



# SAWYER COUNTY 2019-2020 MUSKELLUNGE PIT TAG REPORT



Fisheries technician Evan Sniadajewski with a 48 inch muskellunge captured on Round Lake in spring 2019 in a fyke net.

## Introduction

This report details information about muskellunge captured with Passive Integrated Transponder (PIT) tags in Sawyer County, Wisconsin from 2019-2020 and describes where new tags were deployed during that time. The deployment and recapture of PIT tags is a collaborative effort between the Wisconsin Department of Natural Resources (DNR), Muskies Inc., guides, and other local stakeholders and lake groups. Tags are implanted into both adult muskellunge captured in the field and juvenile muskellunge raised in hatcheries that are stocked into area lakes. Recapture information is gathered by “scanning” fish with a PIT tag reader which records the unique number of the tag implanted in that fish (see **Appendix A for step-by-step instructions**).

## 2019-2020 Sampling Effort Summary

Combined sampling efforts from the WDNR’s Hayward Fish Team, Spooner Fish Research Team, Governor Thompson Hatchery Crew, Park Falls Fish Team and several volunteer anglers and guides led to the capture of 813 muskellunge from 31 different waterbodies in (mostly) Sawyer County in 2019 and 2020. A list of the number of fish caught by waterbody, the number of recaptures, and the average and maximum length of those fish can be found in **Table 2**. Of those 813 fish, 269 were PIT tag recaptures and of those 119 were known-age fish stocked with a PIT tag implanted. Despite a canceled spring field season in 2020 due to Covid-19, spring fyke netting still proved to be the most productive way to encounter muskellunge, capturing 350 fish in 2019 alone. Boom shocking, typically targeting other species but also collecting muskellunge, yielded another 296 fish, and volunteer anglers landed 166 fish (**Table 1**). The most muskellunge both captured and recaptured came from the Chippewa Flowage with 145 fish encountered of which 65 were recaptures. The largest fish was 51.5 inches caught on Round Lake in a fyke net in spring 2019. The average length of all fish captured was 32.9 inches. In the 2 years only 3 other muskellunge over 50 inches were captured – two more from Round Lake and one from Sand Lake. 10 other muskellunge over 47 inches were captured. The largest fish landed by a volunteer angler was 49 inches, caught in the fall of 2020 on Sissabagama Lake. **Figure 1** shows the length frequency of all fish caught by year. In 2019, angler tagged fish accounted for 14% of the total number of fish tagged but in 2020, with limited DNR sampling occurring, this number jumped to 44% and was similarly high in 2018 at 48%. A big thank you goes out to all those, especially anglers, who assisted in the collection of this data.

