

# Summary of the voluntary bass creel survey



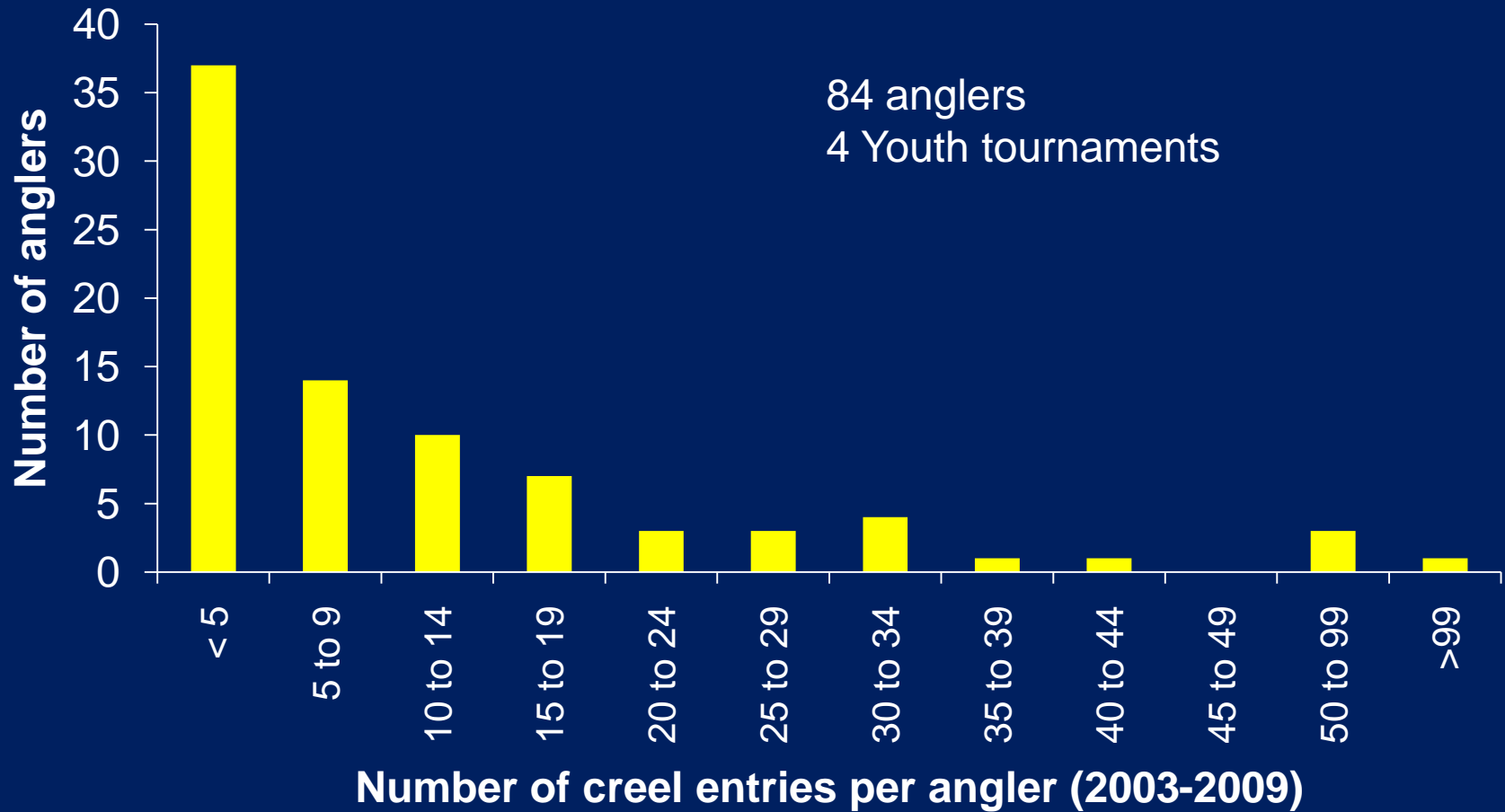
Michael C. McInerny  
Fisheries Research Biologist  
Minnesota DNR



# Topics

- Trends in angler participation
- LMB only
- Recreational vs tournament angling
- Characterize angler success
- Effects of water temperature, vegetation, water clarity, and sky effects catch per hour (CPH)
- Uses of angler-data by DNR

