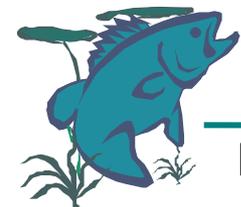


# Improving bluegill and crappie size structure on selected lakes across Wisconsin



**Panfish Management Team**

**Wisconsin Dept. of Natural Resources**

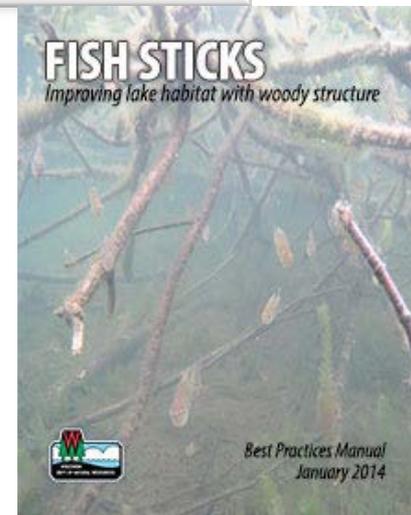


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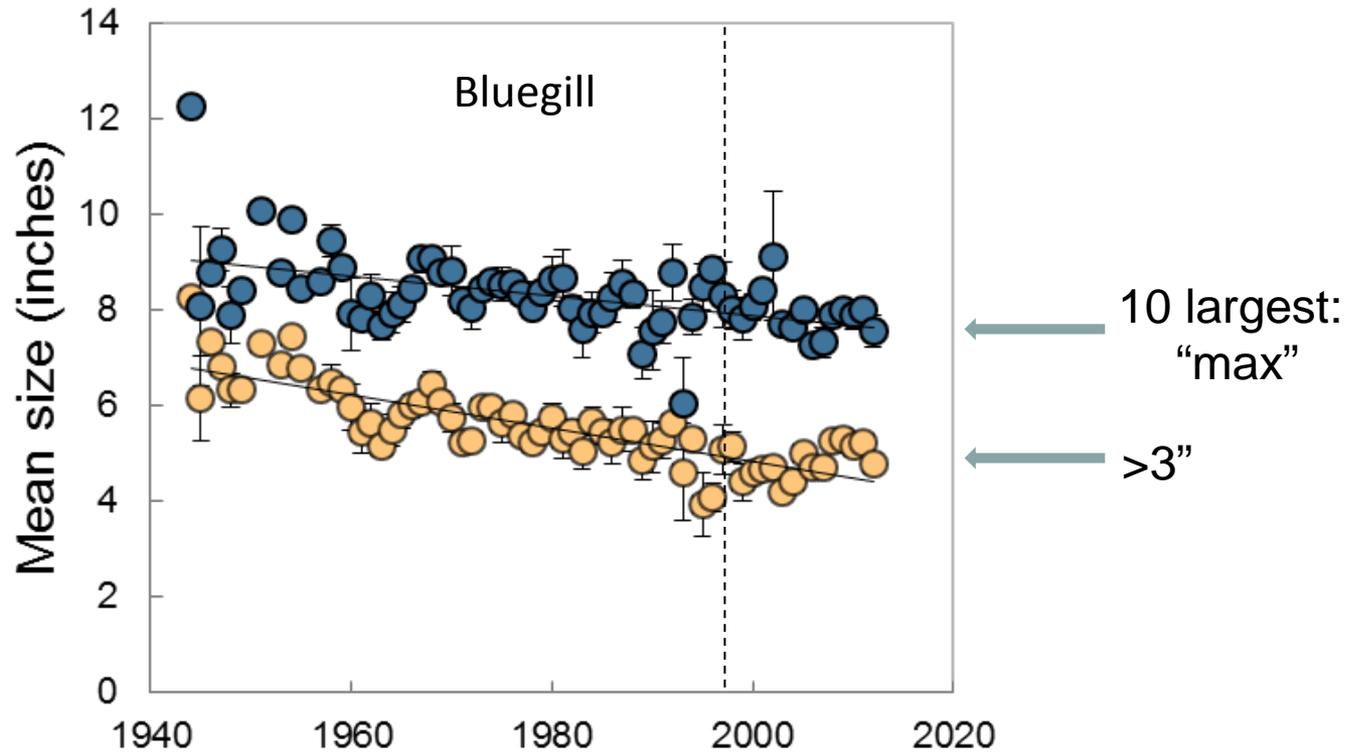


# Planning for panfish: public input

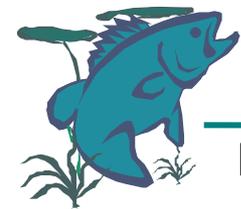
- Voluntary angler survey, 30 public meetings, focus group, 2014 CC spring hearing questions
- **Panfish Management Plan**
  - Habitat and Predators: long-term
  - Short-term: Regulations
    - “NO” to statewide change but interest in addressing underachieving lakes