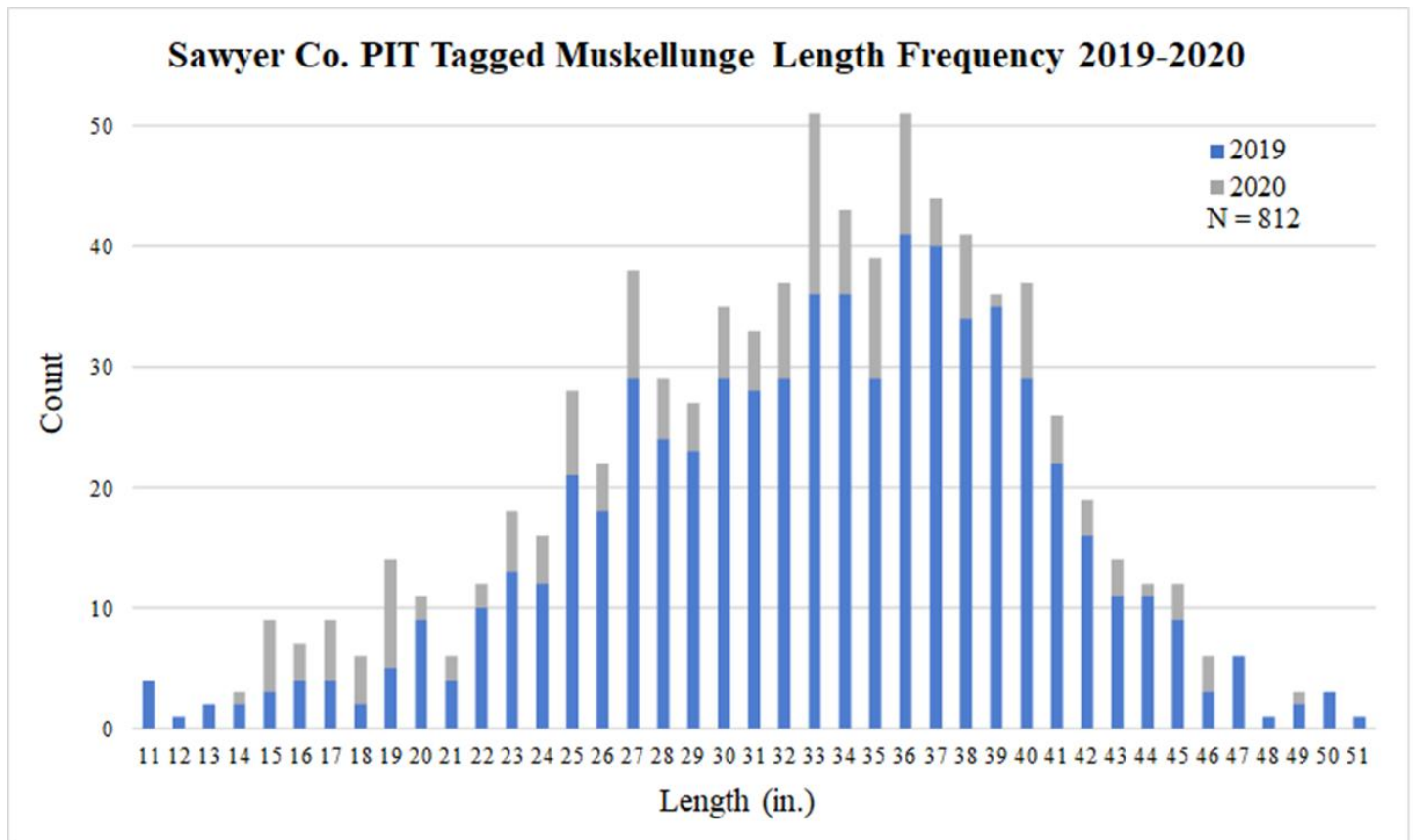


A PIT tag reader (left) and a PIT tag (right). Images from Biomark.com

**Table 1. Muskellunge catch by gear type, total number of fish caught, average length, and max length (inches), 2019-2020.**

Gear Type	Count		Average Length		Max Length	
	2019	2020	2019	2020	2019	2020
Boom shocker	200	96	28.3	26.9	44.8	46.3
Fyke net	350		36.0		51.5	
Hook and line	91	75	34.6	35.5	46.0	49.0
<b>Grand Total</b>	<b>641</b>	<b>171</b>	<b>33.4</b>	<b>30.7</b>	<b>51.5</b>	<b>49.0</b>

**Figure 1.**



**Table 2. Muskellunge catch by waterbody, total number of fish caught, number of recaptures, average length, and max length (inches), 2019-2020.**

<b>Waterbody</b>	<b>Count</b>	<b># Recaptures</b>	<b>Average Length</b>	<b>Max Length</b>
Barber Lake	29	6	27.3	43.5
Black Dan Lake	21	3	30.7	41.1
Black Lake	1		36.3	36.3
Blaisdell Lake	26	4	30.6	41.3
Chippewa Flowage	145	65	32.7	47.1
Chippewa River	48	16	38.4	45.9
Connors Lake	34	8	34.3	47.5
Couderay River	1		29.0	29.0
Flambeau River	6		31.5	38.6
Ghost Lake	6	1	29.1	34.5
Grindstone Lake	32	13	34.3	45.6
Island Lake	6		37.9	45.6
Lac Courte Oreilles	8	5	27.7	44.4
Lake of the Pines	124	45	28.3	44.1
Lost Land Lake	71	43	34.6	49.2
Lower Clam Lake	21	7	30.9	44.8
Meadow Lake	2		27.7	28.6
Mud/Callahan Lakes	10		33.6	39.5
Namekagon River	9		33.3	46.0
North Fork Chief River	4		30.6	33.0
Partridge Crop Lake	1		28.6	28.6
Radisson Flowage	2	1	40.3	42.2
Round Lake	42	5	39.4	51.5
Saint Croix River	14		33.2	44.0
Sand Lake	31	22	40.3	50.8
Sissabagama Lake	8	1	36.3	49.0
Spider Lake	60	13	31.0	40.6
Teal Lake	23	4	31.3	42.0
Tiger Cat Flowage	26	7	35.1	43.1
West Fork Chippewa River	1		30.0	30.0
Whitefish Lake	1		28.5	28.5
<b>Grand Total</b>	<b>813</b>	<b>269</b>	<b>32.9</b>	<b>51.5</b>

