

Voluntary bass creel survey

Minnesota Bass Federation Meeting

January 21, 2012



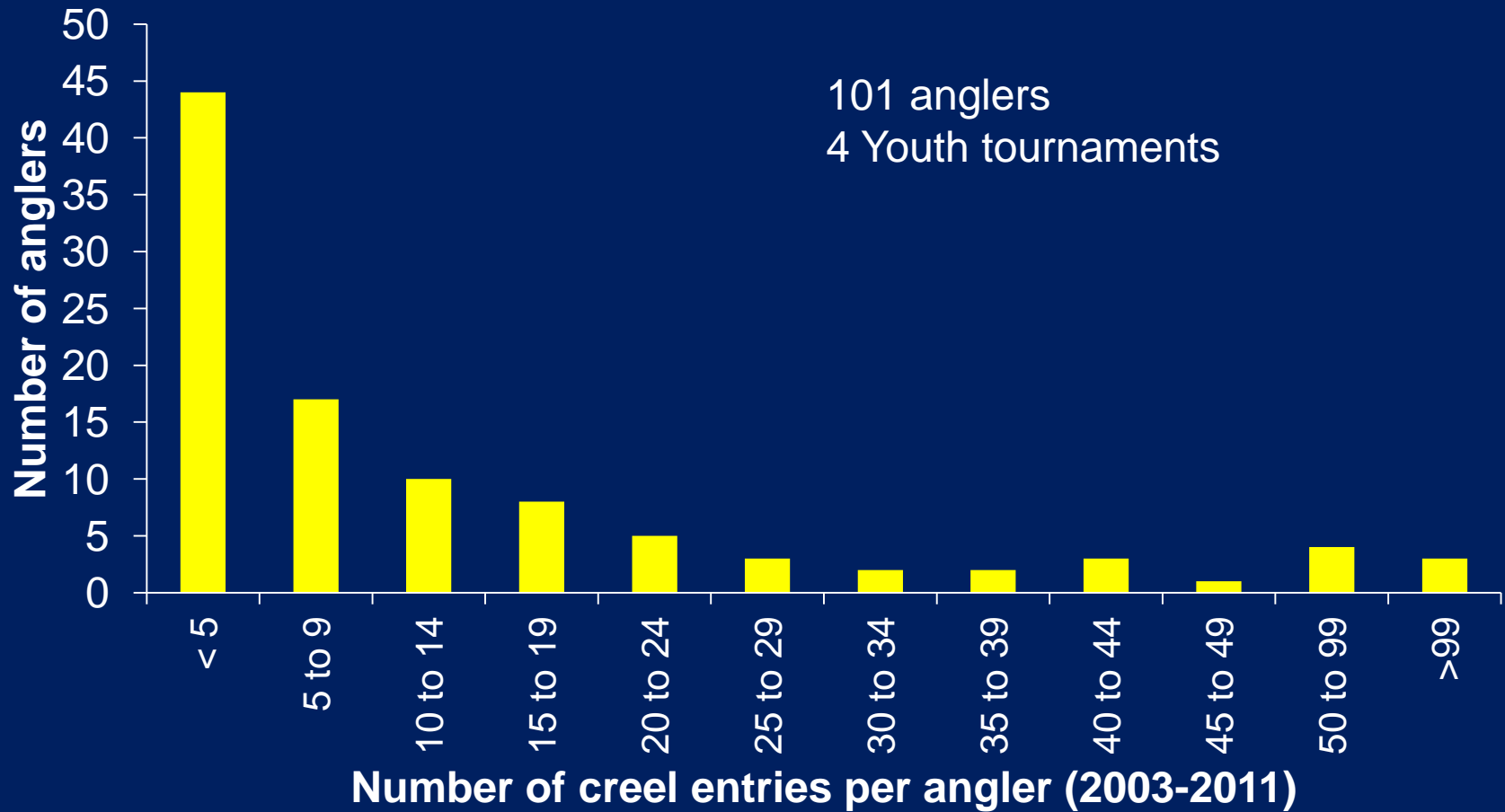
Mike McInerny
Fisheries Research Scientist
Minnesota DNR



Update

- Angler participation
- Numbers of fish reported
- Compare recreational and tournament angling
- Trends in CPH
- What affects CPH?
- Angling and electrofishing
- Trends in length distributions