# What we know: trends in decreasing size



Cause of poor size structure: "stunting" vs. harvest  
"stunting" = slow growth (less common than you think)  
harvest = growth OK

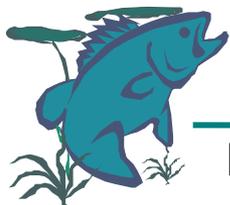
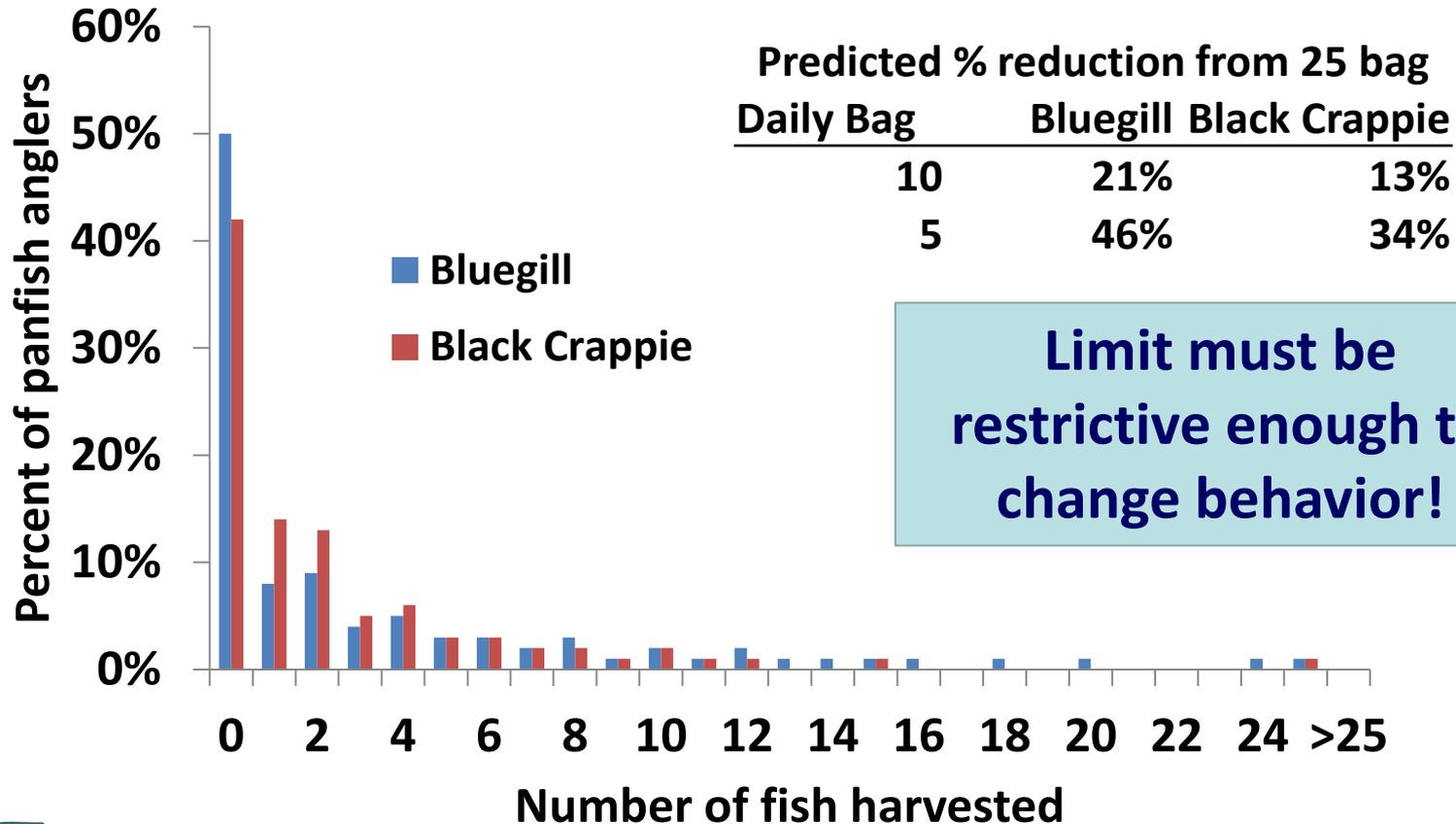


