## Pennsylvania Fish & Boat Commission Biologist Report

## **Gouldsboro Lake - Update**

## Monroe County

## Early Spring Trap Net Evaluations 2018 and 2015

Gouldsboro Lake is a 250-acre public impoundment located in Gouldsboro State Park. The park's entrance is one-half mile south of the village of Gouldsboro on PA Route 507, which can be accessed from Exit 13 off Interstate 380. The lake was almost completely drawn down in 2007 to repair the dam, however a small remnant pool remained which held resident fish species of various ages and sizes. Since its refilling in 2008, the Pennsylvania Fish and Boat Commission has managed the lake's fishery under Commonwealth Inland Waters regulations for most all fish species; except for Yellow Perch, Black Crappie, and Bluegill/Pumpkinseed which are managed with Panfish Enhancement rules, and Largemouth Bass which are managed via the Big Bass special regulation program. These special regulation programs were implemented in addition to Commonwealth Inland Waters regulations in 2009 to enhance rebuilding fish populations which was also assisted through a five-year warm/cool water species stocking program, initiated in 2008.

To evaluate progress in restoring fish abundance, Biologists from Fisheries Management Area 5 conducted the first of three annual surveys starting in 2012, refer to the 2012 Gouldsboro Lake Trap Netting web report for catch results. The follow-up surveys noted in the 2012 web report were tentatively listed to occur in 2014 and 2016; but were rescheduled for 2015 and 2018 due to operational priorities. Gouldsboro Lake was surveyed between April 23 and April 25, 2018 and April 21 and April 23, 2015. A total of 8 overnight trap net sets were fished for 194.13 hours in 2018 and 190.4 hours in 2015. In 2018, Area 5 Staff was assisted by Park Manager Devin Buzard. A summary of the fish species enumerated and measured is presented in Table 1.

Table 1. Fish caught during the 2018 and 2015 Gouldsboro Lake trap net survey.

Early Spring Trap Netting						
Game Species						
	April 23-25, 2018			April 21-23, 2015		
		Size			Size	
Fish Species	Number	Range	Additional	Number	Range	Additional
	Caught	(inches)	Comments	Caught	(inches)	Comments
Yellow Perch	219	5 - 14	78% <u>&gt;</u> 9 inches	38	5 – 12	71% <u>&gt;</u> 9 inches
Black Crappie	115	5 – 11	75% <u>&gt;</u> 9 inches	109	6 – 11	80% <u>&gt;</u> 9 inches
Bluegill	319	4 – 8	92% <u>&gt;</u> 7 inches	124	3 – 9	75% <u>&gt;</u> 7 inches
Pumpkinseed	65	5 – 10	85% <u>&gt;</u> 7 inches	32	5 – 8	50% <u>&gt;</u> 7 inches
Largemouth Bass	16	10 – 16	13% <u>&gt;</u> 15 inches	18	11 – 17	22% > 15 inches
Chain Pickerel	43	10 – 23	5% <u>&gt;</u> 18 inches	39	10 – 23	18% <u>&gt;</u> 18 inches
Brown Bullhead	61	9 – 14	95% <u>&gt;</u> 10 inches	62	10 – 13	100% <u>&gt;</u> 10 inches
Yellow Bullhead	84	7 – 12	26% > 10 inches	46	8 – 11	70% <u>&gt;</u> 10 inches
Walleye	1	20	N/A	1	17	N/A
Forage Species						
Golden Shiner	97	3 – 10	N/A	85	6 – 10	N/A
Creek Chubsucker	51	8 - 15	N/A	85	9 – 16	N/A

Gouldsboro Lake supports exceptional Bluegill and Yellow Perch populations, while also exhibiting consistent good abundance of Black Crappie throughout the three-year monitoring period. All three species provide a high-quality fishing experience, as 92 percent of the Bluegill assessment catch was greater than or equal to 7 inches, 78 percent of the Yellow Perch catch were greater than or equal to 9 inches.

The dramatic rise of Bluegill in 2018 (N=319) compared to their abundance in 2015 (N=124) and 2012 (N=50) suggest production of an abundant natural year class and shift from the historic community structure. It should be noted that our restocking of Bluegill fingerling occurred only 2012, and after the 2012 trap net survey. Thus, the Bluegill present in 2012 were derived from progeny of adults within the remnant pool left during the drawdown and refilling phases. The natural proliferation of this species is clearly demonstrated and is why upon restoring a lake, Bluegill stocking occurs in the latter years of the program. This is done to ensure other species, such as Largemouth Bass have a head start in producing young and experience limited nest predation. Perhaps abundant Black Crappie and Bluegill populations can coexist as the time series suggests and continue to provide anglers with a high quality and diverse fishing experience.

Annual stocking of Walleye fingerling was discontinued in 2015 due to poor survival to adulthood as demonstrated in the 2015, 2012, and 2018 surveys. Walleye fingerling were annually stocked in 2008, 2009, 2010, 2011 and 2014; subsequent assessment surveys provided adequate time to have generated a targeted fishable adult population, however this did occur as evidenced in survey results. Maintenance stocking of Walleye will not occur in Gouldsboro Lake in the future.

Gouldsboro Lake provides diverse and good fishing opportunities for naturally sustained fish species. Anglers should note that Gouldsboro Lake water color is naturally light tea colored, so anglers may want to keep this in mind when selecting the color of their terminal tackle.

In the pictures below is a Bluegill, followed by Gouldsboro State Park Manager Devin Buzard proudly holding a Pumpkinseed, Yellow Perch, Black Crappie, and a male Creek Chubsucker in breeding condition as denoted by the presence of horns called tubercles (yellow arrow).







David Arnold Area 5 Fisheries Manager