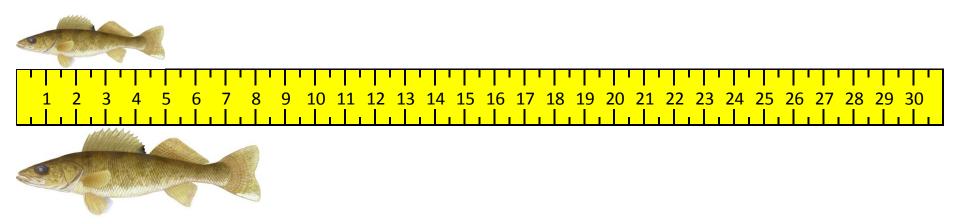
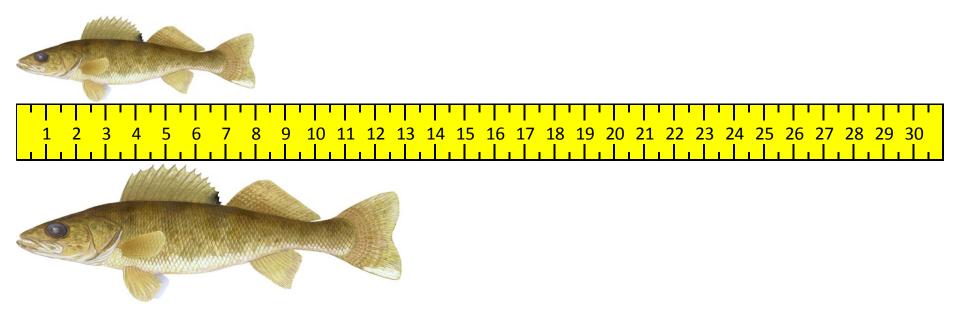
Walleye Growth Comparison **Rainy Lake and Lake Pepin** The following slides step you through the annual average growth of a walleye from Rainy Lake and Lake Pepin. (Data from 2010-2012 Large Lake Surveys) These lakes provide an excellent contrast between slow growing long lived walleye from northern Minnesota's shield lakes, and fast growing short lived walleye from southern Minnesota Minnesota's nutrient rich water.





**Rainy Lake** 





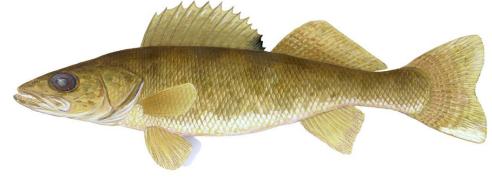
**Rainy Lake** 







1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

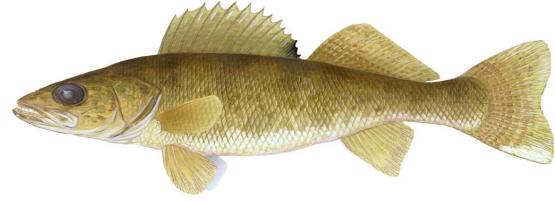








1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

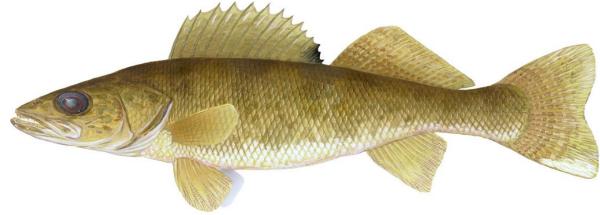


**Rainy Lake** 





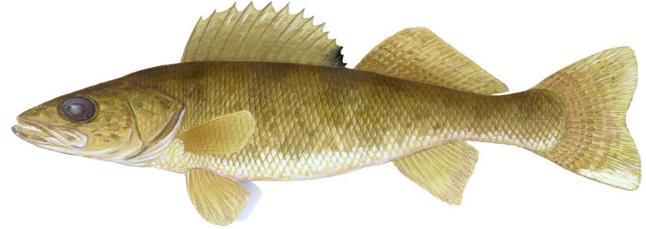
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30