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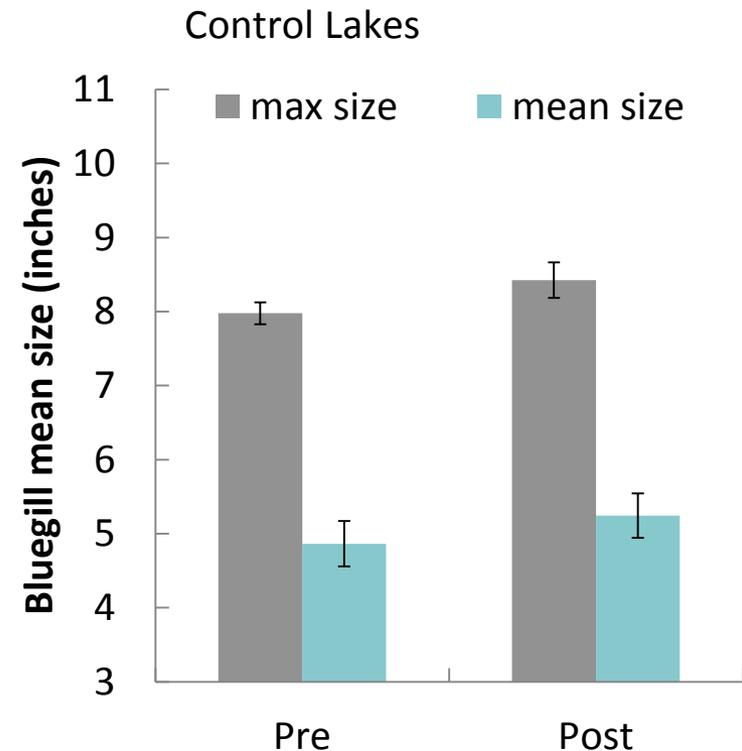
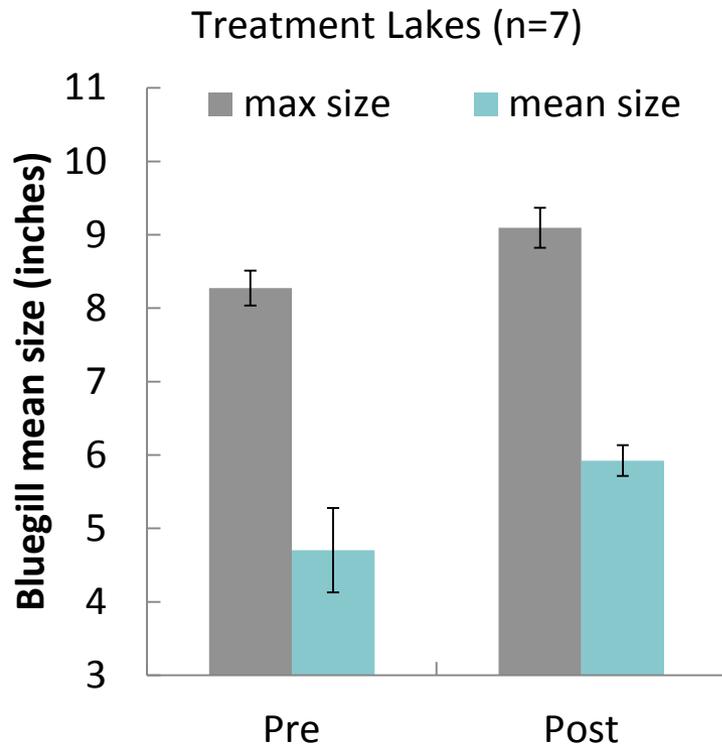
# Can restrictive regulations work?

Modeling based on all creels conducted over last 20+ years



# Do restrictive regulations work?

## Evaluation of current aggregate 10 bag lakes for bluegill (*A. Rypel*)



- Gain in mean size = 0.8 inches and gains in max size was = 0.5 inches
- 28% increase in weight of fillet per individual



# Addressing underachieving lakes

- Unclear which regulation most effective and socially acceptable
  - Biological and social tradeoffs