Angler entries



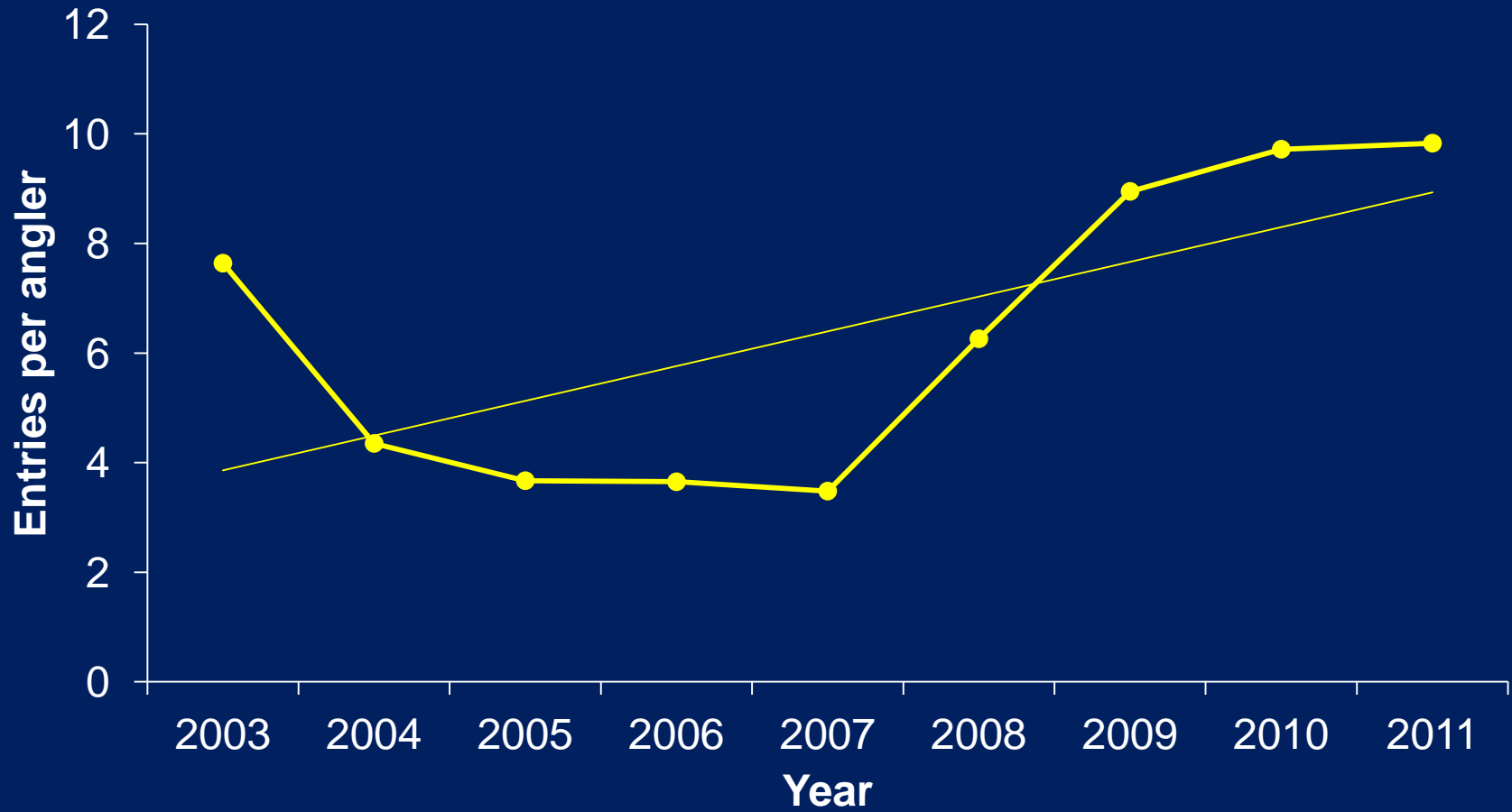
Angler participation



Number of entries



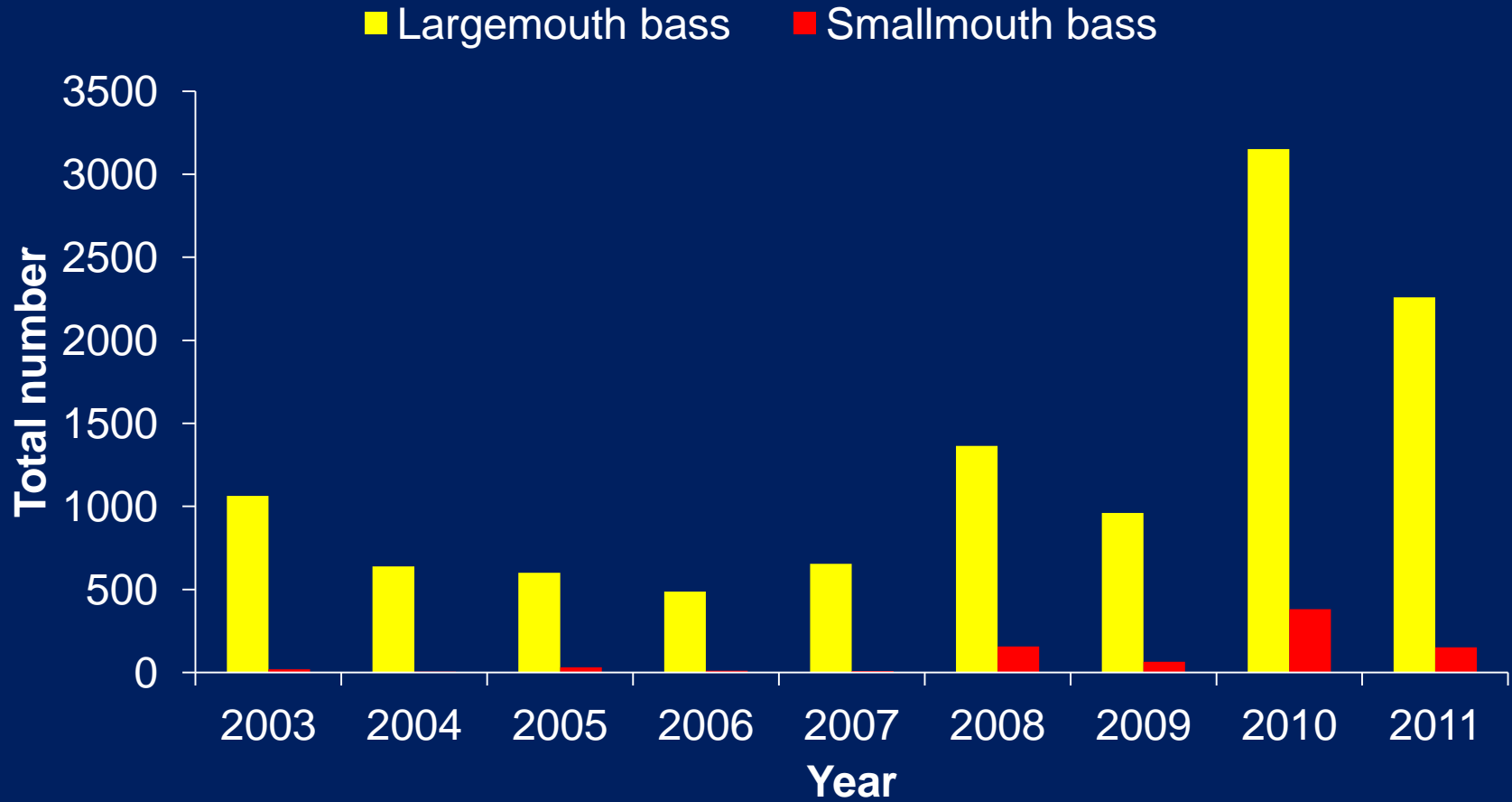
Entries per angler



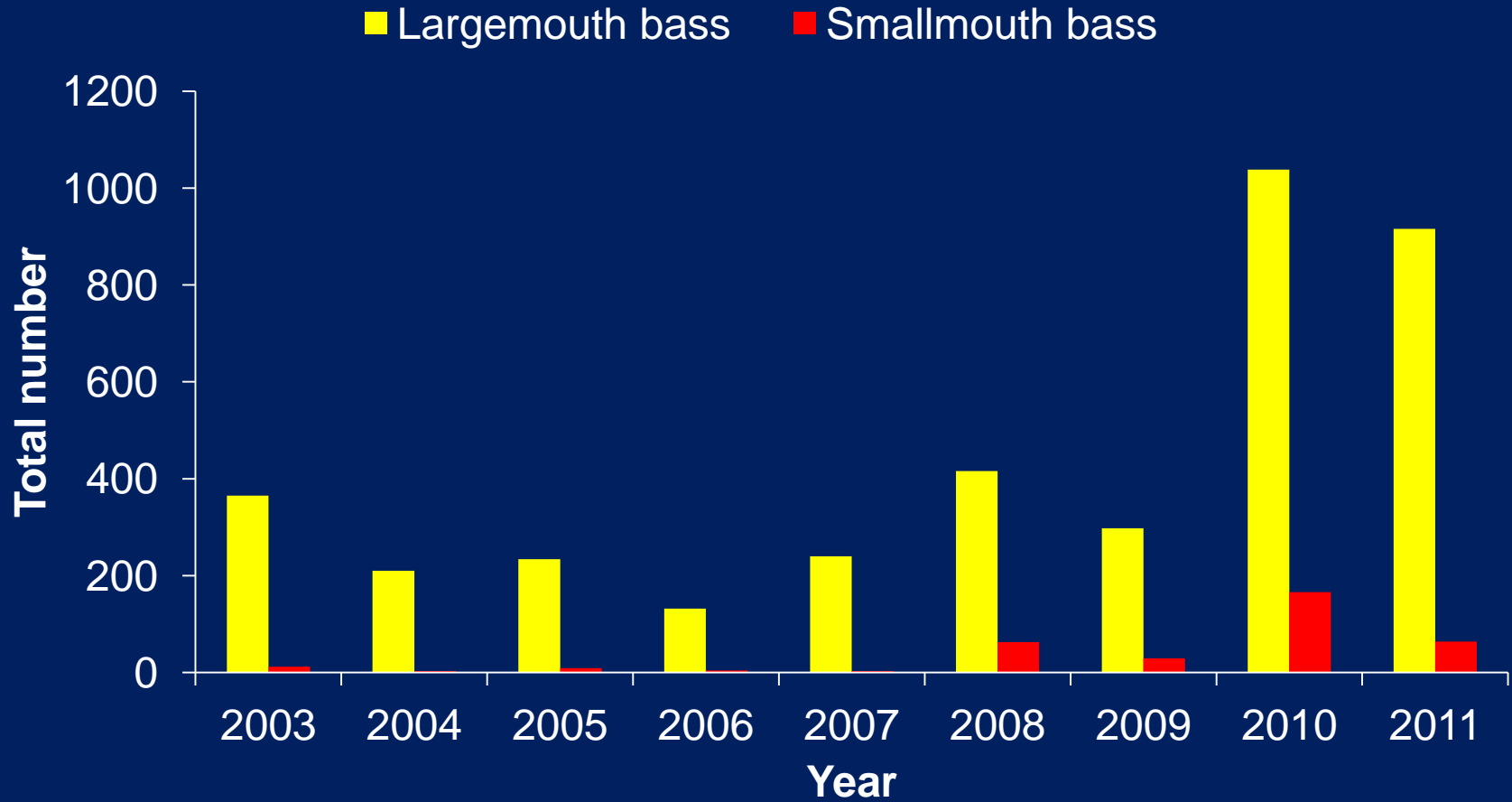
Number of water bodies fished



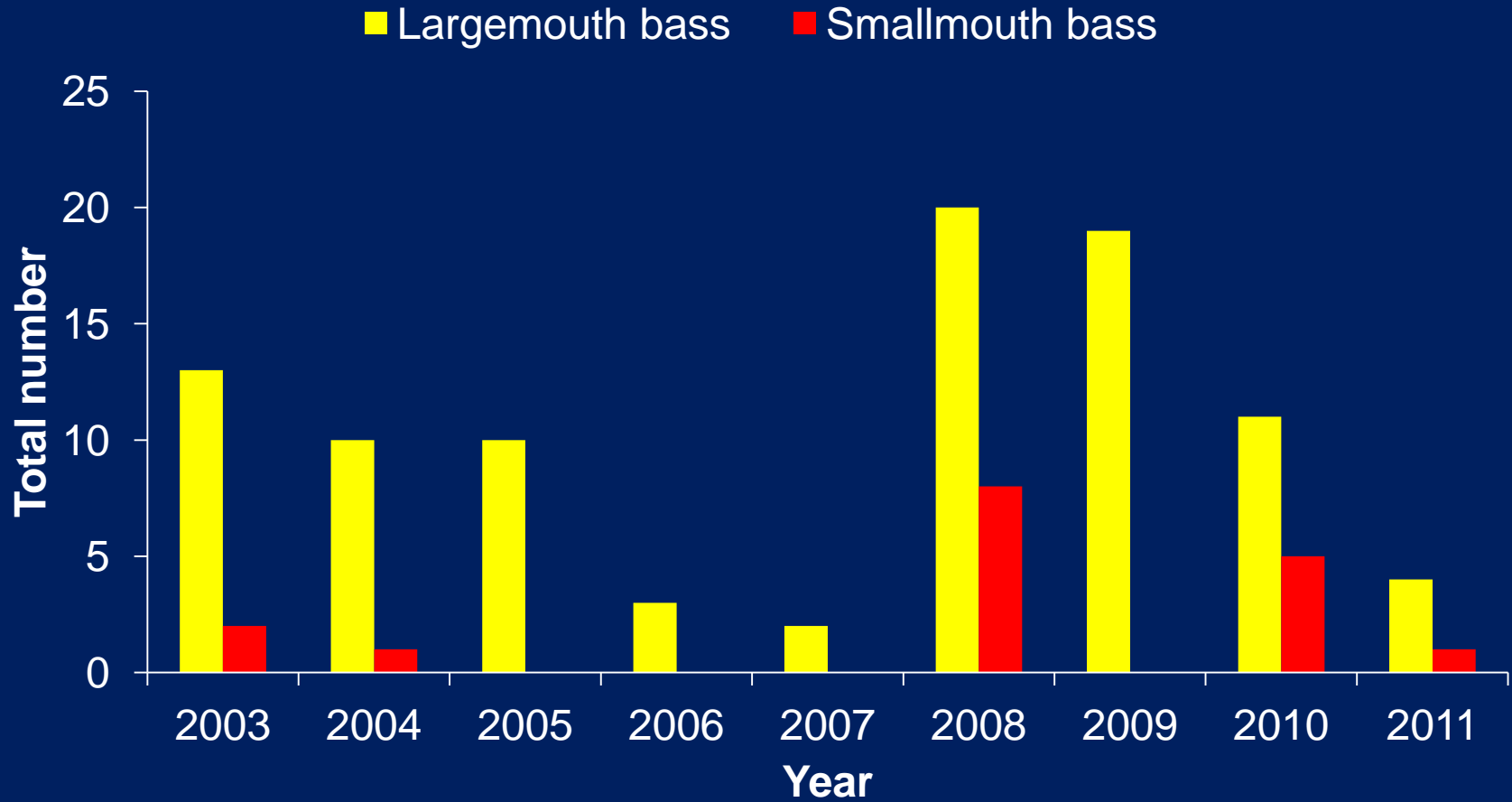
Number ≥ 12 " reported



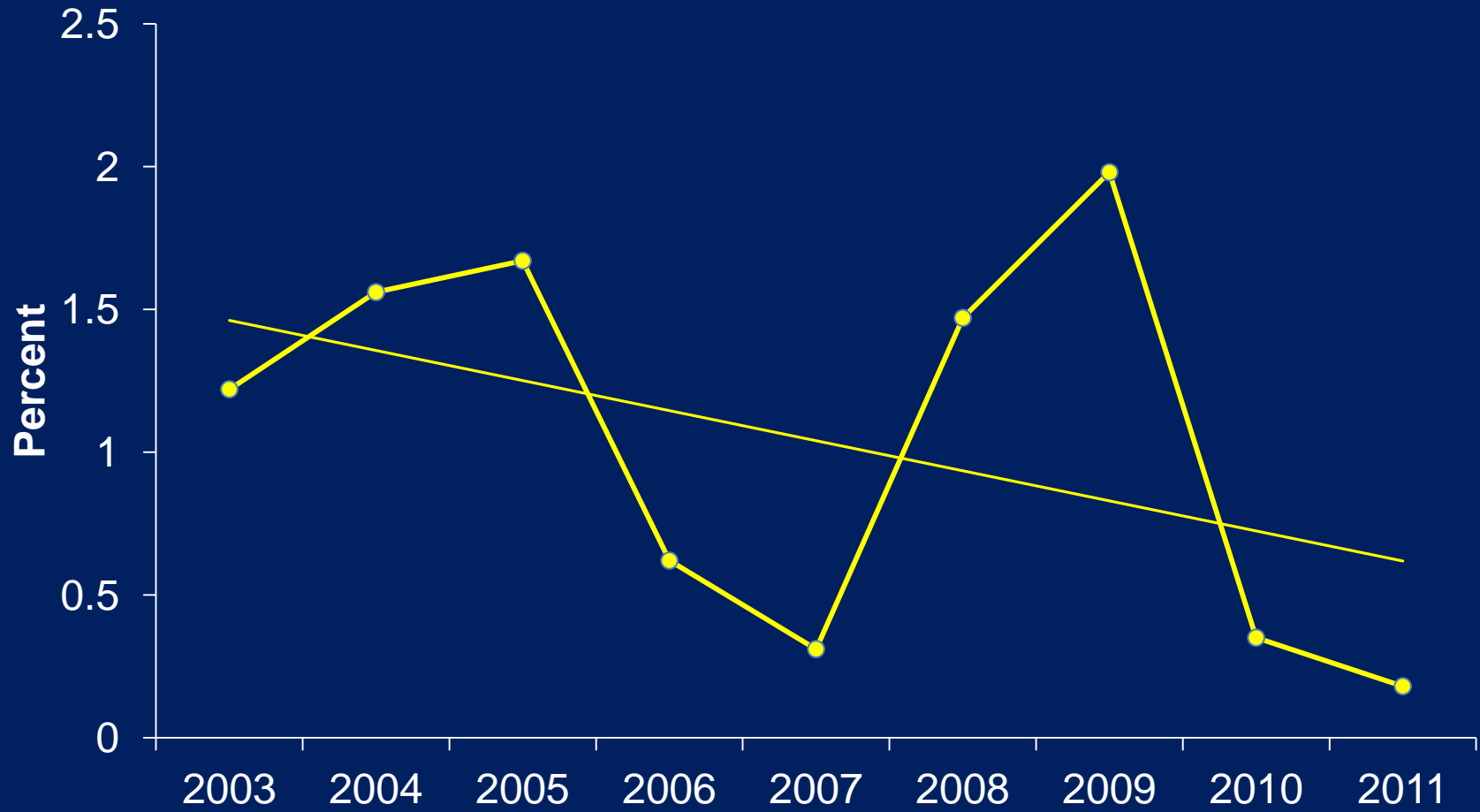
Number ≥ 15 " reported



Number ≥ 20 " reported

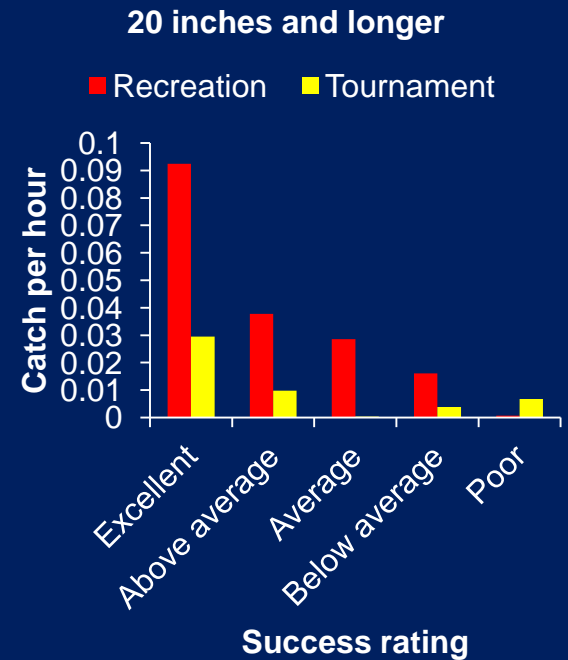
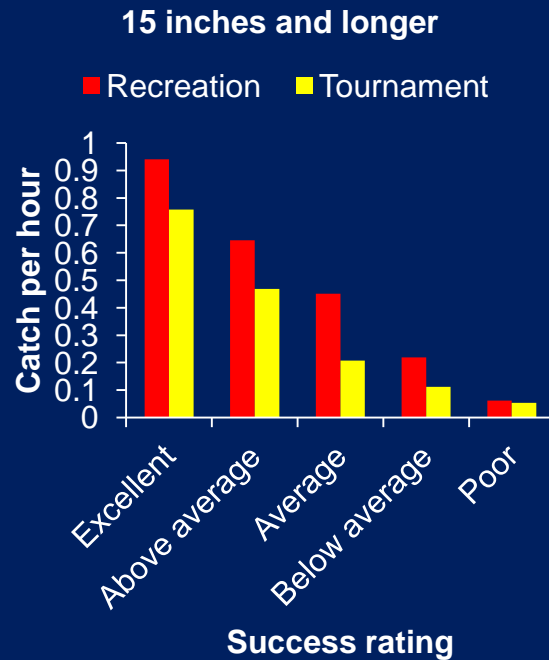
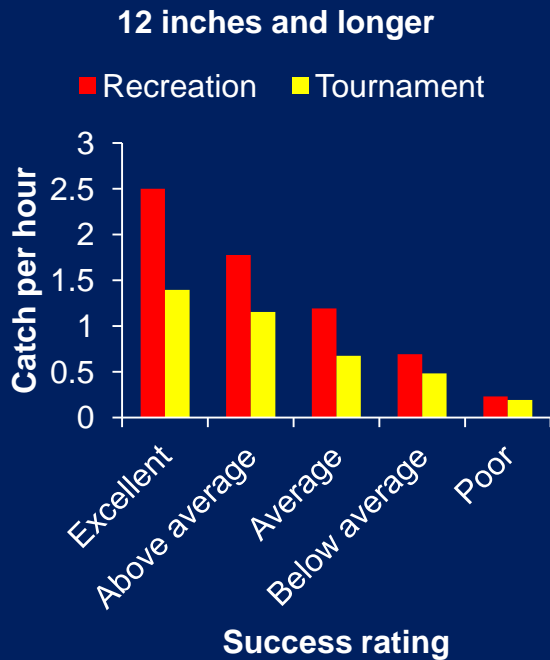


