

Fall 2022 Parkland Trout Investigation



Manitoba Natural Resources
and Northern Development
2022

Introduction

Manitoba Natural Resources and Northern Development conducted a trout assessment and overall species composition investigation using objective-based electrofishing on five lakes in Manitoba's Parkland Region. East Goose Lake, West Goose Lake, Spear Lake, Patterson Lake and Tokaryk Lake were the five lakes that were investigated in the fall of 2022. The primary objective of this study was to assess salmonid and non-salmonid populations in each respective lake through non-lethal electrofishing surveys to collect data in order to properly manage each fishery moving forward.

East Goose Lake

Located in the Town of Roblin, East Goose Lake is a small aerated lake (15 hectares) with a rich history of being a world class trout fishery and was home to the first-ever Canadian National Fly-Fishing Championship. East Goose Lake offers fishing opportunities for anglers of all experience levels with a boat launch with a dock (electric motor use only), numerous angling docks, washrooms and campground. The mean depth of East Goose Lake is 5.3m, with the maximum depth reaching 9.4m.

Rainbow trout were originally introduced to East Goose Lake in 1958 when 9,000 fingerling were stocked. These stocking events ceased in 1962 and did not resume until 2004. The initial brown trout introduction to East Goose Lake occurred in 2008. In addition to trout, anglers also have a chance to catch walleye and yellow perch in East Goose Lake.

West Goose Lake

On the west side of Highway 83, across from East Goose Lake, West Goose Lake provides anglers with another historically world class trout fishery in the Town of Roblin. Similar to East Goose Lake, West Goose Lake is a small aerated lake (15 hectares) with an average depth of 5.3m and maximum depth of 8.5m. A boat launch is located on the west shore for electric motor use only. Both rainbow trout and brown trout were first introduced to West Goose Lake in 2005.

Spear Lake

Located 2km northwest of Russell, Spear Lake is a 47.5 hectare lake that reaches a maximum depth of 5m. With multiple casting docks, a boat launch (electric motor only) and day camping area, Spear Lake provides anglers of all experience levels a great opportunity to angle. Conjuring Creek, which flows west into the Assiniboine River was first controlled in 1964 when a water control structure was constructed to create Spear Lake as a water source for Russell. The first trout stocking event occurred in 1998 when 4,200 rainbow trout were introduced, years after Russell halted water use of Spear Lake.

Due to an increased non-salmonid population and an aggressive decline in trout numbers, trout stocking was put on hold in 2014. In efforts to regain Spear Lake as a stocked trout waterbody, the Municipality of Russell- Binscarth and Russell Fish and Game began fish removals (walleye and white sucker). After successful fish removal efforts, Spear Lake was stocked again in 2020 with 6,000 18+cm rainbow trout and 6,000 18+cm brown trout.

Patterson Lake

Patterson Lake, located roughly 8.5 km north of Oakburn, totals 141 hectares, with an average depth of 4.2m. Patterson Lake has a boat launch (electric motor use only), lakefront campground and washrooms which provides anglers with a unique opportunity to camp at a Parkland trophy stocked trout water. The initial stocking of rainbow and brown trout occurred in 2002 when 13,500 12-15cm brown trout and a total of 7,800 rainbow trout were introduced to Patterson Lake. Patterson Lake was FLIPPR's (Fisheries and Lake Improvement Program for the Parkland Region) flagship lake, developed in 2003.

Tokaryk Lake

Within a mile east of Patterson Lake, Tokaryk Lake is an 84 hectare lake with an average depth of 5.1m. Tokaryk Lake was originally stocked in the early 1990's with both brown and rainbow trout which have been staple species of the fishery. Anglers have also reported increased numbers of northern pike and yellow perch.

Overview

West Goose Lake (A) and East Goose Lake (B), located at the northern extent of the study area in Roblin, MB. Spear Lake (C), located 2 kilometers northwest of Russell, MB. Patterson Lake (D) and Tokaryk Lake (E), located just south of Ohla, MB and roughly 8.5 kilometers north of Oakburn, MB.