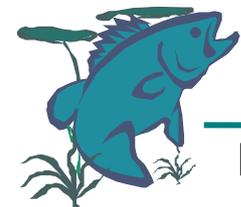
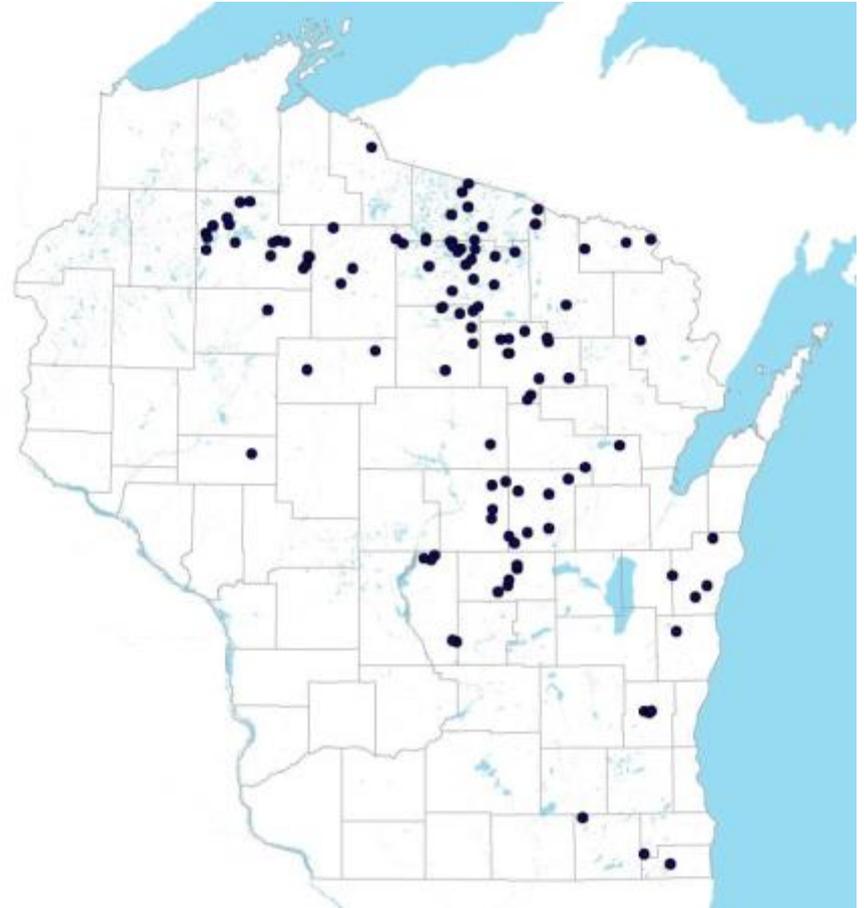
GOAL: Increase average size of bluegill and crappie and identify which regulation is most effective

APPROACH: Apply best three regulations in a varied but structure manner and evaluate



# The candidate lakes

- Statewide in coverage but not extent
  - 110 selected lakes
- Initial evaluation completed in 6 years
  - Results used to update plan
- List available on back of factsheet

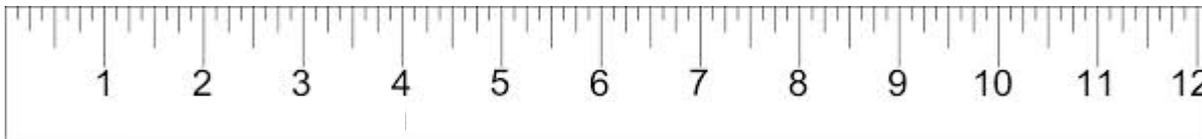


# Regulations

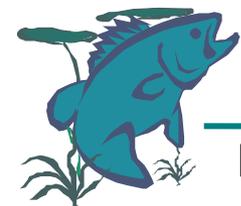
- **25/10:** A total of 25 panfish but no more than 10 of any one species
- **15/5 bag:** A total of 15 panfish but no more than 5 of any one species
- **25/5 over 7":** A total of 25 panfish but no more than 5 of the sunfish\* may be over 7"



\*Sunfish =  
bluegill and  
pumpkinseed



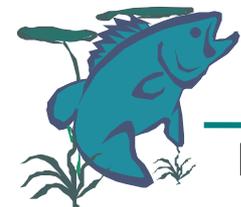
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# Less fish in the creel = same/more fish in the pan?

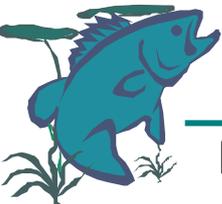
- Expected increases in pounds of fish taken home should offset reduced number of fish allowed

1 pound of bluegill fillets	
Size (inches)	Number of Fish
6	25
7	15
8	6
9	4



# Proposed Timeline

- 3 Public meetings in late August & early Sept
- Adjustments made throughout Sept.
- Final list submitted for internal approval in Oct.
- NRB approval in Dec.
- Winter 2014-15: Panfish Management Plan finalized
- 2015 Spring Hearings
- 2016 Implementation





Tell us what you think!  
Take a quick survey and  
find more information on  
our panfish plan website!  
<http://dnr.wi.gov/topic/Fishing/Outreach/PanfishPlan.html>

Questions/Comments:  
Local Fisheries Biologist or  
Jon Hansen  
[jonathan.hansen@wisconsin.gov](mailto:jonathan.hansen@wisconsin.gov);  
608-266-6883