% of LMB $\geq 12''$ also $\geq 20''$



Success ratings: Recreation vs tournament

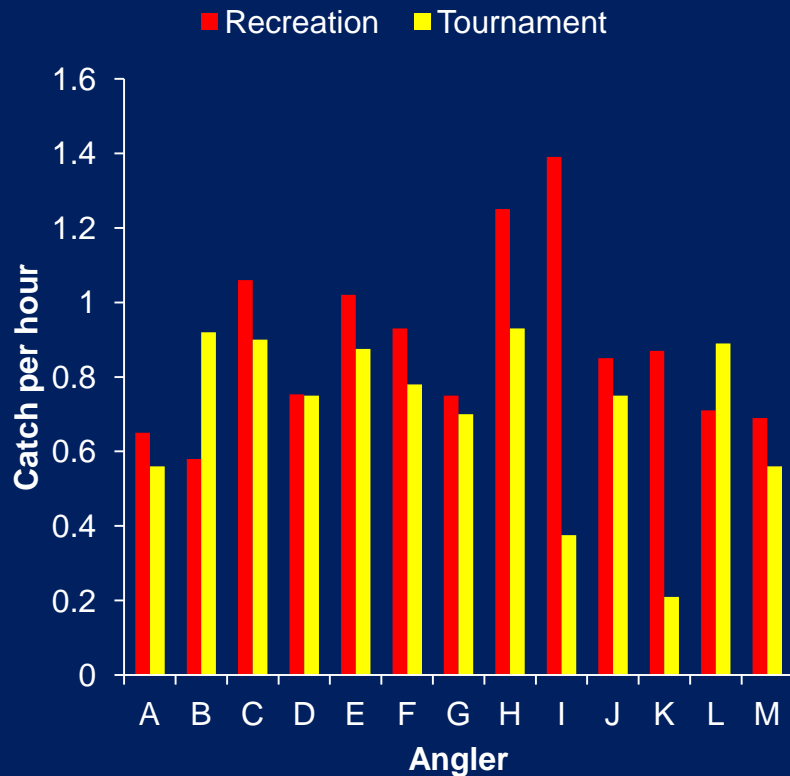
(all anglers; assuming each angler rates success similarly)



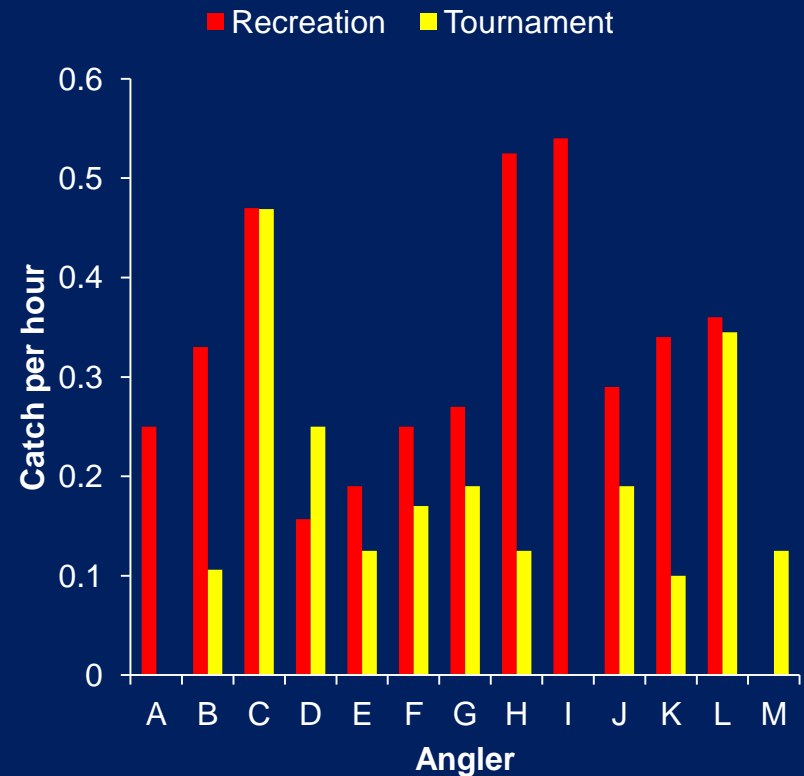
Recreation vs tournament

(comparisons among anglers; success = average)

