



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Upper Mississippi River National Wildlife and Fish Refuge  
7071 Riverview Road  
Thomson, Illinois 61285  
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## Potential Research Projects on the Upper Mississippi River National Wildlife & Fish Refuge

The Upper Miss Refuge extends along 261 miles of the Upper Mississippi River and includes 240,000 acres within the states of Minnesota, Wisconsin, Iowa and Illinois. The Refuge's Illinois office is located in Thomson and administers 64,000 acres that extends 80 river miles. The Refuge offers challenge cost share grants to schools/universities, temporary employment programs (Student Temporary Employment Program, Student Cooperative Education Program) to college students and volunteer opportunities to facilitate scientific research. There are many opportunities available for Master's and Doctorate degrees. Below is a list of general categories that offer unlimited research opportunities. For additional information on specific research interests, contact Jeramie Strickland, USFWS Wildlife Biologist at 815-273-2732 or email [jeramie\\_strickland@fws.gov](mailto:jeramie_strickland@fws.gov).

**Reptiles & Amphibians:** There are 22 species of reptiles that include 11 species of turtles such as the the Illinois endangered Blanding's turtle and the threatened ornate box turtle. There is a long term comprehensive study on the ornate box turtle that offers many research opportunities. Currently, we have 63 ornates with radio transmitters being tracked at 5 sand prairies in Northwest Illinois. Automatic Receiving Units are being used to monitor turtle activity. Ibuttons are attached to turtles to log temperature information and males have tilt transmitters that identify copulation events. There are also 13 species of amphibians that include the threatened Plain's (western) hog-nose snake.

**Habitat:** Refuge habitat includes floodplain forest, backwater lakes, flowing side channels, islands and sand prairie. The diversity of habitat offers research opportunities ranging from studying the impacts of flooding upon forest diversity to vegetative comparisons in sand prairies to the impacts of prescribed fire upon vegetation and invertebrates. The Lost Mound Unit (former Savanna Army Depot) contains 4,000 acres of remnant sand prairie and is an ecological jewel for grassland species where 46 state listed species have been documented.

**Climate Change:** One of the most challenging issues facing the Refuge is the impact of climate change upon the landscape including wildlife, plants and habitat. Scientists speculate that some of the greatest changes will occur in wetlands. A comprehensive study of climate change impacts is needed.

**Invasive species:** Invasive and exotic species are the greatest threat to ecosystem integrity within the Refuge system. Locally, Asian carp and other aquatic invaders (plants and animals) are increasing. Exotic plant species now dominate some prairie and wetland areas. The exotic Bithynia snail has caused death in tens of thousands of waterfowl/waterbirds.

**Migratory Birds:** The diversity of habitat provides optimum conditions for many species of migratory birds including waterbirds, shorebirds, raptors, waterfowl and neo-tropical migrants. The Refuge is home to colonial nesters such as pelicans, herons and egrets. Thousands of bald eagles over-winter on the Refuge and 30+ eagle nests are surveyed for success and production each year.