



West Watjask Lake Musky Introduction

Final Report for FES Project 16-019

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November 2019

Swan Valley Sport
Fishing Enhancement Inc

West Watjask Lake Musky Introduction

Summary

As part of SVSFE's mandate, enhancement to local fisheries includes reviewing potential waterbodies for fish introductions. Muskellunge are a very sought-after species with limited angling opportunities in Manitoba. The objective of the project initiative was to re-introduce muskellunge to one of the most popular angling destinations in the province, the "Ducks". This objective would be met by stocking non-sterile Leech Lake spotted muskie fingerlings supplied from the Minnesota Muskie Farm Inc. This report is a summary of the project activities and the lessons learnt along the journey.

Contents

| | |
|-----------------------------|----|
| Summary | 1 |
| Objective | 2 |
| Why Muskie? | 2 |
| What does it take? | 2 |
| The Right Habitat..... | 2 |
| The Right Source..... | 2 |
| Funding & Support..... | 3 |
| Hard Work and Patience..... | 3 |
| The "BIG" Day | 6 |
| Looking Forward | 9 |
| Acknowledgements | 11 |

**Please refer to additional reports for more details on past work completed leading up to the 2019 muskellunge stocking:*

- 1) 2015 Watjask Lakes Investigations*
- 2) 2016 West Watjask Lake Muskellunge Sustainability Assessment*
- 3) 2017 West Watjask Lake Musky Introduction Intermediate Report (16-019)*
- 4) 2019 West Watjask Lake - Evaluation of the 2017 Muskellunge Stocking*

Objective

The objective of the project initiative was to re-introduce muskellunge to one of the most popular angling destinations in Manitoba, the Duck Mountains.

Why Muskie?

The Muskellunge (*Esox masquinongy*) is one of the largest and most valued sport fishes in Canada and sought-after by many Manitoban anglers. With limited opportunities in the province, muskie introductions became a topic of discussion in 2014 for SVSFE members. This species once attracted anglers to the Ducks, particularly to Line Lake back in 90s and early 2000s awarding 122 anglers with master anglers awards, 75% of MB muskie records today. Records indicate muskie grew over a meter long (43.75") before unfortunate winterkill conditions removed this species from area in the early 2000s. This was the same cause for the species to disappear in both Beautiful Lake and Twin Lakes. Today, muskie opportunities are restricted to the west portion of Shoal Lake along the Manitoba/Ontario border.

Enhancing local fisheries has always been a focus initiative for SVSFE. The elusiveness and challenge to hook a muskie has the purists of anglers chasing these fish from all distances. Providing unique angling opportunities in the area is one approach to fisheries enhancement.

What does it take?

The Right Habitat

Muskellunge along with the northern pike (*Esox lucius*) are part of the *Esox* family. This family contains two of the six largest native fish species in Manitoba (Stewart 2004). Unfortunately, these family members do not do their best when together. The presence of northern pike are known to have negative impacts on muskellunge recruitment, therefore finding suitable habitat without northern pike was the first challenge.

To SVSFE's benefit, there was a file on the backburner just waiting to be re-investigated. In 1996, former fisheries biologist Ken Kansas had determined West Watjask Lake a suitable recipient for a possible muskie transfer. West Watjask lake was void of major predators and possessed a large stunted population of yellow perch which displayed long-term survival. The transfer never did take place, but this initiated the investigations on the Watjask Lakes. In the summer of 2015 & 2016, SVSFE technicians conducted various field assessments and put the results through a habitat suitability index for muskellunge. Results found West Watjask Lake to be suitable for muskie introductions. Please refer to the "2016 West Watjask Lake Musky Suitability Assessment" for more details on surveys.

The Right Source

Step two was to determine the appropriate stocking rate and purchase disease-free certified muskie stock. The Introductions and Transfer Committee is responsible for reviewing and approving fish transfers and introductions in Manitoba. After receiving approval, a muskie supplier was located in Alexandria

Minnesota - Rob & Debbie Jost owners and operators of Minnesota Muskie Farm Inc. With limited muskie stocking programs in Canada, SVSFE had no choice but to go with an international supplier. The muskie farm raises a variety of certified freshwater game fish and supplies fish to various jurisdictions within Minnesota and all over the United States.