12 inches and longer

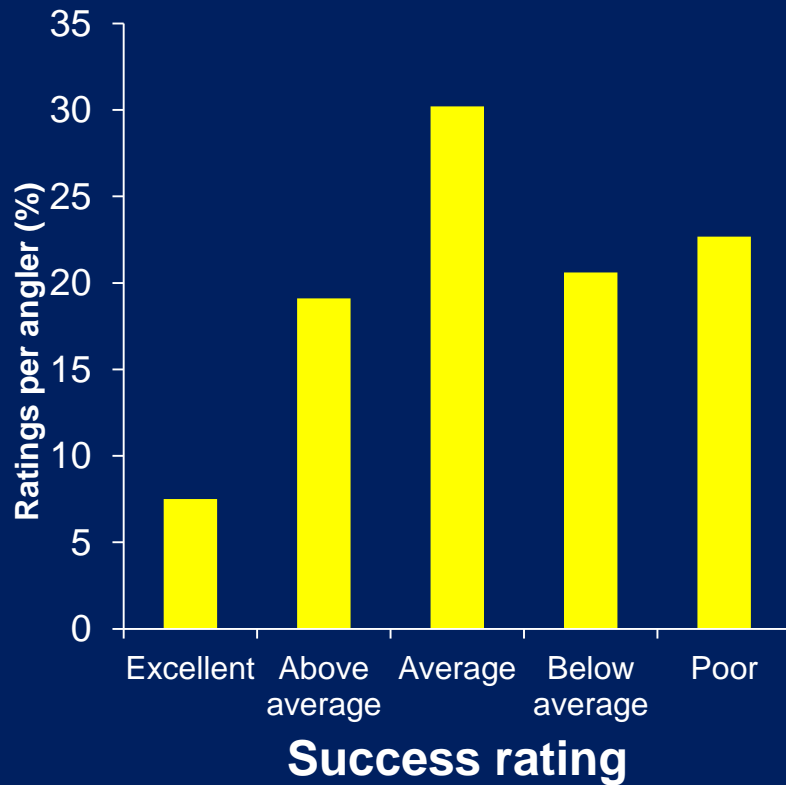


15 inches and longer

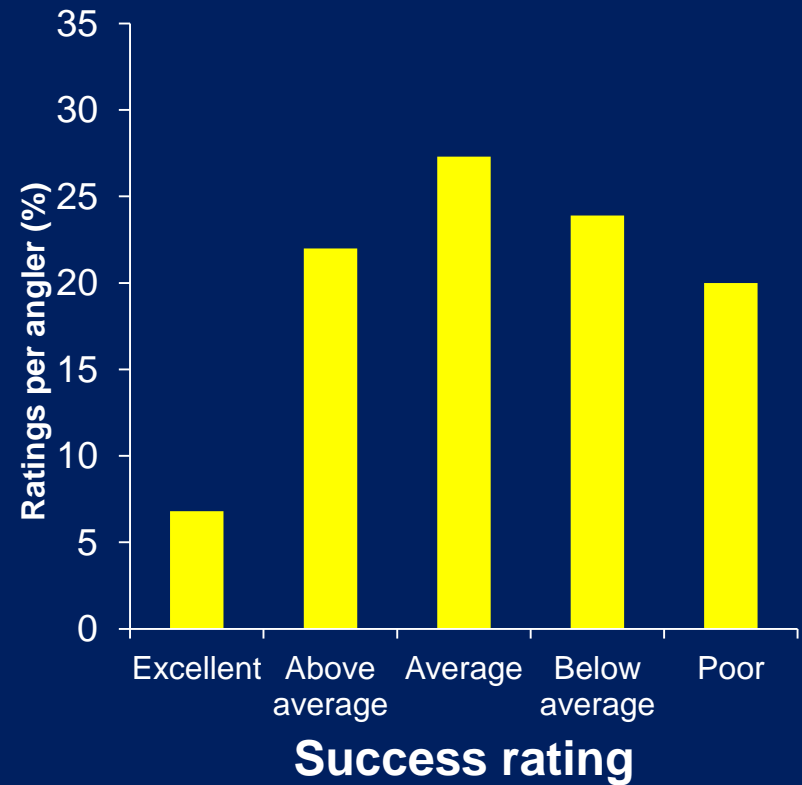


Distribution of success ratings

Recreation

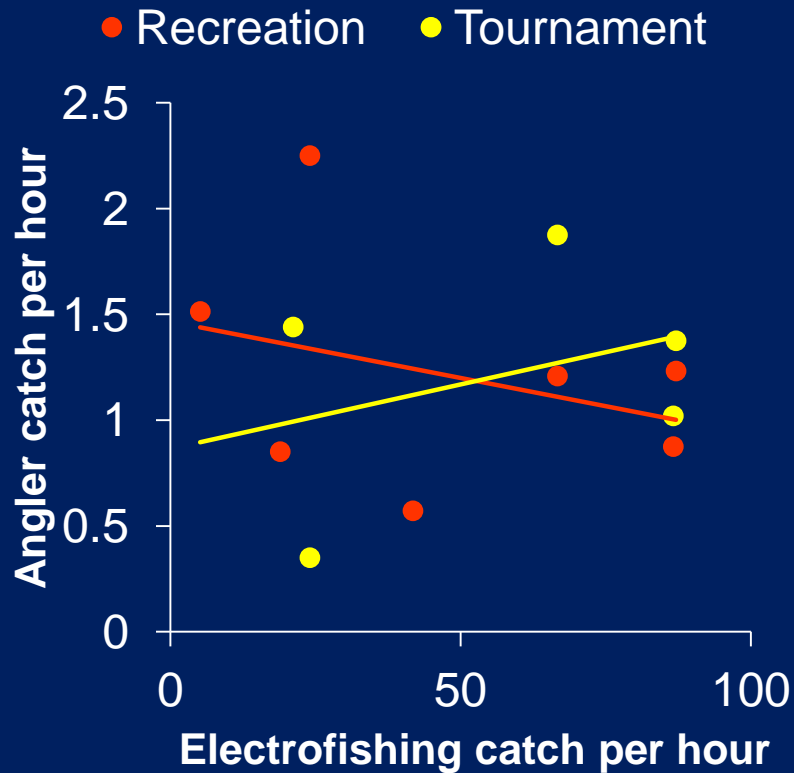


Tournament

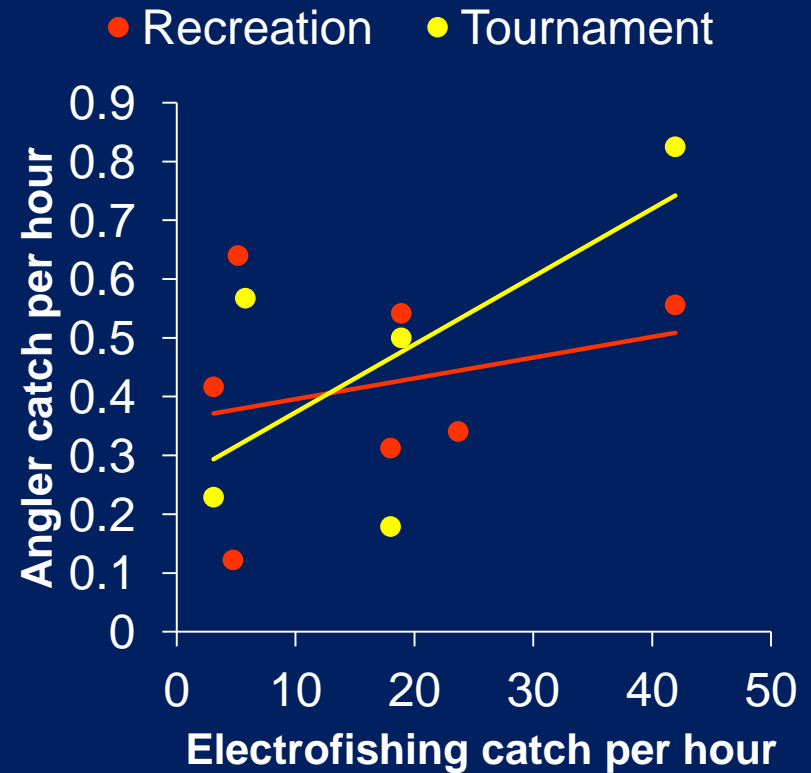


Angling and electrofishing CPH

12 inches and longer



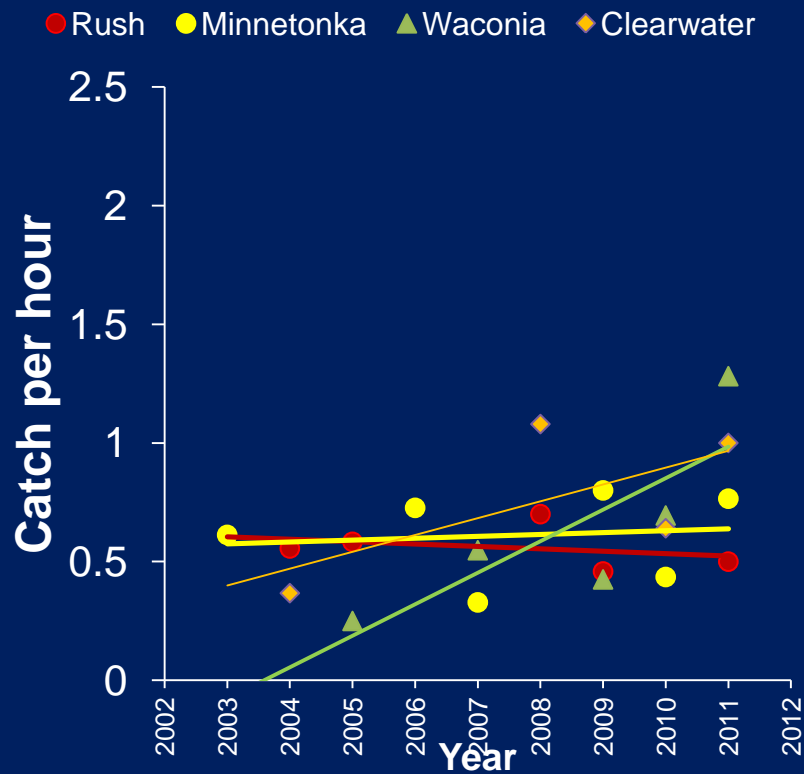
15 inches and longer



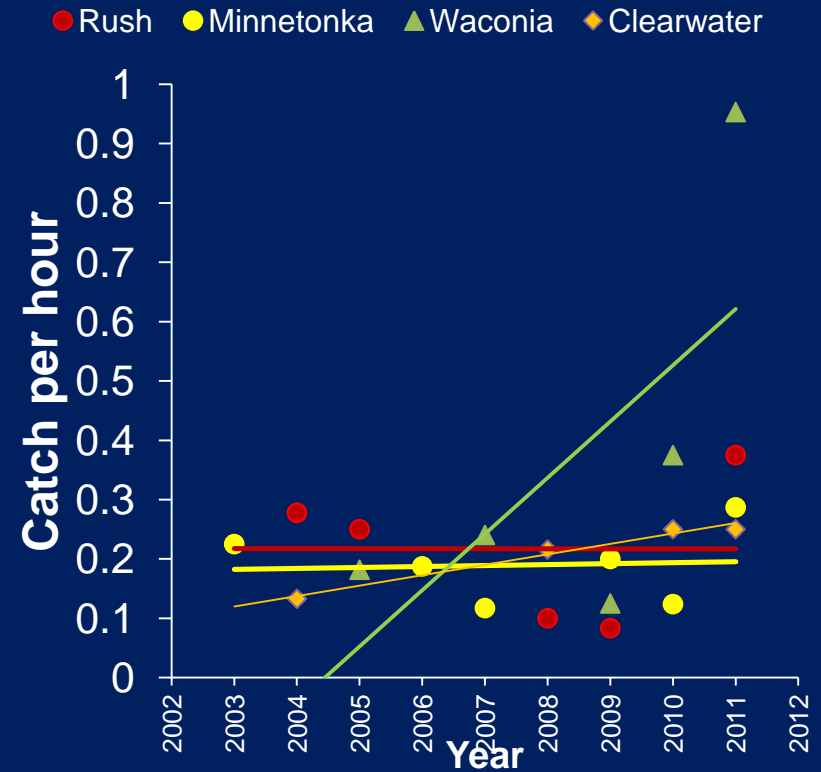
Annual trends in catch rates by lake

(Tournaments)

12 inches and longer



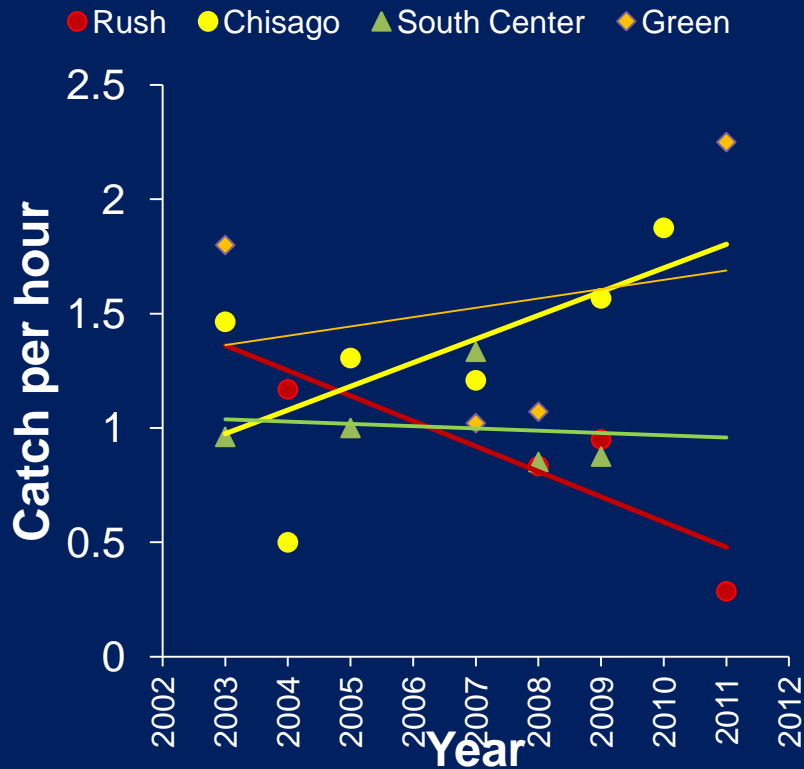
15 inches and longer



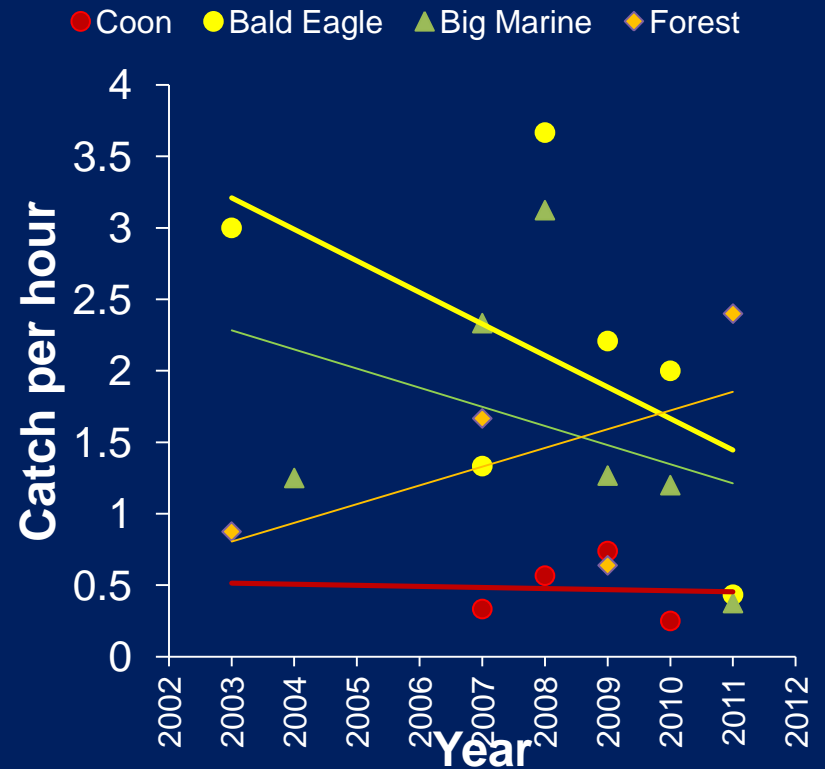
Annual trends in catch rates by lake

(Recreational fishing; 12 inches and longer)

Chisago County



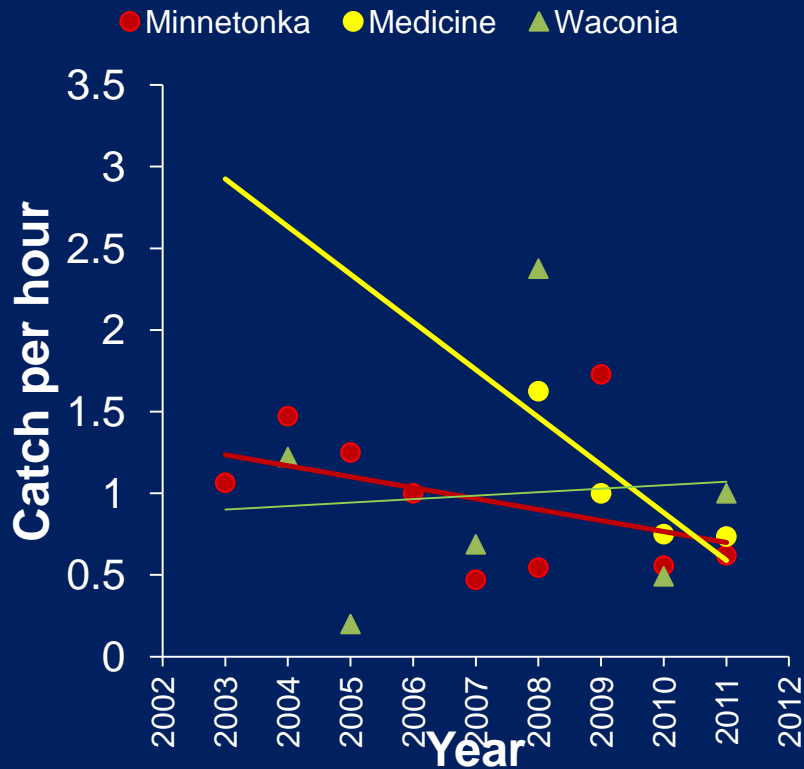
Anoka, Ramsey, and Washington



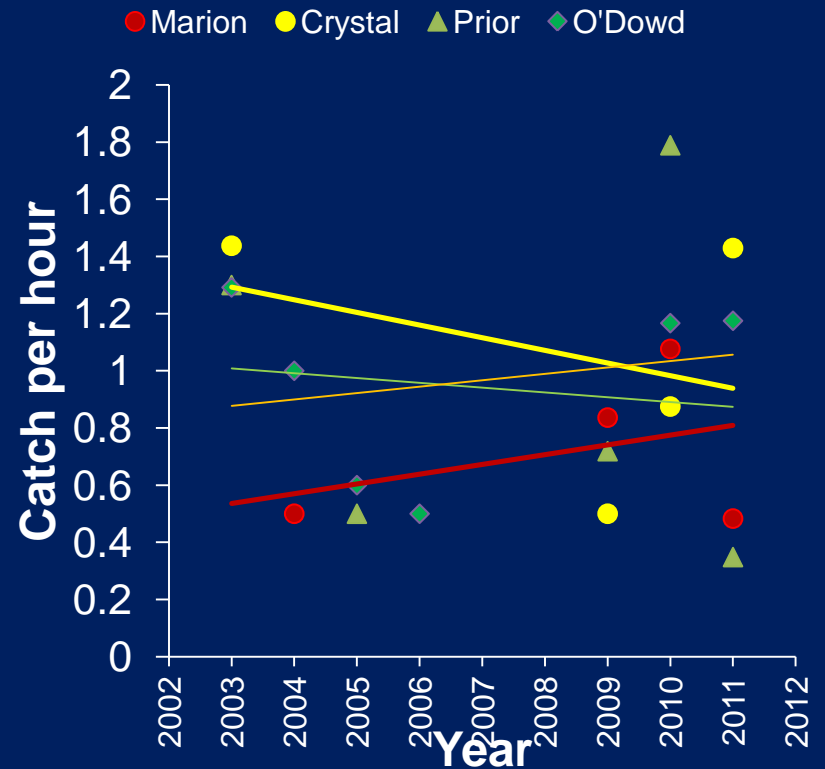
Annual trends in catch rates by lake

(Recreational fishing; 12 inches and longer)