## Tag Return Summary 2019-2020

Of the 813 muskellunge captured, 269 or 33% were recaptures. Two hundred nineteen were caught in 2019 composing 34% of the total catch that year and 50 were caught in 2020 composing 29% of the total catch. Muskellunge were recaptured in 19 different waterbodies (**Table 2**). The three lakes with the most recaptures were the Chippewa Flowage (65 recaptures), Lake of the Pines (45), and Lost Land Lake (43). These are three of the primary lakes being stocked with “known-age” PIT tagged large fingerlings and the opportunity to encounter an already tagged fish is much higher. Of the 269 recaptures 119 were of known-age fish, 97 caught in 2019 and 22 caught in 2020.

Anglers recaptured 22 muskellunge in 2019 and 15 in 2020 for a total of 37 of the 269 recaptures (14%). With muskellunge fishing now predominately a catch and release fishery, anglers often wonder if other anglers will ever catch the fish they released. Even after only a few years of consistent angler tagging the numbers show that that answer is yes! In 2019 and 2020, most (166) angler caught fish were captured once, 9 fish were caught twice, and 6 fish were caught three times with the shortest amount of time in between captures being only 10 days for two different fish! When considering all forms of sampling, of the muskellunge caught in 2019 and 2020, the fish caught the most throughout its life was handled 6 times. This male fish was initially captured on Lost Land Lake on April 20, 2009 at 34.5 inches in a fyke net. It was recaptured for the first time in 2010 by hook and line and then again in the Spring of 2014 in a fyke net where it had grown to 37 inches. The following spring it was again recaptured in a fyke net and then disappeared for 4 years until the spring of 2019 when it was yet again recaptured in a fyke net at 38.1 inches. The 6<sup>th</sup> and final encounter with this fish came only 4.5 months later while boom shocking in fall of 2019 where it had shrunk to 37.7 inches. Only this one fish was recaptured 5 times but several were recaptured more than once. Three muskellunge were recaptured 4 times, 7 muskellunge were recaptured 3 times, and 49 muskellunge were recaptured twice.



PIT tagging began between 2006 and 2008 on certain waterbodies, the maximum amount of time for a fish to be at large available for recapture is 12-14 years. Also, many of those initially tagged fish were adults and being 12-14 years beyond the age at which they were tagged allows more time for mortality to reduce the number of fish remaining. That said, one angler managed to land a muskellunge on Teal Lake in 2020 that was initially tagged in the first tagging effort on Teal Lake on May 11, 2008. The fish was a male initially tagged at 30” but only managed to grow 3.0” in 12.27 years! Showing it is difficult to guess the age of a fish based solely on its length! Twelve of the “oldest” recaptures, or fish with the most time spent at large, are summarized in **Table 3**.

Muskellunge are known to exhibit sexually dimorphic growth, where the growth rates of the males and females diverge over time. Generally, muskellunge males slow or stop growing at a younger age than females. This results in males obtaining a smaller maximum size, often rarely surpassing 40 inches, but not having a shorter lifespan. This sex specific age/length distinction can be lost and often go unnoticed by anglers who rarely know the gender of the fish they’ve caught. That “nice” 38 incher might just be the biggest and oldest male in the lake! **Table 4** shows 7 examples of “topped out” males who grew little to none over the relatively long amounts of time they were at large.

The fastest growth was observed in juvenile muskellunge that were recaptured within a few years of being stocked with growth rates ranging from 4-6 inches per year. It is well documented that muskellunge growth slows with time. This trend was observed in the recapture data with larger fish growing progressively more slowly and growth rates falling to 1 inch per year or less in many of the largest and oldest fish. Not all adults captured however exhibited this trend. **Table 5** shows the fastest growing adult muskellunge ( $\geq 30$  inches) recaptured in Sawyer County in 2019 and 2020. Of note is that 6 of the 9 fastest growing fish were females.