After reviewing stocking rates in various districts and discussions with local fisheries staff and muskie supplier, SVSFE proposed a stocking rate of 2 fish/acre. This would equate to approximately 475 muskie in this 238-acre lake. In 2016, 500 non-sterile leech lake spotted muskellunge were order through the Minnesota Muskie Farm and scheduled to be stocked in the fall of 2016.

Funding & Support

Purchasing larger fingerlings is expensive in any stocking program and purchasing across international borders also comes at a higher price. For that reason, SVSFE reached out to the Fish and Wildlife Enhancement Fund for financial support. The group was successful and granted \$9,875 to purchase muskellunge. SVSFE also reached out to local municipalities, government, industry and sport fish entities for non-monetary support including the Municipality of Swan Valley West, Town of Swan River, Municipality of Roblin, Louisiana Pacific, Manitoba Sustainable Development, Manitoba Fly Fisherman Association, Canadian Esoc Association, Hooked Magazine, etc. The objective was to collect feedback and support to incorporate within project objectives.

Hard Work and Patience

Importing fish across international borders involves permitting by both parties and can take some time and a fair bit of communication and organization with US and Canadian departments. In 2016, SVSFE received permits for a live fish import with the Canadian Food Inspection Agency (CFIA) and live fish handling permit with Manitoba Sustainable Development Fisheries Branch anticipating to stock muskellunge that fall. Unfortunately, Rob Jost was not satisfied with the growth of his stock and recommended over-wintering the fish until the spring of 2017. SVSFE agreed but come spring, more bad news from the muskie farm. There was a high case of mortality in the overwintered stock and only 35 fish remained. Rob offered to sell the fish at a discount price and since SVSFE staff would be in the Winnipeg area during the proposed stocking date, SVSFE agreed to meet at the Emerson border. The stocking would act as a trial for the transfer logistics and to further assess survival. On June 22nd 2017, 35 muskellunge were transferred, and scatter stocked in West Watjask Lake. All fish faired the 13-hour transport and were healthy specimens. Please refer to the 2017 Intermediate Report - Prj 16-019 West Watjask Lake - Musky Introduction for full details on the transfer

Following this, SVSFE continued to work with Minnesota Muskie Farm Inc. to purchase the appropriate amount of muskellunge for introductions. To the group's disappointment, time after time, plans fell through. In the fall of 2017, the lakes were frozen prior to Rob shipping the fish and not ideal for stocking. In 2018 his crop did not produce enough for him to supply fish. At that time, SVSFE reached out to many other US suppliers and to the Lake Simcoe

Muskellunge Restoration Program with the Ontario Ministry of Natural Resources (OMNR) and Fleming College. No US suppliers were interested in shipping into Canada and Chris Wilson, Production Planning Biologist with OMNR, stated the muskie program in Ontario is incredibly small, run in conjunction with multiple partners and he did not foresee any surplus for shipping out of province.

In the fall of 2018, SVSFE request yet another extension with the FWEF administration with a final deadline of December 2019 for the initiative. During the winter of 2019, the Minnesota Muskie Farm was unsure if they would have enough stock to accommodate a shipment in future years but would contact SVSFE if they had a surplus.

Not hearing from Rob, SVSFE decided to try a different approach to acquire muskie. On June 13th, 2019 SVSFE contacted Minnesota Muskie Farm to request the option of stocking muskie eggs/fry versus fingerlings. Rob's casual response was "things are looking pretty good for this fall, we have 20,000 muskie on feed. I will know by the end of July". Naturally, SVSFE was ecstatic but like the saying states "Never count your chickens before they hatch".

By the end of July, technicians had the go ahead from Minnesota, permits were acquired and 450 muskie were scheduled for delivery in October. Now the work began, the fish were coming. SVSFE coordinated support to help in preparing the trail to easily transport the fish from the road to the lake, sourced volunteers to help with the event and developed a stocking strategy to minimize stress on these valuable muskie. The group wanted to ensure everything would go accordingly to plan. The date was set for Oct 10, 2019 and fish scheduled to arrive at the lake late that afternoon. What happened next, no one could predict.



