

Northern Pike Regulations Reconsidered in the UP Inland Waters



- All Data - DNR Fisheries

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photos by Bill Ziegler

Internal DNR Fisheries Pike Regulation Committee goals were to stockpile a greater number of larger pike to produce a higher size structure and potential trophy fishery



(Bill Ziegler was an alternate District Rep on that committee)

Erich Ziegler with a quality pike out of ideal pike habitat



Research has yielded the following pike population growth facts

A higher Minimum Size Limit (MSL) **cannot work without fast (+)** growth rate by the species.

The Pike Regulation Committee recommendation in 1992 did not follow the science. Extensive data indicates most inland waters in the UP have slow (-) pike growth rates.

Pike MSL Changes since 1992 – Example County- Iron

- 1992 – No MSL on 12 well known slow growth waters
- 1993 to 2001 – all No MSL eliminated, 24 " MSL on all waters.
- 2002 – No pike MSL reinstated on 7 waters
- 2004 – No pike MSL reinstated on an additional 6 waters
- 2018 – No pike MSL added on 5 new waters
- 2019 – No pike MSL added on 2 new waters
- 2022 – No pike MSL added on 4 new waters
- To date 24 waters in Iron County have been made No MSL on pike.

Pike bag limit changes since 1993

- 1993 to 2001 continuation of long time pike bag limit of 5
- 2002 - Default State Bag only 2 pike. No MSL pike bag of 5.
- 2013 – new- only one of 5 bag can be over 24" on No MSL Pike Lakes. That remains to date.

Extensive Crystal Falls District Pike Data Set

Pre 1993 pike regulation change
mean growth index: - 2.8 " below
State Average

Follow up surveys indicate the
growth rate did not change
significantly



Relatively high natural mortality has been wildly documented for northern pike

- High natural mortality prevents pike from being effectively stockpiled
- Although northern pike can in limited cases live longer, few live beyond their 4th year. In other words they get large fast or they are gone.
- In this case northern pike resemble the high natural mortality rate of brook trout rather than their closer relative the musky.



Evaluation of 24" in MSL

The Crystal Falls DNR Fisheries maintained likely the largest pike survey data set in the UP.

- Prior to the MSL Change in 1993 only an average of 11 % of the pike attained 24 " or larger
- Follow up pike evaluation (1994 to 2010) revealed that post MSL change only 10% attained 24" or greater. In other words no change even though evaluations showed immediate change in bass size structure.
- Almost all of the DNR Large Lake Survey Efforts found slow pike growth across the UP.



Good pike growth rates require a strong soft rayed forage fish species population



• White Sucker



• Lake Whitefish



• Cisco



• Minnow Species.

Additional requirements for fast pike growth rates

- Ample oxygenated cold water refuge habitat during summer.
- Adequate, **but not** over abundant pike spawning habitat.
- Maintained good genetics
- Very few inland UP lakes have all these requirements! One of a very few examples would be Portage Lake Waterway – Houghton, MI.



Performance of Pike 24" MSL perspective

- A MI DNR Deer Researcher told me only 10% legal would be like having a minimum **9 point APR**



- Our extensive evaluations on other game species (bass, walleye) revealed typically 25% or more attained legal MSL or larger

Many of the UP lakes pike size structure looks about like this



- Photo from Russian Pike thinning operation

The 24" MSL is **counterproductive** and puts more extraction pressure on the faster growing female pike that have the best potential to grow to trophy size. In many inland UP water few males attain legal MSL



Specific examples from large pike sample surveys

– Michigamme and Peavy Reservoirs

- Michigamme Reservoir survey – 1503 pike captured only 6.2 % over 24 in. Mean Growth: **- 2.7 "**
- Peavy Reservoir survey - 2,336 NOP captured only 4.3 % over 24 ". Mean Growth: **-1.4 "**
- Bond Falls Flowage – 821 NOP captured only 12% over 24 ". Mean Growth: **- 2.4 "**.
- Lake Gogebic – 1,123 NOP captured , 18% over 24 ". Mean Growth: **- 1.4 "**.
- Cisco Chain (14 connected lakes) – 3,392 NOP captured only 6 % over 24 ". Mean Growth: **-3.2 "**.
- **Mean pike growth index for all the large lake surveys in the UP : -2.2 ". behind State Avg. growth rate That is slow growth !**

Pike size structure often improves in the No MSL Pike lakes – all from No MSL UP lakes



All 3 top photos are from smaller pike No MSL waters in the Crystal Falls Unit that had been under those regulations for years. The bottom 3 photos are all from Michigamme and Peavy Reservoirs with long time No MSL on pike.



Proposed Inland UP Pike Regulation Change

- **Default** UP wide inland waters— **No MSL on Pike.**
- Bag limit of 5. (Current MI pike regulations would limit it to only one over 24 ")
- Make the exception lakes the higher MSL with limited bag, **only** if they meet all the requirements for a higher MSL to succeed

