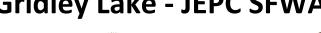


## **IDNR** – Fisheries 2016 Lake Status Summary **Gridley Lake - JEPC SFWA**













Location: At the Jim Edgar Panther Creek State and Fish and Wildlife Area. 8 miles north of Ashland. 40 miles northwest of Springfield.

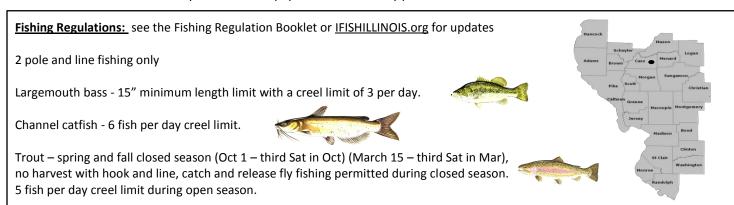
Lake history and characteristics: In the early 1990's the Department of Natural Resources purchased 15,575 acres of ground from Commonwealth Edison. Ten old farm ponds on the site were rehabilitated and restocked and three new larger lakes were constructed. Gridley Lake is 24.6 acres with a maximum depth of 42'. The lake is very clear and is steep-sided making electrofishing surveys difficult. Gridley Lake was to be managed to produce a quality sunfish population. It was initially stocked in 1997 and in the early years did very well. It initially progressed ideally, but eventually began to prove unsuccessful. A catchable rainbow trout program was opened at Gridley Lake in 2014 along with an early catch-and-release fly fishing season. Northern Pike were introduced into Gridley Lake through a one-time stocking event in the summer of 2014 to add predatory pressure to the fish community and assess growth rates and survival.

Largemouth bass: Fish community monitoring via electrofishing has shown to be very difficult in this lake with sample sizes being less than desired. The 2016 spring survey showed a catch rate of only 35 bass/hr electrofishing and very few fish under 12". The majority of bass collected ranged from 12-18". The bass collected showed average body condition. Approximately 2,100 – 4.1" bass were stocked in August 2016 from the state hatchery system to supplement the population. We collected more fish under 12" in the spring 2017 survey, but the overall catch rate was still poor. Data collected from Gridley Lake has been highly variable over the last several years, therefore it is difficult to determine whether reproduction and recruitment are an issue, or if the lack of small bass and sample size is an artifact of sample bias. A spring night electrofishing survey may be needed to adequately survey the community.

Bluegill: The spring 2017 survey sampled the bluegill more effectively than the bass population. We collected 79 bluegill/hr of electrofishing ranging from 2-7.5" with the majority ranging from 3-4". Bluegill body condition values averaged 100, which is average, but all other population characteristics are poor. We will be working toward improving the bass population, which should have a positive effect on the bluegill population. A spring night electrofishing survey may be needed to adequately survey the community.

Redear sunfish: We only collected five redear sunfish in the spring 2017 survey. Redear ranged in size from 4 – 8". Redear showed average body condition values. Poor sampling effectiveness has resulted in few data and little than can be said about the fish community. A spring night electrofishing survey may be needed to adequately survey the community.

Channel catfish: One channel catfish was collected in the spring 2017 fish survey. The population is most likely doing well even though catch rates are low in Gridley Lake. Gill nets, trap nets or low frequency, pulsed-DC electrofishing may be needed to better assess this population, but is difficult to execute due to time and man-power constraints. Non-vulnerable channel catfish will continue to be stocked biennially to sustain the population as hatchery production allows.



												LMP
	2007	2008	2009	2010	2011	2012	2013	2014*	2015	2016	2017	Objectives
Largemouth Bass	spring*	spring*	spring*	summer	spring	spring	summer	fall	spring	spring	spring	
% >12"	9	10	12	11	0		0	67	83	93	96	40-60
% >15"	4	6	4	0	0		0	11	0	48	83	10-25
%>18"	4	6	3	0	0		0	0	0	47	13	5-10
body condition	87	-	90	82	86		86	95	96	96	106	90-110
CPUE (fish/hour EF)	68	90	218	92	44		12	35	34	33	38	>75
Bluegill												
% >6"	56	64	33	46	86		9	33	10	16	14	25-45
% >7"	4	14	3	4	23		0	15	3	1	0	5-10
% >8"	0	0	0	0	0		0	0	0	0	0	3-5
body condition	87		93	83	84		107	85	90	99	100	90-110
CPUE (fish/hour EF)	26	14	138	64	50		30	72	77	123	79	>50
Redear sunfish												
% >7"	43	60	29	53	49		84	29	0	0	20	25-45
% >8"	20	27	14	14	16		16	13	0	0	0	5-10
% >10"	0	1	0	0	0		0	0	0	0	0	3-5
body condition	91		105	95	92		94	87	102	89	95	90-110
CPUE (fish/hour EF)	57	80	182	98	138		38	53	22	15	5	>50
*night survey												
<b>2014*</b> - replaced 3-ph	aca AC with	nulsed DC	oloctrofichi	n.a								

## Fisheries Management Activities Completed:

-Stocked 1250 lbs of rainbow trout 3/14 and 10/5.

-Conducted a spring fish population survey utilizing standard sampling protocol (1-1 hr pulsed-DC electrofishing survey). 6/1

## Aquatic vegetation and/or chemical treatment:

-treated nuisance submersed aquatic vegetation and filamentous algae around bank fishing areas on 5/22

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JEPC Site office: (217) 452-7741