**Table 3. “Oldest” muskellunge (fish with the most time spent at large) recaptured in 2019-2020, Sawyer County.**

Waterbody Name	Length	Starting Size	Growth	Years at Large	Growth Rate (IN/YR)	Age	Gender
Teal Lake	33.0	30.0	3.0	12.27	0.24	U	M
Lost Land Lake	44.0	35.4	8.6	11.05	0.78	U	F
Lake of the Pines	31.9	10.4	21.5	9.67	2.22	10.0	M
Lake of the Pines	34.2	10.8	23.4	9.66	2.42	10.0	M
Lake of the Pines	32.9	10.7	22.2	9.65	2.30	10.0	F
Lake of the Pines	38.4	11.2	27.2	8.02	3.39	8.4	U
Lake of the Pines	33.1	11.8	21.3	7.65	2.78	8.0	F
Lake of the Pines	33.6	11.7	21.9	7.65	2.86	8.0	U
Sand Lake	40.6	12.3	28.3	7.64	3.70	8.0	F
Sand Lake	42.3	11.8	30.5	7.63	4.00	8.0	F
Sand Lake	39.6	12.1	27.5	7.63	3.61	8.0	F
Sand Lake	42.7	13.0	29.7	7.09	4.19	8.0	F

**Table 4. Seven examples of male muskellunge that grew very little over the relatively long amount of time they were at large.**

Waterbody Name	Length	Starting Size	Growth	Years at Large	Growth Rate (IN/YR)	Gender
Teal Lake	33.0	30.0	3.0	12.27	0.24	M
Teal Lake	35.0	34.6	0.4	7.22	0.06	M
Sand Lake	40.5	38.0	2.5	7.11	0.35	M
Sand Lake	39.4	36.5	2.9	7.09	0.41	M
Chippewa Flowage	38.2	36.9	1.3	5.99	0.22	M
Chippewa Flowage	38.4	37.2	1.2	5.98	0.20	M
Lake of the Pines	37.8	37.2	0.6	5.97	0.10	M

**Table 5. Fastest growing adult muskellunge ( $\geq 30$  inches) recaptured in Sawyer County, 2019-2020.**

Waterbody Name	Length	Starting Size	Growth	Years at Large	Growth Rate (IN/YR)	Gender
Teal Lake	35.2	30.9	4.3	0.99	4.32	U
Grindstone Lake	34.5	31.1	3.4	0.98	3.47	F
Grindstone Lake	33.6	31.1	2.5	0.98	2.56	M
Sand Lake	40.3	33.3	7.0	3.03	2.31	F
Grindstone Lake	39.5	33.1	6.4	3.02	2.12	F
Lost Land Lake	33.1	31.0	2.1	0.99	2.11	M
Connors Lake	39.5	31.0	8.5	4.05	2.10	F
Grindstone Lake	40.4	38.4	2.0	0.98	2.04	F
Sand Lake	45.1	36.8	8.3	4.06	2.04	F

## Recaptures of Known-Age Muskellunge

“Known-age” refers to muskellunge that were raised in a hatchery and given a PIT tag before being stocked into the wild. This allows biologists to use tag data to determine the year the fish was stocked, and therefore, its age. While all recapture data are important, recaptures of known-age fish are particularly valuable because of the extra information attached to those fish and how rare these data have historically been. In 2019, 97 of the 219 recaptured muskellunge were known-age fish and in 2020, 22 of the 50 recaptured fish were known-age. Annual totals of recaptured muskellunge have been gradually increasing in Sawyer County, but numbers of known-age recaptures have been rapidly increasing, with 2018 being the highest year on record (**Table 6**). This is largely the result of an effort to stock known-age fingerlings into more lakes since 2012, creating more opportunities for recaptures. The percent of known-age recaptures fell slightly in 2019 to 44%, down from 58% in 2018, but remained stable through 2020 despite significantly reduced sampling effort due to Covid-19.

**Table 6. Muskellunge recaptures and known-age recaptures (a subset of all recaptures) in Sawyer County 2011-2020.**

Year	# of Recaptures	# of Known Age Recaptures	Percent %
2011	5	0	0
2012	69	21	30.4
2013	105	6	5.7
2014	81	7	8.6
2015	127	34	26.8
2016	101	31	30.7
2017	98	43	43.9
2018	184	106	57.6
2019	219	97	44.3
2020	50	22	44.0
Total	1039	367	35.3

