, Illinois Department of Transportation - District 8 Resident Engineer, will be the liaison between the contractor and IDOT.

Dr. David A. Enstrom, Illinois Natural History Survey - Center for Biodiversity, will be responsible for the supervision of the removal and relocation of eggs and/or nestlings if necessary.

Michael Cooke, World Bird Sanctuary, will be responsible for the removal and relocation of the eggs and/or nestlings from the bridge if necessary. Mr. Cooke will also monitor the incubation, rearing and release of any eggs and/or nestlings removed from the bridge.

Glen Kruse and Joe A. Kath, Program Manager and Project Manger, respectively, Office of Resource Conservation, Illinois Department of Natural Resources, are responsible for critically reviewing this CP. They are also responsible for issuance of the Illinois Department of Natural Resources Incidental Take Authorization.