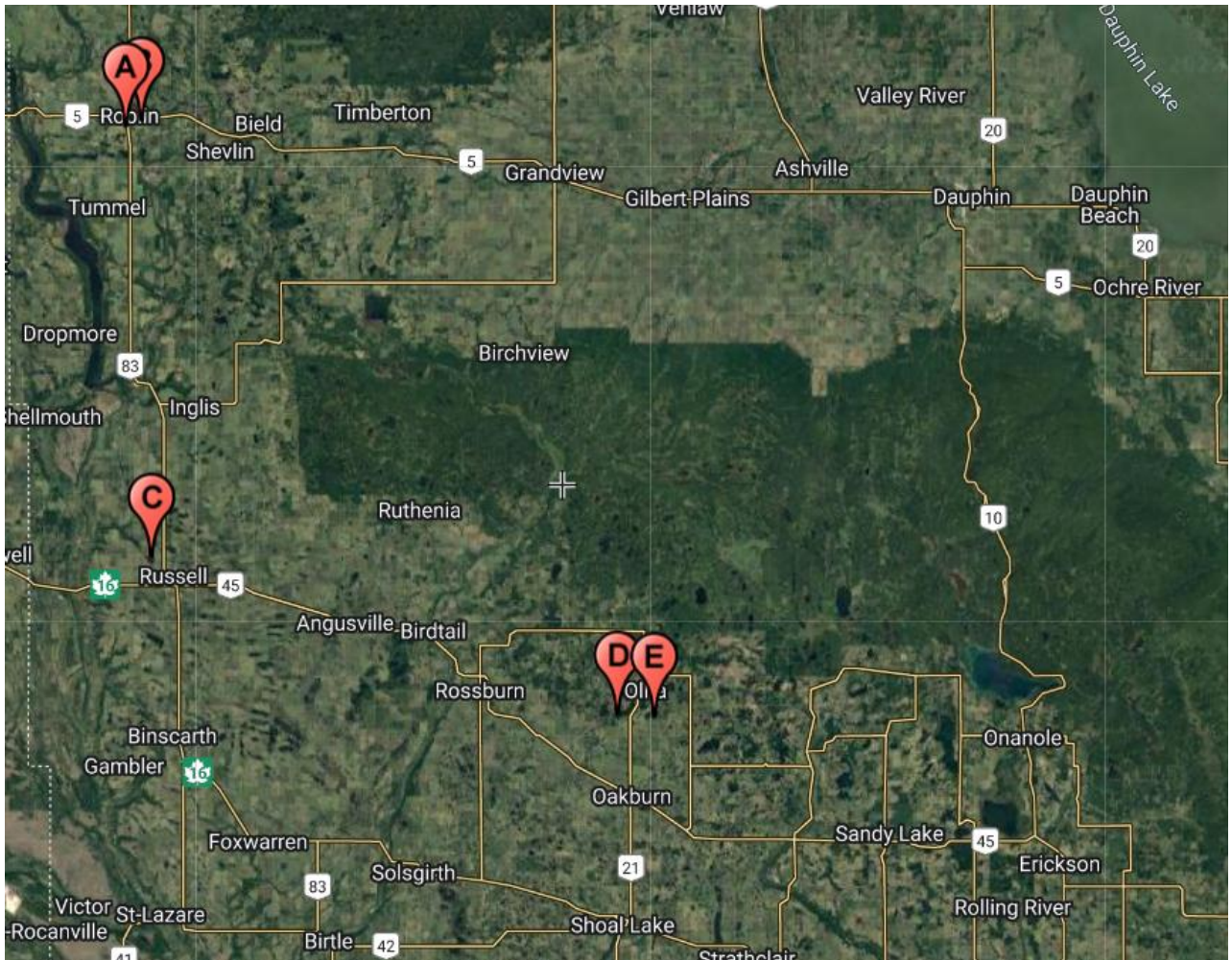


Figure 1: Map of project area.

Methods

Through a working agreement with Department of Fisheries and Oceans, a 20' Smith-Root Electrofishing Boat was utilized in data collection. The data collection crew consisted of provincial fisheries staff with the assistance of Swan Valley Sport Fish Enhancement (SVFSE). All large-bodied fish were sampled for fork length, total length and round weight. Additional information with sex, maturity and aging structures were collected from walleye, rainbow and brown trout, and smallmouth bass.



Figure 2a. West Goose Lake electrofishing effort.

	Time of Day	Effort (minutes)
Transect 1	21:00	41.53
Transect 2	22:05	26.03
Transect 3	22:50	23.85



Figure 2b. East Goose Lake electrofishing effort.