2019 marked the first year a large proportion of the known-age recaptures were adult fish with 69 of the 97 muskellunge (71%) being 5 years old or older. In most other years, including 2020, most known-age muskellunge captured were still juveniles. Examining sizes of known-age individuals gives us a reliable means to compare growth of muskellunge in various Sawyer County lakes to reported Northern Wisconsin averages. **Table 7** shows the number of known-age muskellunge caught by waterbody and age class with the average length of those fish compared to northern Wisconsin averages. Of note is that the sample size of some of the age classes is small, sometimes only 1 individual, and that that individual may not accurately represent the population, more confidence can be placed in the average length of a given age class when sample sizes are higher. The known-age fish recaptured in 2019 and 2020 (**Table 7**) show muskellunge growth in the Chippewa Flowage, Lac Courte Oreilles, and Sand Lake compare favorably to the northern Wisconsin average with lengths at age ranging from 3.6-7.3 inches greater than an average fish. The fastest growth was observed in the Chippewa Flowage, particularly in the 2016 stocked year class, 20 individuals recaptured in 2019 at age 3 were 5.4 inches greater than the northern Wisconsin average and five individuals recaptured in 2020 at age 4 were 7.3 inches greater than the northern Wisconsin average. Growth that was comparable to the northern Wisconsin average was observed in 28 7-year-old muskellunge recaptured in Lost Land Lake in 2019 (2012 was the only year in which stocked fish were PIT tagged in Lost Land Lake). The slowest growth was observed in Lake of the Pines where younger fish (to age 5) were 1-2 inches larger than the northern Wisconsin average and older fish less than average with four 8-year-olds in 2019 being 1.7 inches smaller, and eight 10-year-olds being 5.5 inches smaller than the northern Wisconsin average.

These waterbody specific trends in muskellunge growth are more evident when the dataset is expanded to include all 337 known-age recaptures. **Figure 2** shows the length at age of all known-age recaptures in Sawyer County (28 recaptures and their stocking records from Lac Courte Oreilles were excluded because the dataset is young, small, and yielded no interpretable information). Three hundred and eight individual fish were recaptured 337 times in 4 study lakes over 9 years from 2012 to 2020. Their length upon stocking and at each subsequent recapture was plotted against their age (fish were given a birthdate of May 1 in the year in which they were stocked) and a second order polynomial trendline was fit to the data to represent the average values for each lake. The northern Wisconsin average muskellunge length at age is plotted as the dotted black line with data labels for lengths at 1-year intervals. Trends observed in the known-age recaptures from 2019 and 2020 persisted when the dataset was expanded to include all known-age recaptures. The Chippewa Flowage showed the fastest growth with lengths at age 4-5 inches greater than the northern Wisconsin average. Sand Lake had the next fastest growth with lengths at age 3-4 inches greater than the northern Wisconsin average. Lost Land Lake showed mediocre growth with muskellunge by age 7 falling to the northern Wisconsin average although remaining slightly higher than the average at younger ages. A similar, but more exaggerated trend was observed in Lake of the Pines where fish 4-years-old or less were slightly larger than average then fell to the average by age 5 and got progressively further from average the older the fish got. The larger size of young known-age muskellunge compared to the northern Wisconsin average, observed in all the lakes, is partially the result of the large size at which the fish are stocked. A naturally reproduced fish in its first fall would be several inches smaller than a stocked fish. In the Chippewa Flowage and Sand Lake where growth is good the difference persists with time but in Lost Land Lake and Lake of the Pines where growth is slower the difference fades and is overtaken.

Given what we already know about the muskellunge populations in these lakes the overall results of the study are not particularly surprising, however the rates at which growth changes with age and by waterbody are valuable numbers that could previously only be estimated. Previous methods for determining muskellunge length at age relied upon counting the number of annuli in a calcified structure (such as an anal spine or cleithrum) of the fish to estimate its age, much like you would count the rings on a tree. While this is a proven and valuable technique it becomes increasingly difficult to age older fish as the annuli stack closer together. This can result in estimates of age having a range of several years or more, by PIT tagging all uncertainty is eliminated and the age of the fish is known, allowing growth to be calculated with certainty.

Two of the largest factors in muskellunge growth are fish density and lake size with low density populations in larger bodies of water growing the fastest. This trend can be seen in the four study lakes. The Chippewa Flowage is the largest at 15,300 acres and has an assumed low-density population (no recent estimate available) with fast growth while Lake of the Pines is the smallest at only 273 acres and has a high-density population (0.78 fish per acre) with slow growth. Density comparisons are made to the range observed in Sawyer County of 0.03-1.17 muskellunge per acre. The only conflation comes between Lost Land Lake and Sand Lake. Sand Lake has better growth than Lost Land Lake even though Lost Land is approximately 400 acres larger. This may be explained by density. Sand has a low-density population (0.05 fish per acre) while Lost Land Lake has a moderate density population (0.4 fish per acre). The insights yielded into muskellunge growth by continuing to track these known-age fish will multiply with time as the number of recaptures increases and the fish get older.