# **Rainy Lake**

Walleye Captured in GN Age-5

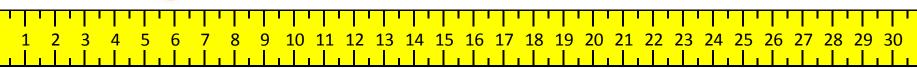


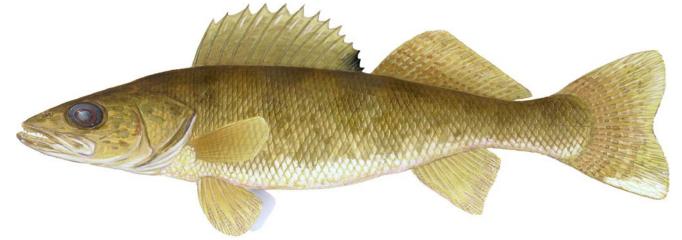




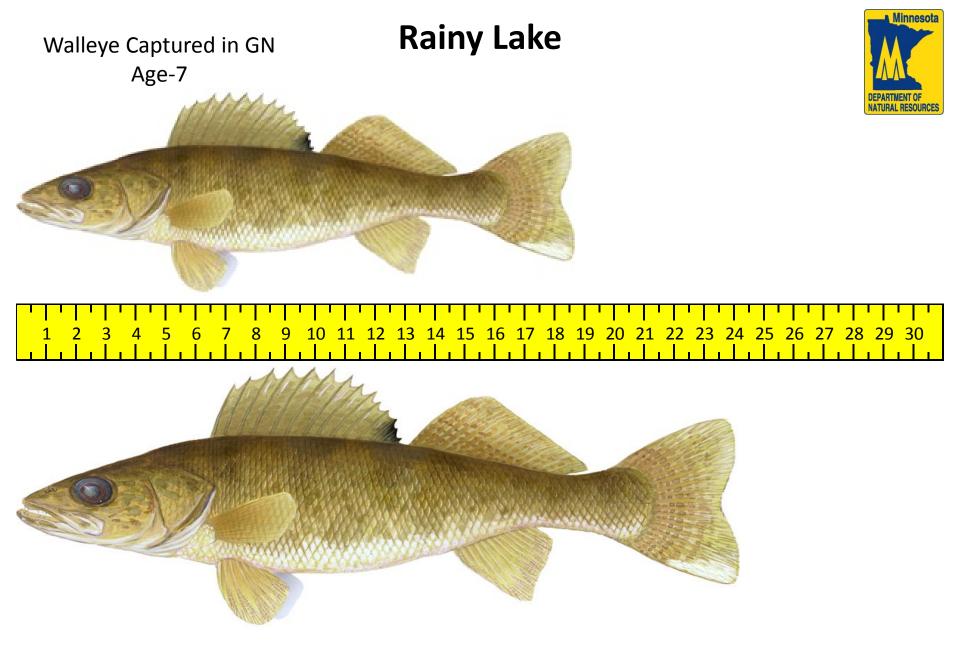
**Rainy Lake** 

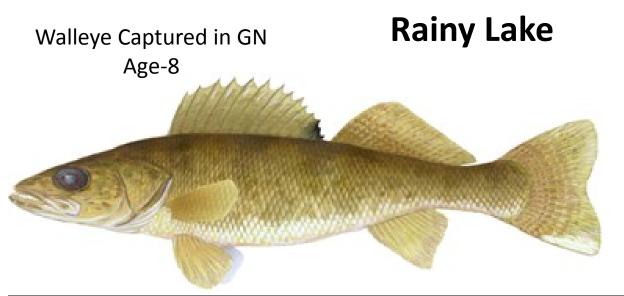










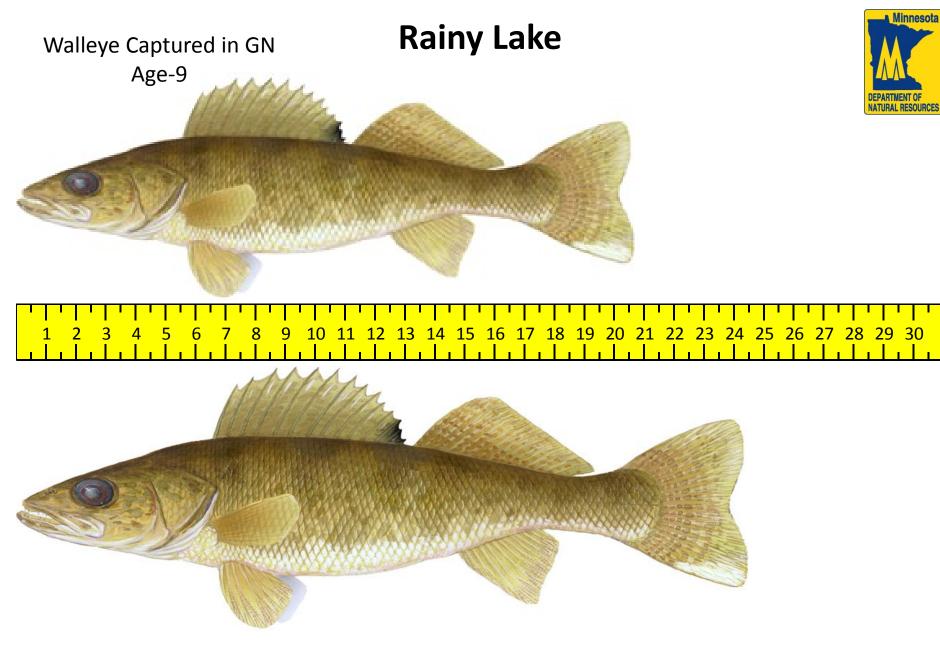




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## Lake Pepin

After Age-8 average size at age of walleye in Lake Pepin begins to go down. This is likely due to higher mortality rates among females due to spawning stress ect. The more numerous but smaller males then pull down the average size.





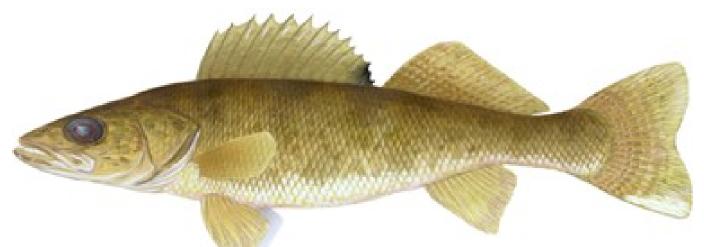


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30



## **Rainy Lake**

### Walleye Captured in GN Age-11



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Lake Pepin

Most Lake Pepin walleye die before Age-10. Though a few males may live to Age-11 to Age-13 they are rarely the largest fish in the population.

Minnesota

## **Rainy Lake**



Note: Essentially no change in size of Rainy Lake fish from Age-11 to Age-12 due to low sample size of Age-12 fish.

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Most Lake Pepin walleye die before Age-10. Though a few males may live to Age-11 to Age-13 they are rarely the largest fish in the population.





# 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Lake Pepin

Most Lake Pepin walleye die before Age-10. Though a few males may live to Age-11 to Age-13 they are rarely the largest fish in the population.

Minnesota





#### 

Lake Pepin

Most Lake Pepin walleye die before Age-10. Though a few males may live to Age-11 to Age-13 they are rarely the largest fish in the population.



# 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 1 1 1 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 <td

Lake Pepin

Most Lake Pepin walleye die before Age-10. Though a few males may live to Age-11 to Age-13 they are rarely the largest fish in the population.

Minnesota

# Summary and Take Away Message

- Few walleyes and almost no female walleye are captured above Age-10 in Lake Pepin/Pool 4.
  - This is even more pronounced for sauger in the system.
- In Rainy Lake and other northern lakes, however, fish routinely live to their mid-teens and occasionally to their mid- to uppertwenties.
- This difference in growth has to do with length of the growing season, availability of food (Lake Pepin/Pool 4 has higher lbs/acre of fish), and increased average water temperatures.
- The high water temperatures (>90°F) in some summers on Lake Pepin/Pool 4, however, also increases mortality in larger fish, contributing to shorter lifespans.