Hennepin and Carver counties



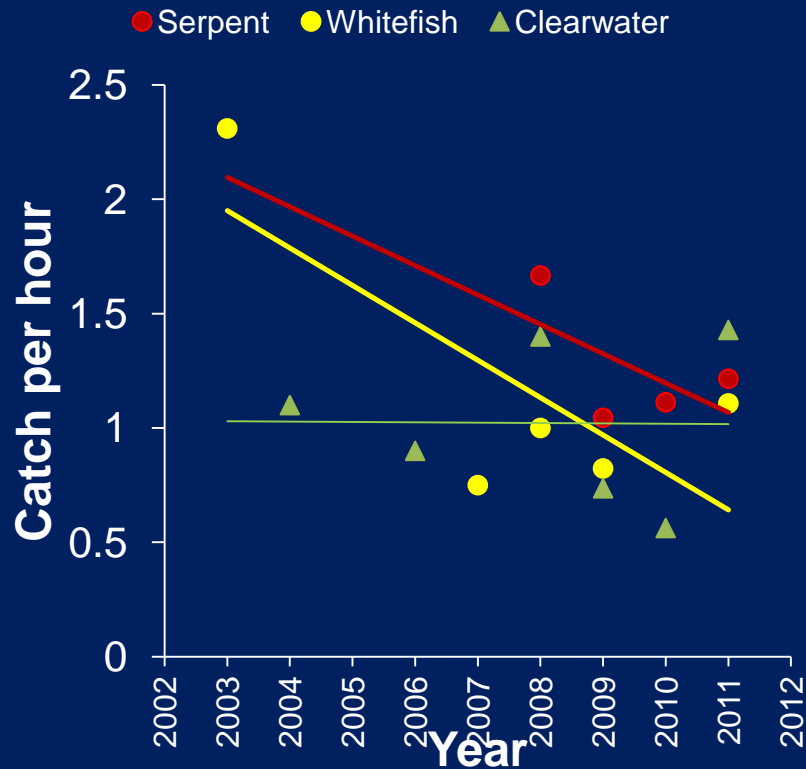
Dakota and Scott counties



Annual trends in catch rates by lake

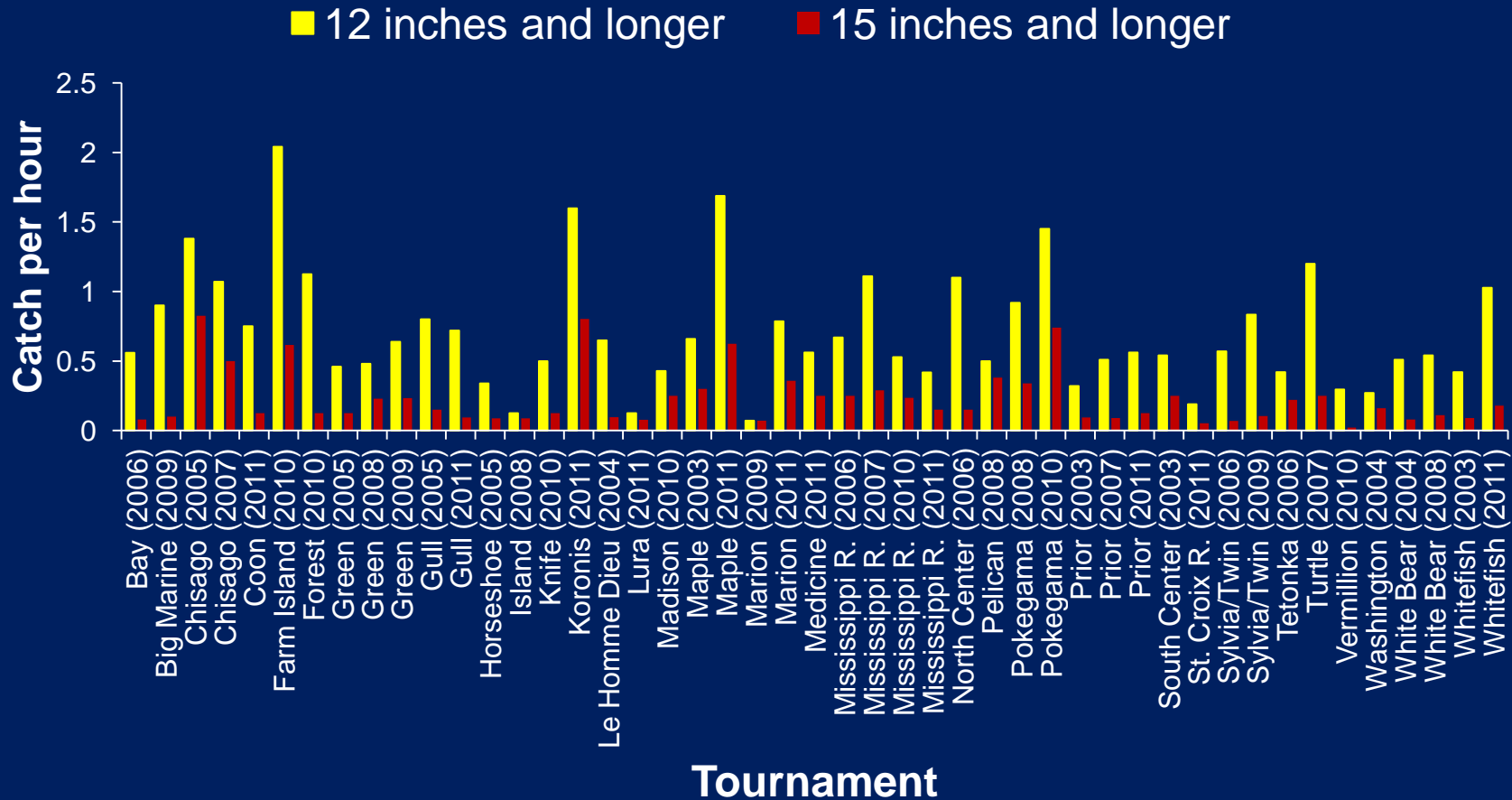
(Recreational fishing; 12 inches and longer)

Crow Wing and Wright Counties



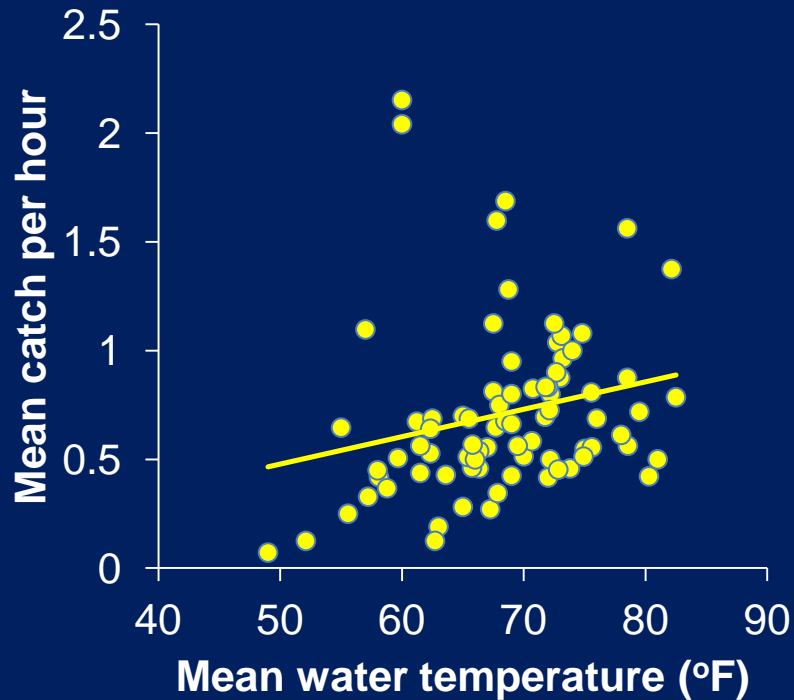
Catch per hour of largemouth bass by tournament

(excluding Clearwater, Minnetonka, Rush, and Waconia)