	Time of Day	Effort (minutes)
Transect 1	20:40	40.73
Transect 2	22:15	39.53

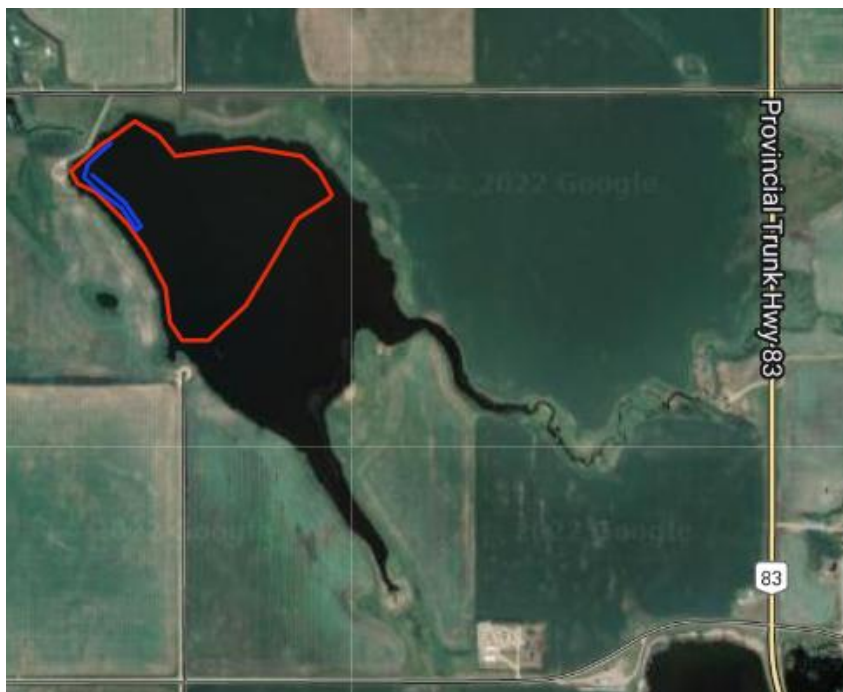


Figure 2c. Spear Lake electrofishing effort.

	Time of Day	Effort (minutes)
Transect 1	12:32	62.6
Transect 2	14:00	22.28

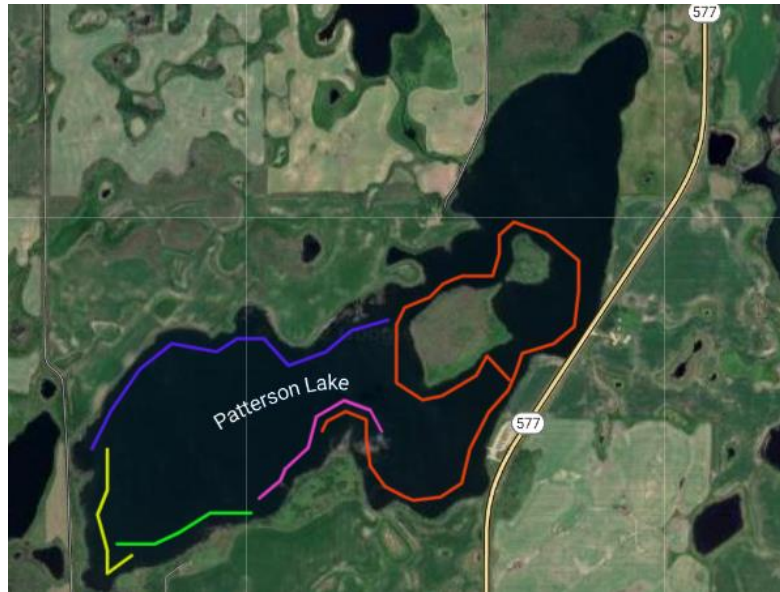


Figure 2d. Patterson Lake electrofishing effort.

	Time of Day	Effort (minutes)
Transect 1	19:25	80.28
Transect 2	21:05	35.58
Transect 3	22:15	15.73
Transect 4	22:45	22.28
Transect 5	23:35	25.88

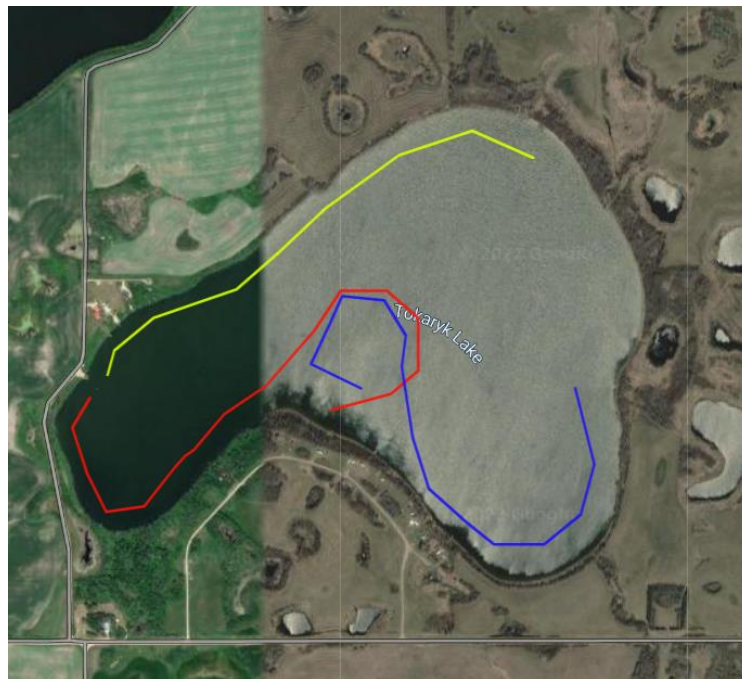


Figure 2e. Tokaryk Lake electrofishing effort.