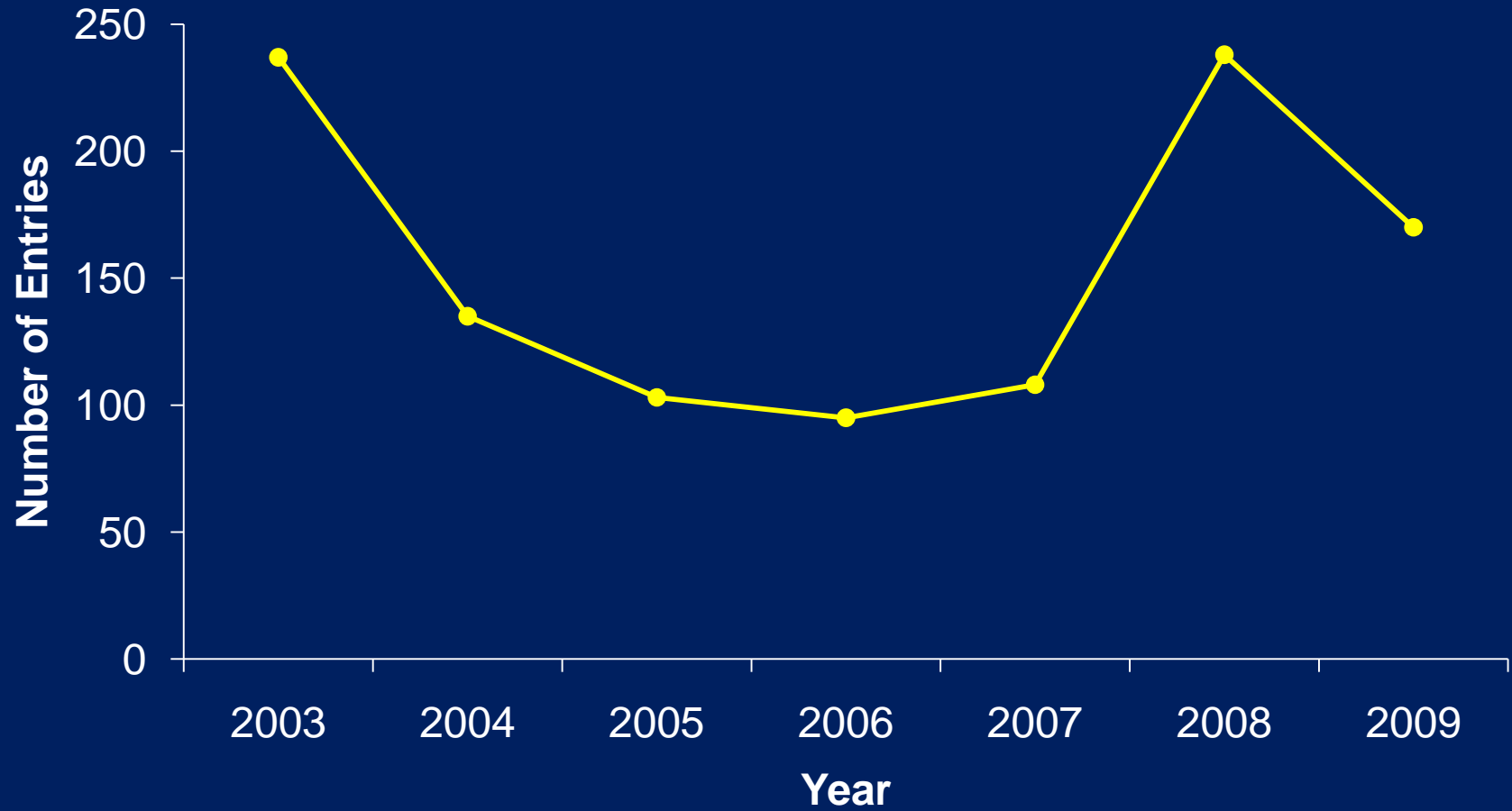
# Angler entries



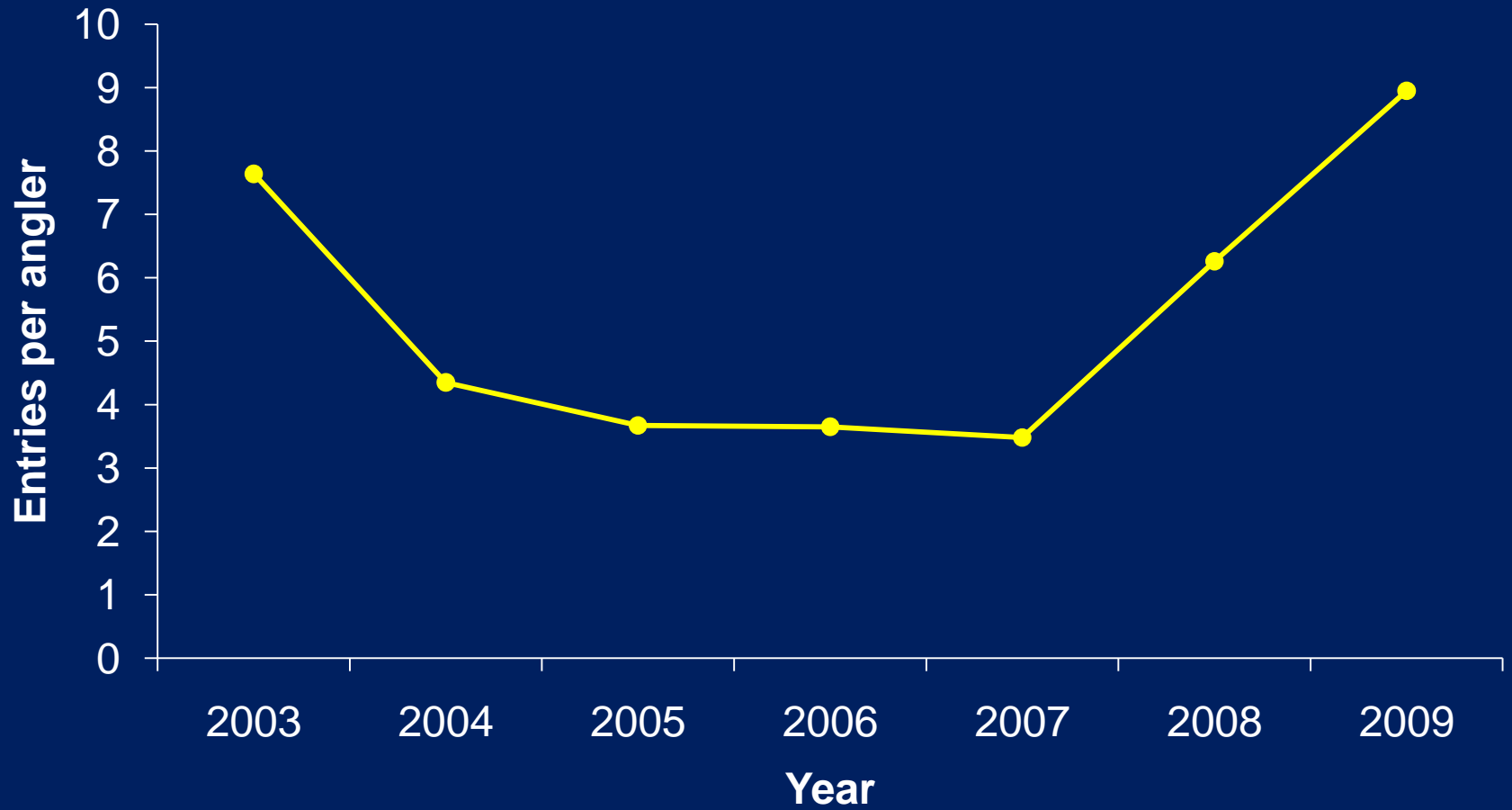
# Angler participation



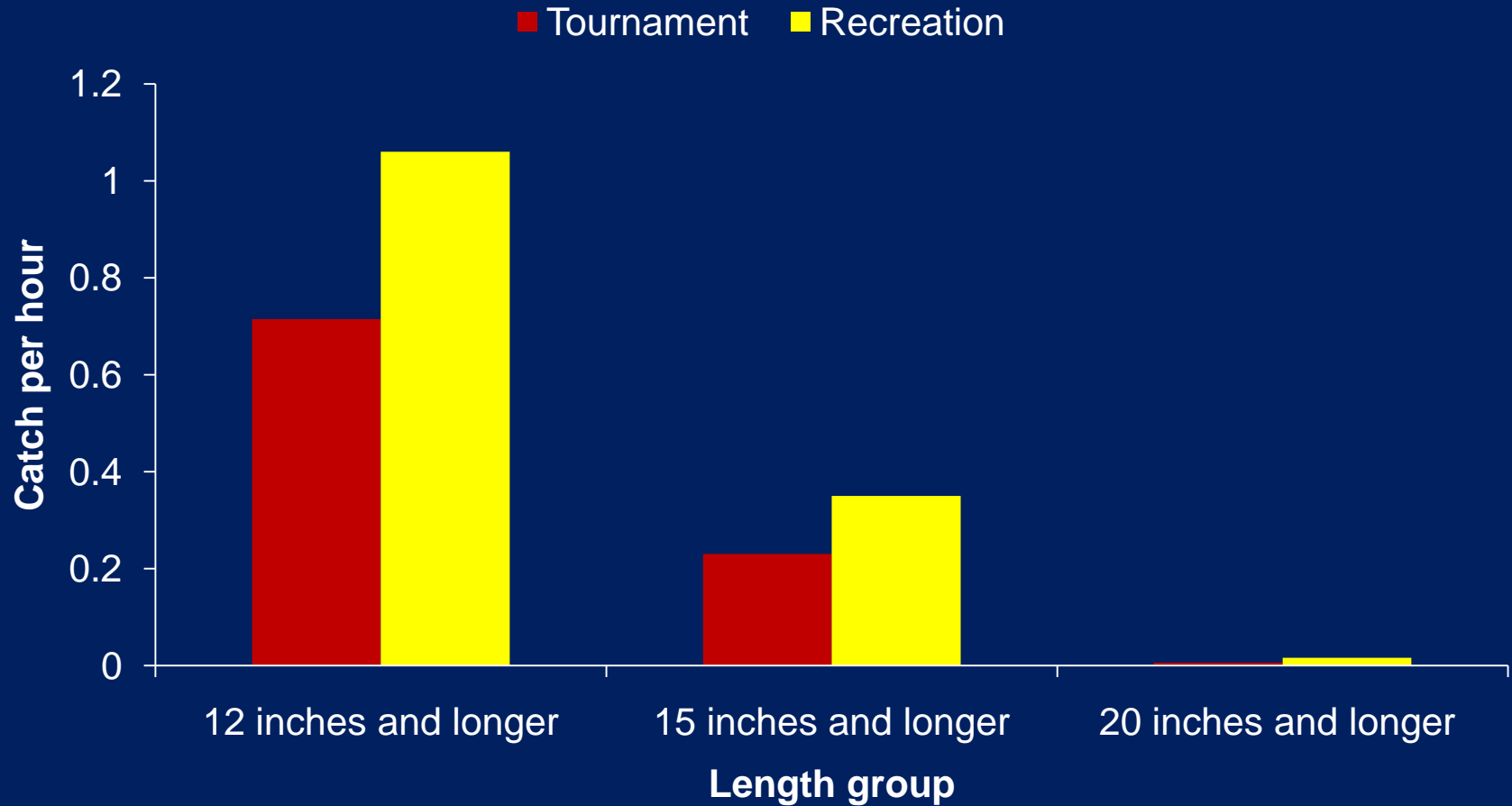
# Number of entries



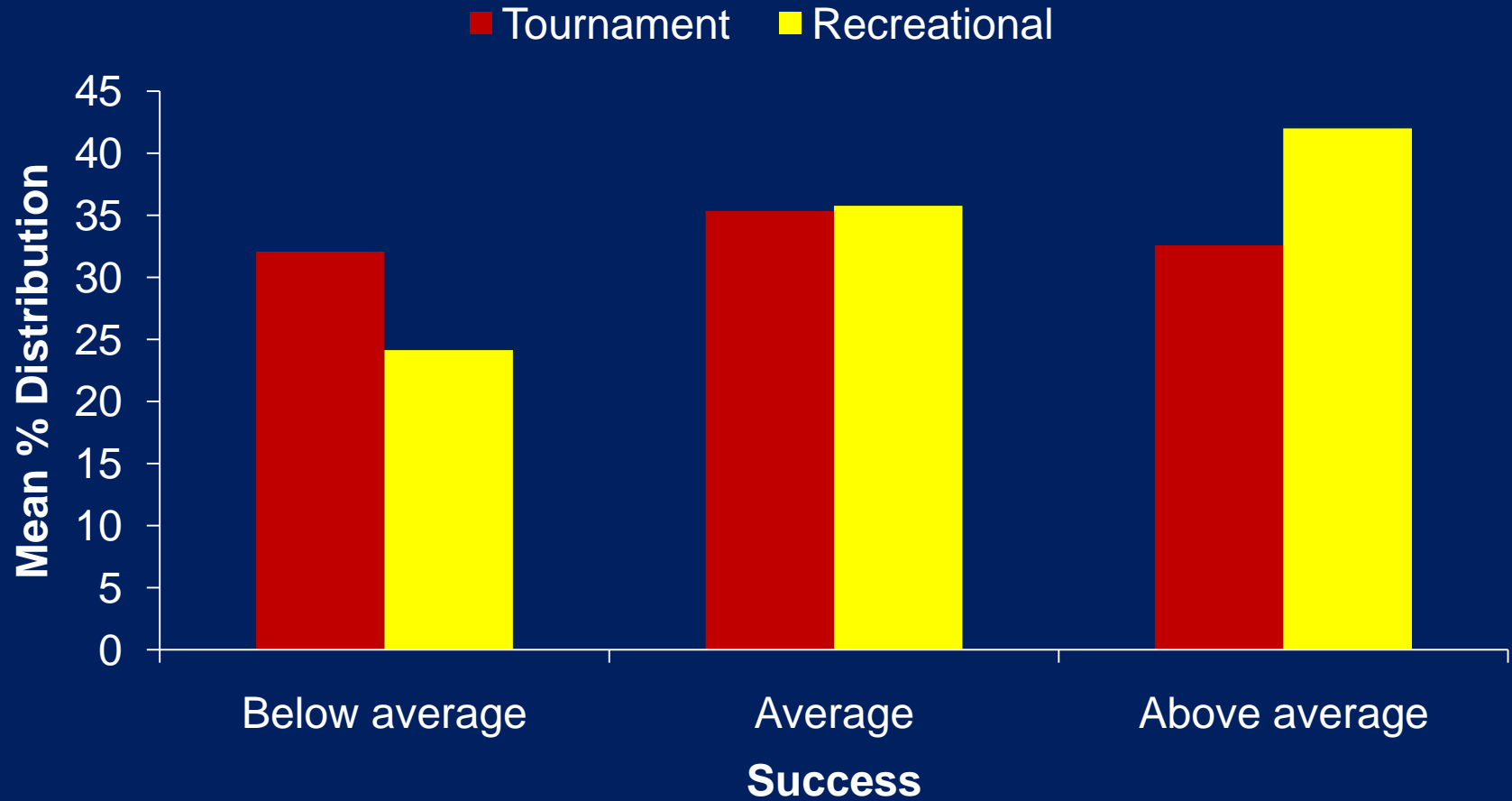