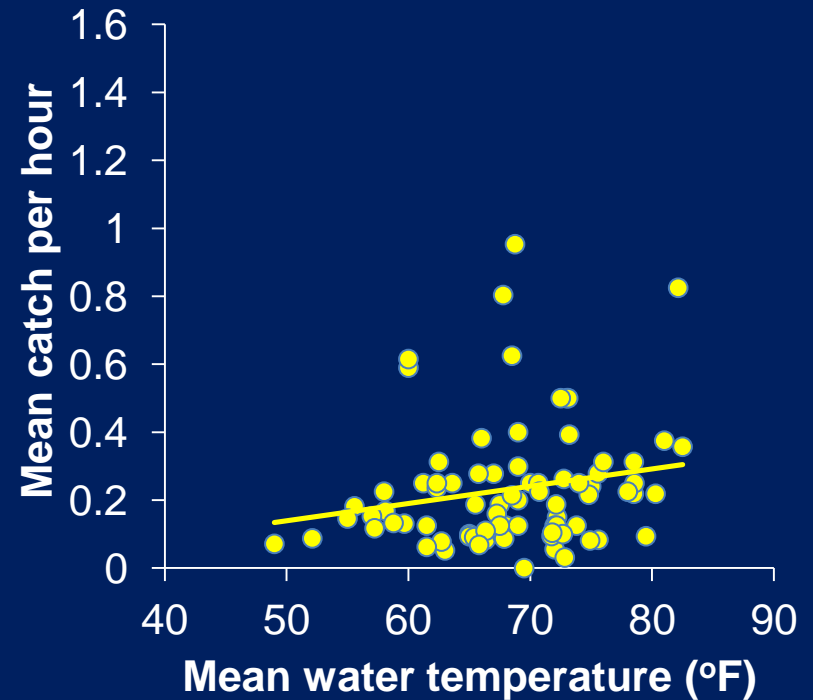


Mean catch per hour (tournaments) and mean water temperature

12 inches and longer

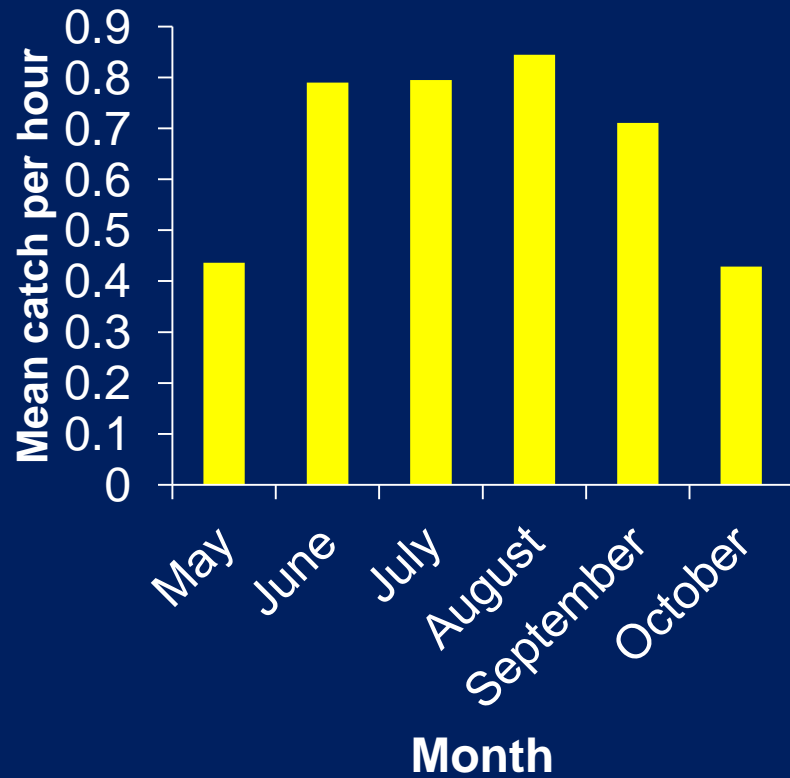


15 inches and longer

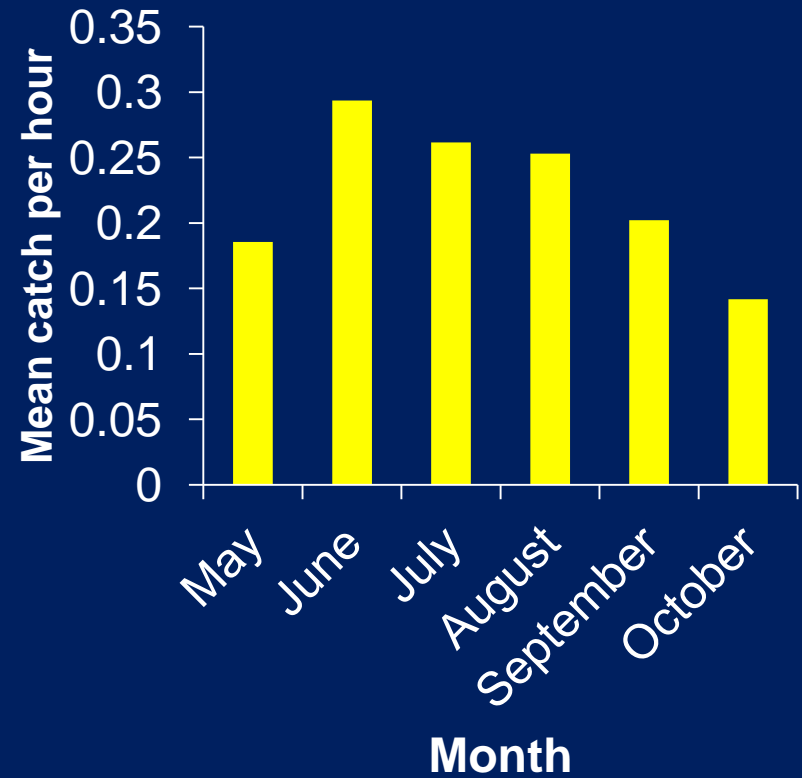


Mean catch per hour (tournaments) by month

12 inches and longer

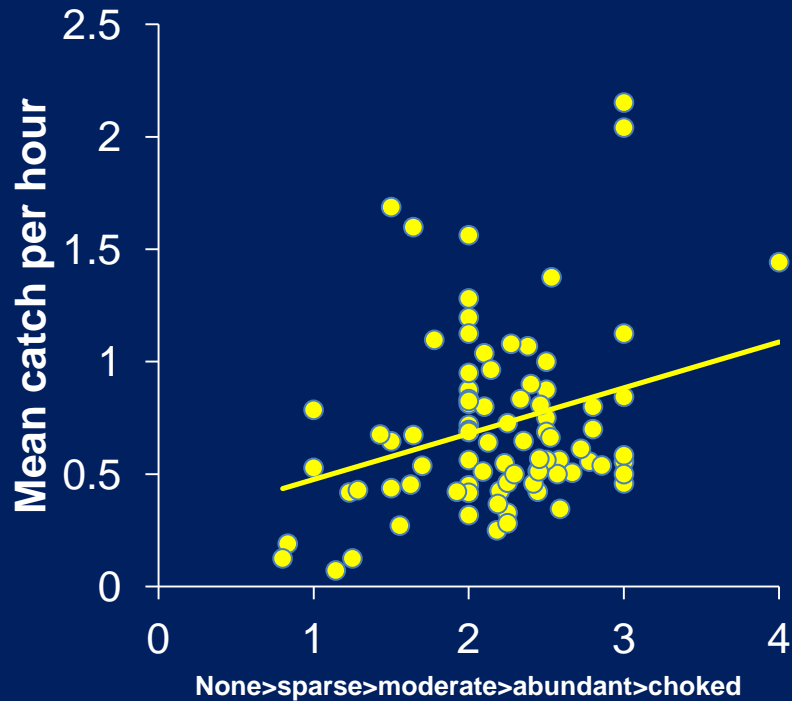


15 inches and longer

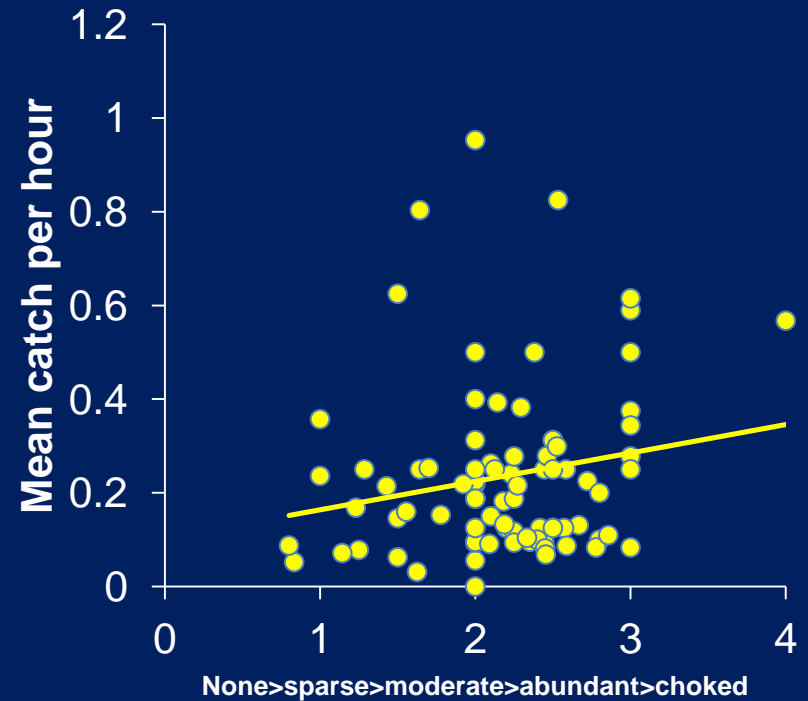


Mean catch per hour (tournaments) and vegetation

12 inches and longer

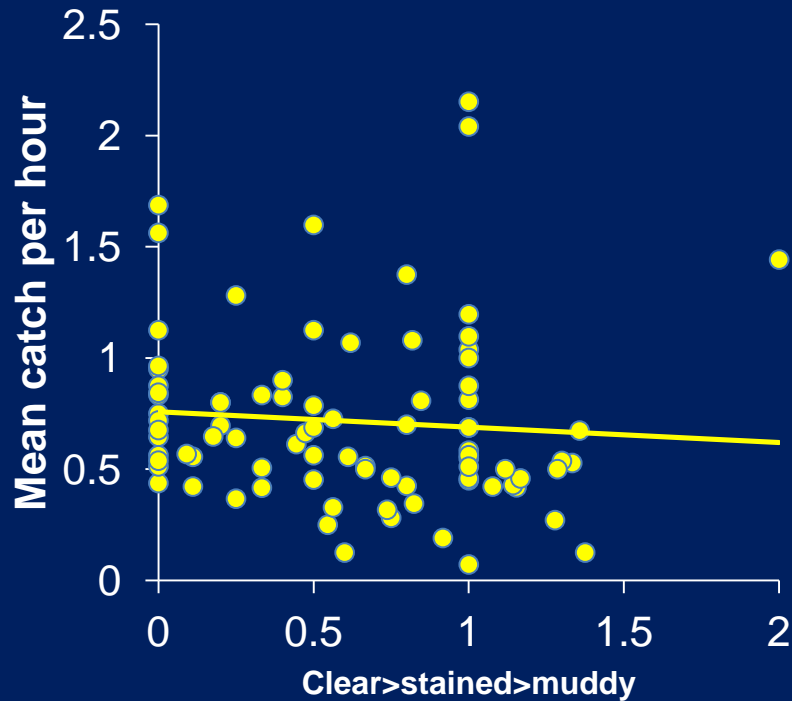


15 inches and longer

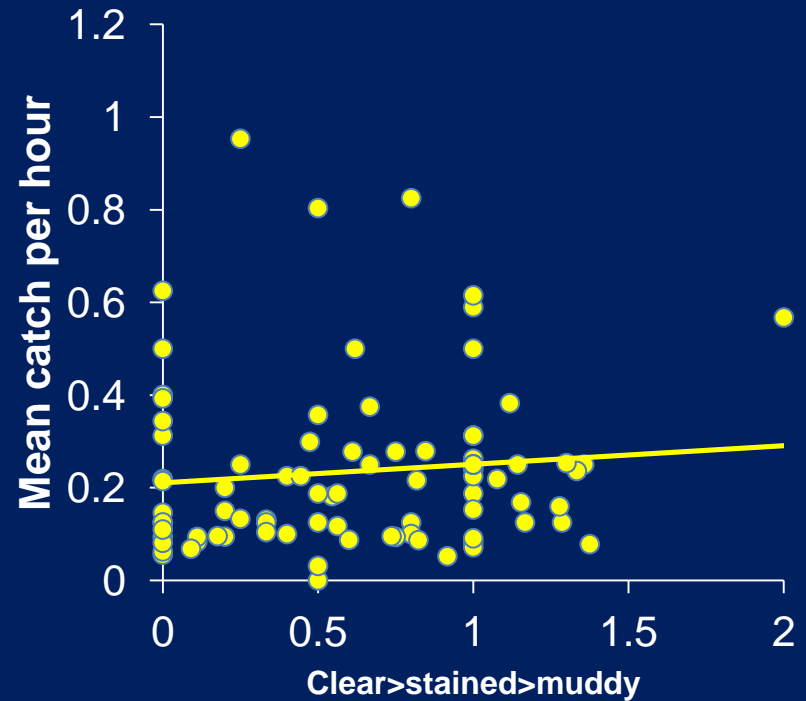


Mean catch per hour (tournaments) and water clarity

12 inches and longer

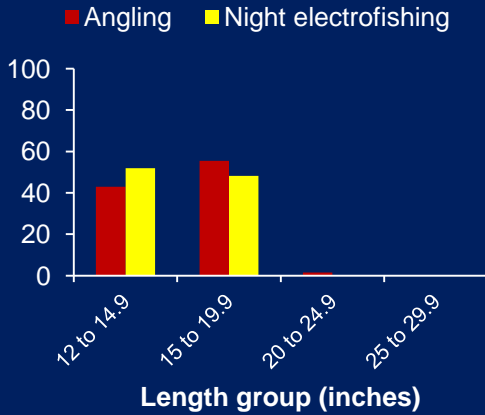


15 inches and longer

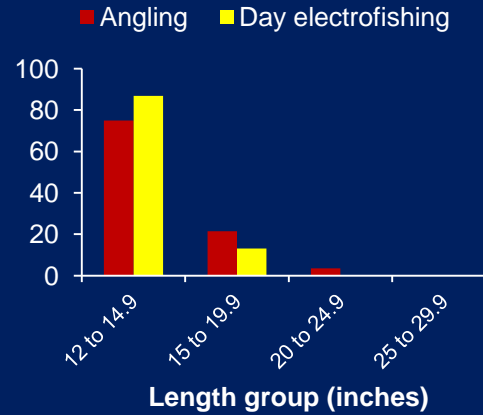


Length distribution of largemouth bass (angling (rec & tourney) and electrofishing)

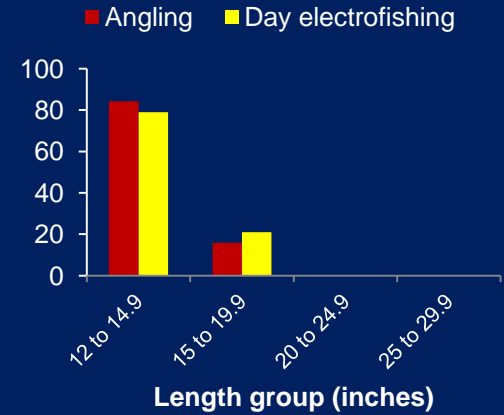
Chisago (2005)



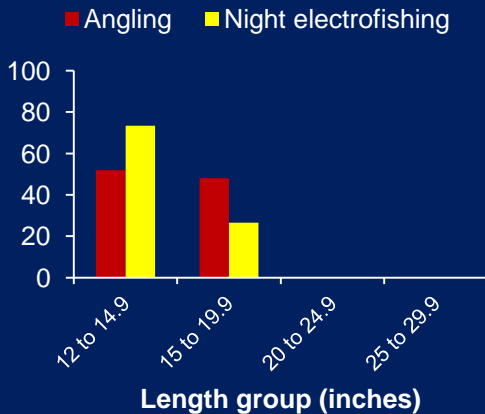
Turtle (2003)



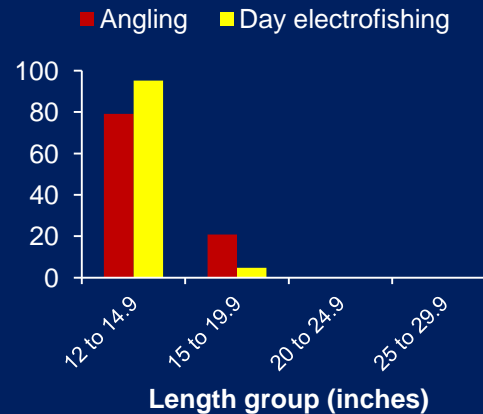
Le Homme Dieu (2004)



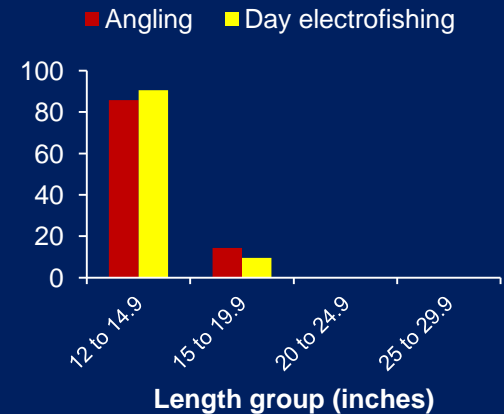
Chisago (2007)*



Turtle (2007)

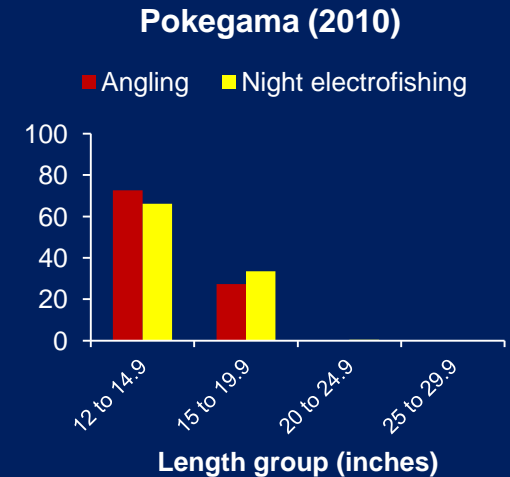
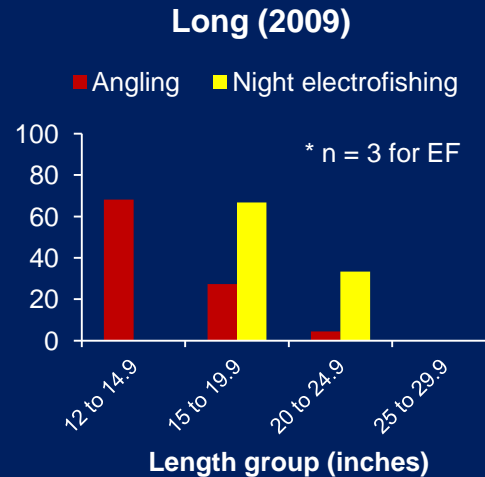
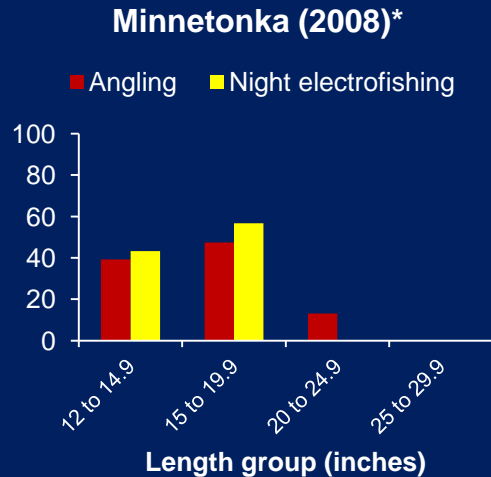
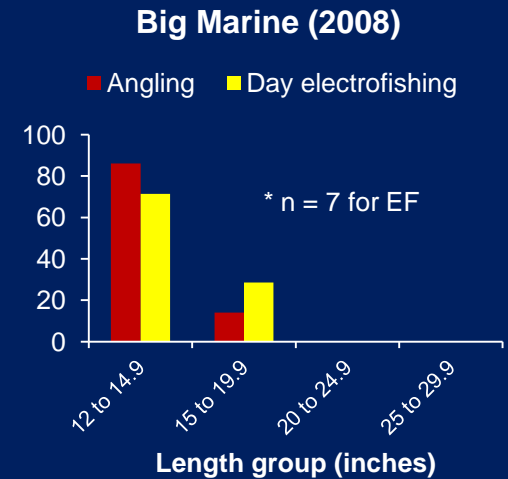
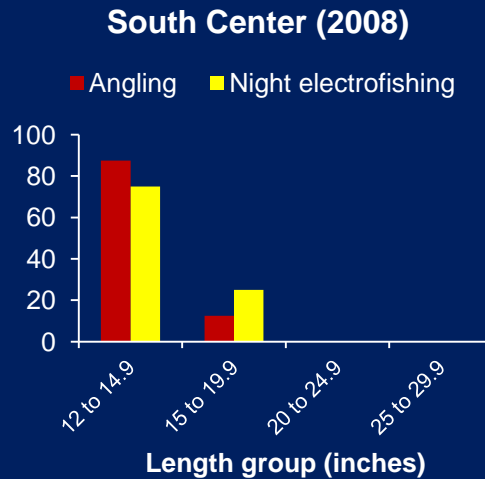
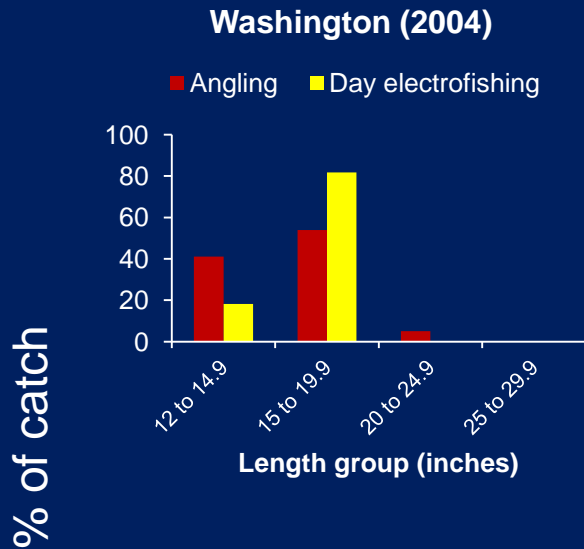