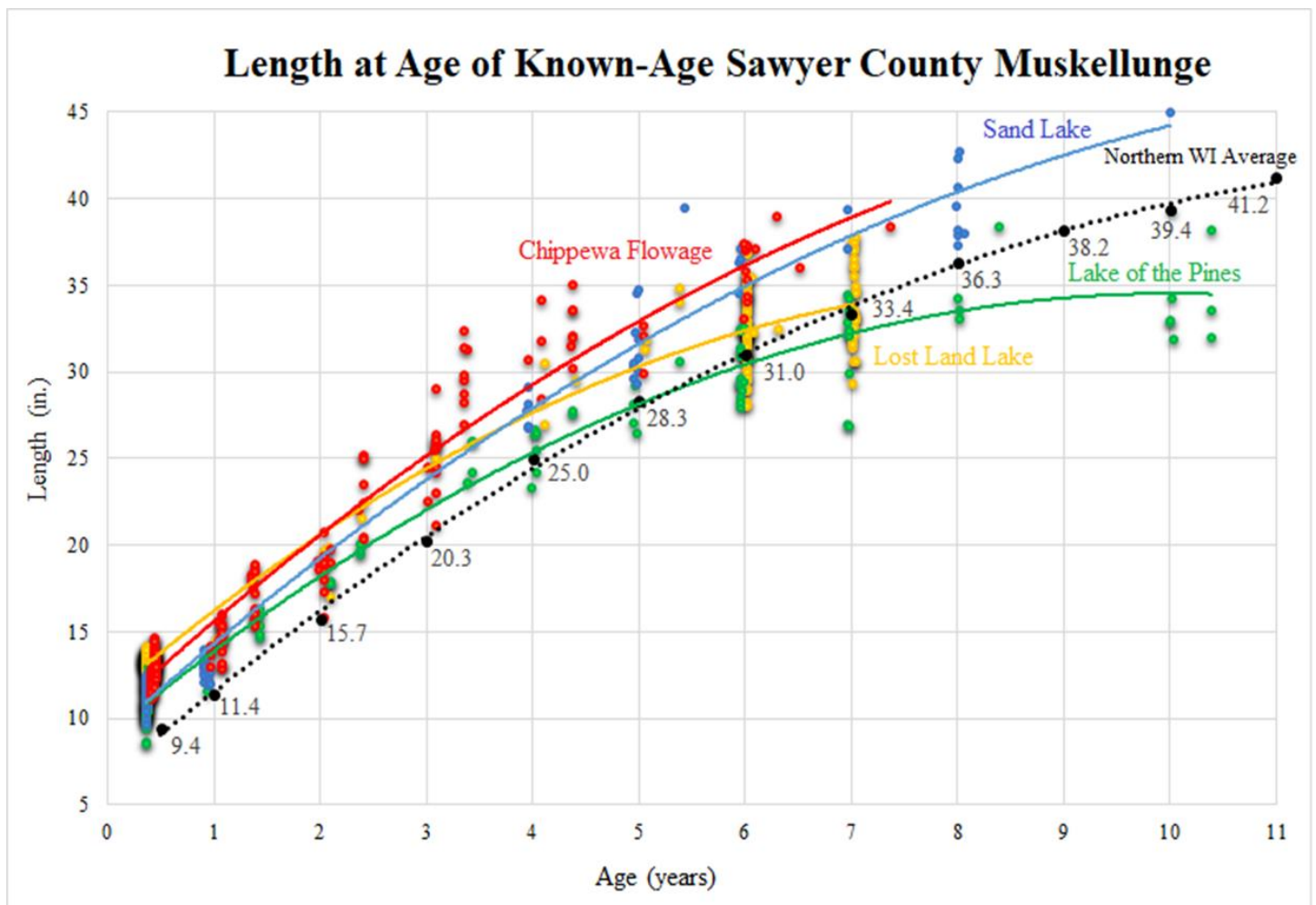
**Table 7. Sawyer County known-age muskellunge length at age by waterbody and age class in 2019-2020 compared to the northern Wisconsin average.**

Waterbody	Sample Year	# of Known-Age	Age Class	Average Length	Northern WI Average	Difference
Chippewa Flowage	2020	12	1	16.9	13.2	3.7
	2019	20	3	26.6	21.2	5.4
	2020	5	4	33.1	25.8	7.3
	2019	14	6	35.8	31.3	4.5
Grindstone Lake	2019	1	5	32.4	28.0	4.4

