

# Questions

- What controls macrophyte community structure?
- What role does landscape position play?
- What role do people play?
- Have macrophyte communities changed since the time of European settlement?  
How and why?

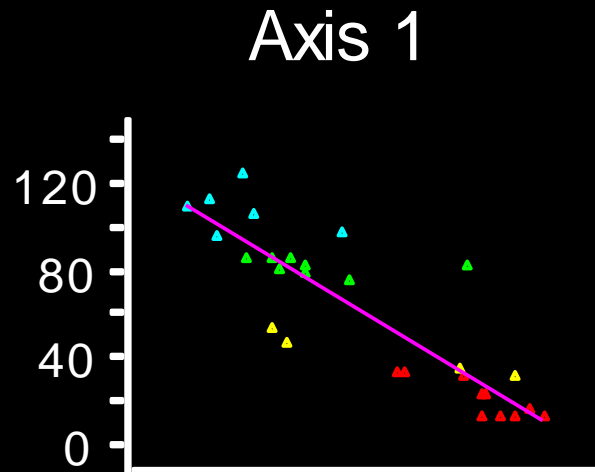


# Lake Scale

Conductivity (us)

- △ 1
- △ 2
- △ 4
- △ 5

$R^2 = 0.77$   
 $P < 0.0001$



Conductivity

High: 81-127us

Low: 15-49us

Secchi Depth  
 $R^2=0.57$   
(axis 3)  
 $P=0.001$

#Houses/km  
 $R^2=0.31$   
(axis 3)  
 $P=0.03$

Secchi Depth  
 $R^2=0.35$   
(axis 2)  
 $P=0.02$

Lake Scale

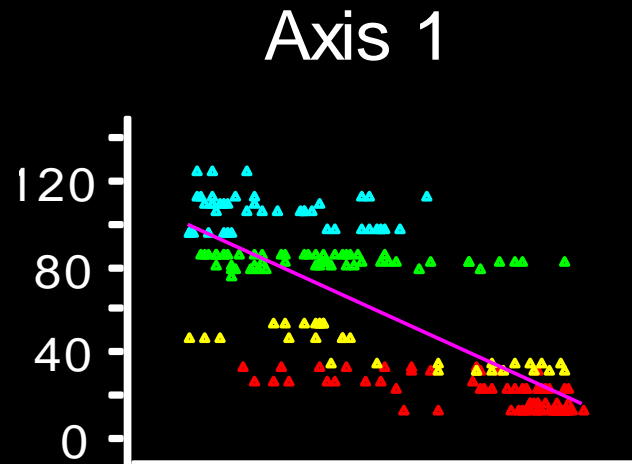
# Intra Lake (Site) Scale

Cond

- △ 1
- △ 2
- △ 4
- △ 5

# Conductivity

$R^2=0.57$   
 $P<0.0001$



# Intra Lake Scale



## Conductivity

High: 81-127us

Low: 15-49us

**Hse/km**  
 $R^2=0.24$   
(axis 1)  
 $P<0.0001$

**Secchi**  
 $R^2=0.20$   
(axis 2)  
 $P<0.0001$

**Substrate**  
 $R^2=0.24$   
(axis 3)  
 $P<0.0001$

**Slope**  
 $R^2=0.33$   
(axis 1)  
 $P<0.0001$

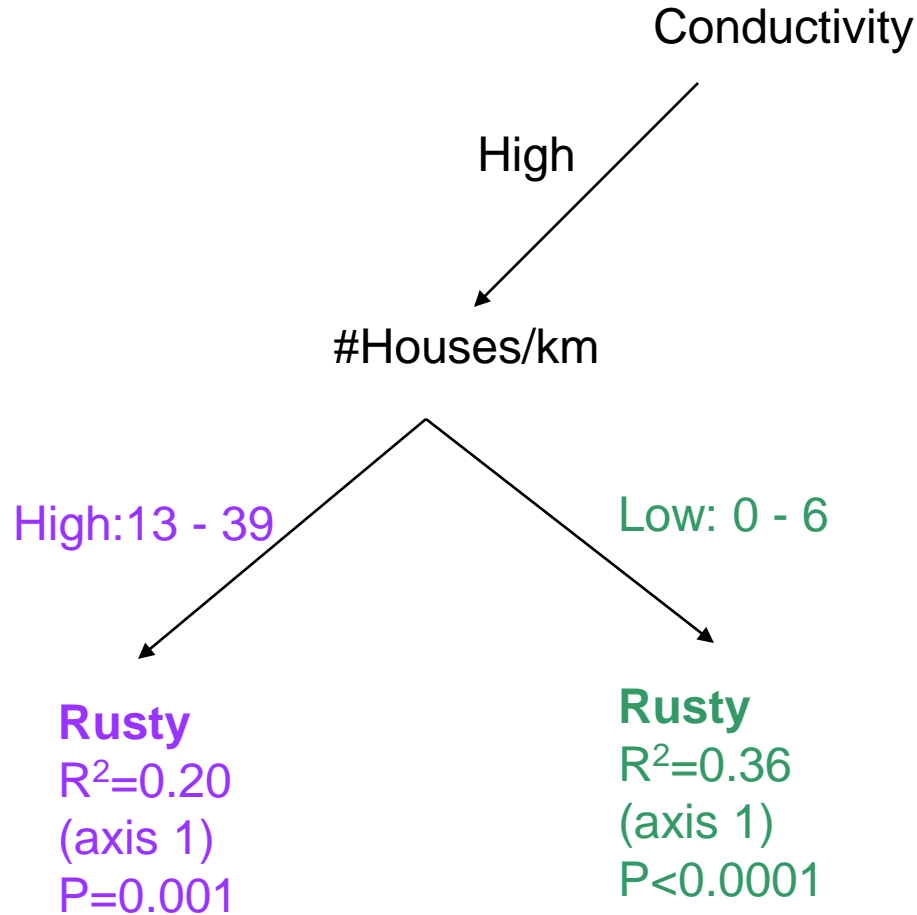
**Hse/km**  
 $R^2=0.17$   
(axis 1)  
 $P<0.0001$

**Secchi**  
 $R^2=0.25$   
(axis 2)  
 $P<0.0001$

**Substrate**  
 $R^2=0.25$   
(axis 3)  
 $P<0.0001$

# Intra Lake Scale

## Rusty Crayfish



# Questions/Papers I plan to answer/write within the next year:

- What controls macrophyte community structure?
- Where is the best place to take a sediment core in order to study the history of macrophyte communities?
- Does the macrophyte fossil record match the long term ecological research data from Trout Lake, Vilas County, WI?

# Questions/Papers I plan to answer/write within the next year:

- Is there a correlation between cladoceran species and macrophyte community structure?