On October 10th Southern Manitoba experienced a recording setting winter storm with accumulations of snow up to 74cm, winds over 100km/hour, putting over 50,000 Manitobans out of power and of course, setting the transfer date back yet again.

The storm brought some snow to the north, which quickly degraded the road conditions into West Watjask. This caused issues with trying to reschedule a transfer date. SVSFE stayed in close communication with the local logger who assisted by clearing off the snow to help dry out the road. In addition to the road, the muskie supplier had not received their export permit from the United States Department of Agriculture - Animals and Plant Health Inspection Service (USDA-APHIS).

Setbacks from not ideal road conditions and the delay in the export permit limited available delivery dates for the Minnesota Muskie Farm. They were right in the middle of their busy season transporting fish all over the United States and stated it would be difficult to commit a driver for a two-day trip to Canada. Hesitate at first, but with no other options SVSFE agreed to meet at the Emerson border to pick up the muskie. A little more consideration was needed now that technicians would be transporting the fish through Manitoba. After a few phone calls with the Whiteshell Fish Hatchery Manager, Kevin Dyck, some tweaking to the transfer tank equipment and locating a new friend in Winkler MB to source clean water, SVSFE was ready. The challenges faced with this initiative may have delayed the arrival of the muskellunge, but everything happens for a reason.

The "BIG" Day

On the morning of October 25th, SVSFE technicians Holly Urban and Megan Paterson, already in Winkler, headed to the Winkler Water Treatment Plant. Here employees Dave and Kevin supplied some of the purist water from their state-of-the-art reverse-osmosis plant to transfer the muskie in. Due to concerns of aquatic invasion species, special practices are required to stop the spread and transferring fish with a clean water supply is essential.

By 9:30 am, the muskellunge had passed the vet inspection by CFIA and SVSFE technicians met up with Alex Jost, from Minnesota Muskie Farm to transfer the fish between vehicles.



Muskellunge are such a rare fish to Manitoba, even some of the Canadian Border Security Agency (CBSA) officials had to check them out prior to departure. At 10am the muskie were northbound for the seven-hour journey.

Meanwhile, SVSFE technician Brock Koutecky and volunteers were busy setting up for stocking at the lake. This involved hauling in a small jon boat & motor, water pump and hose, nets, cans and trough to prepare for scattered stocking.



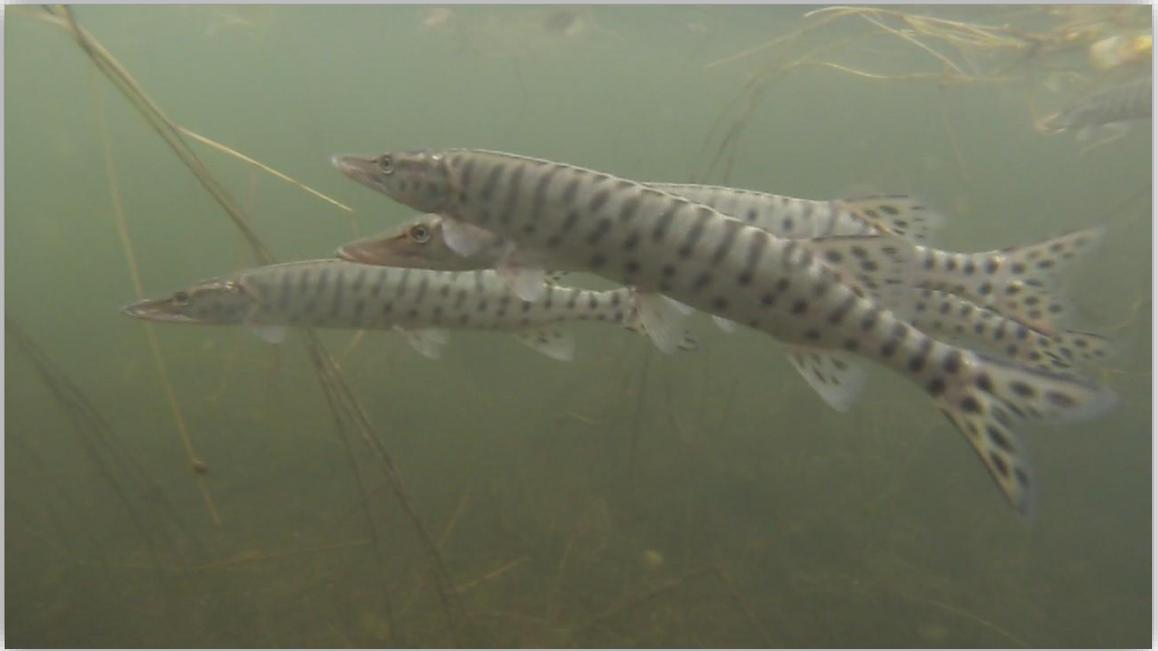
Like mentioned before, things happen for a reason. October 25th turned out to be the best possible day to stock muskellunge in the Ducks. The weather was ideal with temperatures in the double digits. The 9-km logging road had dried up nicely, the ice along the edge of the lake had softened and a handful of volunteers were available to assist that Friday evening. One trip at a time, small batches of muskie were transferred to stocking cans, carried to the boat and boated to various highly vegetated locations suitable for stocking. Each volunteer had an opportunity to release the muskie, even our youngest, Hannah Yakielashek, daughter to SVSFE President Todd Yakielashek.