**Table 7 Continued. Sawyer County known-age muskellunge length at age by waterbody and age class in 2019-2020 compared to the northern Wisconsin average.**

Waterbody	Sample Year	# of Known-Age	Age Class	Average Length	Northern WI Average	Difference
Lac Courte Oreilles	2019	2	2	23.6	17.6	6.0
	2020	3	3	27.4	21.8	5.6
Lake of the Pines	2019	3	2	19.8	17.8	2.0
	2020	1	3	23.6	22.0	1.6
	2019	3	4	26.2	25.3	0.9
	2020	1	5	30.6	29.2	1.4
	2019	2	6	31.0	31.1	-0.1
	2019	4	8	34.8	36.5	-1.7
	2019	8	10	34.4	39.9	-5.5
Lost Land Lake	2019	28	7	33.7	33.9	-0.2
Sand Lake	2019	4	5	31.9	28.0	3.9
	2019	7	8	39.8	36.2	3.6
	2019	1	10	45.0	39.7	5.3
<b>Grand Total: 119</b>						

**Figure 2. Length at age of all known-age Sawyer County muskellunge by lake compared to the Northern Wisconsin average.**





## Muskellunge Movement in 2019-2020

PIT tags allow for a rough idea of muskellunge movement both within waterbodies and between connected waterbodies. Some interesting examples of muskellunge movement documented by PIT tags in Sawyer County from 2019-2020 are detailed below:

- One muskellunge that was stocked as a large fingerling into Lac Courte Oreilles in the fall of 2014 was recaptured once in Lac Courte Oreilles in 2017 and then again in 2019 in Grindstone Lake. Muskellunge PIT tag recaptures have now documented fish moving between all four of Grindstone, Lac Courte Oreilles, Whitefish, and Sand Lakes providing evidence for the interconnection of the fish populations in these large basin lakes connected by only small creeks.
- Three muskellunge tagged in the Chippewa Flowage, two stocked fish from 2013 and one adult tagged in 2014, were recaptured by hook and line in 2019 in the Chippewa River below Winter Dam (the dam that creates the Chippewa Flowage). These fish provide evidence of entrainment between the Chippewa Flowage and the Chippewa River. The frequency with which this happens is important to understand when managing muskellunge populations in reservoir systems.
- A muskellunge caught and tagged by hook and line below the Winter Dam on the Chippewa River in 2018 was recaptured by angling in 2019 in the Radisson Flowage approximately 12 miles downstream and then again by angling only 34 days later back at the Winter Dam!
- Somewhat less impressively a muskellunge tagged in Teal Lake in 2008 was recaptured in Lost Land Lake in 2019 and a muskellunge tagged in Lake of the Pines in 2019 was recaptured only 7 days later in Connors Lake.

## Waterbodies with PIT Tagged Muskellunge in Sawyer County

Continued efforts to PIT tag all adult muskellunge handled in DNR surveys has greatly increased the number of lakes where tags are present, although many lakes have only a small number of tags deployed to date (**Table 8**). PIT tagging fingerlings stocked into lakes rapidly increases the number of tags at large, but these efforts are expensive and time consuming, and may only be appropriate on high-priority waters with specific management questions or established research projects.

**Table 8. PIT tags deployed in muskellunge in Sawyer County lakes.**

Waterbody	Adults Tagged	Stocked Fingerlings Tagged	Waterbody	Adults Tagged	Stocked Fingerlings Tagged
Barber Lake	155	0	Lost Land Lake	442	1302
Barker Lake	1	0	Lower Clam Lake	62	0
Black Lake	1	0	Meadow Lake	2	0
Black Dan Lake	41	0	Moose Lake	117	0
Blaisdell Lake	92	0	Mud/Callahan Lakes	131	0
Chippewa Flowage	505	13739	Partridge Crop Lake	1	0
Chippewa River	61	0	Radisson Flowage	2	0
Connors Lake	62	0	Round Lake	68	679
Couderay River	1	0	Sand Lake	85	1914
Flambeau River	2	0	Sissabagama Lake	43	0
Ghost Lake	49	0	South Barber Lake	1	0
Grindstone Lake	97	0	Spider Lake	678	0
Island Lake	11	0	Teal Lake	201	0
Lac Courte Oreilles	107	7411	Tiger Cat Flowage	125	0
Lake Hayward	5	0	W. Fork Chippewa R.	1	0
Lake of the Pines	324	855	Whitefish Lake	30	0
Lake Winter	2	0	<b>Grand Total:</b>	<b>3505</b>	<b>25900</b>

# APPENDIX A- HOW TO SCAN A PIT TAGGED MUSKELLUNGE

Note- this manual shows a Biomark 601 reader. The described procedure is identical for other models.