# Entries per angler



# Recreational vs. tournament catch per hour



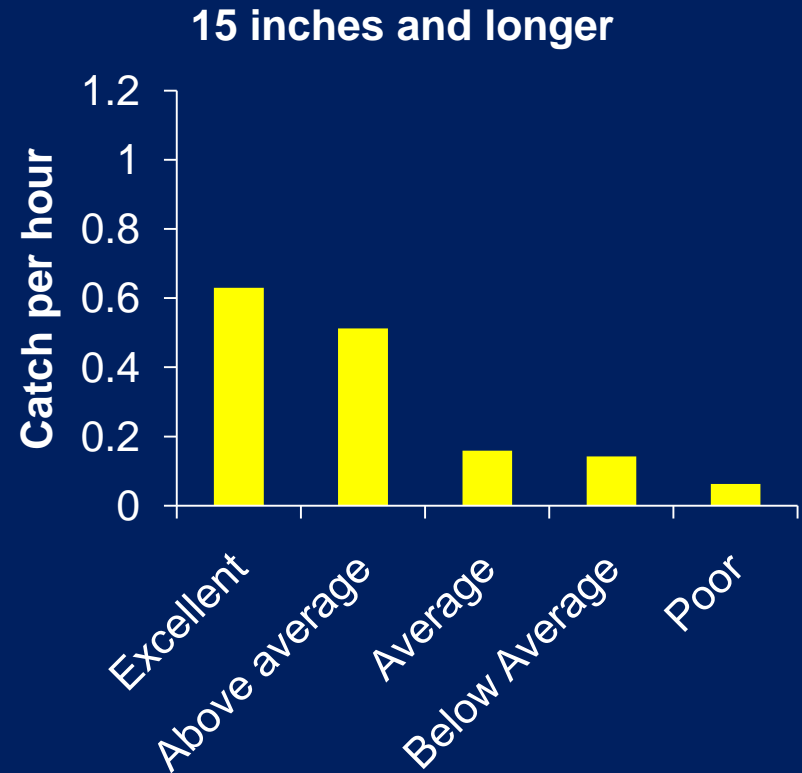
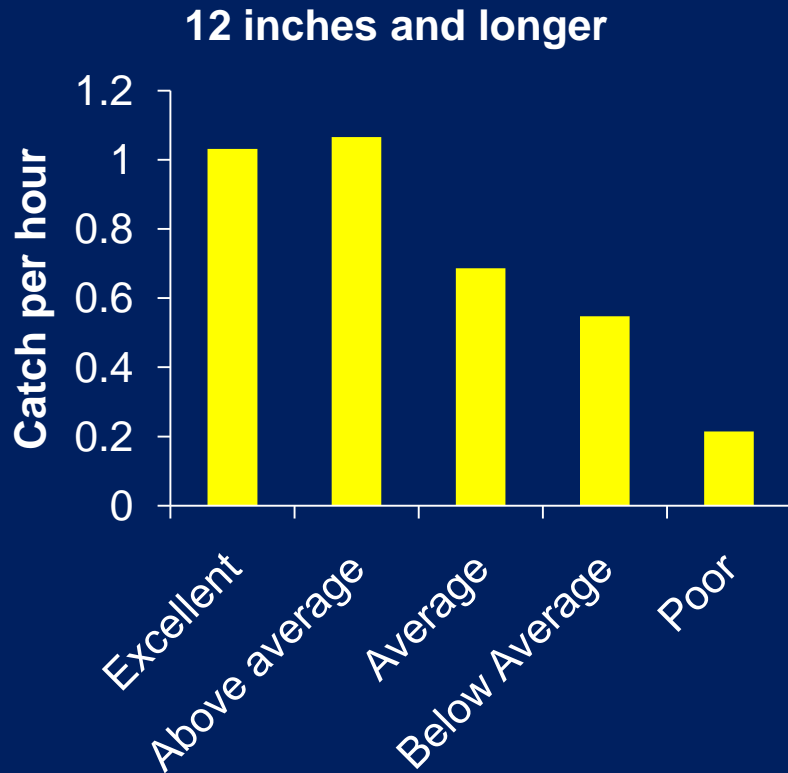
# Distribution of success





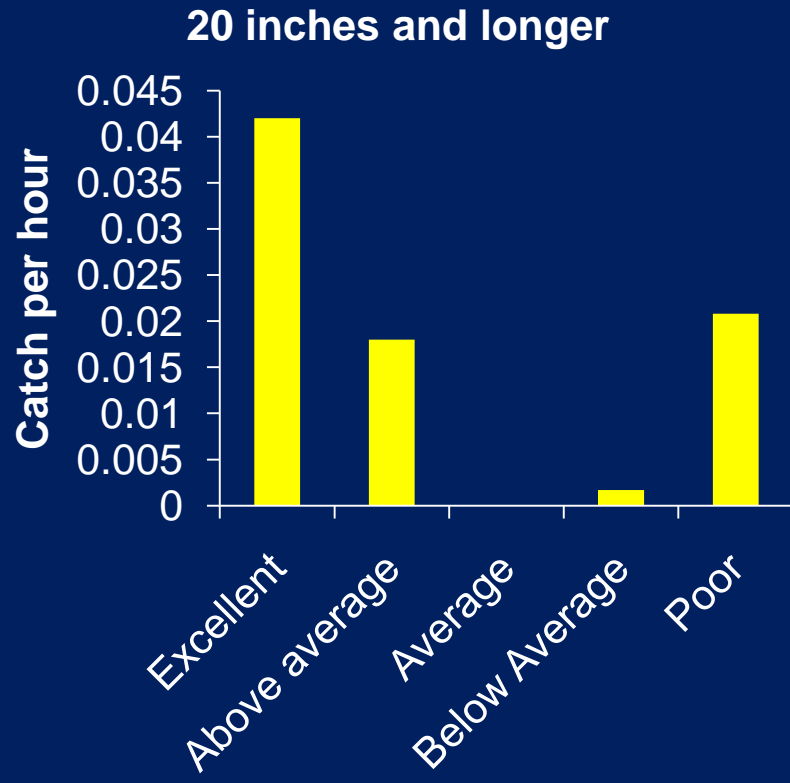
# Catch per hour and success

(12 tournament anglers)

