



## LAKE PUCKAWAY HATCHERY UPDATE

The Lake Puckaway walleye stocking assessment MCGL Proj. 2312 was performed by Dr. Amy Springer, Laboratory Manager Molecular Conservation Genetics Lab, University of Wisconsin – Stevens Point Project.

The first goal was to determine whether the 19 walleye from Lake Puckaway were produced by the 2022 walleye hatchery. It was determined that eight of the 19 screened Puckaway Lake walleye were produced by the walleye hatchery.

They identified parent-offspring relationships between wild caught walleye and 2022 walleye hatchery broodstock parents for 8/19 (42%) samples collected from Lake Puckaway in 2022. Detected parent-offspring relationships were all assigned with >99.99% confidence, including the eleven fish identified as having been produced by unsampled wild parents.

The identified parent-offspring from the hatchery broodstock parents are noted in the summary of each jar that the hatchery collected charts for each jar. The parents of the offspring are noted in red genetic numbers and lower-case letters that correspond with the male and female parents. Of the 12 jars that had eggs in them, 5 produced offspring that were collected in the fall samplings. A total of 12 parent walleye produced offspring, with 5 females and 7 males involved in the offspring.





The hatchery staff has been doing the chart of each jar for the past 12 years and doing the genetic testing for the past 2 years. In this past year sampling, there wasn't any 2023 class walleye collected, just 2022.

I hope that this information sheds some light on what the hatchery is doing other than just producing walleye fry for the lake. Although the volunteer staff at the hatchery have released over 14,481,700 walleye fry since 2010. Paul Gettelman LPPRD Board Member/Hatchery

**Walleye information and Trough Count of number of eggs per Jar**

female * spawning condition	total length (in.)			GENETIC #	jar #	Quarts in Jar	DAY 1
	female	GENETIC #	male				Trough count
			15.5	<b>14757 c</b>			75
R	25.0	14759.0			<b>2</b>	1.370	
R	<b>25</b>	<b>14760 a b c</b>	17.5	14758			181,905
			18.6	14761			
<b>4/9/2022</b>			18	<b>14762 a b</b>			
			15.5	14763			
AVERAGE	24.95		17.02				1.37 QTS





**Walleye information and Trough Count of number of eggs per Jar**

female * spawning condition	total length (in.)				jar #	Quarts in Jar	DAY 1
	female	GENETIC #	male	GENETIC #			Trough count
	R	23.5	14782	19.5			14779
R	<b>26.6</b>	<b>14783 a</b>	<b>17</b>	<b>14780 a</b>	5	2.75	282,595
	23	14787	17.2	14781			
			18.4	14784			
<b>04/09/22</b>			18.2	14785			
			17.5	14786			
AVERAGE	24		17.96666667				

**Walleye information and Trough Count of number of eggs per Jar**

female * spawning condition	total length (in.)				jar #	Quarts in Jar	DAY 2
	female	GENETIC #	male	GENETIC #			Trough count
				19.8			14823
R	25.4	14825	17.5	14824	<b>10</b>	<b>1.5</b>	<b>171,402</b>
R	18.5	14826	17.6	<b>14827 a</b>			
R	<b>26.9</b>	<b>14828 a</b>	14.3	14829			
4/10/2022							
AVERAGE	23.60		17.3				
H	23						
H	25						





**Walleye information and Trough Count of number of eggs per Jar**

female * spawning condition	total length (in.)				jar #	Quarts in Jar	DAY 2
	female	GENETIC #	male	GENETIC #			Trough count
				15.4			14836
R	<b>21.6</b>	<b>14839</b>	14.3	14837		<b>1.875</b>	<b>238,749</b>
R	<b>21.9</b>	<b>14840 c</b>	17.7	14838	<b>12</b>		
R	<b>24.1</b>	<b>14841 a b</b>	16.4	<b>14842 c</b>			
			17.4	14843			
			17	<b>14844 a</b>			
			19.5	<b>14845 b</b>			
AVERAGAE	23		16.81428571				