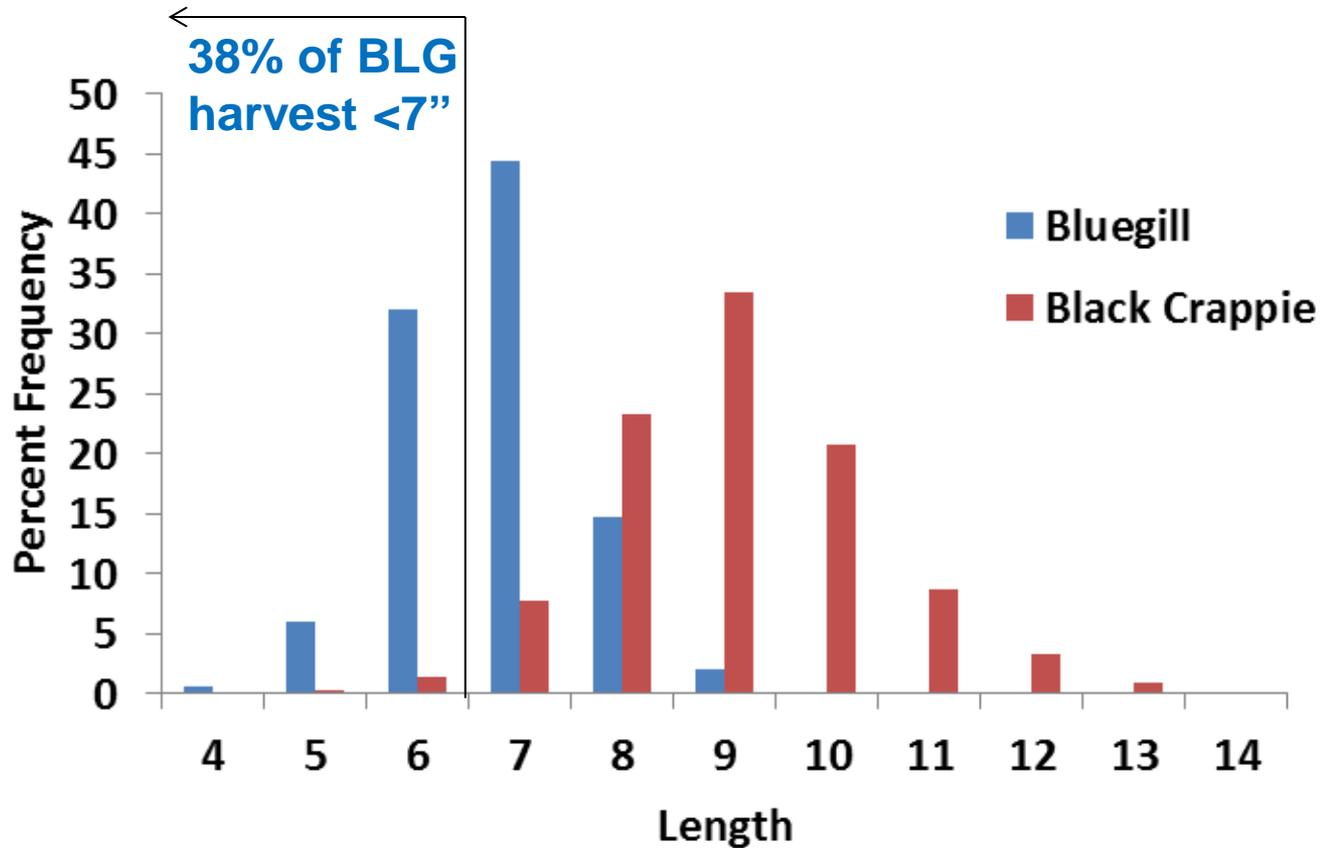


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# FAQ: What size fish do people harvest?