	Time of Day	Effort (minutes)
Transect 1	11:15	30.25
Transect 2	12:05	31.08
Transect 3	13:00	29.78

Results

West Goose Lake

Electrofishing efforts occurred over the evening of August 29th, 2022 between 9:00pm - 12:00 am. Over three transects, the total effort totalled 6,025 seconds. Surface water temperature measured 19.7 °C. Electrofishing settings remained constant over the 3 transects at 60 (DC) pulses per second, 40% of 360-500 volts with an amperage averaging 10.2.

During the first transect (perimeter of lake) of 2,492 seconds, a total of 7 smallmouth bass, 1 walleye, 3 yellow perch and roughly 40 common shiner were captured. The second transect of 1,562 seconds resulted in 1 rainbow trout being captured. The third transect of 1,971 seconds resulted in 2 rainbow trout and 2 yellow perch.

The 7 total smallmouth bass resulted in 44% of total catch with a CPUE (catch per unit effort) of 4.19 fish/hour. 1 walleye was captured making up 6% of the total catch, resulting in a CPUE of .6 fish/hour. Yellow perch made up 31% of the total catch with a CPUE of 2.99 fish/hour. Rainbow trout were the third most abundant species captured resulting in a total of 3 rainbow trout with a CPUE of 1.8 fish/hour. The totality of the West Goose electrofishing study resulted in 16 fish being captured with a CPUE of 9.58 fish/hour.