The stocking was a success with 100% survival of the 12"+ leech lake spotted muskellunge supplied by the Minnesota Muskie Farm. With the introduction complete, volunteers enjoyed a tailgate wiener roast and reminisced in the ups and downs of the project and how this initiative will impact the angling community and Parkland in many ways.





Looking Forward

Moving forward, future considerations and follow-up steps are required in order to achieve the objective of establishing a muskellunge fishery at West Watjask Lake. During the spring of 2019, SVSFE conducted a short survey on West Watjask Lake to review the survival of the 35 muskellunge stocked in 2017. In the 2019 West Watjask Lake - Evaluation of the 2017 Muskellunge Stocking summary, there are projects initiatives and management strategies to consider;

- 1) Improve lake access for anglers - West Watjask Lake is unique and not like typical muskie fisheries in neighbouring jurisdictions. The lake is located along an active logging road 9 km off highway #83. Today, the lake is easily accessible by truck under dry conditions or ATV/snowmobile under wet/frozen conditions. SVSFE is currently working with the local forestry company, Louisiana Pacific and government to create a development plan for access and has received support for such initiatives. In 2020, SVSFE intends to clean up the access trail to the lake and install a dock for easier launching of small watercraft. Other future infrastructure (parking area) will be completed in the following years.
- 2) Monitor muskellunge populations - This can be achieved through collecting both dependent and independent fishery data. Independent fishery data would include a rotational monitoring program to evaluate stocking success, growth and natural recruitment. Dependent fishery data would rely on anglers to voluntarily submit data on their angling experiences (hours fished, fish caught/see and measurements). Together, both

approaches will monitor the development of this fishery and whether management steps is required (ie. supplemental stocking).

- 3) Maintain healthy population of large muskellunge - The long-awaited return of the muskie to Manitoba is a unique initiative in itself. One that deserves special considerations to ensure success. Muskellunge are not native to Manitoba waters and regulations are very minimal in the province due to this rarity. Maintaining a healthy population truly comes down to management through regulations. Current regulations restrict anglers to catch and release only and use of barbless hooks. Other muskie management jurisdictions utilize season closures and tackle restrictions. To increase recruitment success and decrease post-release mortality, strategies such as a closed season and tackle restrictions have been recommended. Please refer to the 2019 West Watjask Lake - Evaluation of the 2017 Muskellunge Stocking for details on proposed regulation changes.



- 4) Angler education - This exclusive muskie fishery will draw anglers from near and far. Many which may have never seen a musky before and may not understand their biology and characteristics. Muskie are much more fragile than most anglers think...they are not northern pike even though they resemble them (Gord Pyzer 2019). SVSFE plans to install information signage on muskellunge regulations, catch and release tips and angler participation in managing the fishery. This will also be promoted through various media including newspaper articles, newsletters, magazines and social media. Education is vital to the future management of West Watjask Lake muskie.