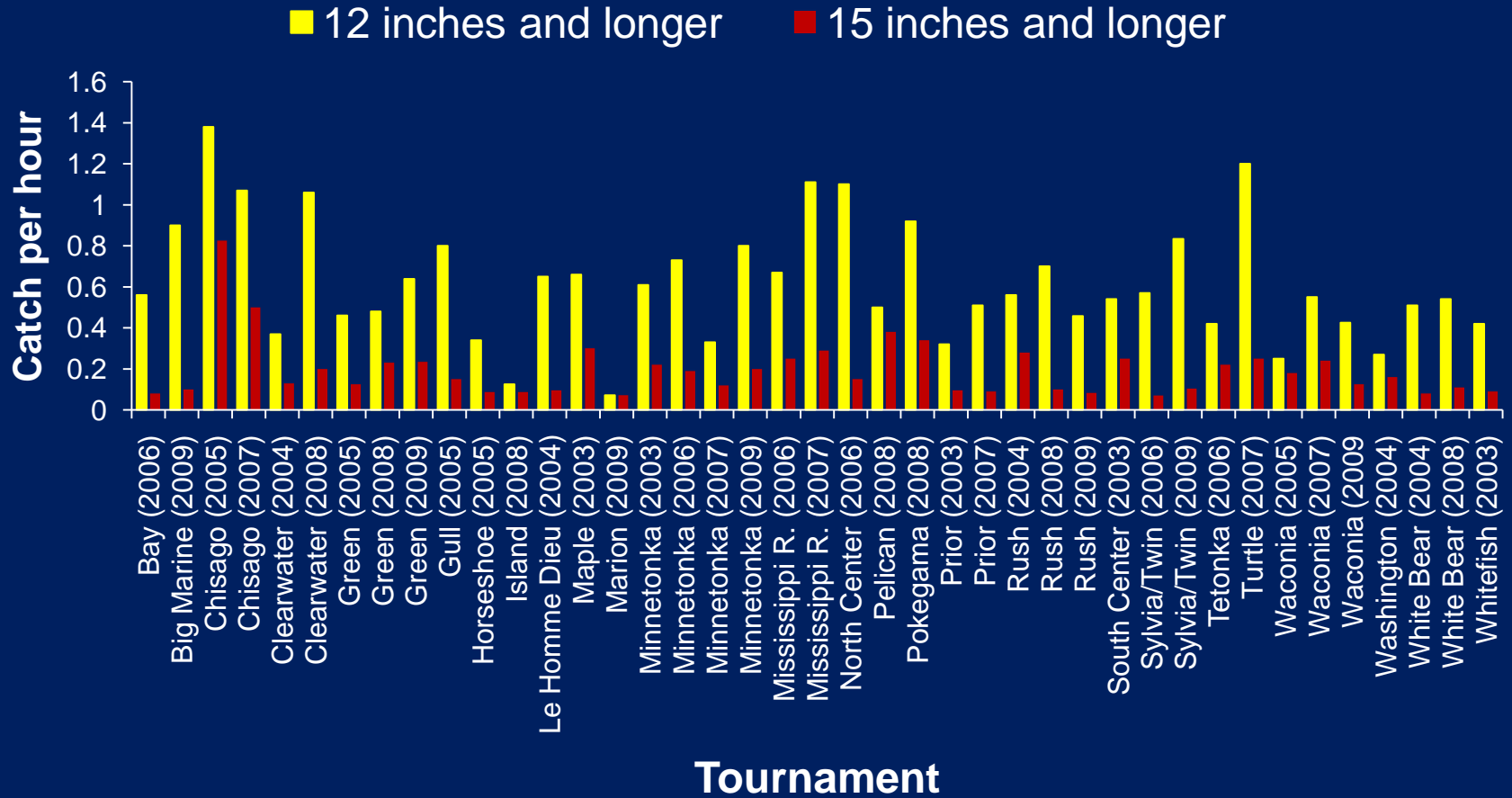


# Catch per hour and success

(12 tournament anglers)

