2016 Minong Flowage Fisheries Survey

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Goals for the talk

- What we did in 2016
- Results/Conclusions
- What needs to be done



What We Did



- Netted for pike/walleye
- Electrofished the Totagatic River upstream for spawning walleye
- Electrofished the shoreline for bass and panfish
- Fall electrofished to check walleye reproduction

Walleye

- Adult population was similar to 2010 survey (5.5) to 2016 (5.7 fish/acre)
- Average size decreased from 15.4 to 14.9 inch





Young Walleye

Abundant young of year



Young Walleye

- Abundant young of year
- Survival is good to age-1



Walleye average length-at-age



- Growth is below NW average for walleye
 - Growth was above average in 1988

Walleye Spearing Harvest Numbers





Northern Pike

- Size structure similar to rest of lakes in the area
- 2005 avg = 18.3 inch
- 2016 avg = 19.7 inch
- Catch rate dropped from 9
 to 3 fish/net night



Northern Pike Aging

- Difficult to age
- Aged to look for potential drawdown impacts
- Small drop in Age-3, but strong year of Age-2



Largemouth Bass

Percent catch

- Small sample size
- Avg. size increased from 13.4 to 14.5 inch
- Catch rate decreased from
 9 to 6 fish/mile





Largemouth bass aging

• Bass recruitment



Largemouth bass aging

• Bass recruitment



Smallmouth Bass



- Small sample size
- Average size stayed similar
 ~ 11 inch
- Catch rate increased from 2 fish/mile to 7 fish/mile



Smallmouth bass aging

 Drawdown benefited smallmouth bass



Bluegill

- 6 inch and larger fish more abundant in 2016
- **Recruitment still** ullet
- present Catch rate ightarrow





Bluegill Aging

• Low 2013 year class



Muskellunge

- One 44.3 inch fish in nets
- First one documented, but several reports over the years
- Could be a remnant population or illegal introduction?
- Hard to conclude origin



Other species





- Between nets and electrofishing we noted 10 common carp
- Low abundance of crappie and yellow perch in our 2016 sample

Drawdown



Drawdown



Drawdown

- Walleye and smallmouth bass seemed to benefit
- Based on aging data, Northern pike and largemouth bass had less fish in 2013, but not severe
- Bluegill seemed to have the biggest drop with a very low number of 2013 fish



No vegetation management

- IF EXTREMELY HIGH LEVELS of EWM/aquatic vegetation occur
- Favors Largemouth Bass, Bluegill, and Northern Pike
- Bass populations could take off
- This hasn't occurred on the flowage, even when EWM was abundant

Using frequent drawdowns

IF DRAWDOWNS ARE USED FREQUENTLY

- Favors Walleye, Smallmouth Bass, other riverine fish species
- Potential long term impacts on bluegill and largemouth bass (depending on frequency)
- May create a window for carp
- Timing of the drawdown is important

What needs to be done

• Complete the fisheries survey report

QUESTIONS????

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