Le Homme Dieu (2008)

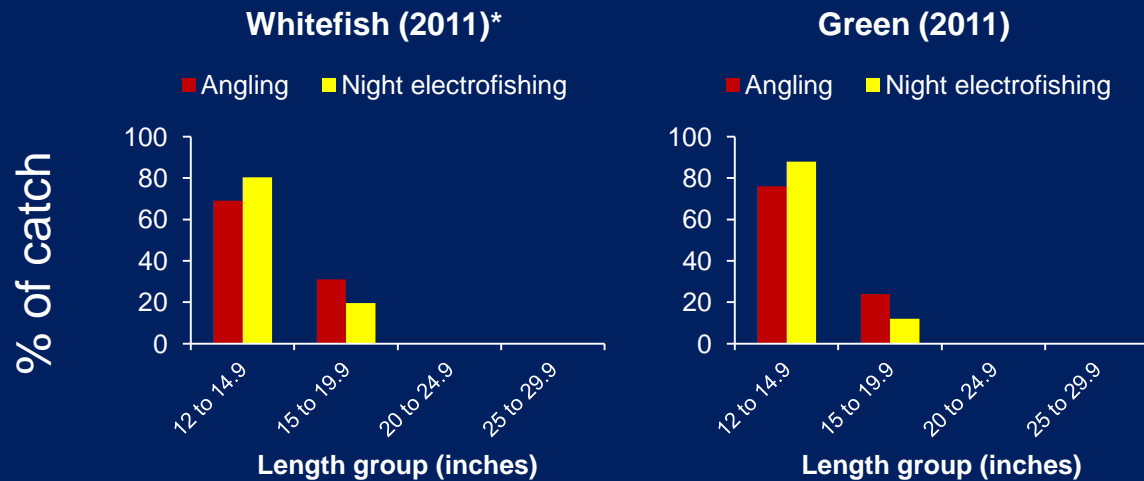


% of catch

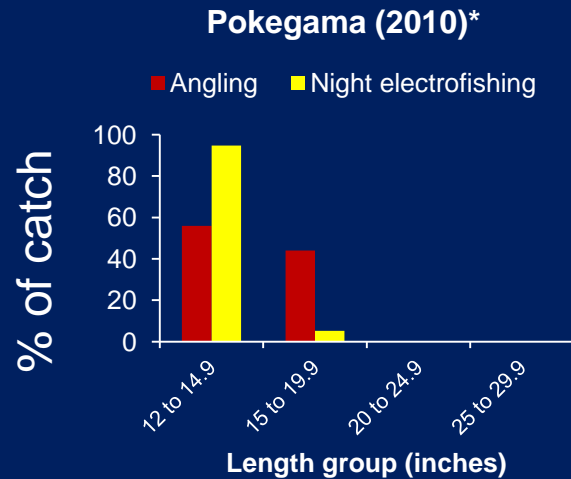
Length distribution of largemouth bass (angling (rec & tourney) and electrofishing)



Length distribution of largemouth bass (angling (rec & tourney) and electrofishing)

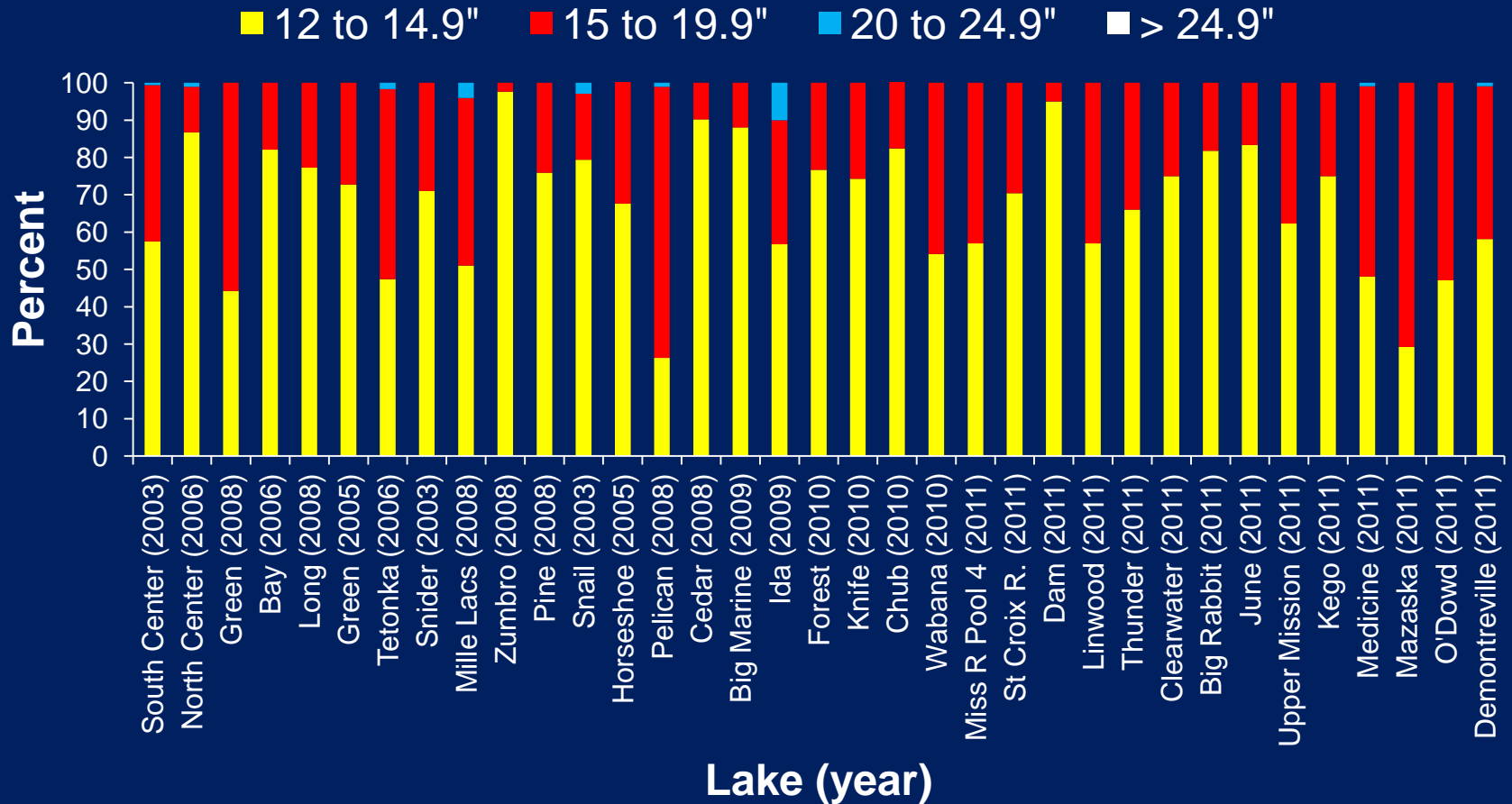


Length distribution of smallmouth bass (angling (rec & angling) and electrofishing)



Angler-provided size structure data of largemouth bass

(Lake-year combinations not electrofished by DNR; tournaments & recreation combined)

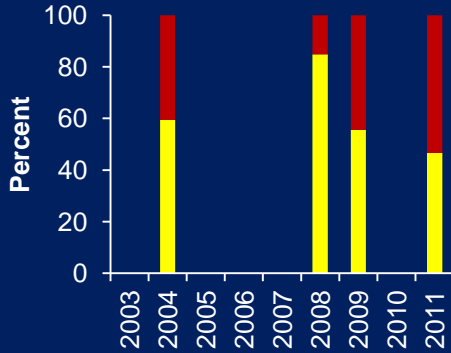


Size structure of largemouth bass

(angler-provided data; $n \geq 20$; tournaments&recreation combined)

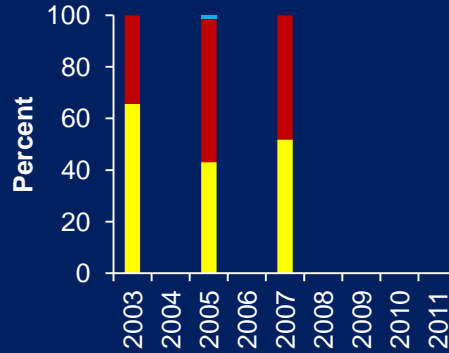
Rush; Chisago

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



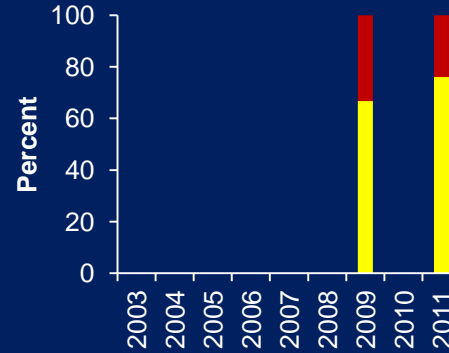
Chisago; Chisago Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



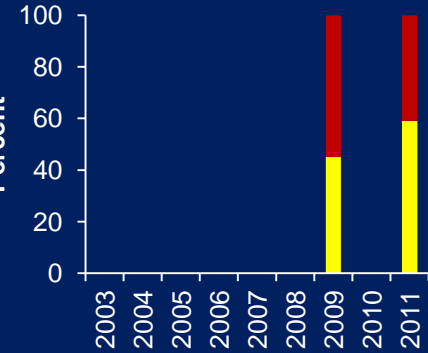
Green; Chisago Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



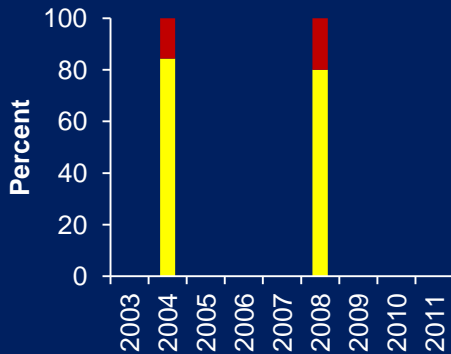
Coon; Anoka Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



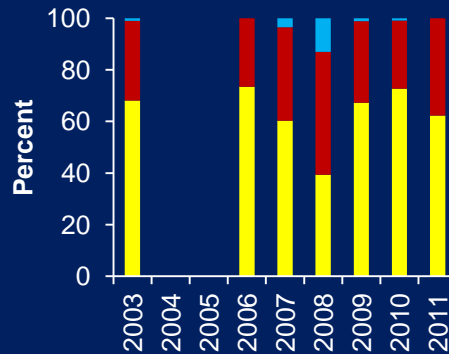
White Bear; Wash. Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



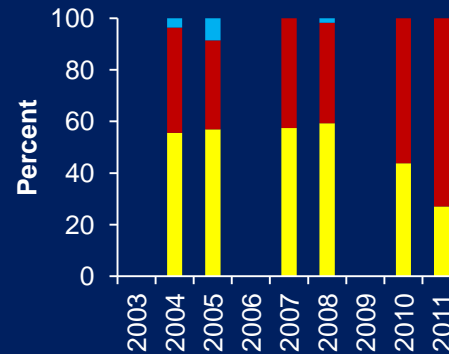
Minnetonka; Henn. Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



