

# Fish and Pine Lake Management Planning Meeting

## Fisheries



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# Fish Lake

153 acre clear water seepage lake

Max depth around 37'

Mean depth 15'

Water level fluctuations not uncommon

Sampled in 2013

Spring Fyke Netting

Spring Electrofishing (two nights)



# Pine

93 acres

Max depth around 21'

Mean depth 8'

History of Winterkills

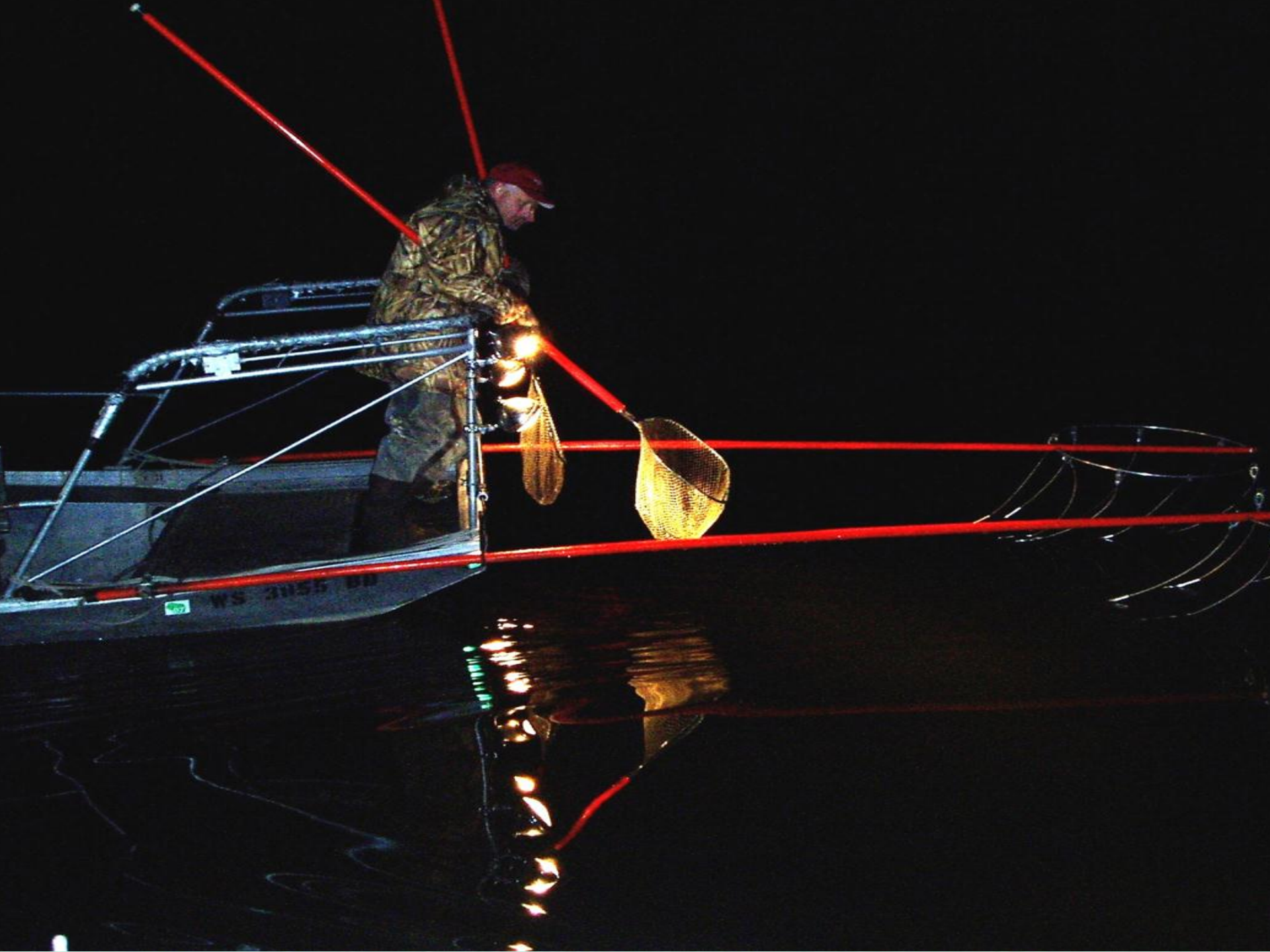
Sampled in 2010

Spring Electrofishing





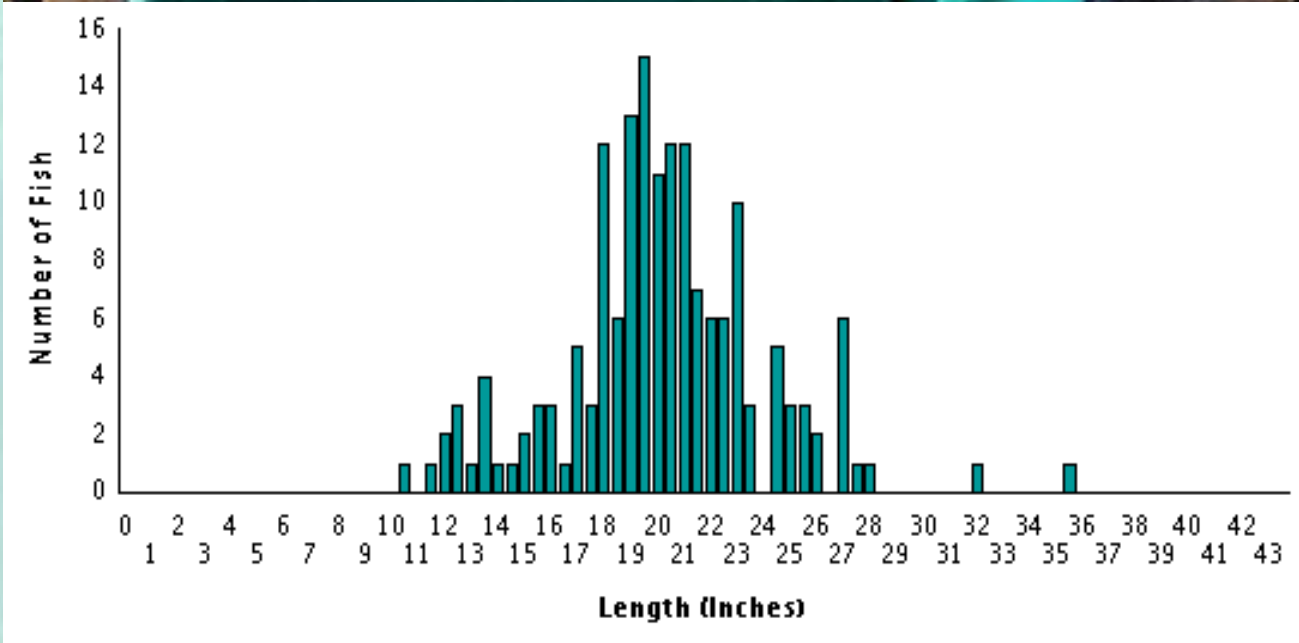




# Northern Pike

- Average abundance
  - 3.9 adults/acre
  - 4.5 in 2004
- Average size structure
  - Mean size – 20.4”
  - PSD21 = 43%
  - RSD26 = 17% (18% in 2004)