## All creel data available



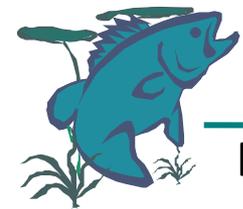
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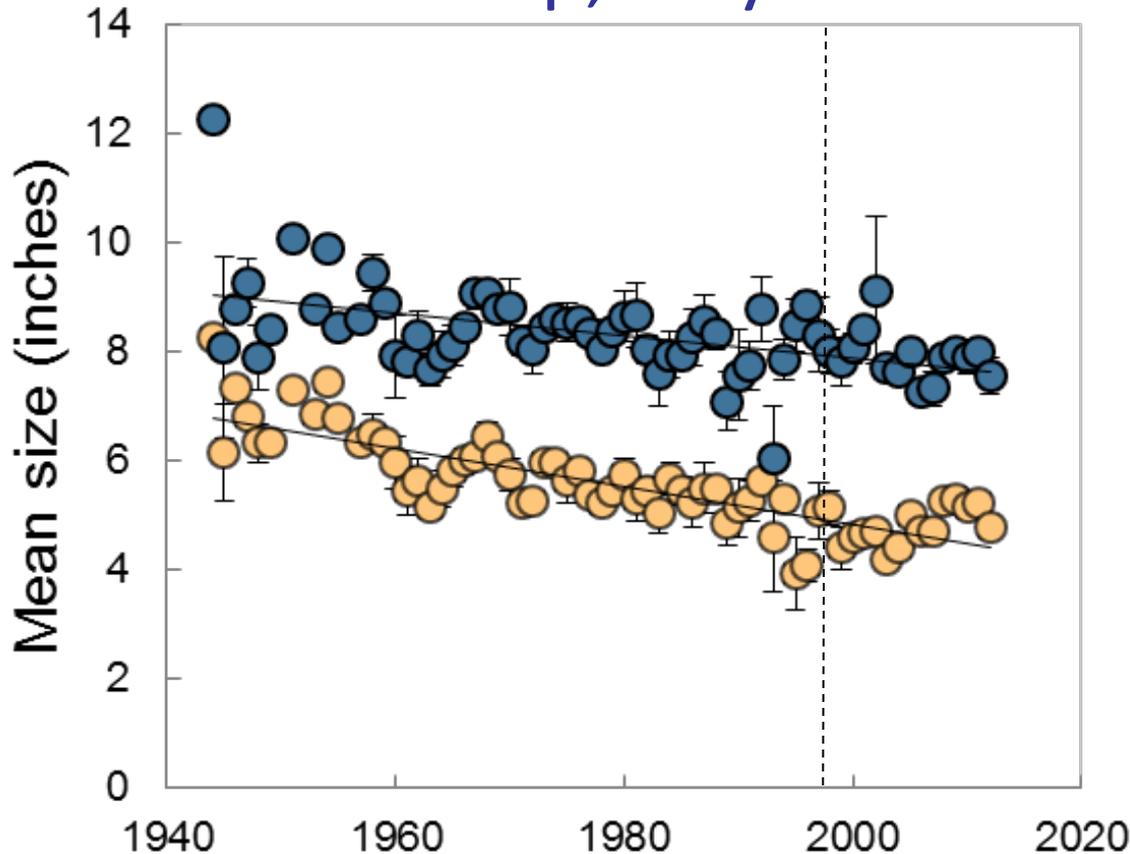
# FAQ: How old are bluegills?

Waupaca and Shawano area otolith data (A. Niebur)

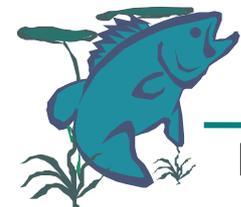
- 6" fish are 4.4 years old
- 7" fish are 5.3 years old
- 8" fish are 6.8 years old
- >9" very few but up to 11



# FAQ: If going from a 50 bag to a 25 bag in 1998 didn't help, why would a 10 bag help?

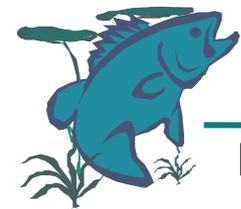


Since 1998 there appears to have been a leveling off of the decline in mean size which suggests some effect of the bag limit reduction. Moreover, studies from WI (mentioned before) and MN show improvements from a 10 bag in limited field evaluations.



# FAQ: What about other regulations?

- Minimum length limits
  - Highly variable responses based on natural mortality and growth, most likely to have issues with hooking mortality
- Seasonal closures during the spawn
  - Full closures are challenging because of the massive loss in harvest opportunity—the spawning season is the only time some anglers can/will harvest, particularly so for families; timing of spawning is highly variable; however, majority of large fish are harvested during this time period and this warrants further exploration
- Spawning area refuges/closure
  - Logistically challenging to identify and effectively mark areas; spawning colonies are often scattered throughout lake and may change from year to year



# FAQ: But the anglers already said no to change!

## CC 2014 spring hearing questions involved statewide questions but also specific waters questions—below are the specific waters questions

Panfish species have distinctly different life histories, behaviors, and growth patterns. Having separate angling bag limits for bluegill, crappie, and perch may help improve management of these species, but would add a level of complexity to the regulations.

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17. Would you be supportive of having separate angling bag limits for bluegill, crappie and perch if it can be shown to improve management? 17. YES \_\_\_ NO \_\_\_

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Certain waters across the state have the capability to produce truly large panfish. Special angling regulations would maximize the potential for these waters to produce very high quality size panfish. Because of the variability of panfish populations, it is unclear which regulations will work best in which waters. The department is considering differentially applying regulations on this subset of waters in a structured manner to determine the most effective regulation. Over time the department will evaluate these regulations and continually move towards using the most effective ones.