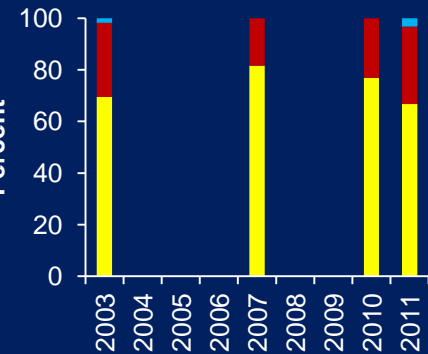
Waconia; Carver Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



Prior; Scott Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"

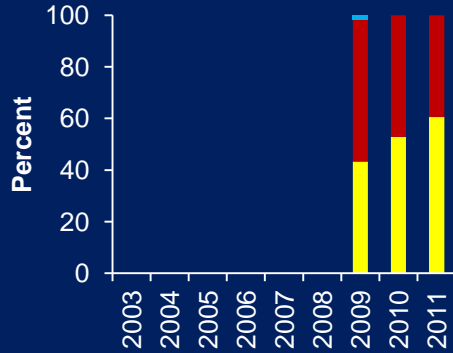


Size structure of largemouth bass

(angler-provided data; $n \geq 20$; tournaments&recreation combined)

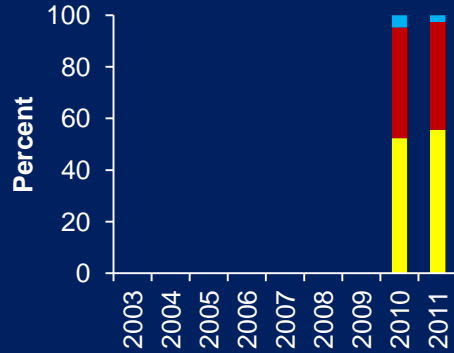
Marion; Dakota Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



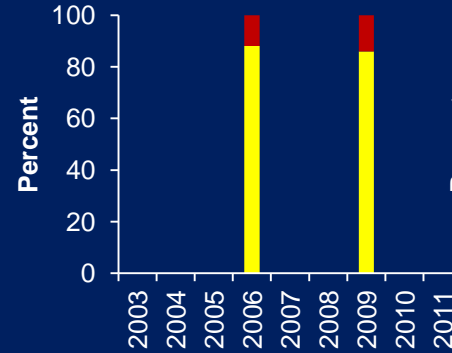
Crystal; Dakota Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



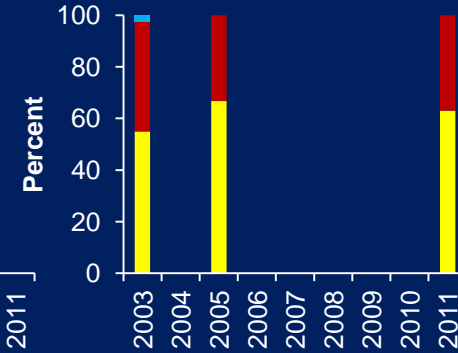
Sylvia/Twin; Wright Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



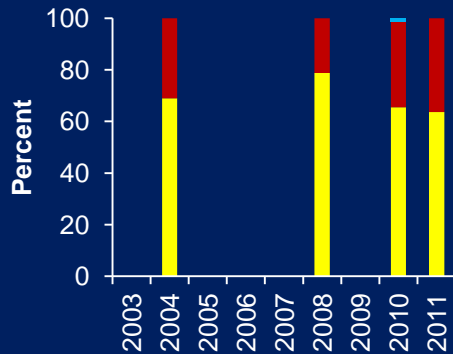
Maple; Wright Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



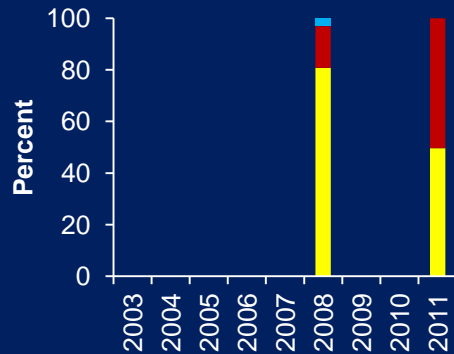
Clearwater; Wright Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



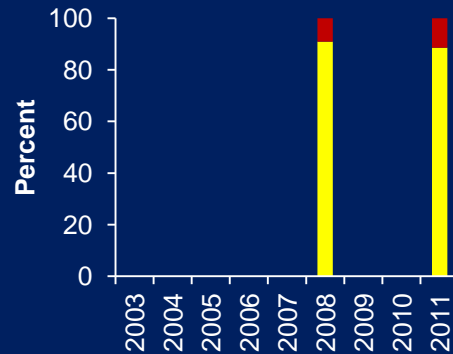
Koronis; Stearns Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



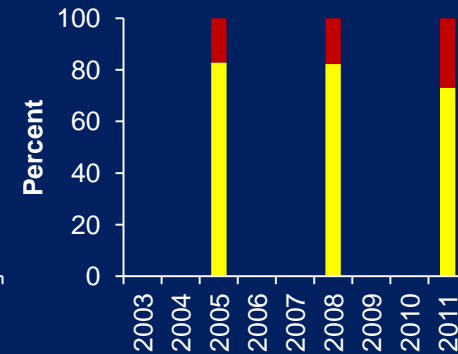
Alexander; Morrison Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



Gull; Cass Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"

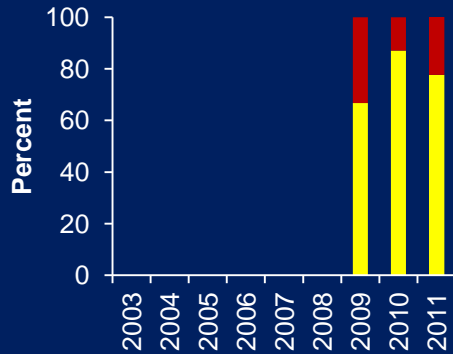


Size structure of largemouth bass

(angler-provided data; $n \geq 20$; tournaments&recreation combined)

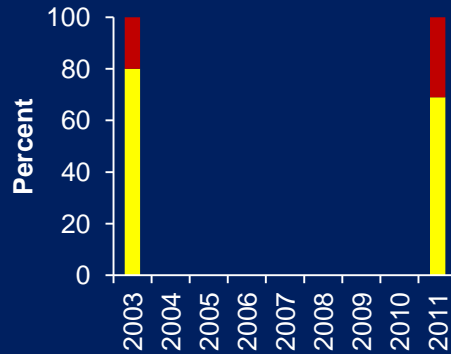
Serpent; Crow Wing Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



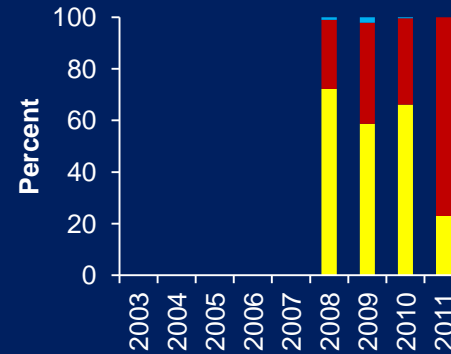
Whitefish; Crow Wing Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



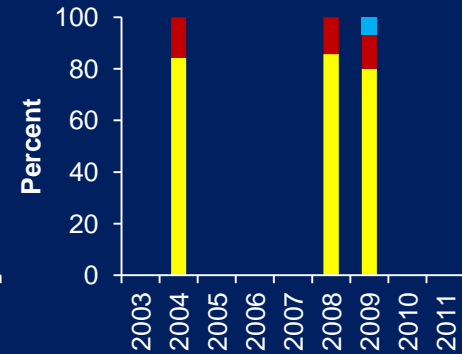
Pokegama; Itasca Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



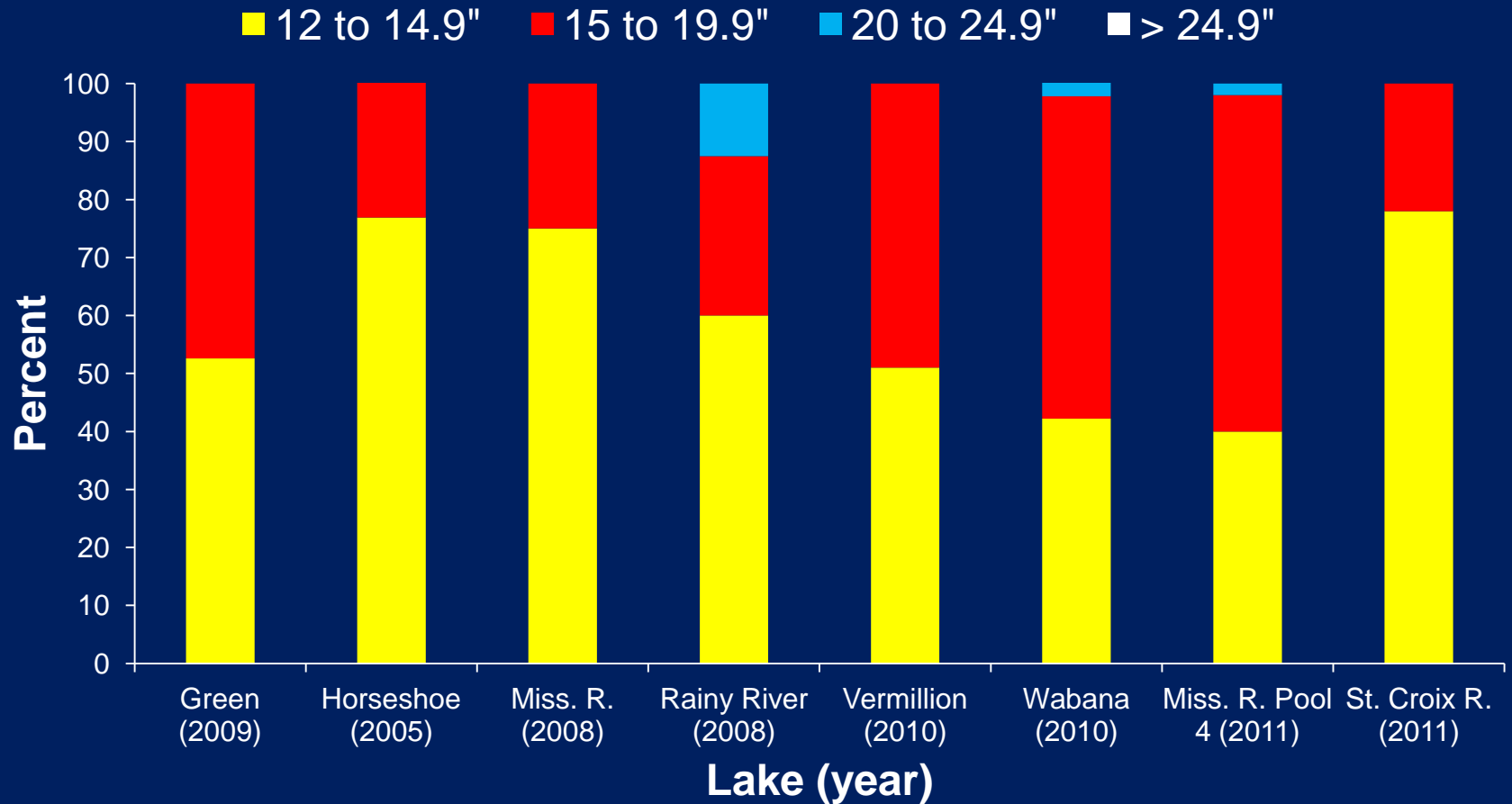
LeHommeDieu; Doug. Co.

■ 12 to 14.9" ■ 15 to 19.9"
■ 20 to 24.9" ■ > 24.9"



Size structure of smallmouth bass

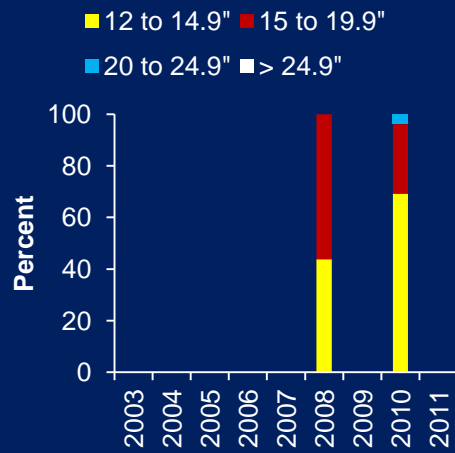
(angler-provided data; $n \geq 20$; tournaments&recreation combined)



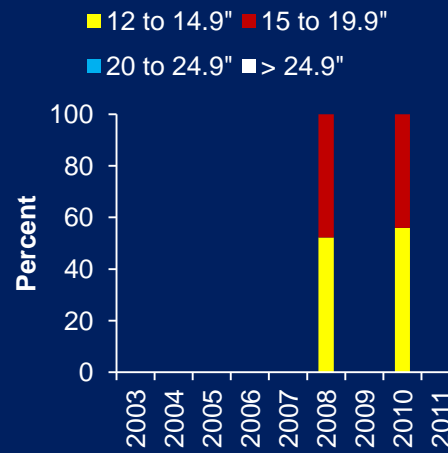
Size structure of smallmouth bass

(angler-provided data; $n \geq 20$; tournaments&recreation combined)

Island Res.; St. Louis Co.



Pokegama; Itasca Co.



Summary

- Good participation by anglers
- Rec. CPH > Tourney CPH
- Tourney CPH ~ LMB abundance
- Recreation CPH?
- CPH better in veg., summer, and rainy days
- Valuable length data for both species
- Beginning of long-term data sets on CPH and length distributions

How to get started?



- www.mnbfm.org
- Click: 'DNR Creel survey'
- Click: 'Getting started'
- Questions: Mickey Goetting