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# Walleye

- Average abundance
  - 1.2 adults/acre
  - only 13 large adults sampled in 2004

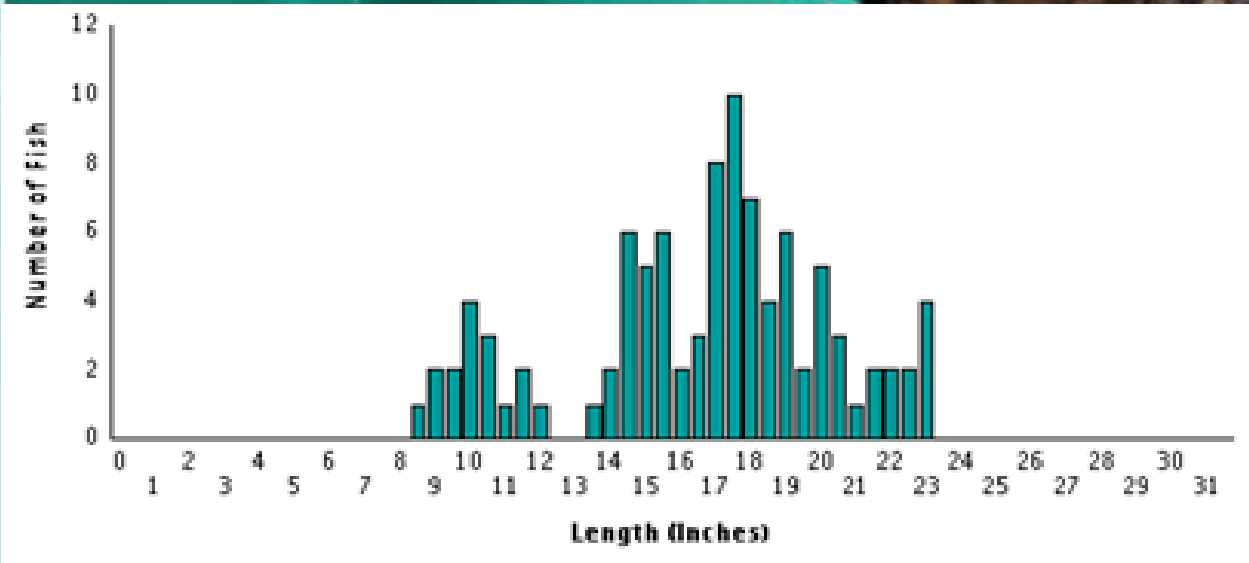
Size structure good

mean length 16.9"

PSD15 = 78%







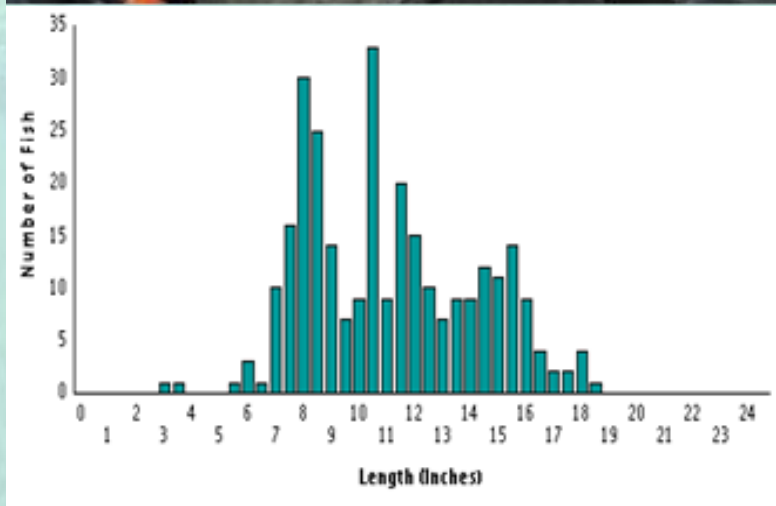
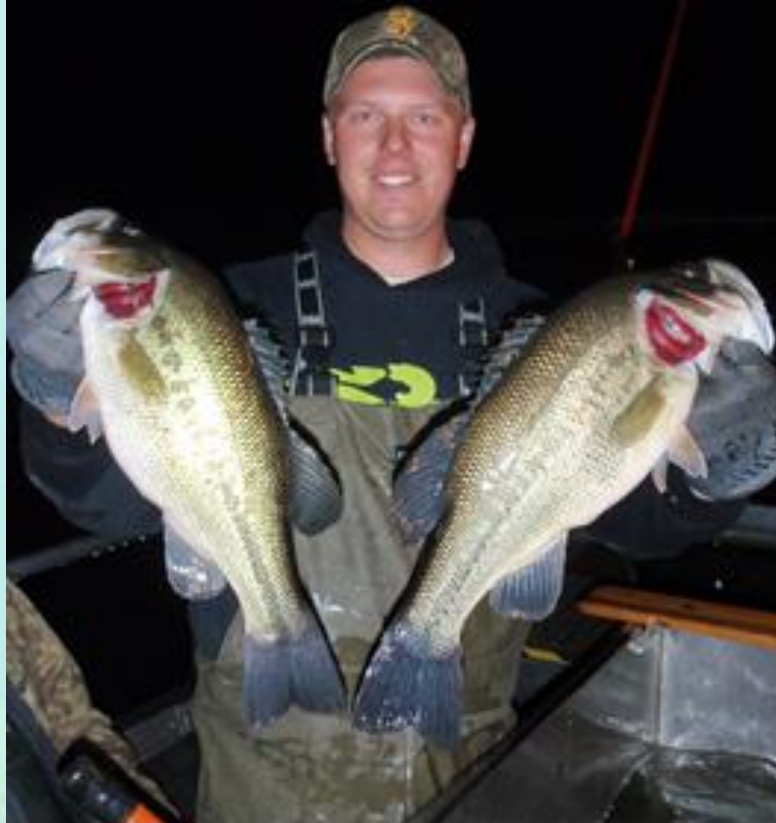
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# Largemouth Bass