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18. Would you support high minimum length limits on panfish in specific waters? 18. YES \_\_\_ NO \_\_\_

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19. Would you support greatly reduced bag limits for panfish, in specific waters, in order to determine the effects on panfish populations? 19. YES \_\_\_ NO \_\_\_

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20. Would you support restricting harvest of game fish in specific waters, to increase populations to levels that would control panfish abundance through predation and maximize panfish growth? 20. YES \_\_\_ NO \_\_\_

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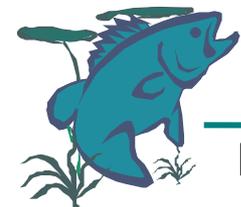
21. Would you support habitat improvements or habitat protection, in specific waters, in order to determine the effects on panfish populations? 21. YES \_\_\_ NO \_\_\_

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# FAQ (continued from previous) -- Specific waters results: CC 2014 spring hearing results

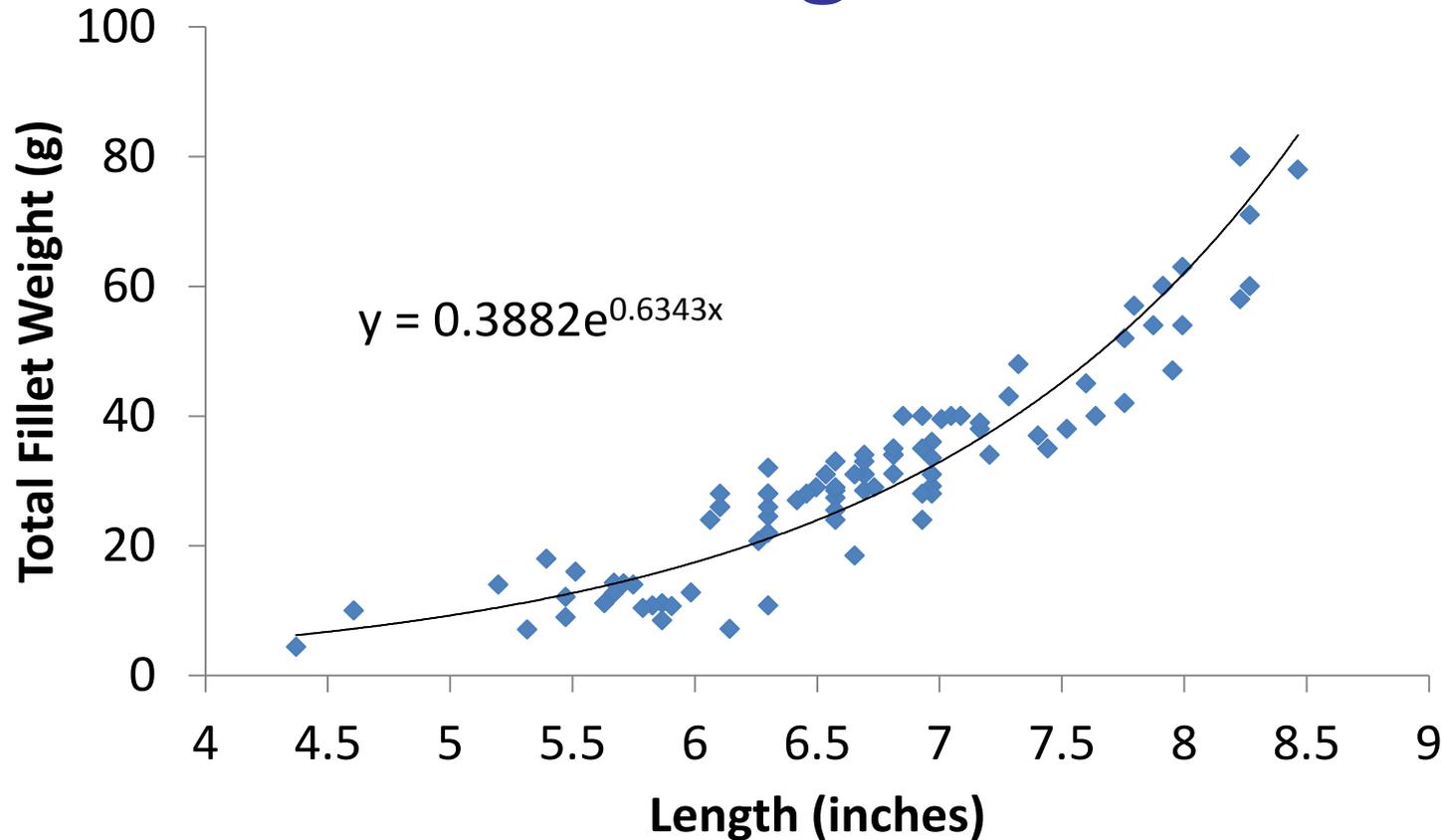
Question	Votes Yes	Votes No	Majority	Counties Approving	Counties Rejecting
17. Separate angling bag limits for bluegill, crappie, and perch	3484	2162	Yes	60	12
18. High minimum length limits on panfish in specific waters	2639	2893	No	24	47
19. Reduce bag limits for panfish to determine effects on populations	3169	2396	Yes	54	18
20. Restrict harvest of game fish to control panfish abundance through predation	3430	2085	Yes	66	6
21. Habitat improvements or habitat protection to determine the effects on panfish	4937	631	Yes	72	0