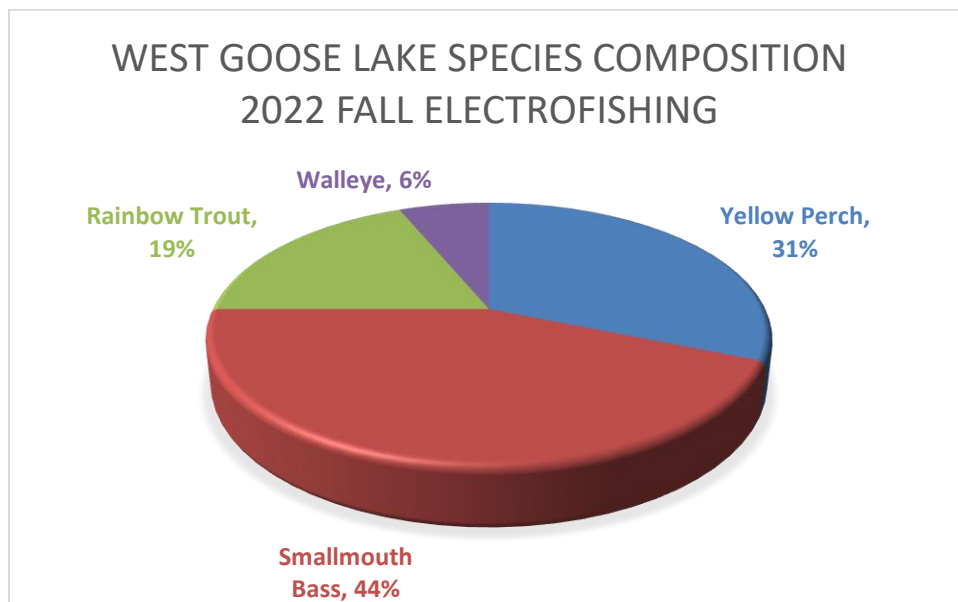


Figure 3. West Goose Lake Species Composition

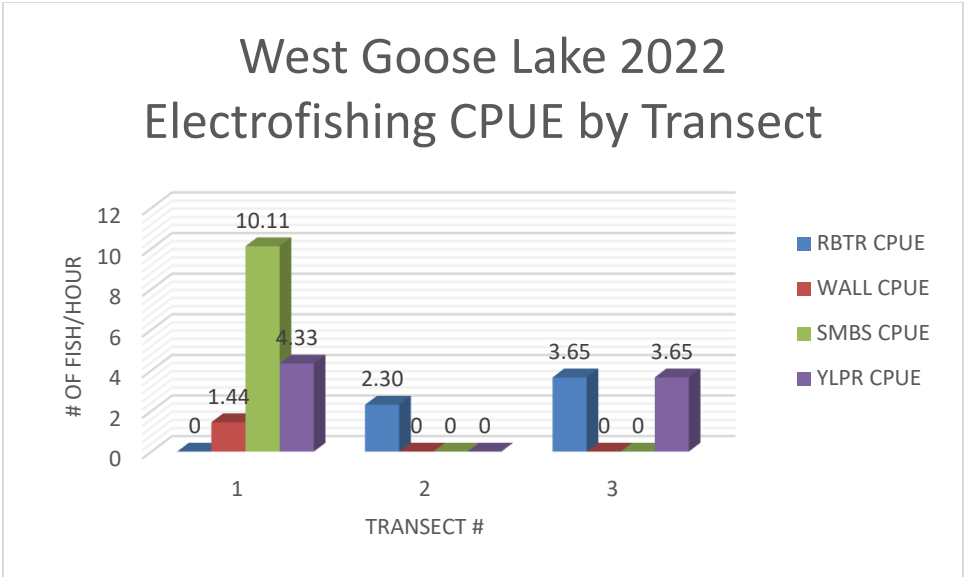


Figure 4. West Goose Lake Catch-Per-Unit-Effort

East Goose Lake

Two electrofishing transects were conducted over the evening of August 30th, 2022 between 8:30pm – 10:30pm. Over two transects, the fishing effort totalled 4,816 seconds with an average surface water temperature of 20.1°C. Electrofishing settings remained constant over both transects at 60 (DC) pulses per second, 40% of 360-500 volts with an average amperage of 10.6.

The first transect of 2,444 seconds was an assessment of the littoral zone (lake perimeter) yielding a catch of 2 walleye and 1 yellow perch. The second transect of 2,372 seconds resulted in 3 walleye being captured. The 5 total walleye captured resulted in a CPUE of 3.74 fish/hour making up 86% of the total catch. The remaining 14% of the total catch was composed of yellow perch with a CPUE .75 fish/hour. The totality of the East Goose electrofishing study resulted in 6 fish being captured with a CPUE of 4.49 fish/hour.

