

# Panfish Forum 2014



# Meeting Purposes:

- Gather public feedback regarding panfish management
- Provide information on panfish biology and mail survey regarding panfish management
- Discuss options for future panfish management

# Bluegill Biology

## Parental Males - Bulls

- Nest Defenders
- Grow Fast and Large
- Genetically Superior
- Important To Quality
- Vulnerable
- Release Them!
- Best To Take Females

## Cuckolder Males

- Small, Grow Slowly
- Sneak Spawners
- Genetically Inferior
- Reduce Quality

# Male and Female Bluegill



# Growth and Reproduction

- Good Growth= 8 inches in 5 years
- Average Growth= 8 inches in 7-8 years
- 5 to 8 year “Replacement Time”
- Harvest of large bluegill DOES NOT usually mean small fish grow faster – Opposite is true as reduced harvest has shown to improve growth
- Growth “Bottleneck” at smaller sizes
- Reproduction- seldom a problem except when we get too much! “Stunting”



# Panfish Regulation Options

- DNR “Toolbox” Regulations = Bluegill – 5 or 10 fish bag limit
- 10 fish bag limit- has worked on some lakes
- Slot limit – keep fish between 7 and 9 inches?
- Can only keep a certain number over a certain size  
example: limit still 20 but only 5 over 8 inches
- Other ideas? Aggregate limit 15 BLC and BLG
- Current 20 sunfish, 10 crappie bag limits not expected to improve quality – basically a “Social Statement” to keep fewer fish

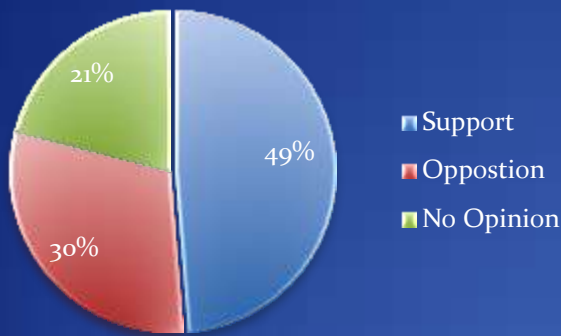
# Mail Survey Results

Winter 2012-13

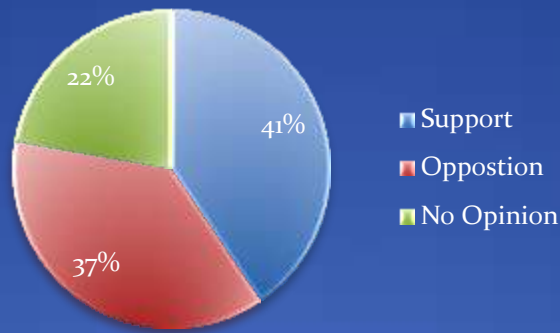
- Scope – All of Morrison, Todd and Benton Counties and portions of northern Stearns and southern Crow Wing
- 1000 surveys sent out to randomly selected licensed anglers, 554 surveys returned
- 94% had fished for sunfish and 56% fished >10x/year
- 54% felt fishing pressure was impacting sunfish quality
- 2/3 harvested at least 1 limit of sunfish per year, 1/5 harvest more than 5 limits of sunfish per year
- Support for 10 fish bag > than opposition for all levels of participation
- Anglers who targeted sunfish >50% of the time and harvested more than 5 limits per year opposed 10 fish bag

# Opinions on Regulation Options

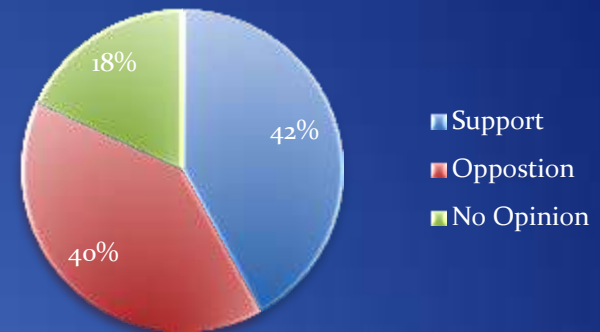
**10 Fish Bag Limit**



**20 Bag, 5 fish >8"**



**15 Fish Aggregate Limit  
BLG/BLC**



- Support outweighed opposition to all three regulation options
- The 10 fish daily bag limit was the most strongly supported option (49%)
- No option received a clear majority of support (>50%) as 18-22% of responses were “No Opinion”



