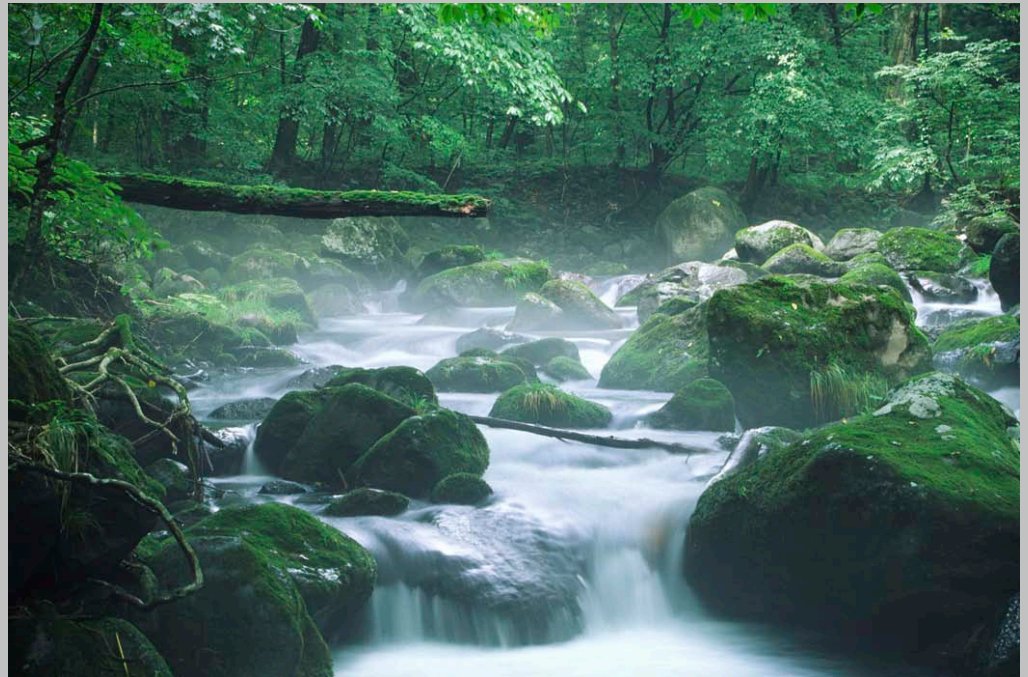


# West Milton Dam

## Stillwater River - Dam versus No Dam

### Aquatic Resources

John Navarro  
Program Administrator

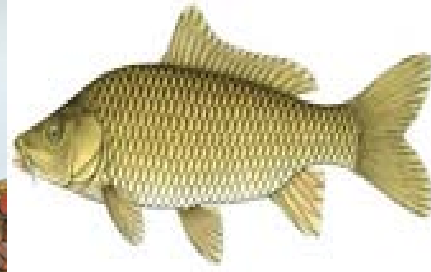


# Dams Alter Habitat Type

- Dams transform part of a river into lake-like habitat.
- Slower water flow and larger surface area can alter the species composition, favoring species that are better adapted to lake habitat.
- Dam removal can enable the return of native species by restoring river habitats.



# Before Dam Removal



# After Dam Removal



# River Redhorse *Moxostoma carinatum*

## Ohio Species of Concern

- **Prefers:** larger rivers, moderate/fast current, and gravel/cobble substrates
- **Threats:** habitat alteration (impoundments), turbidity/siltation, and pollution.
- **Stillwater River:** has one of the best populations in Ohio



# Why Should We Care About Freshwater Mussels

- They are a vital link in the food chain.
- As natural filterers, they improve water quality.
- Mussels are good indicators of environmental health.
- Biomedical uses of mussels are presently being studied.