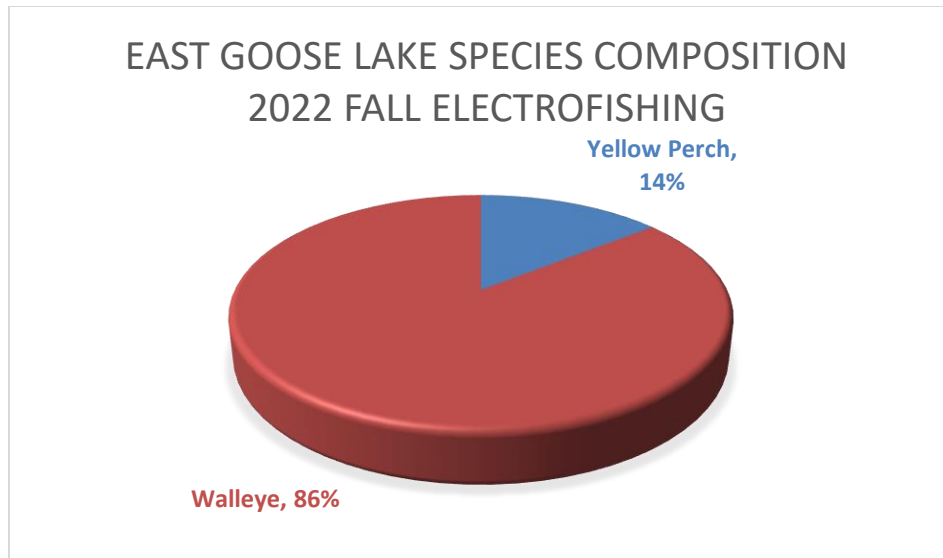


Figure 5. East Goose Lake Species Composition

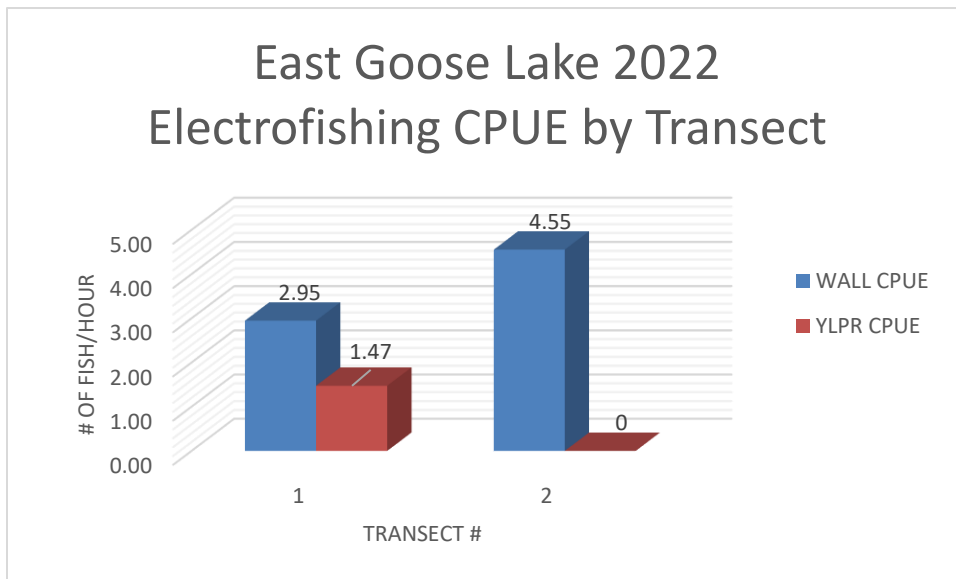


Figure 6. East Goose Lake Catch-Per-Unit-Effort

Spear Lake

Electrofishing efforts were conducted during day time hours from 12:00pm – 2:00pm on August 31st. Two transects were electrofished totalling 5,093 seconds of effort. The average surface water temperature was 19.8 °C. Electrofishing settings remained constant over both transects at 60 (DC) pulses per second, 40% of 360-500 volts with an amperage averaging 10.4.

The first transect, a littoral zone assessment, resulted in an effort of 3,756 seconds. 77 total fish were captured during the first transect, 73 being white suckers (CPUE of 69.97 fish/hour.) The remaining catch was composed of 2 rainbow trout and 2 brown trout, each resulting in a CPUE of 1.92 fish/hour. The second transect focused on the southwest corner of Spear Lake, passing by the casting docks, boat launch and aeration shed. The second transect resulted in 40 total fish captured, 38 being white suckers (CPUE of 102.32 fish/hour.) 1 rainbow trout and 1 brown trout were also captured during the second transect resulting in a CPUE of 2.69 fish/hour per trout species.

The totality of the Spear Lake electrofishing species composition investigation resulted in 117 fish being captured with a CPUE of 82.98 fish/hour.