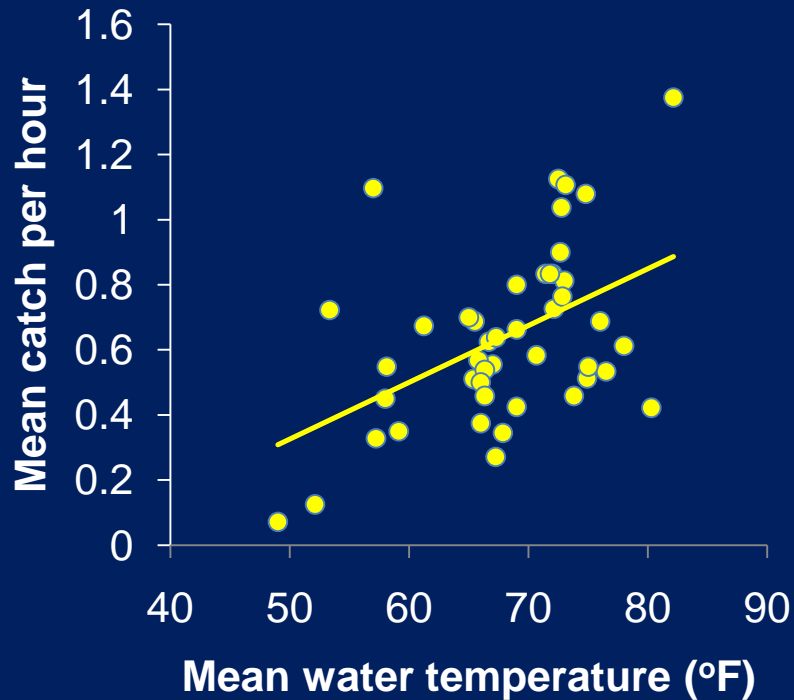


# Catch per hour by tournament

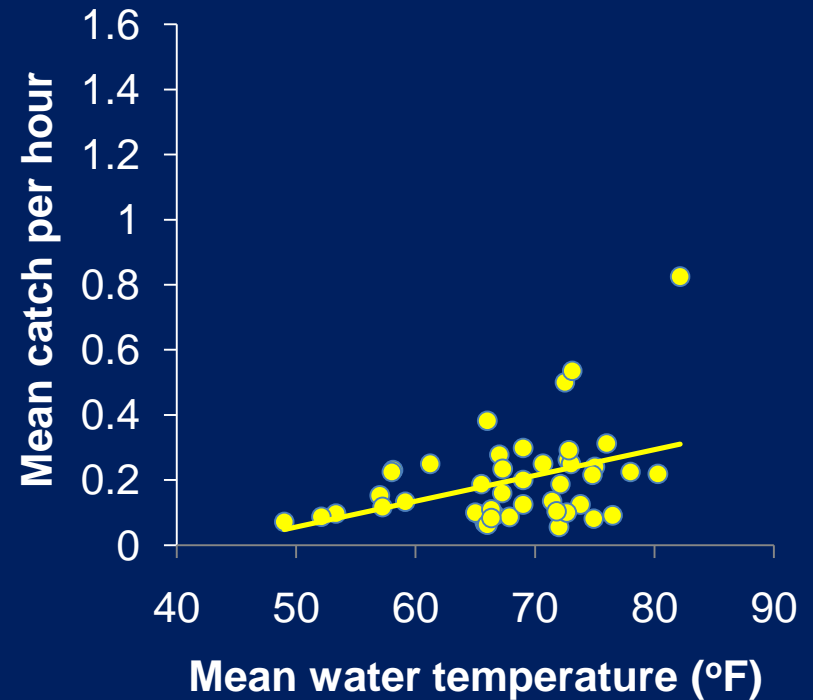


# Mean catch per hour and mean water temperature

## 12 inches and longer

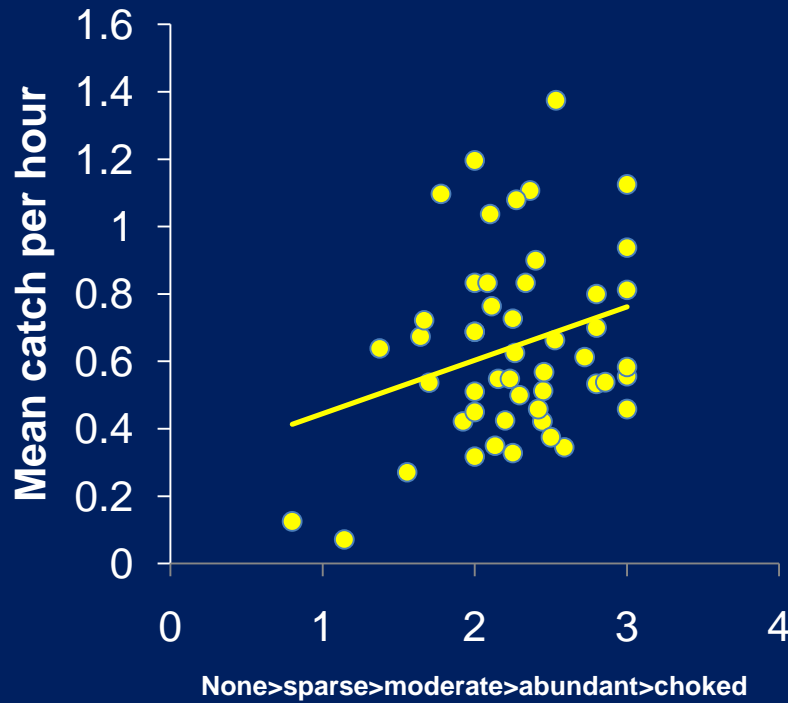


## 15 inches and longer

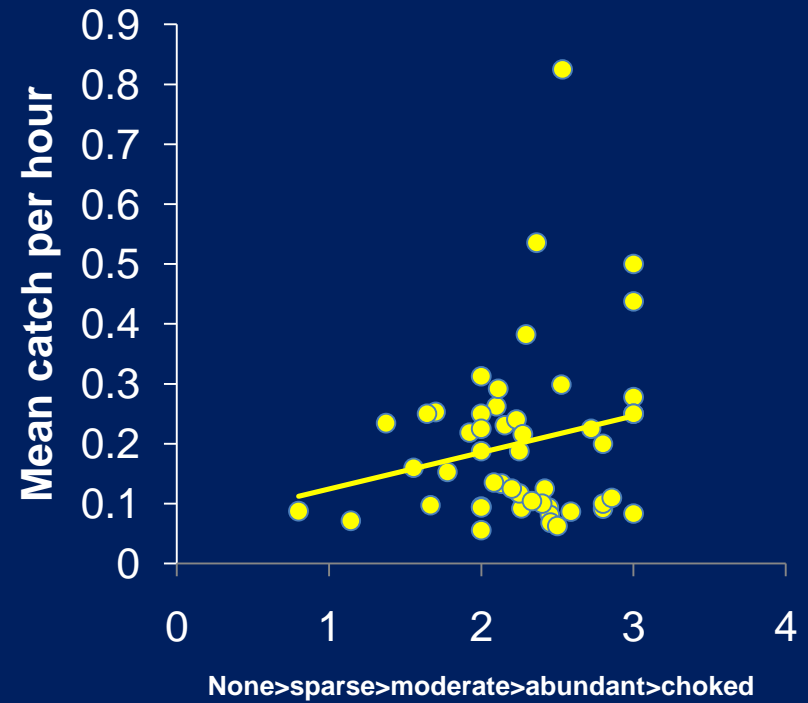


# Mean catch per hour and vegetation

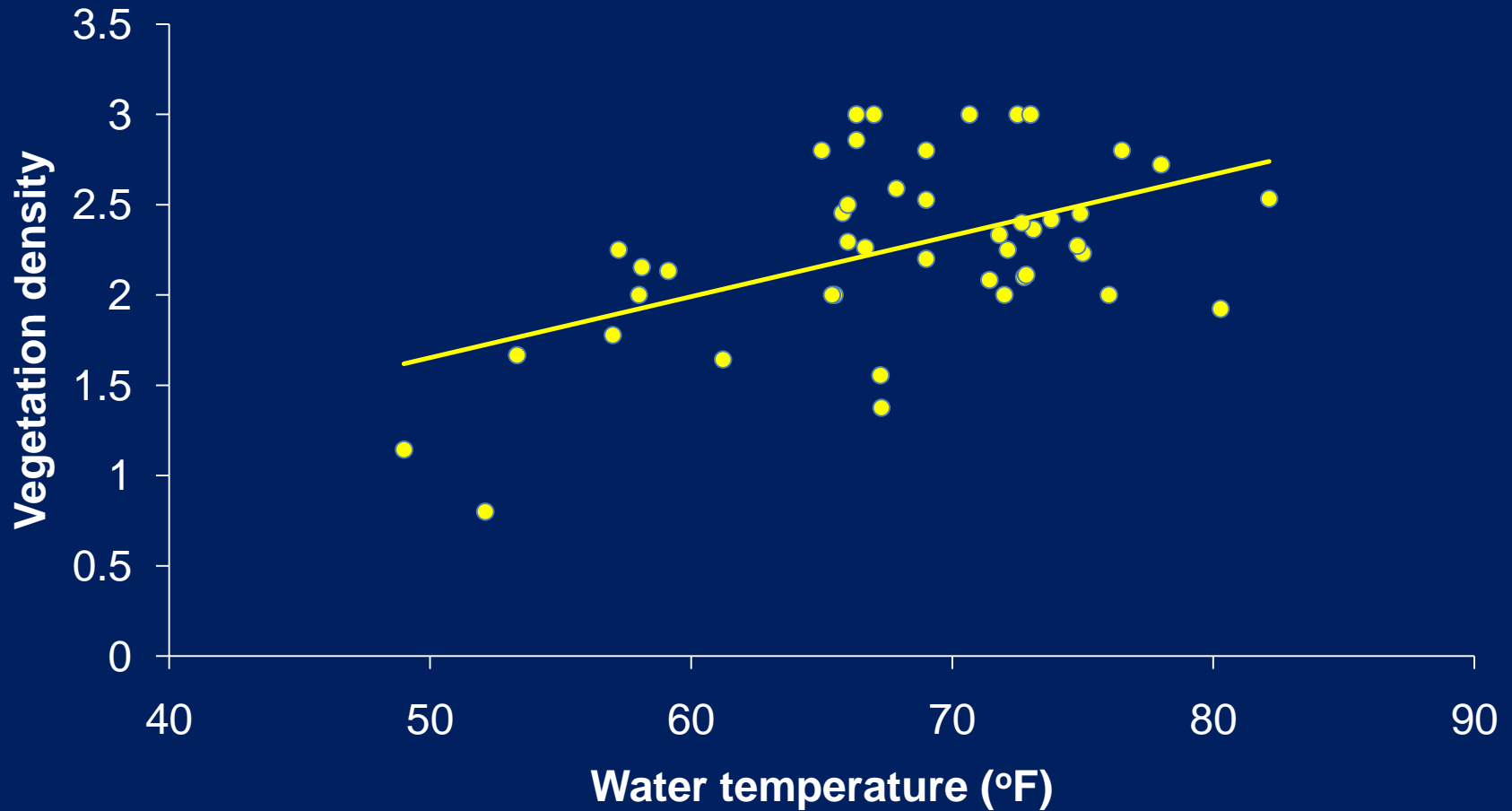
## 12 inches and longer



## 15 inches and longer

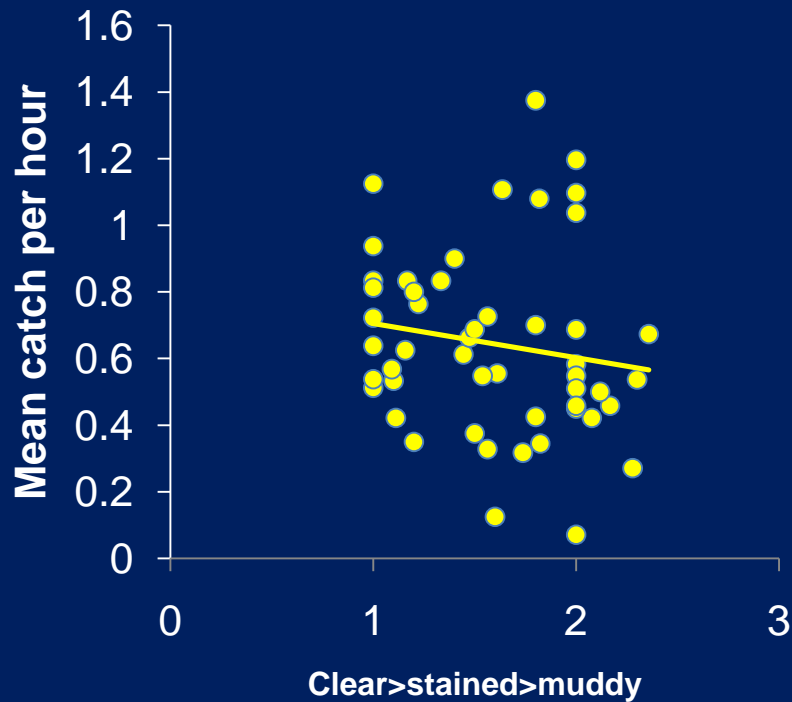


