Pennsylvania Fish and Boat Commission Biologist Report

Frances Slocum Lake

Luzerne County

2021 Muskellunge Survey



Biologist Garret Kratina with 42.9 inch 27.8 pound Muskellunge (Tag #246) caught April 15, 2021 from Frances Slocum Lake.

Pennsylvania Fish and Boat Commission biologists conducted Muskellunge netting at Frances Slocum Lake at <u>Frances Slocum State Park</u> during the week of April 12, 2021. This work was part of an on-going, multi-year, statewide study (see previous surveys <u>2013</u>, <u>2015</u>, <u>2016</u>, <u>2017</u>, and <u>2018</u>.) We set 20 trap nets and caught 12 Muskellunge. Muskellunge catch rate was 0.026 per hour. The size of Muskellunge ranged from 25.0 to 49.6 inches in length and 4.2 to 33.1 pounds in weight.

Part of this work involves marking Muskellunge with Passive Integrated Transponder (PIT) tags. Over the years we've marked 32 individual Muskellunge at Frances Slocum Lake. The lengths and weights of these fish recorded in each year of capture (Table 1) provide some interesting information about growth rates. In 2021, six of the twelve Muskellunge captured were caught for the first time.

		Length (Inches)						Weight (Pounds)					
Tag Number	Sex	2013	2015	2016	2017	2018	2021	2013	2015	2016	2017	2018	2021
246	Female	20.9			38.4		42.9	2.3			15.8		27.8
304	Female		27.9	32.2	34.1				6.5	9.5	13.0		
288	Female		40.6			44.7	49.6		19.4			33.2	33.1
253	Male		34.7	36.1	36.8		39.0		12.3	13.2	14.6		20.3
316	Male		36.8						17.5				
322	Female		28.1	32.7					6.7	9.9			
234	Female		35.3		39.1				15.0		22.2		
242	Female		25.8						4.4				
289	Female		19.0			35.2			1.4			13.1	
239	Male			35.6	37.0					15.8	17.6		
258	Female			33.8	35.9		40.5			10.1	13.7		15.4
240	Female			33.8	37.1					11.0	15.1		
238	Male			30.8	33.1		37.6			9.1	10.0		11.7
310	Male			33.4	36.0					10.6	15.9		
321	Female			32.7	35.5					10.4	12.5		
263	Female			50.2						45.2			
286	Male			34.2	35.1	35.8				12.8	12.9	15.4	
228	Female			32.9						10.1			
284	Female			34.3	36.9					11.7	14.2		
257	Female			37.3						17.3			
225	Male				36.9						12.6		
232	Female				26.3						5.6		
235	Female					35.6						13.1	
267	Female					34.1						12.2	
274	Male					31.1	35.4					11.0	15.0
281	Male					37.3						15.4	
291	Immature						26.5						5.5
295	Immature						27.6						5.3
525	Male						31.4						8.6
528	Male						27.2						5.1
545	Male						25.0						4.2
549	Male						27.4						5.3



Area 5 Fisheries Manager Daryl Pierce with 49.6 inch, 33.1 pound Muskellunge (Tag #288) caught April 14, 2021 from Frances Slocum Lake.



Muskellunge (Tag #288) measured 44.7 inches and 33.2 pounds when caught April 13, 2018.

Garret Kratina Area 4 Fisheries Biologist