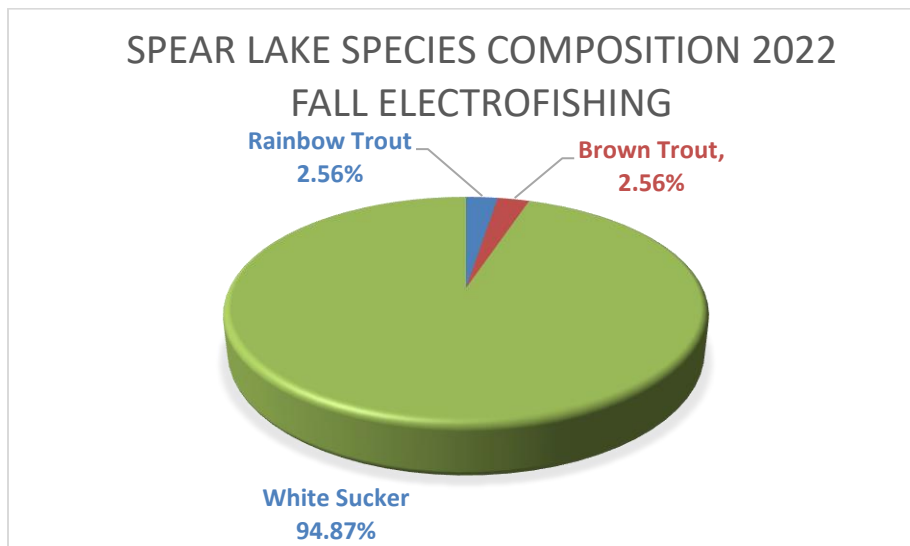


Figure 7. Spear Lake Species Composition

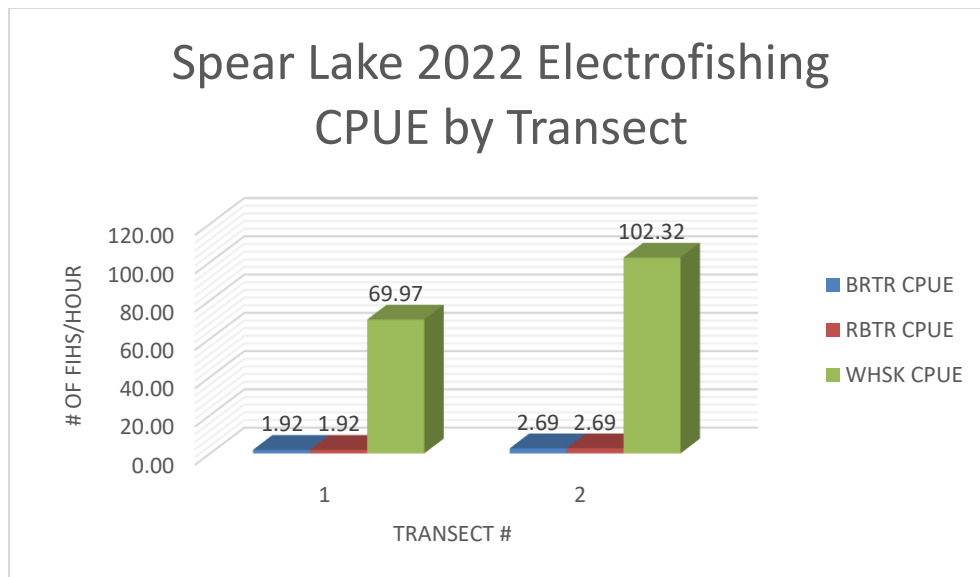


Figure 8. Spear Lake Catch-Per-Unit-Effort

Patterson Lake

A total of 5 electrofishing transects were conducted between the hours of 7:00pm – 12:00am during the night of September 6th. The total of the 5 electrofishing transects resulted in an effort of 10,780 seconds and 245 fish of 3 species (brown trout, rainbow trout and white sucker.) Water surface temperature averaged 19.88°C. Electrofishing settings remained constant over both transects at 60 (DC) pulses per second, 50% of 240-340 volts with an amperage ranging from 11.5-13.

The first transect, totaling 4,817 seconds, encompassing the island and the east shore nearest the boat launch resulted in a total of 80 fish. 79 of the fish captured in the initial transect were white suckers (CPUE of 59.05 fish/hour) and 1 rainbow trout (CPUE of .75 fish/hour). The second transect covered the north shore, west of the island, totaling 2,129 seconds of effort and resulted in 68 white suckers (CPUE of 114.98 fish/hour) and 1 brown trout (CPUE of 1.69 fish/hour). The third transect electrofished was the southwest corner of Patterson Lake, totalling 944 seconds. 21 fish were captured, 20 of which being white suckers (CPUE of 76.27 fish/hour) and 1 brown trout (CPUE of 3.81 fish/hour). The fourth transect occurred in the littoral zone of the south shore of the west bay. 25 white suckers (CPUE of 67.31 fish/hour) were captured making up 83% of the total catch in transect four. The remaining 5 fish were rainbow trout (CPUE of 13.46 fish/hour), resulting in 17% of the total catch in transect four. The fifth transect totalled 1,553 seconds resulting in 45 total fish, 44 being white sucker (CPUE of 102 fish/hour). One rainbow trout was captured (CPUE of 2.32 fish/hour).

The totality of the Patterson Lake electrofishing investigation resulted in 245 fish being captured with a CPUE of 81.94 fish/hour.