# Water temperature and vegetation



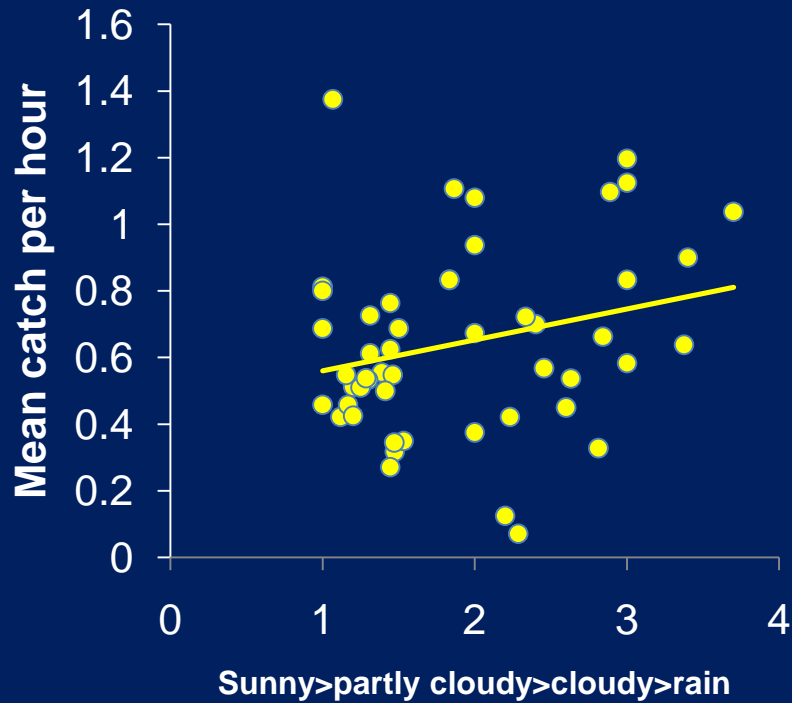
# Mean catch per hour and water clarity

12 inches and longer

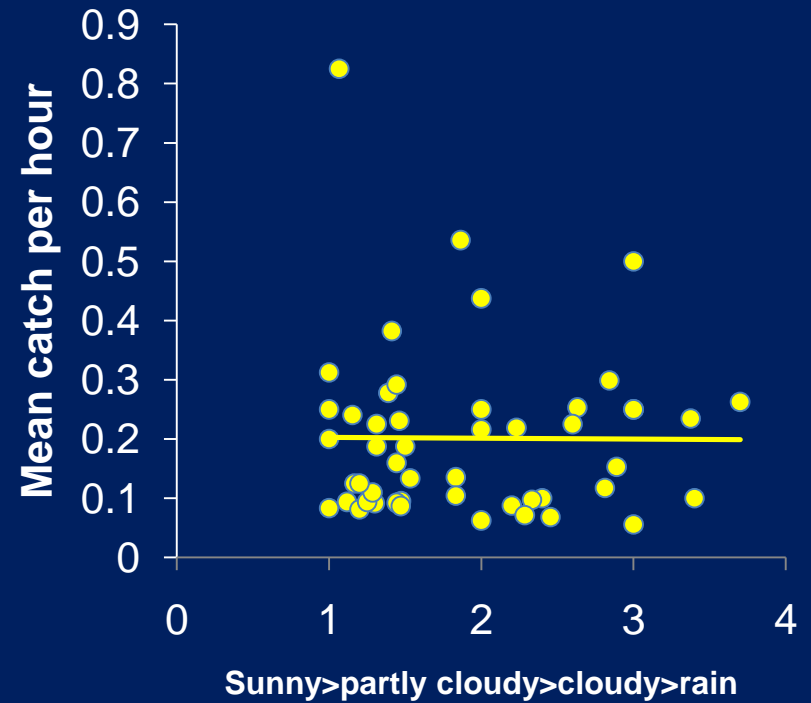


# Mean catch per hour and sky

## 12 inches and longer



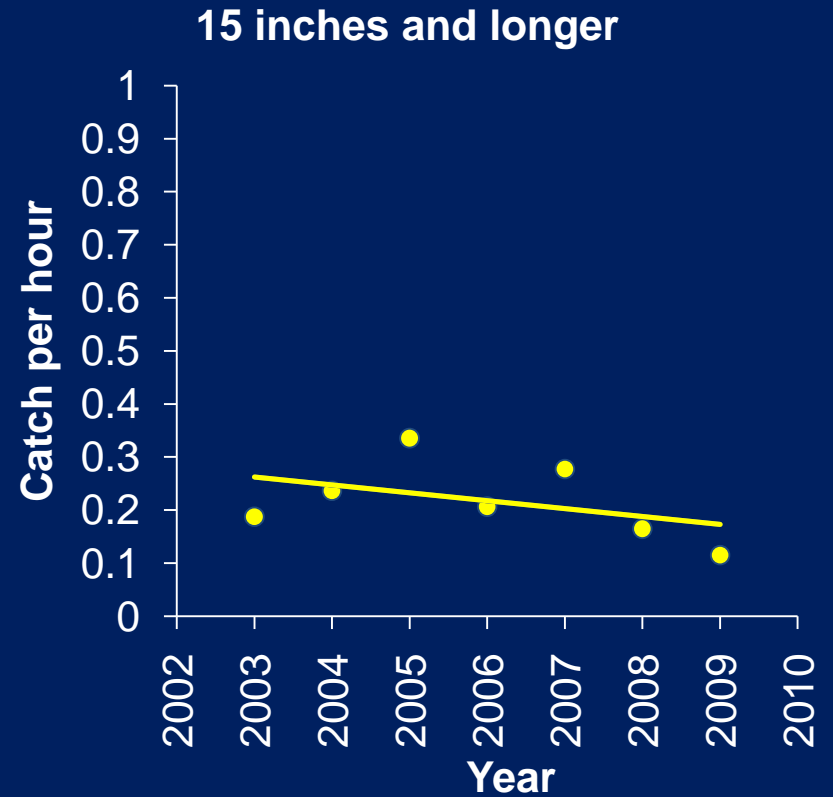
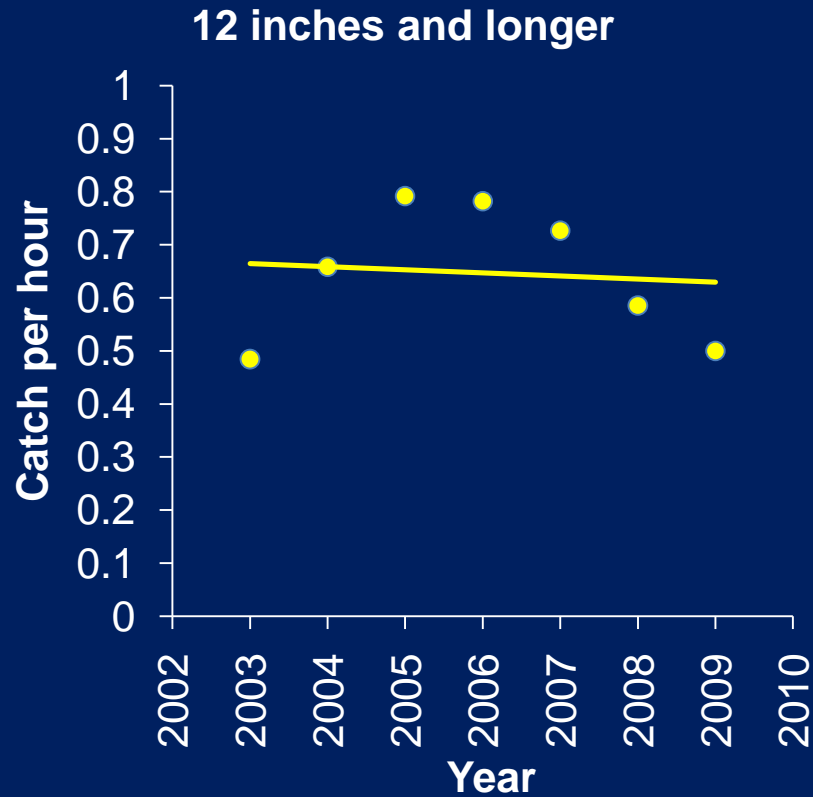
## 15 inches and longer





# Annual trends in catch rates

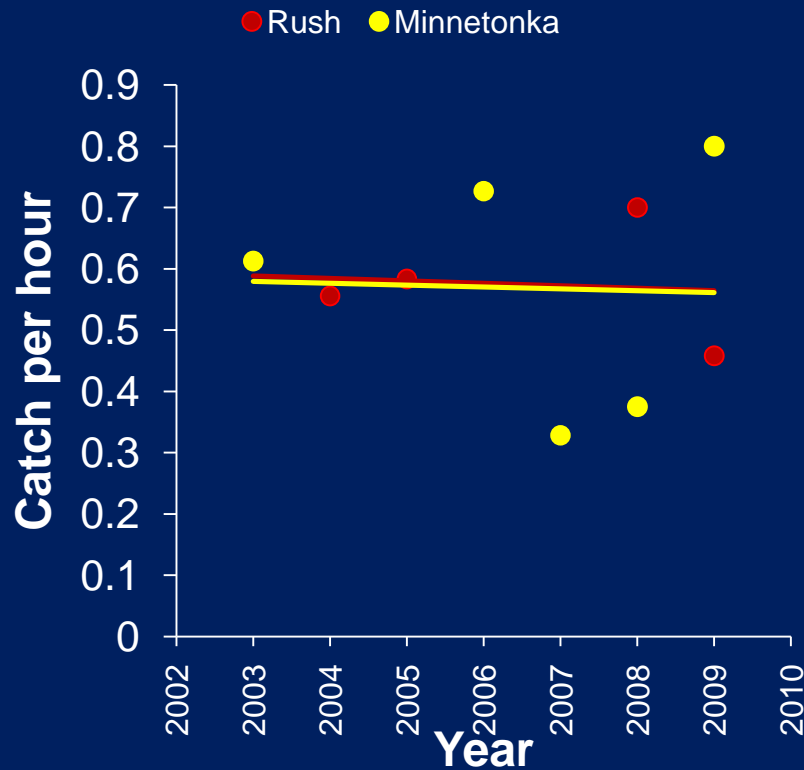
(Metro Area Tournaments)



