

Oxbow Restoration

A Guide for Farmers
and Landowners



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The Boone River and North Raccoon River watersheds are priority areas for oxbow restoration projects.

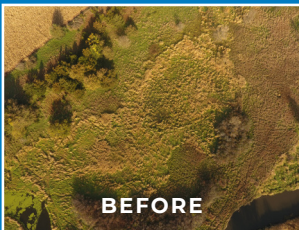
The Iowa Soybean Association, in cooperation with Syngenta, U.S. Fish and Wildlife Service, The Nature Conservancy and Iowa State University, invite Iowa farmers and landowners to restore oxbows benefiting the once-abundant endangered Topeka shiner minnow and other aquatic species.

What is an oxbow?

Over time Iowa streams move throughout the landscape and will eventually cut a portion of itself off creating a Oxbow. Oxbows are off channel wetlands that will only connect to the main flow of the stream periodically throughout the year when the stream floods.

Restoration

Oxbows are restored by excavating soil to historic riverbed depth allowing access to ground water and creating deeper pools. Maintaining deeper pool depth so oxbows will not freeze solid or dry up completely in the summer is crucial so species are able to over year and complete their life cycle. Connections will be constructed so during flood events that oxbow will be able to connect to the main channel and then disconnect as flood water subside.



AFTER

Benefits

Improve water quality

Drainage tiles can be routed through restored oxbows. When an oxbow intercepts drainage water, microbes in the ecosystem remove an average of 50 – 95% of the nitrate before the water is released into the creek.

Assist with flood mitigation

One acre of oxbow can provide an estimated one million gallons of floodwater storage each year.

Create wildlife habitat

Critical habitat for the endangered Topeka shiner minnow and thousands of fish representing 40 species have been found utilizing restored oxbow habitat.



Timing and Cost

Restoring an oxbow

How quickly a project is completed depends on weather and its size and scope. Restored oxbows often fill with aquatic species within a matter of weeks.

Cost-assistance for oxbow restoration is available through various sources, including the Environmental Quality Incentives Program. There is typically no cost to the landowner. A half-acre restoration typically costs around \$10,000 in the North Raccoon and Boone River watersheds.

“
My dad and I are interested
in conservation and wildlife
preservation. It has been great to
see more fish using the oxbows,
plus wood ducks and geese are
nesting around there. My family
and I love the land and want to
leave it better than we found it.”

— Tom Mrazek, farmer from Renwick



Oxbows are being restored across the Boone and Raccoon watersheds. Thirty-five additional oxbow restorations are planned.

The impact of restoring oxbows is immediate and incredibly positive. An evaluation of three of the most recently completed projects found Topeka shiner populations had returned in two shortly after restoration was completed.

Contact

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