



# Ecological Importance of Northern Wild Rice

## NORTHERN WILD RICE

is an annual, aquatic grass species that grows in slow-moving rivers and shallow lakes in the Great Lakes region of North America, where it is extremely important ecologically in aquatic ecosystems.

## What is a Keystone Species?

- ✦ A species which contributes important services to an ecosystem and whose removal would drastically change the ecosystem
- ✦ The health of many Great Lakes ecosystems can be gauged by the health of their northern wild rice populations



## Many organisms use northern wild rice!



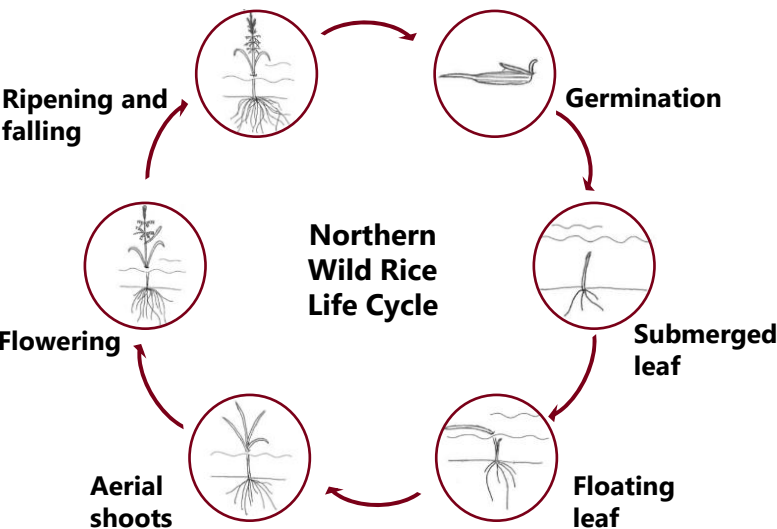
## Ecosystem Services

- ✦ Roots help anchor saturated soil to keep water clean and clear
- ✦ Utilizes nutrients like phosphorus, preventing algal blooms
- ✦ Acts as a wind buffer, keeping water calm

## Threats to Northern Wild Rice

- ✦ Water pollutants
  - Mining waste water
  - Agricultural runoff
- ✦ Water Levels
  - Dams: too much or too little
- ✦ Weather
  - Storms
  - Wind
- ✦ Disease
- ✦ Invasive Species
  - Competition: aquatic plants
  - Predation: Asian carp
- ✦ Tourism
  - Lakeshore development
  - Boat motor damage

✦ = plant used for food    🏠 = plant used for shelter



### References:

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 Rogosin, A. 1954. An ecological history of wild rice. Minnesota Committee on Wild Rice. Minnesota Department of Conservation, Division of Game and Fish.