Fish and Pine Lake Management Planning Meeting

Fisheries
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)
Walleye

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

Size structure good
  mean length 16.9”
  PSD15 = 78%
FISHERIES MANAGEMENT.......................... we make fishing better
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)
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%
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)
1952 June - Fyke 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??