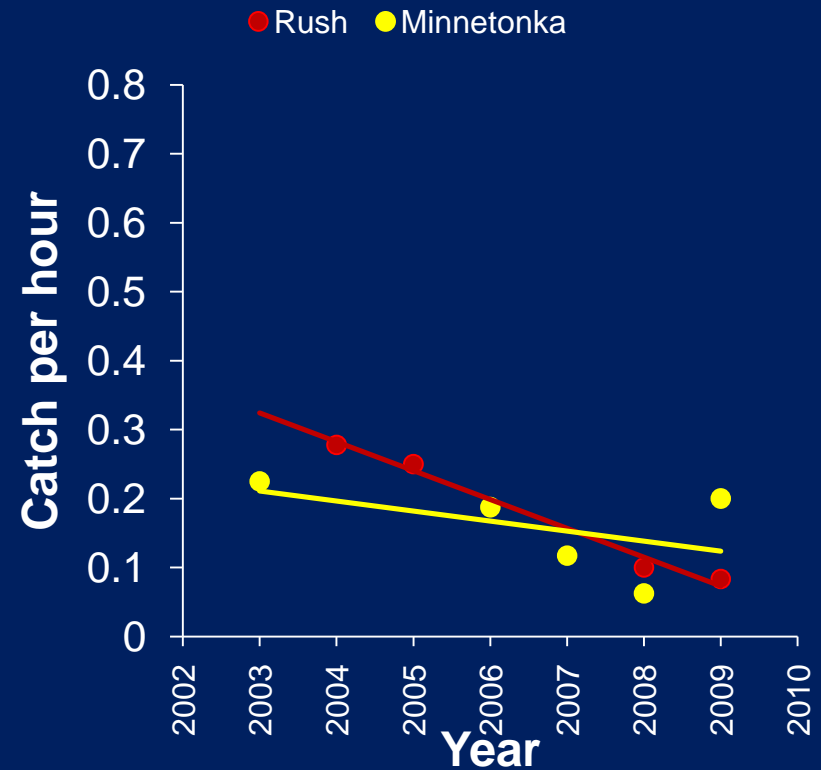
# Annual trends in catch rates by lake

(tournaments)

## 12 inches and longer



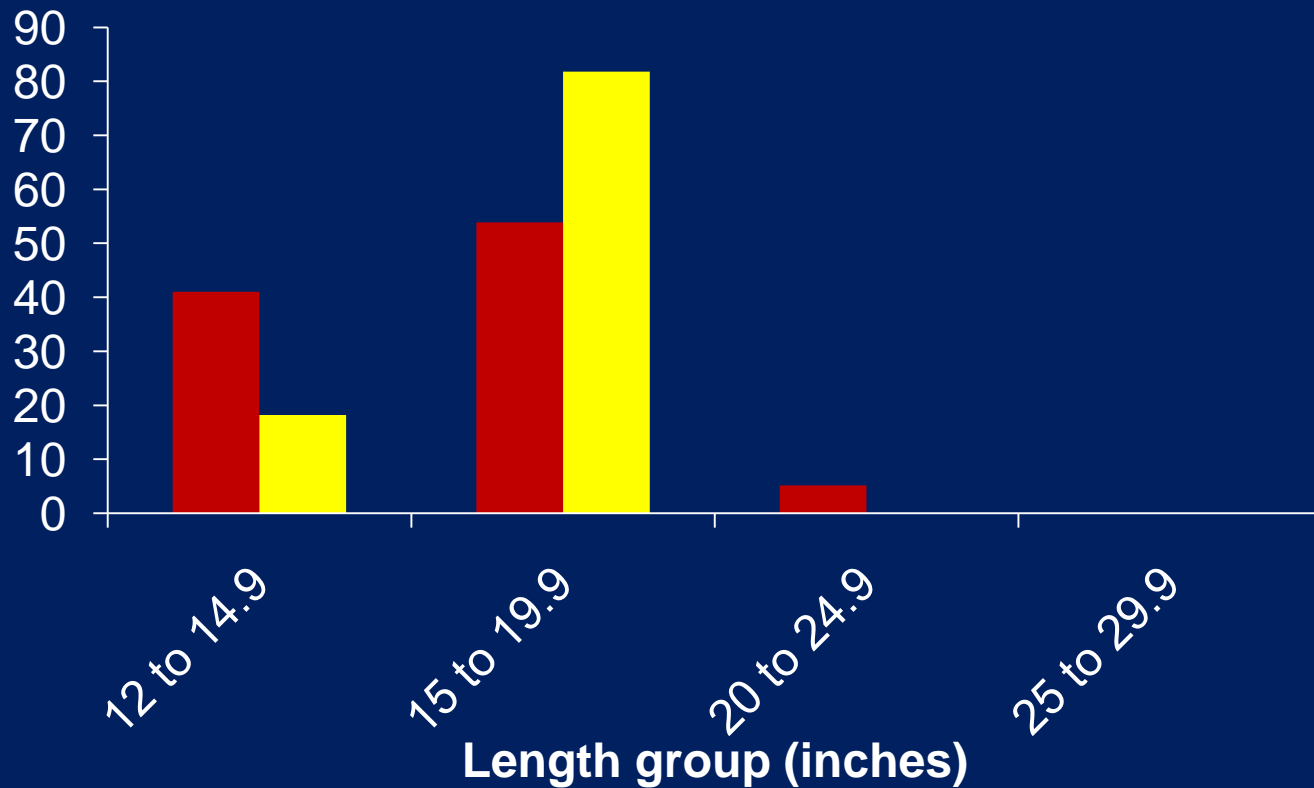
## 15 inches and longer



# Length distribution between angling and DNR electrofishing

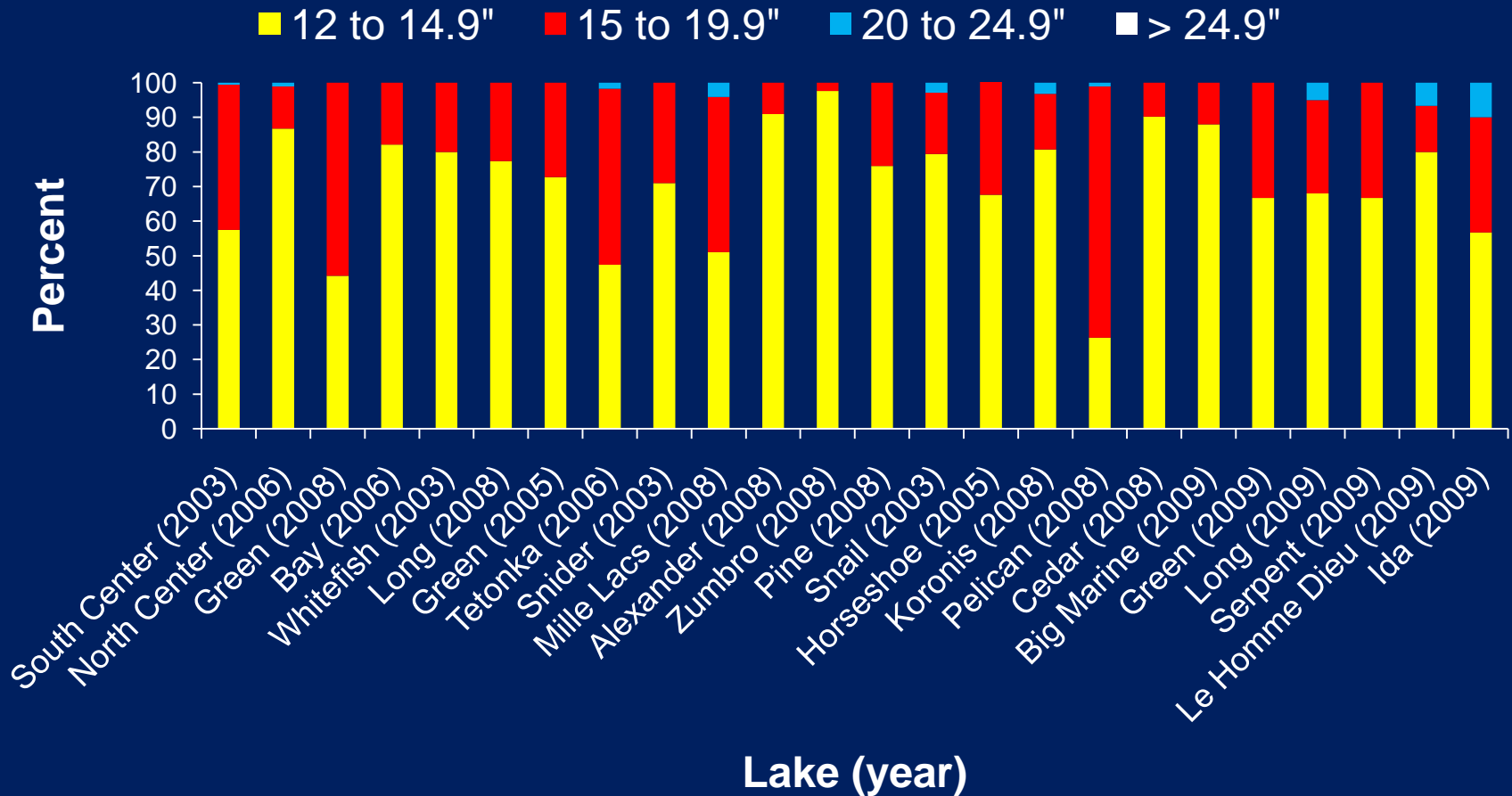
Washington (2004)