- Good abundance
  - 145/hour >8”
  - 55/hour in 2004
- Good size structure
  - mean length = 11.3
  - PSD12 = 43% (46% in 04)
  - RSD14 = 23% (22% in 04)





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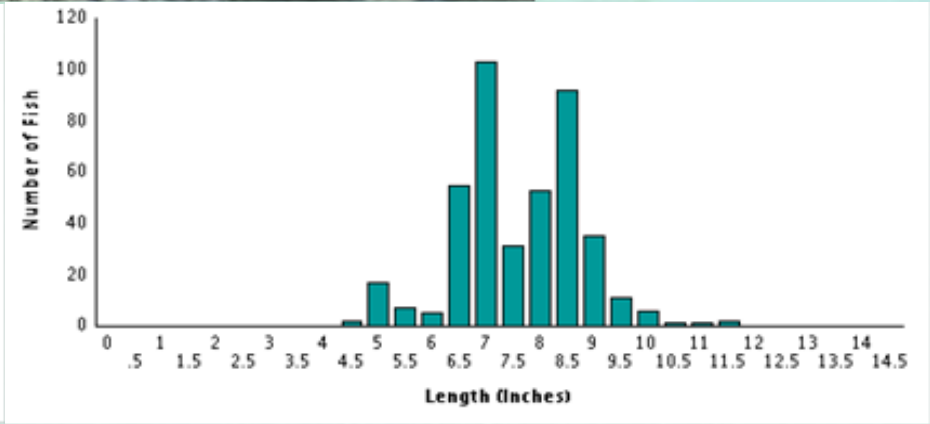
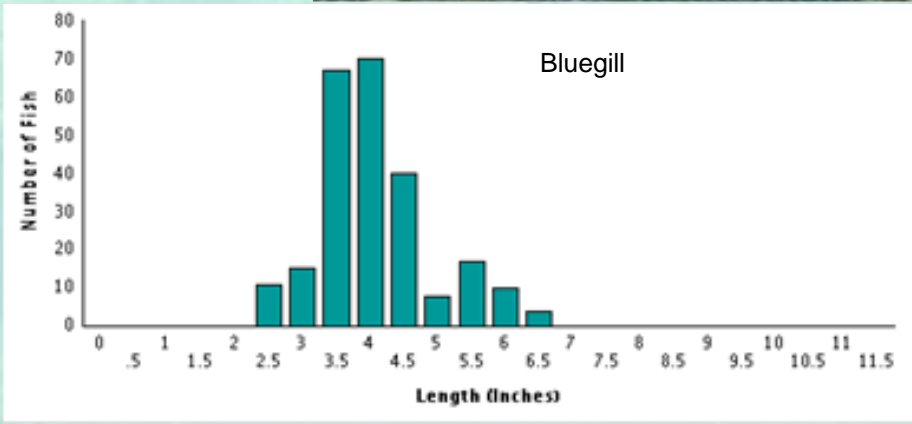


