

# **Cowanesque Lake**

## **Tioga County**

### **2017 Crappie Survey**

Area 4 biologists used trap nets to sample crappies at Cowanesque Lake during the week of May 1, 2017. Our goal was to determine how the Crappie population responded to Alewife invasion. We set 9 trap nets that caught 619 Black Crappie and 30 White Crappie. The Black Crappie ranged from 2.0 to 14.9 inches long (Figure 1). Most were small but 18 individuals (3%) exceeded 10 inches.

Most likely, the presence of Alewife influences Black Crappie size distribution at Cowanesque Lake. When small, Crappies have a hard time competing with Alewife for planktonic food and so grow slowly. This process accounts for the high percentage of small fish in the population. However, once an individual gets large enough to feed on Alewife, its growth rate rapidly increases. This process accounts for the low percentage of large fish in the population.

White Crappie was a new species record for Cowanesque Lake. Their population originated from a single Pennsylvania Fish and Boat Commission stocking of 45,000 fingerlings in 2012. They only represented 5% of the total Crappie catch but they were reproducing in the lake. White Crappie growth was faster than Black Crappie growth. Measurements showed that 30% of the White Crappie we caught exceeded 10 inches.

The complete list of fish we caught in 2017 is in Table 1. It's important to note that we only targeted Crappie at Cowanesque Lake so catches of other species are not representative of their populations. That said, the nine trap nets did catch 5 tiger muskellunge ranging from 37.0 to 44.9 inches long. Tiger muskellunge catch rate was 0.02 per hour, which was double the minimum value that the [2017 Update to Pennsylvania's Muskellunge Management Plan](#) requires for continued stocking.



Black Crappie (left) and White Crappie (right) captured at Cowanesque Lake in 2017.

Table 1. Fish captured at Cowanesque Lake in 2017.

<b>Species</b>	<b>Number Caught</b>	<b>Length Range (Inches)</b>
Alewife	18	4.0 – 5.9
Black Crappie	619	2.0 – 14.9
Bluegill	87	2.0 – 7.9
Brown Bullhead	127	3.0 – 16.9
Channel Catfish	2	25.0 – 26.9
Common Carp	15	20.0 – 29.9
Golden Shiner	26	5.0 – 9.9
Green Sunfish	1	4.0 – 4.9
Largemouth Bass	1	20.0 – 20.9
Pumpkinseed	8	2.0 – 5.9
Quillback	17	15.0 – 21.9
Smallmouth Bass	1	18.0 – 18.9
Tiger Muskellunge	5	37.0 – 44.9
Walleye	1	27.0 – 27.9
White Crappie	30	3.0 – 12.9
White Sucker	2	12.0 – 14.9
Yellow Bullhead	37	2.0 – 12.9
Yellow Perch	3	6.0 – 11.9

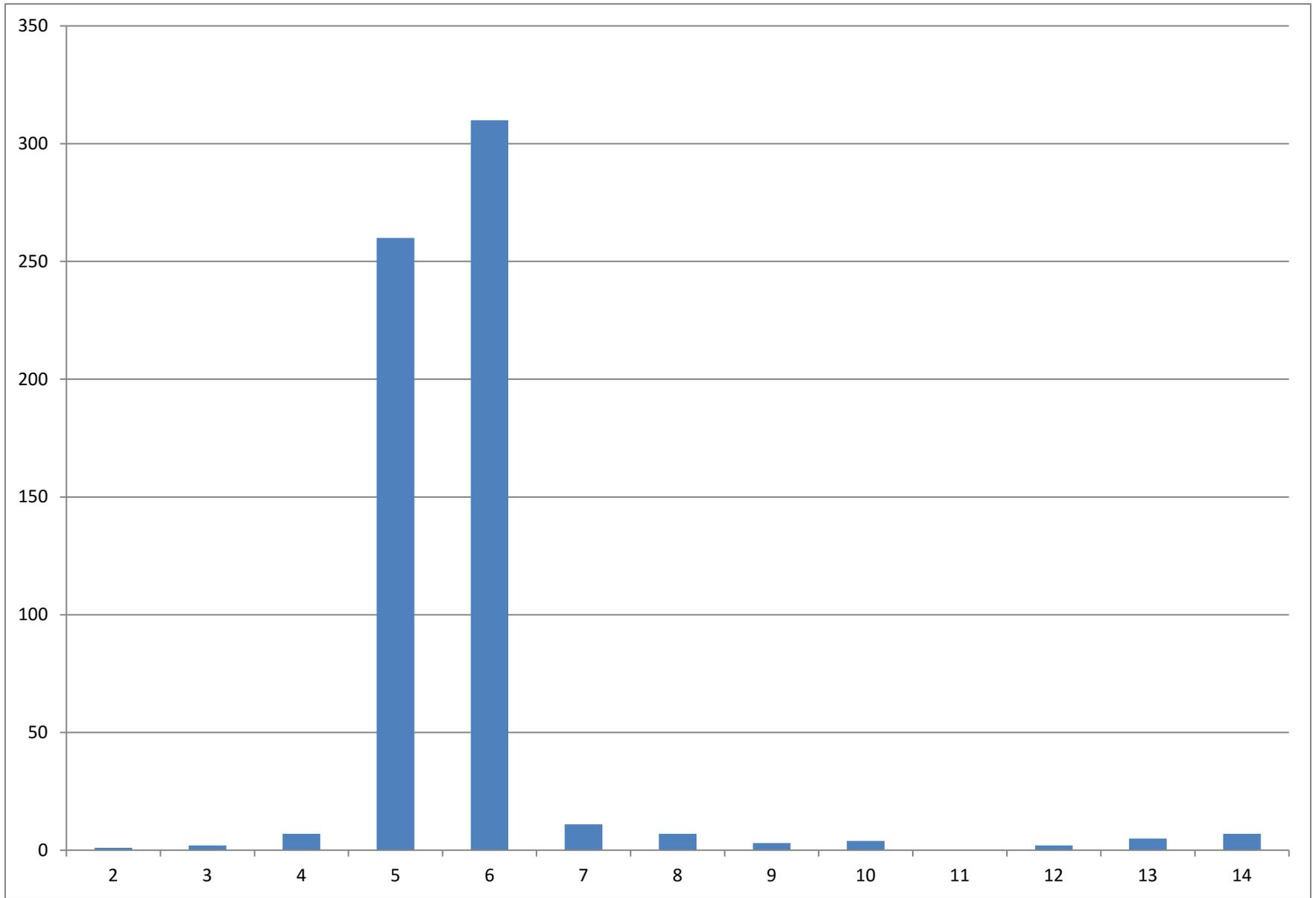


Figure 1. Length-frequency distribution of Black Crappie caught at Cowanesque Lake in



*Fisheries Biologist Aaron Frey with a 44 inch tiger muskellunge captured at Cowanesque Lake in 2017.*

*Rob Wnuk  
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