## **STEP 1- GET IT IN THE BOAT!!!!**

The first hurdle to collecting data for this project should be the easiest to overcome. Get the PIT tag reader in the boat in a secure location, but somewhere it will be remembered when you catch a fish. We recommend putting it with the digital camera or pliers.

These readers are water-resistant (rain and splashing are ok), but not waterproof (do not submerge). You can keep the reader in a clear waterproof ziplock bag. The reader will even work through the bag so you do not need to take it out. Replace the batteries at the start of each season. WDNR can provide extra batteries.

## **STEP 2- REMEMBER IT WHEN THE ACTION STARTS**

Catching a musky is exciting and rare so it can be easy to get caught up in the moment and forget to scan. That's why having it near the camera, pliers, or any other item you commonly use when you boat a fish is critical. Make it part of your routine to scan every fish, including muskies on lakes that don't have PIT tags. That will make it part of your routine and easier to remember.

## **STEP 3- TURNING ON THE READER**

There is one main button (round) on the reader, pressing the button once will turn it on.



The first thing you will see will likely be the *last tag* the scanner read.



#### **STEP 4- READING YOUR FISH**

Once you have the reader on, press and hold the button until the display says “READING”. When you see that message the reader is actively looking for a new tag. Wave the reader over the fish **at a distance of less than 2 inches**. The reader is smooth and nonabrasive so we recommend rubbing it right on the fish. Pass the reader over the fish a couple times to make sure a tag is not missed. Check:

**-both the cheeks**



**-the belly in around of the pelvic fins**



This can all be done relatively quickly with just a few seconds used to scan each location. It can be done with the fish still in the net, while safely held on board, or as the fish is recovering boatside depending on what you are comfortable with. Having a reader in a waterproof bag makes it easier to check fish while they are in the water.

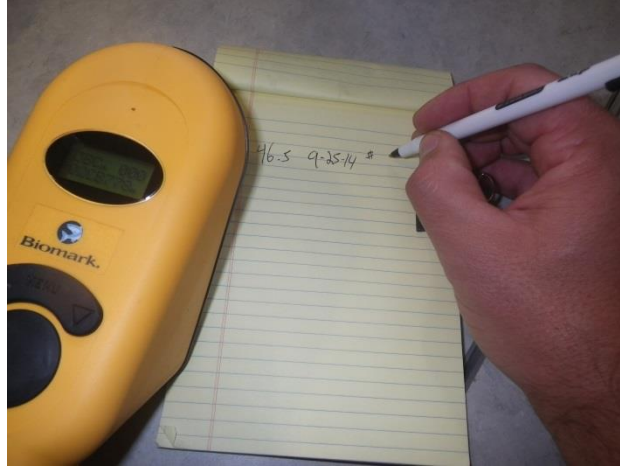
The reader will beep when a tag is detected and the number will now appear on the screen.

If you scan thoroughly and the reader does not beep the fish does not have a tag. BUT you are not done, continue reading!

## **STEP 5- RECORDING THE DATA**

The number will stay on the display for a period of time after the tag is read. Write down the tag number on the DNR provided datasheet or another piece of paper. The last six digits of the tag number are the most important but writing down the full tag number is preferable.

\*If you are not able to record a number before it disappears from the readout or if you accidentally press the button and clear the screen do not worry. The tag number will be stored and can be retrieved later. Continue with the rest of these steps.



**WHETHER THE FISH HAD A TAG OR NOT**, write down the length of the fish to the nearest tenth of an inch if possible, otherwise the nearest quarter or half inch. Write down the date and the lake you are fishing on. It is optional, but if you are fishing a large lake or a chain of lakes a more specific catch location can be interesting as it allows tracking of fish movements within the water body.

It may be worthwhile to create a backup of your data either on a cell phone or another sheet of paper at home or in the car. If you or your clients are curious about the tagged fish you captured send the tag number by email to Max Wolter (info below) and an update on the fish will be provided.

At the end of the season all data can be turned in to:

Max Wolter  
[max.wolter@wisconsin.gov](mailto:max.wolter@wisconsin.gov)  
(715)-634-7429  
10220N State Hwy 27S  
Hayward, WI 54843