# Panfish

- Bluegill
  - Abundance good
  - Size structure poor (mean = 4.3")
  - PSD6 = 6%
  - No BG over 7" sampled
- Black Crappie
  - Abundance good
  - Size structure good (mean 7.9")
  - PSD8 = 48%







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# Gamefish Summary

- A total of 8 northern pike were sampled
- Length range 7.6"- 24.5"
- A total of 5 largemouth bass sampled
- Length range 5.2"-6.7"



# Panfish Summary

- Pumpkinseed
  - Fairly high abundance
  - 85 captured in 15 minute interval
  - Length range 1.7”- 7.8”
- Bluegill
  - Major decline obvious from 07-08 winterkill
  - Only 40 fish dipped in 15 minute interval
  - Most less than 3”
  - CPE 76/hour (642/hour in 2006)



# History

- 1952 June - IFyke net & shoreline seine haul reveals stunted NP fishery , very abundant black bullhead population & limited panfish.
- 1958-59 Winter - Severe Winterkill
- 1959 June - Chemically treated to keep bullhead numbers in check.
- 1960 May-Oct - NP, LMB, BG, YP and WY were stocked.
- 1960 August - Boom shocker survey found NP, LMB, BG, YP and RKB present.
- 1961 May - Walleyes were stocked.
- 1961 July - Boom shocker survey determined NP, LMB, BG, and YP in good condition with excellent growth rates. No walleyes observed.
- 1962 May - Seine survey determined NP, LMB, BG, and YP in good condition with excellent growth rates. No walleyes observed.
- 1962-63 Winter - Severe Winterkill
- 1963 April - Boom shocker survey showed heavy kills of LMB & BG, other species were fine.
- 1963 Summer - Largemouth Bass were stocked, there appeared to be enough BG left to re-establish themselves.
- 1964-65 Winter - Severe Winterkill
- 1966-67 Winter - Partial Winterkill
- 1967 May - Seine haul done to assess winterkills and stocking efforts. NP & BG population good. Only 1 LMB, 1 YP & 1 Black Crappie sampled.  
\* It was decided future management for Pine Lake would primarily be re-introduction of fish following severe winterkills.
- 1970-71 Winter - Severe Winterkill
- 1976-77 Winter - Partial Winterkill
- 1977-78 Winter - Severe Winterkill
- 1978 May-Oct - NP, LMB, BG and YP were stocked.
- 1979 May - Oct - Northern Pike and Largemouth Bass were stocked.
- 1981 June - boom shocker survey showed 3 strong year classes of LMB 7-16 inches, 4 NP 18- 21 inches, BG 4 - 4.5 inches common, YP 4 - 4.5 inches abundant, pumpkinseed common and black bullheads common.
- 2006 Oct - Boom shocker survey showed a bass population with good numbers and size structure. Bluegills numerous but small.
- 2007-08 Winter - Partial Winterkill
- 2010 May - Boom shocker survey showed heavy kills of LMB & BG, other species were fine.
- 2013-14 Winter - Severe Winterkill





# Conclusion

- Habitat (shoreline assessment)
  - Pine lake – high total score
  - Fish lake – medium total score
  - Protection and restoration of near shore
  - Use of Large Woody Debris LWD in Littoral Zone
- Stocking
  - Walleye in Fish
  - Species for Pine?
- Water levels
  - Aeration in Pine to prevent winterkills?
  - Dredging of channel between basins on Fish?



Thank You!

Questions??



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