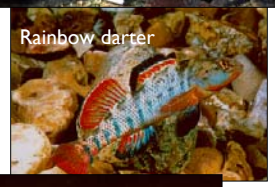
The River Has a Rhythm…

Reintroduction of Fish and Mussels

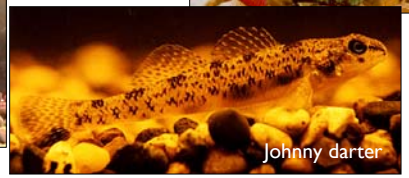
FISH SPECIES

- Fewer fish species found in the West Branch/DuPage River after dams built (41 species in 2000 vs. 54 species in 1920s)
- 23 species (58%) are not found upstream of dams


Green sunfish


Rainbow darter


Tadpole madtom


Johnny darter

FRESHWATER MUSSEL SPECIES

- As of 2005, nine native freshwater species of mussels and one introduced species are found in the West Branch/DuPage River system
- Only two mussel species are found upstream of the dams

Because of the parasitic association with fish, the decline in fish abundance and diversity affects the reproduction of mussels.


Giant floaters


Plain pocketbook


White heelsplitter


Plain pocketbook and Fatmucket

WHY IN DECLINE?

- Water quality conditions: point and non-point source pollution
- Chemicals and silt run-off from an urbanized landscape
- Dams block fish movement and alter water flow
- Decreased oxygen within the dam impoundment and increased sediment
- Loss of habitat = loss of fish and mussel abundance/diversity
- Loss of a natural floodplain habitat
- Introduced species competition
- Mussels need fish to complete their life cycle


MCDOWELL GROVE LOWHEAD DAM

The Collective Projects Seek To Enhance…

- Fish passage up- and downstream for successful reproduction of fish and mussels
- Enhance present and reintroduce historic populations of mussels and non-game fish to stream system through Research Center
- Overwintering pools to sustain larger game fish in upper reaches
- Specialized side channel habitat to support diverse populations of aquatic organisms
- Riffle and meander pools, which improve oxygen, vary flow velocity, and provide niches for macroinvertebrates, fish, and mussels
- In-stream structures to improve the quality of habitat for macroinvertebrates, fish, and mussels
- Sub-surface water connection to enhance floodplain habitat and in-stream water quality
- Educational and recreational opportunities


Debris dam


Mussel bed

…in a Healthy River Valley