■ Angling   ■ Day electrofishing



# Angler-provided size structure data

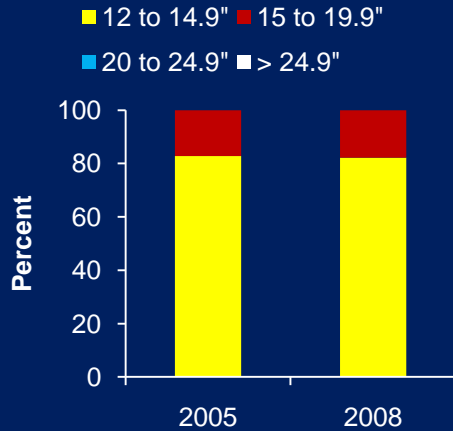
(Lake-year combinations not electrofished by DNR)



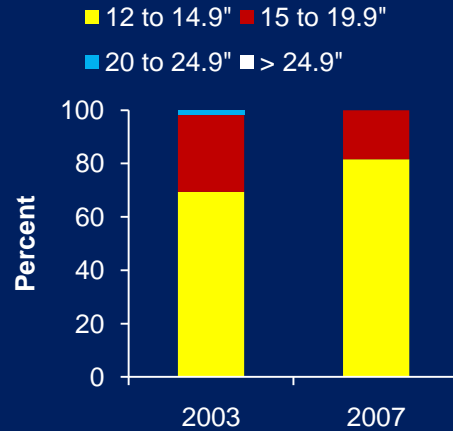
# Size structure comparisons

(lakes not electrofished by DNR; two different years; angler-provided data)

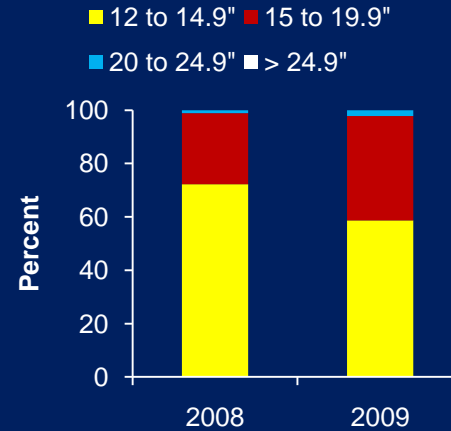
### Gull



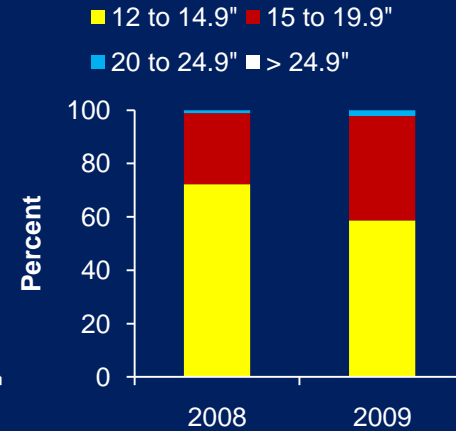
### Prior



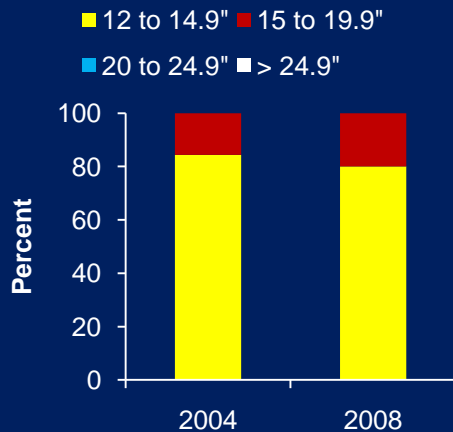
### Pokegama



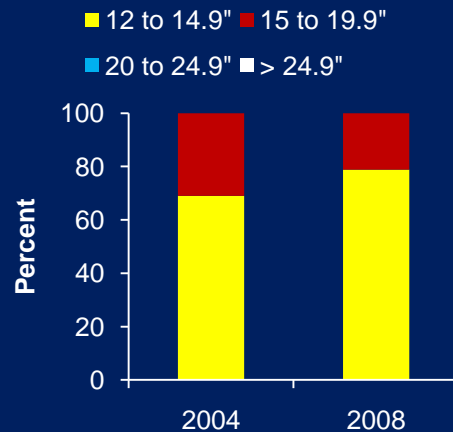
### Maple



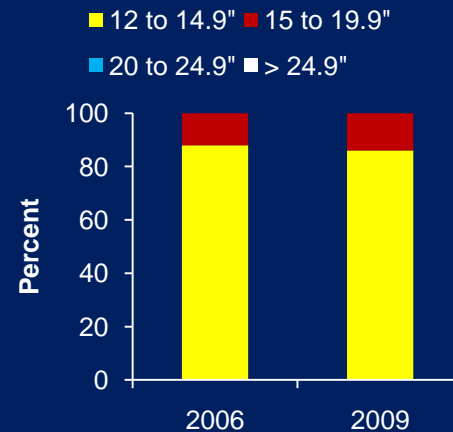
### White Bear



### Clearwater



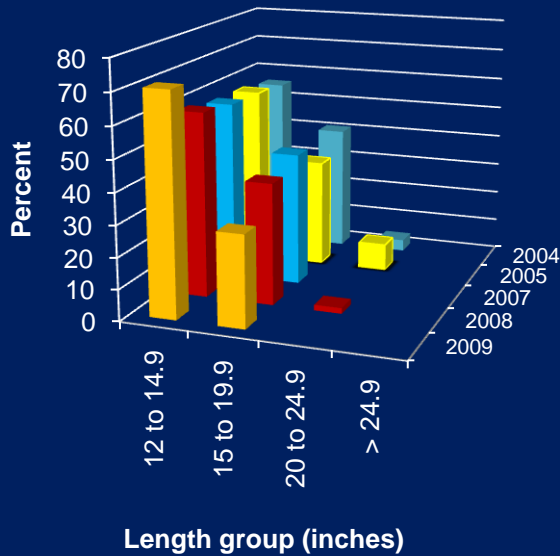
### Sylvia/Twin



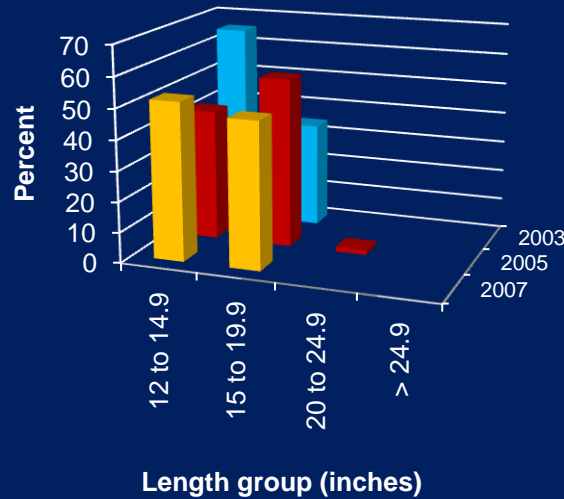
# Long term trends in size structure

(angler-provided data)

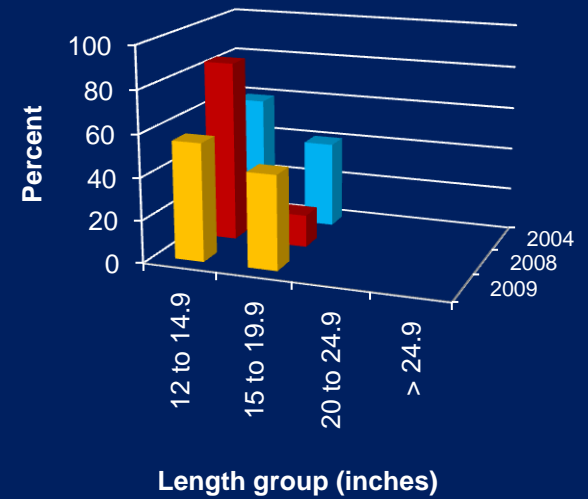
## Waconia



## Chisago

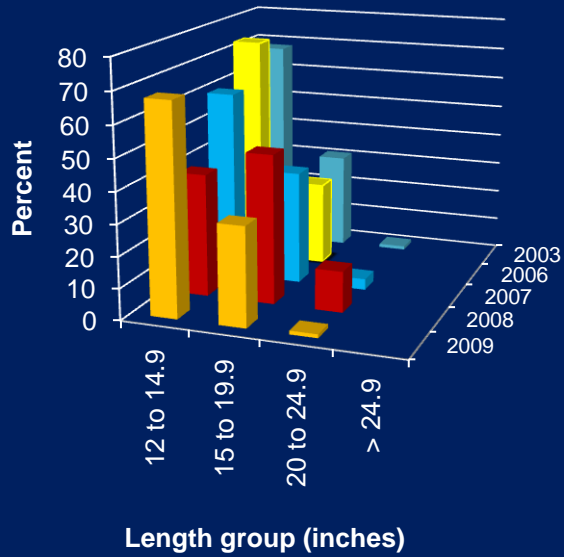


## Rush



# Long term trends in size structure (angler-provided data)

## Minnetonka



# Summary

- Declining angler participation?
- Tournament and recreation CPH differ
- Tournament CPH increases with increasing water temperature and increasing vegetation
- Recreational/tournament anglers provide useful length distribution data
- Beginning of long-term data sets on catch per hour and length distributions