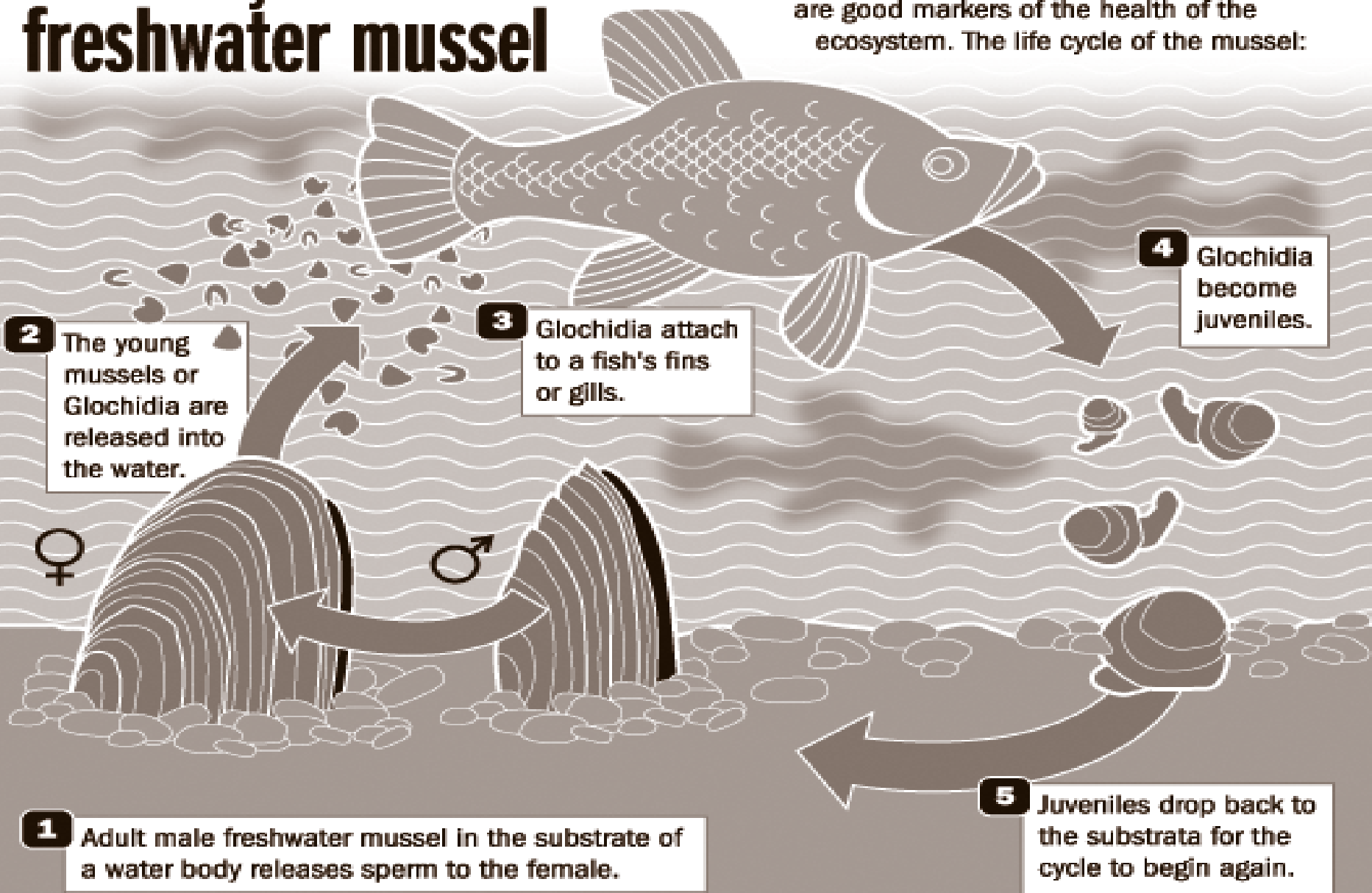


# Freshwater Mussels are the Most Threatened Group of Animals in the US

Group	# Endangered	% Endangered
Mammals	65	14 %
Birds	78	7 %
Reptiles	14	4 %
Amphibians	11	5 %
Fishes	71	9 %
Snails	21	1 %
<b>Mussels</b>	<b>62</b>	<b>20 %</b>
Crustaceans	18	1 %
Insects	35	< 1 %
Arachnids	12	< 1 %

# Life cycle of the freshwater mussel

Water quality and flow are essential requirements for freshwater mussels, which are good markers of the health of the ecosystem. The life cycle of the mussel:





# Find the Freshwater Mussel



# Freshwater Mussels Above and Below West Milton Dam



The map shows a river system with a dam labeled 'West Milton Dam' in the center. Red dots representing mussel species are plotted along the river. A grey box on the left side of the map contains text about species upstream of the dam, and another grey box at the bottom left contains text about species downstream. The river is shown in blue, and the surrounding area is light green.

## Nine Mussel Species Upstream

- 2 State Listed
- 1 Federally Listed

## Nineteen Mussel Species Downstream

- 6 State Listed
- 2 Federally Listed

# Take Home Message

- Removal will restore river habitat
- Restored river habitat will benefit river species.

