

Beaver Influence on Coldwater Stream Habitat and Trout Populations in Wisconsin

This study will examine the way beavers affect coldwater streams and trout populations in eco-regions and beaver management zones across Wisconsin. Results of this study will better inform beaver and trout management strategies.

TIMELINE

Launch: July 2018
Completion: June 2023

EXTERNAL STAKEHOLDERS

Great Lakes Indian Fish & Wildlife Commission
USDA APHIS Wildlife Services

DNR PARTNER BUREAU

Fisheries Management

FUNDING

Federal Aid in Sportfish Restoration
Federal Aid in Wildlife Restoration
Pittman-Robertson
Dingell-Johnson

The Wisconsin DNR's 2015-2025 Beaver Management Plan addresses the complex role that beavers play in coldwater ecosystems. While preserving beaver control as an important management tool, it also highlights the need for studies on the ecological influence, both positive and negative, of beaver activity on trout streams of the Upper Midwest.

This study will be statewide in scope. Study sites include streams currently colonized by beavers and streams with active beaver control (free-flowing streams). Study site selection began in 2018 in cooperation with regional DNR fisheries biologists. Researchers also plan to work with Wildlife Services.

Initial data collection will include habitat and fish metrics. Stream habitat include water temperature, substrate composition and beaver dam distribution. Fish surveys measure biotic integrity, trout abundance size and demographic rate parameters. Historical data will also be used to compare trends in stream habitat and trout population metrics in streams maintained with free-flowing conditions versus streams with no targeted beaver control efforts.



Key Points

- » To understand the way beavers affect coldwater streams and trout populations, this study will compare beaver-colonized streams to beaver-controlled streams.
- » Habitat and fish metrics will be collected throughout the study, as well as historical data will be used to understand how beaver colonization has affected stream conditions and trout populations.
- » The second phase of the study will include experimentally manipulating beaver populations on study streams. Beavers will be allowed to recolonize a select number of streams, while beaver control will be implemented in other streams to restore freeflowing conditions. Additional streams will remain under current management protocols as control streams.

SPOKESPERSON

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