

# ECOSYSTEM MANAGEMENT AND RESTORATION RESEARCH PROGRAM

## FY25 Q2 WEBINAR SERIES

**JAN. 27  
1:00 PM (CT)**

**Impacts of Water Level Management Decisions on  
Overwintering Turtles**



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This study aimed to identify the characteristics of overwintering habitat for turtles within US Army Corps of Engineers (USACE) reservoirs and predict the impacts winter water level changes are likely to have. Turtles, particularly aquatic and semi-aquatic species, utilize nearshore and shoreline habitats throughout their life history. Winter water level drawdowns are a common management practice in USACE reservoirs though little is currently known about the impacts these drawdowns have on overwintering reptiles. Winter drawdowns in reservoirs may eliminate ideal overwintering habitat during peak hibernations months, causing overwintering animals to desiccate or freeze. In this study, we utilized telemetry transmitters to track turtles in Lake Red Rock, Iowa over two years. Over the course of the study, 21 painted turtles (*Chrysemys picta*) were captured, weighed, tagged, and tracked during overwintering. When possible, the overwintering location of each turtle was calculated and depth was measured. Visual surveys were also conducted across Lake Red Rock to explore the relationship between turtle presence and absence and habitat features.

### WEBEX



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