

LAKE MANAGEMENT STATUS REPORT

Date of Report: 3/9/2023 **Fisheries Manager:** Rob Hilsabeck
District No.: 4 **LAKE NAME:** Double T SFWA, Big Lake
County: Fulton **Water No.:** 15036 **Ownership:** State **Acreage:** 64

1. All Fish - 2 pole and line fishing only.

<u>Species</u>	<u>Size Limit</u>	<u>Creel Limit</u>
Largemouth bass	21 inch minimum	1 fish/day*
Smallmouth bass	21 inch minimum	
Channel catfish or Blue catfish	NONE	6 fish/day
White, Black, Or Hybrid Crappie	10 inch minimum	25 fish/day
Bluegill or Redear Sunfish	NONE	25 fish/day
Muskie	42 inch minimum	1 fish/day

*daily limit includes all largemouth and smallmouth bass either singly or in the aggregate.

Recreational Use Restrictions - Waterfowl Refuge or Hunting Area (All use other than waterfowl hunting is prohibited from October 1 through the end of the central zone Canada Goose Season.)

2.

1. Spring trapnet survey was completed on 4/19 and 4/20/2022.

2. Conducted DC Electrofishing survey on 5/9/2022.

3. Jake Wolf Hatchery stocked 66 muskie at 13 inches in length on 9/10/2021.

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
White Crappie											
Stock #		5	25	52	50	18	45	43	3	91	6
PSD		100	100	81	74	100	100	98	100	100	100
RSD9		60	100	79	38	83	100	98	67	99	100
RSD10		40	100	79	34	83	89	86	33	68	100
RSD11		0	92	79	24	79	49	44	0	34	83
Wr		82	101	90	81	83	96	90		85	93
CPUE f/min										0.4	0.1
CPUEf/NN										4.6	0.3
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Mue											
Stock#		2	23	22	18	8	11	20		8	4
PSD		50	57	55	67	100	91	75		100	100
RSD42		0	0	0	0	0	0	20		13	25
Wr		89	106	97	89	89	93	89		97	99
CPUE NN			2.3	1.1	1	0.8	1.1	0.9		0.4	0.2

4. This site was acquired by the state of Illinois in September 2001. The big lake is approximately 64 surface acres in size. The smaller lake on the south side of Cypress Road (Baby T Lake) has approximately 14 surface acres under state ownership.

In 2022, the big lake was sampled by spring trap net survey and by spring boat D.C. electrofishing. The small lake was sampled by spring boat D.C. electrofishing.

The Largemouth bass population was sampled by 36 stock size fish in 2022. The current bass regulation of a 21-inch minimum size limit and 1 fish per day was an effort to protect the initial population in the lake and to build this population up. In the 2022 sample, the PSD was 86, the RSD14 was 50, the RSD 16 was 22 and the RSD18 was 3. The RSD16 and RSD18 values were well below the yearly average since 2013. This may have been a sampling challenge for the 2022 survey. The largemouth bass indices since 2013 have been very high for a bass population. The catch rate was .9 in 2022 and has ranged from .6 to 1.8 fish per minute over the last 10 years. The average Wr was good at 92 in 2022.

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The bluegill size structure remained low according to the 2022 electrofishing survey results. The five-year trend appears to be a bluegill population with a top size under 7.0 inches in length. The competition from the current gizzard shad and carp population may limit the ability of the bluegill population to improve to a good status.

In 2022, the black and white populations were sampled by the collection of 31 black crappie and 10 white crappies. The average relative weights for these fish were 100 and 93 respectively. The black crappie indices showed 30% of the fish over 11 inches, and the white crappie indices showed 83% of the fish over 11 inches. A low-density crappie population is currently present with large fish available to anglers. The established regulation is a minimum size limit of 10 inches and a creel limit of 25 fish per day.

No Channel Catfish were sampled and at this time a stocking has not been scheduled due to an anticipated low demand at this site.

