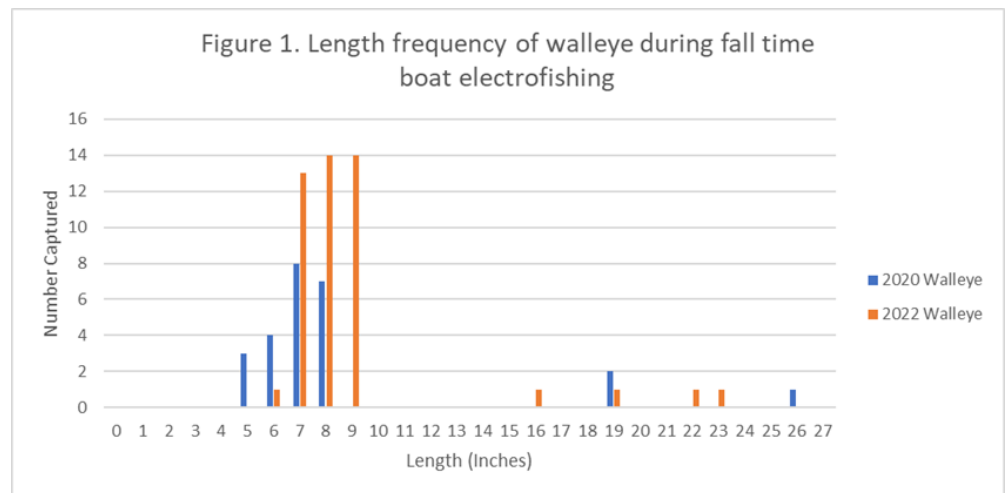


Swinging Bridge Reservoir Percid Survey (Survey #: 322032)  
Garrett Vigrass, Region 3 Fisheries

12/20/2022

Swinging Bridge Reservoir is located in the towns of Thompson, Bethel, Forestburgh, and Lumberland within Sullivan County. This 889-acre reservoir is part of the Mongaup River Hydroelectric facility owned and operated by Eagle Creek Renewable Energy, LLC. A public boat launch provided by Eagle Creek is located on the eastern shore. The reservoir has no boat type restrictions, however special fishing regulations limit the harvest of walleye (*Sander vitreus*) to three fish per day at an 18-inch length minimum. Ice fishing is permitted. Walleye were annually stocked from 1993 until 1998 when stocking efforts were discontinued due to observed natural reproduction. In May 2005 a sink hole in the dam's structure contributed to a partial dam failure. Dam repairs required partial dewatering of the reservoir, the repair and refill was completed in 2007 (Angyal 2008). Fall boat electrofishing surveys have been conducted most years since 1998 following the Percid Sampling Manual (Forney 1994) to assess fall young-of-year walleye resulting from stocking or natural reproduction. Survey data show variability in catch rates (catch/h) for walleye with high catch rates from 2000 until 2011 (Table 1). Since 2011 catch rates were minimal, ranging from zero to 3.8, until a marked increase in catch/h in 2020 at 8.3 /h (Disarno 2020), likely due to a new biennial stocking policy of pond fingerling walleye that started in 2020. The goal of this revised stocking policy was to supplement any natural walleye recruitment within the system. On 11/07/22 a night-time boat electrofishing survey was conducted, with 3.06 hours of on-time targeting gamefish only. The purpose of this survey was to evaluate the success of the stocking efforts as well as the overall population of walleye.

A total of four gamefish species were collected in 2022, including chain pickerel, largemouth bass, smallmouth bass, and walleye. Walleye were the most abundant species observed, with a total 46 collected (15.0/h). Forty-two of the 46 walleye ranged from 6.2 to 9.8 inches, which were assigned as Age-0 through scale reading. Only four walleye collected in 2022 were greater than ten inches (16, 19, 22, 23 inches). Catch rates for largemouth bass of all sizes were 1.6/h, which is well below the statewide mean of 49/h for fall time electrofishing. Smallmouth bass catch rates of all sizes was 7.2/h, falling well short to the statewide mean of 23/h for fall time electrofishing (Brooking et al. 2018).



Results show an increase in catch rates of walleye since biennial stocking has resumed. In 2020 the all-age walleye catch/h was at 8.3 and age-0 rate was 7.3, while in 2022, those rates jumped to 15.0 and 13.7, respectively (Figure 1). These data suggest the stocking policy of pond fingerling walleye is successful at least within the first year, potentially supplementing natural reproduction. However the low catch rates of larger walleye indicates an issue may remain in the recruitment to older ages. It is



Swinging Bridge Reservoir Percid Survey (Survey #: 322032)  
Garrett Vigrass, Region 3 Fisheries

12/20/2022

recommended that the biennial stocking of walleye and subsequent electrofishing surveys continue until results indicate a naturally reproducing walleye population has been re-established within the system. As for other sportfish, the low catch rates of black bass might indicate a low abundance in Swinging Bridge reservoir; however, fall is not the optimal time to sample these populations. A springtime centrarchid survey should be completed in the future to better evaluate the black bass and sunfish population.

Table 1: Total number and catch/size group of walleye caught during fall boat electrofishing surveys conducted since 1998.

Date	Total Caught	#/h	0 to 6	6 to 9	9 to 12	12 to 15	15 to 18	18 to 21	≥21
11/7/2022	46	15.0		28	14		1	1	2
10/22/2020	25	8.3	3	19				2	1
10/22/2018	0	0.0							
10/26/2017	3	1.0						3	
11/17/2016	2	0.9					1		1
10/29/2015	1	0.3						1	
10/16/2014	6	2.2					3	2	1
10/17/2013	9	3.8						8	1
10/3/2012	4	1.7					1	3	
10/18/2011	17	9.0		1	1	2	8	3	2
10/21/2009	36	20.5		5	28	1	2		
10/14/2008	77	35.6		34	14	25	2	1	1
10/24/2007	85	27.8		9	67		5	3	1
10/13/2004	221	182.6		204	1	1	10	5	
10/9/2003	24	9.6		5		8	6	3	2
10/11/2001	217	81.9	11	197			1	6	2
10/25/2000	110	26.3		66	9	1	21	11	2
10/6/1999	3	0.7					3		
10/7/1998	14	2.3				6	3	3	2

Literature Cited:

Angyal, R. 2008. New York State Department of Environmental Conservation Survey Abstract #308019. New York State Department of Environmental Conservation, Bureau of Fisheries. New Paltz, New York.

Brooking, T., Loukmas, J., Jackson, R., VanDevalk, T. 2018. Black bass and sunfish sampling manual for lakes and ponds. New York State Department of Environmental Conservation, Federal Aid in Sportfish Restoration, F-63-R, Study 2, Job 2-2.3, Albany, New York.

DiSarno, M. 2020. Swinging Bridge Percid Survey. Technical Brief #320022. New York State Department of Environmental Conservation, Bureau of Fisheries. New Paltz, New York.

Forney, J. L. L. G. Rudstam, D. M. Green, and D. L. Stang. 1994. Percid sampling manual. Chapter 3 in Fish Sampling Manual. Bureau of Fisheries, New York State Department of Environmental Conservation, Albany, New York