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# FAQ: Fillet weight versus length: bluegill

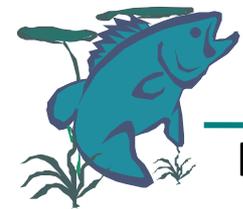


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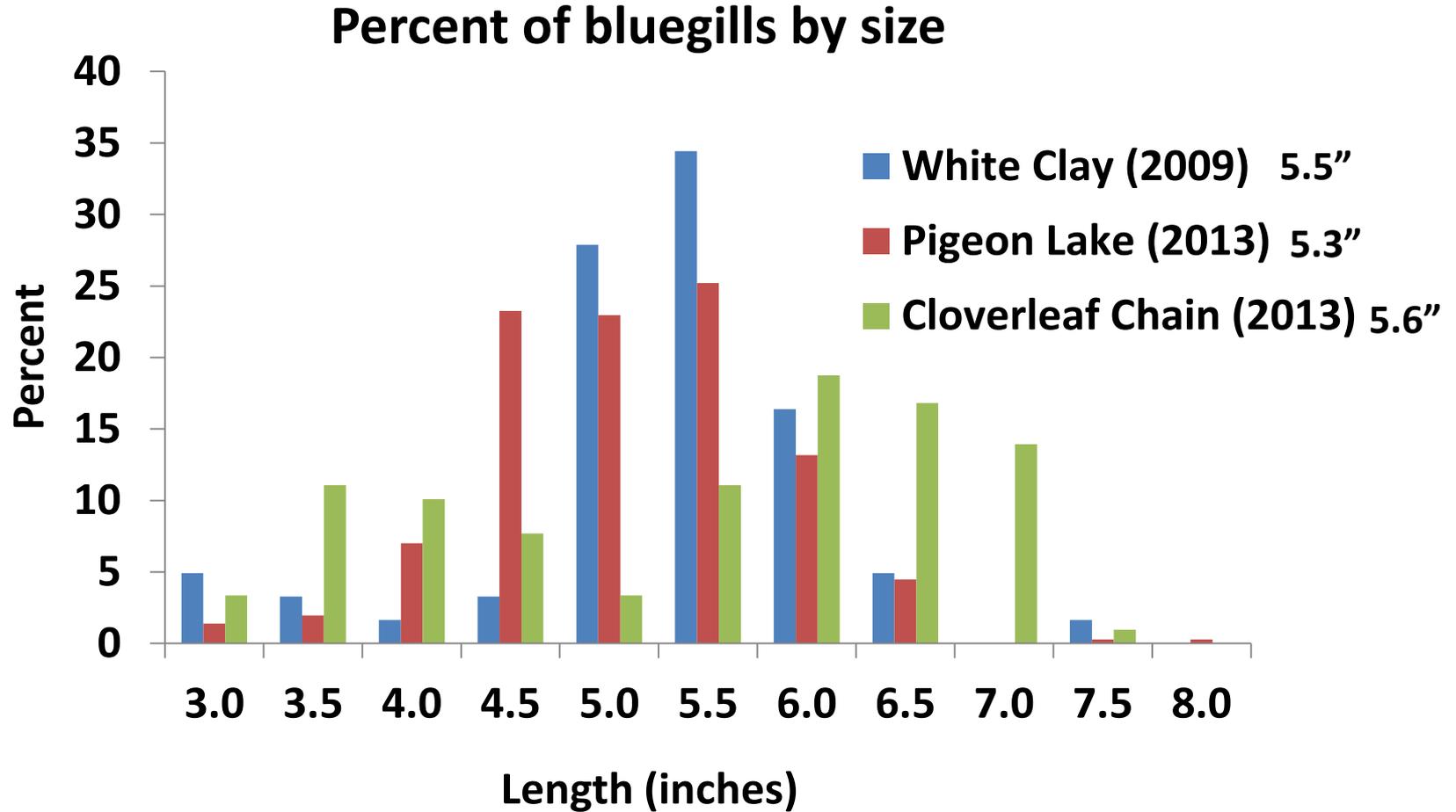


# FAQ: What are the neighboring states panfish regulations?

- **Minnesota**
  - Crappies 10 (individual waters 5 bag, 10" MLL)
  - Sunfish 20 (individual waters 10 bag, 5 bag)
  - Rock bass 30
  - Yellow perch 20
- **Michigan**
  - Yellow perch 50
  - Sunfish (including bluegill, rock bass) 25
- **Illinois**
  - Crappie/bluegill no bag limit
- **Iowa**
  - Bluegill 25
  - Crappies 25
  - Yellow perch 25



# FAQ: Example lakes (Shawano and Waupaca)



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