Acknowledgements

SVSFE is excited to report the long-awaited stocking of muskellunge in West Watjask Lake. However, our team does not do this alone. We rely on partnerships and support through several entities. We can never say thank enough to all the partners who truly make it all happen. First and foremost, recognition of the **Fisheries and Wildlife Enhancement Fund** (FWEF) is imperative. The Public Review Committee (PRC) funded Prj.16-019 West Watjask Lake Musky Introduction and granted dollars to facilitate not only this project, but various other important projects over the years. The stamp is a constant reminder that a portion of angling licenses goes towards creating, protecting, and enhancing fisheries for future generations. The work completed under the Musky Introduction would not be possible without the initiatives of the fund.



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We would also like to thank our **directors** for their understanding and lead on creating partnerships to enhance and sustain local fisheries. Without our group's conviction and support to break boundaries, this type of support would not be achievable. A massive thank you to former Fisheries Biologist, **Ken Kansas** for your technical advice over the years and for writing that memorandum back in 96' which started it all. A huge thank you to Regional Fisheries Manager, **Ian Kitch**, for your endless support, guidance, and the continued use of your gear. We look forward to working together with you and **Derek Kroeker**, new Fisheries Manager for the southern portion of the Duck Mountains on management and monitoring strategies for this unique fishery. We must thank **Kevin Dyck** manager at the Whiteshell Hatchery for providing us with the confidence and know-how to tweak our transfer equipment helping achieve 100% survival. Also, thank you to the regional staff with **Manitoba Sustainable Development** in Swan River, Dauphin & Roblin and Winnipeg for assisting in either past field work, advice in developing surveys, for collaboration on past planning and towards future planning at West Watjask Lake. Thank you to Fisheries Biologist, **Laureen Janusz** for your patience and accommodations in extending or revising multiple permits through this process. Sincere thank you to **Gord Pyzer**, former senior fisheries manager for over 30 years in Ontario's Ministry of Natural Resources for sharing your knowledge and experience on muskellunge behaviour and management.

A big shout out to Manitoba Fire Program IA24 Fire Ranger, **Pat Bergson** who helped Brock clear a trail to the lake. Thanks to Mykula Contracting - **Chad Mykula** kept us informed of the road conditions and graded the road to speed the drying process. Thank you to **LP Woodlands** for lending us your radio over the years while accessing the Watjask area and for previous and future collaboration on improvements for the area. Big shout out to our new friends from Winkler's Water Treatment Plant - **Travis, Dave and Kevin**. Always nice to meet new people who enjoy fishing and willing to go out of their way to help out. We would also like to recognize the Canadian Food Inspection Agency staff - **Ulysse Marion**, Multi Program Inspector and **Dr. Stephani McLean**, Veterinarian and others behind the scenes, along with **Wendy Friesen** with Cole International, the **CBSA & USDA-APHIS** staff. Your assistance and guidance with the permitting, inspection and transfer process was extremely helpful. To our

volunteers.....**Krista Olenick** and **Tammy Forsachuk** who coordinated and surprised everyone with a fantastic tailgate wiener roast with all the fixings. These ladies along with our other volunteers - **Todd & Hannah Yakielashek** and **Trevor Urban**, did such a great job assisting in the muskie stocking and had the opportunity to release a species not many anglers get to see here in Manitoba. We would like to recognize the various associations and businesses that have contributed, promoted and supported the project - **Canadian Esox Association, Manitoba Fly Fisherman Association, Manitoba Lodge & Outfitters Association and Hooked Magazine.**

Last, but not least, Minnesota Muskie Farms - **Rob, Debbie and Alex Jost** - Can't thank you enough! Muskie would not be a topic of discussion in the Parkland if it weren't for your support, patience and dedication to working with us. We hope we have not missed anyone. This project has been in the works for over five years and many individuals have contributed. Goals are only achievable by working with individuals who are passionate about fishing and who have the drive to do meaningful work. These partnerships are truly the key to success. We, as SVSFE technicians are extremely grateful for the encouragement received from the organization and look forward to building this partnership in the years to come.



Figure: 2019 Muskie Stocking Crew (left to right) - Megan Paterson, Krista Olenick, Todd Yakielashek, Hannah Yakielashek, Tammy Forschuk, Brock Koutecky, Holly Urban & Trevor Urban