Approximate Age Estimate for Walleye on the Red Lake/Gullrock System

Instructions:

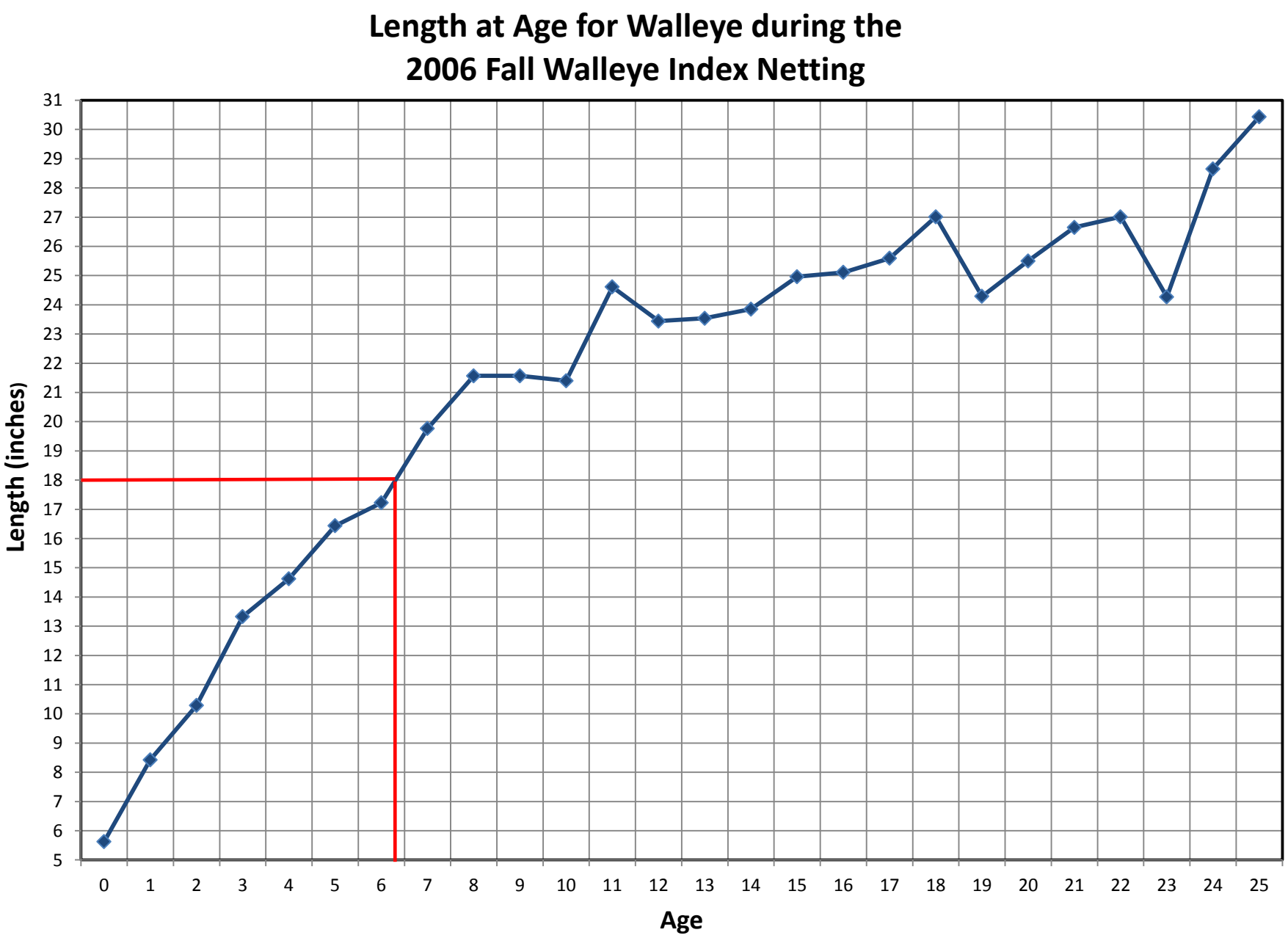
•Get the length of your fish. If it is in millimeters, use the conversion chart to convert it to inches.
•Look at the graph and find the length of your fish on the y axis (vertical side of the graph).
•Once you have located the length, follow the horizontal line until you come across the blue line.
•At the blue line, follow the vertical line down, the number on the x axis (horizontal side of the graph) is the approximate age of a fish that size.

How do we age walleye?

•The third ray of the dorsal fin is taken and sent away to an ageing laboratory.
•At the lab, they do a microscopic cut of the base of the ray.
•When placed under a microscope, growth rings can be observed and counted to determine the age of the fish.
•It's the same concept as the rings on a cut tree that we can easily observe.

Inch conversion chart

Length in millimeters	Length in inches
200	7.9
225	8.9
250	9.8
275	10.8
300	11.8
325	12.8
350	13.8
375	14.8
400	15.7
425	16.7
450	17.7
457	18.0
475	18.7
500	19.7
525	20.7
550	21.7
575	22.6
600	23.6
625	24.6
650	25.6
675	26.6
700	27.6
725	28.5
750	29.5
800	31.5


Length at Age for Walleye during the
2006 Fall Walleye Index Netting
Length (inches)
31
30
29
28
27
26
25
24
23
22
21
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19
18
17
16
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14
13
12
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0 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
Age

To ensure our walleye population is sustainable, it is recommended to release larger fish to keep the good producer and the females in the system.

- Bigger fish don't grow as fast as smaller fish.
- When walleye reach the age of maturity (approximately 7 to 8 years old in Red Lake) they start putting more energy in reproduction and weight gain than in length increases.
- The larger the fish, the more reproductive power it has. For example the bigger females produce more eggs.
- Fertility rates do go down as the fish gets older, but they produce more eggs so they still produce as many viable eggs as a prime female.
- Female are generally larger than males

Average growth is 1 inch per year, however climate has huge impact on yearly growth.

A cold growing season (May to September) has major impact on walleye egg survival and on the growth of the other walleye.

This explains the weird bumps in the curve and the negative values in the adjacent chart. A fish that was born in a poor climatic year or may not do as well as a fish born on a good year.

For more information contact Toby Braithwaite, Management Biologist at 807 727-1367 or nicholas.braithwaite@ontario.ca .

Age	Growth in between year (inches)
1 -2	1.86
2 - 3	3.045
3 - 4	1.295
4 -5	1.81
5 - 6	0.79
6 - 7	2.54
7 - 8	1.805
8 - 9	0
9 - 10	-0.17
10 - 11	3.21
11 - 12	-1.17
12 - 13	0.1
13 - 14	0.31
14 - 15	1.11
15 - 16	0.15
16 - 17	0.48
17 - 18	1.42
18 - 19	-2.72
19 - 20	1.21
20 - 21	1.15
21 - 22	0.36