A total of 19 common carp were sampled from 13 to 22 inches by electrofishing. These fish were in average body condition with a relative weight value average of 92. Carp have been able to recruit to the population in recent years. This is probably due to high water that has occurred in the lake in each spring allowing additional shallow spawning areas and turbidity for the carp. This additional carp biomass in the lake will cause direct competition with the bluegill population.

Only 9 gizzard shad were sampled in 2022 with a range of 10 to 12 inches in length. The gizzard shad density was high in 2013, very low in 2014 and 2015. The duration of the winter of 2013/2014 may have reduced their survival. These fish were in average body condition with an average W_r of 85. The shad will cause competition problems for the bluegill but may create an available forage base for the bass, muskie and crappie.

In 2022, 4 muskie were collected in the spring trap survey. These fish ranged in size from 36 to 43.4 inches long. The average body condition was good with a W_r value of 99. 66 fish were stocked in 2017 and 2021. The muskie stocking for Double T

Lake was adapted to a stocking once every 3rd year starting in 2017. The goal is to maintain a low density of muskie that can grow fast and maintain good body condition.

Recommended Lake Management Activities with Rationale for Implementation:

Fish Stocking - Pure Muskie accepted to the Yes 1 priority list starting in 2002 at a rate of up to 3 fish per acre at 10 to 14 inches long. The stocking frequency went to every 3rd year starting in 2017. Supplemental stocking is required for all the above species due to no natural recruitment occurring.

Biological Surveys - Conduct annual surveys to measure trends in fishery population dynamics, angling regulations and progress toward management goals. In the fall or spring, utilize by standardized methods, D.C. electrofishing or trap netting to sample a target number of at least 100 stock-size largemouth bass and as many other sportfish as available.

Toxicant Fish Control - Severely imbalanced fish populations in watershed ponds, ditches and wetlands may need to be rehabilitated to reduce contamination of the main lake. Rotenone would most likely be the piscicide of choice. Carp and other rough fish will be removed and controlled in all areas of Double T State Fish and Wildlife Area.

Aquatic Vegetation Control - limited need or application due to management goal of providing diverse, significant habitat for fish and wildlife. Will document vegetation coverage each year with annual fish survey.

Habitat Enhancement - The current topography of the large lake is steep and deep with little structure other than two beaver lodges and associated woody debris. The small lake also has a steep and deep shoreline profile with little structure. The addition of woody fish habitat in the future will be attempted as time and effort allow. The use of pallet structures and trees/brush from future project construction areas are possible options.

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Future fish habitat may also be developed at the site through the creation of new lakes, ponds and/or wetlands. Locations for potential sites will be developed with the site-resource management plan.

Lake Access - coordinate with the site staff on the development and maintenance of 1 concrete boat ramp, 4 parking lots and shoreline fishing areas. In 2022, the entire lake was designated as no wake, but the use of gas motors is permitted with no Hp limit.

Fish Stockings 2010-2021:

Waterbody	Species	Size (in)	Count	Delivery Date	Source
Double T Lake (15036)	Muskellunge	13	66	9/10/2021	#2 Jake Wolf Hatchery (09000)
Double T Lake (15036)	Muskellunge	12.5	66	8/31/2017	#2 Jake Wolf Hatchery (09000)
Double T Lake (15036)	Muskellunge	11.8	64	9/4/2014	#2 Jake Wolf Hatchery (09000)
Double T Lake (15036)	Muskellunge	11	64	8/22/2012	#2 Jake Wolf Hatchery (09000)
Double T Lake (15036)	Muskellunge	11	64	8/25/2011	#2 Jake Wolf Hatchery (09000)
Double T Lake (15036)	Muskellunge	11	64	9/3/2010	#2 Jake Wolf Hatchery (09000)

Double T Lake Fish Tournament Results for 2022:

Start Date	ID	Fish Hours	Total Boats	Total Anglers	Species 1	Total Fish	Total Pounds
06-11-2022	<u>20311</u>	4	10	20	LMB	0	0.00

Totals: 80 angler hours 0 fish