# Why 10 Fish Bag Limit Is the Best Option

- 5 fish bag deemed “too restrictive” by area anglers
- 10 fish bag has shown positive results in central MN
- Mail survey showed 10 fish bag to be most acceptable to area anglers among biologically workable options
- Already a DNR Toolbox option which can be compared to other lakes with same regulation

# Effects of Bag Limit Reductions


DNR Fisheries Research Study (1995-2001)  
10 Bluegill bag limit on 4 Lakes in Stearns and  
Cass Counties

- Average length increased, more fish over 8 inches, 3 of 4 lakes
- Growth rate increased, all lakes
- Bluegill matured at a larger size – fewer cuckolders



# Lakes with a 5 Bluegill bag limit since 2005

Goodrich	> 7"	> 8"	> 9"
2005	55.2%	11.9%	0%
2009	89.6%	56.1%	10.4%
2012	95.0%	75.0%	12.5%



Sylvan	> 7"	> 8"	> 9"
2005	55.5%	7.2%	0.3%
2008	73.3%	26.9%	5.5%
2011	69.8%	30.2%	1.5%

# Carnelian vs. “Best” Bluegill Lakes

	> 7”	> 8”	> 9”
<b>Carnelian**</b>	<b>83.1%</b>	<b>27.6%</b>	<b>3.7%</b>
Maple	23.5%	1.5%	0.8%
Moose	50.7%	18.8%	1.2%
Long (Burtrum)	32.2%	6.4%	0.3%
Lady	53.5%	9.3%	0.7%
Lily	35.7%	8.4%	1.6%
Fuller	45.7%	11.8%	1.6%
Buck	34.9%	11.8%	0.3%
Big Birch	25.1%	10.3%	2.3%
Big Sauk	74.8%	11.7%	1.0%

**\*\*5 fish bag limit since 1996**

# How Reduced Limits May Affect Poundage Taken Home

- Bag limit reduction from 20 to 10 means harvest number is cut 50%
  - Reduction in pounds taken home likely to be less than 50% due to selective harvest and availability of larger fish
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Example: If you fish where the limit is 20 bluegill and you harvest your limit of fish averaging 7.5 inches you would take home about 7.5 pounds of fish.

If you fish where the limit is 10 fish but select for the biggest fish and keep a limit of ten 8.5 inch fish you would take home 5.6 pounds of fish (25% reduction).



# Spawning Sanctuaries and Seasonal Closures – Why Not?

- Long bluegill spawning season – into late July
- Restricts fishing opportunities
- Often several spawning sites per lake
- Does not address other high harvest periods such as Winter
- Fairness – Effects seasonal or occasional anglers most
- Socially unpopular – people like fishing panfish in the spring on their favorite spots

## DNR Sampling Efforts and Results

- Intensive spring trap netting targeting panfish has been conducted since 1999 on all popular sunfish lakes.
- Abundance, growth, age distribution and size structure were evaluated.
- Many lakes showed good growth but size and age structure appeared to be limited by angler harvest.
- When combining all data from area lakes – less than 1 fish in 20 exceeds 8 inches and fewer than 1 fish in 100 exceeds 9 inches.
- Spring trap net data was useful in determining which lakes had the best potential to produce more large sunfish.

# Choosing A Regulation Lake - Criteria Used

- Growth – Fast growth is best
- Lake Potential – There should be a history of the lake producing large fish – 9+ inches
- Fishing Pressure – Look for lakes where angler harvest is reducing quality
- Public Acceptance Or Desire – Do the people want us to try to provide larger panfish?

# Suitable Lakes For Quality Panfish

- Cedar-Todd Co.
  - Long (Higgin's)
  - Maple
  - Moose
  - Lady
  - Lily-Long
  - Fuller-Hennessy
  - Guernsey
  - Little Swan
  - Mary
  - Beauty
  - Coal
  - Pepin
  - Big Sauk
  - Big Birch
  - Long (Burtrum)
  - Big Swan
  - Mons
  - Little Birch
  - Buck
  - Green Prairie Fish
  - Sullivan-Platte
  - Pierz Fish
  - Fish Trap
  - Shakopee
- We would like to choose 3-6 lakes from this list to apply a 10 fish bag limit for sunfish.
  - Bag limit regulations would be evaluated for 10 years and maintained or dropped based on results.