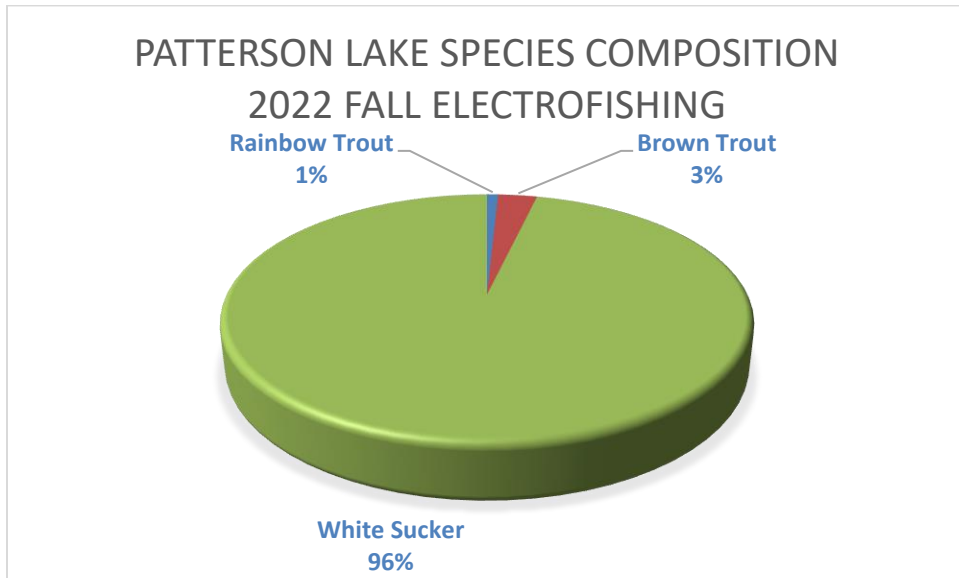


Figure 9. Patterson Lake Species Composition

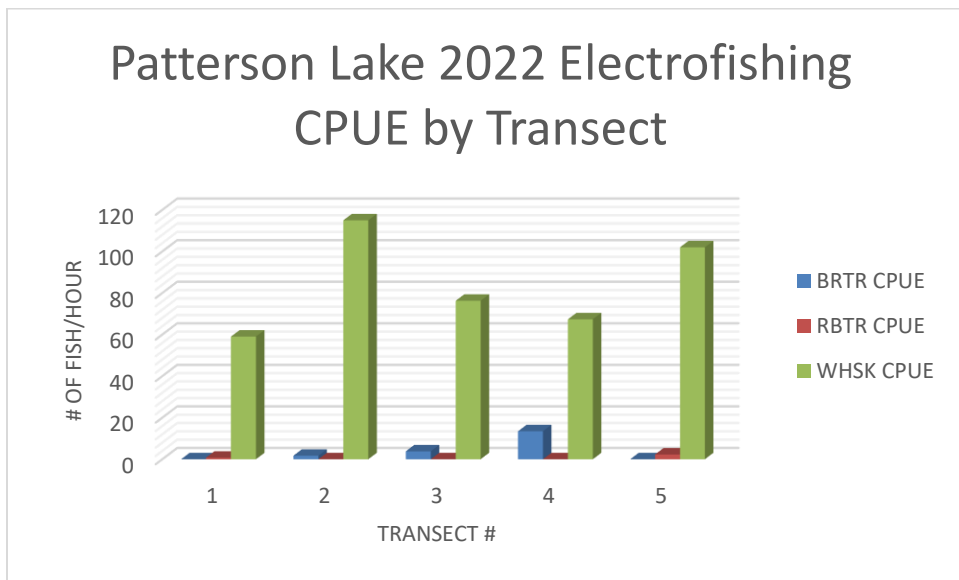


Figure 10. Patterson Lake Catch-Per-Unit-Effort

Tokaryk Lake

Electrofishing efforts took place during the day on September 7th, between the hours of 11:15 am- 2:00 pm. 3 total electrofishing transects resulted in an effort of 5,488 seconds and 177 fish of 5 species (brown trout, rainbow trout, northern pike, yellow perch and white sucker). Water surface temperature averaged 18.7°C. Electrofishing settings remained constant over both transects at 60 (DC) pulses per second, 45% of 360-500 volts with an amperage ranging from 9.9-12.6.

The first transect followed the western shore from the boat launch, along the south shore and the perimeter of an island of aquatic vegetation located centrally along the south shore. This transect totalled 1,824 seconds and resulted in 46 fish being captured. 3 brown trout (1.7% of total catch and CPUE of 5.92 fish/hour), 1 rainbow trout (.6% of total catch and CPUE of 1.97 fish/hour), 39 white sucker (22% of total catch and CPUE of 76.97 fish/hour) and 3 yellow perch (1.69% of total catch and CPUE of 5.92 fish/hour) made up the species composition of the first transect.

The second transect encompassed the same island of aquatic vegetation as transect 1, continuing to follow the south shore before swinging north along the east shore. The second transect totalled 1,877 seconds and resulted in 64 fish being captured. 3 brown trout (1.7% of total catch and CPUE of 5.75 fish/hour), 57 white sucker (32.2% of total catch and CPUE of 109.32) and 4 yellow perch (2.26% of total catch and CPUE of 7.67 fish/hour) made up the species composition of the second transect.

The third transect started in the northeast corner of Tokaryk Lake and followed the north shore to the boat launch in the northwest corner. The third transect totalled 1,787 seconds and resulted in 67 fish being captured. 64 white sucker (36.16% of total catch and CPUE of 128.93), 2 northern pike (1.1% of total catch and CPUE of 4.03) and 1 yellow perch (.57% of total catch and CPUE of 2.01 fish/hour) made up the species composition of the third transect.

The totality of the Tokaryk Lake electrofishing species composition resulted in 177 fish being captured with a CPUE of 116.45 fish/hour.

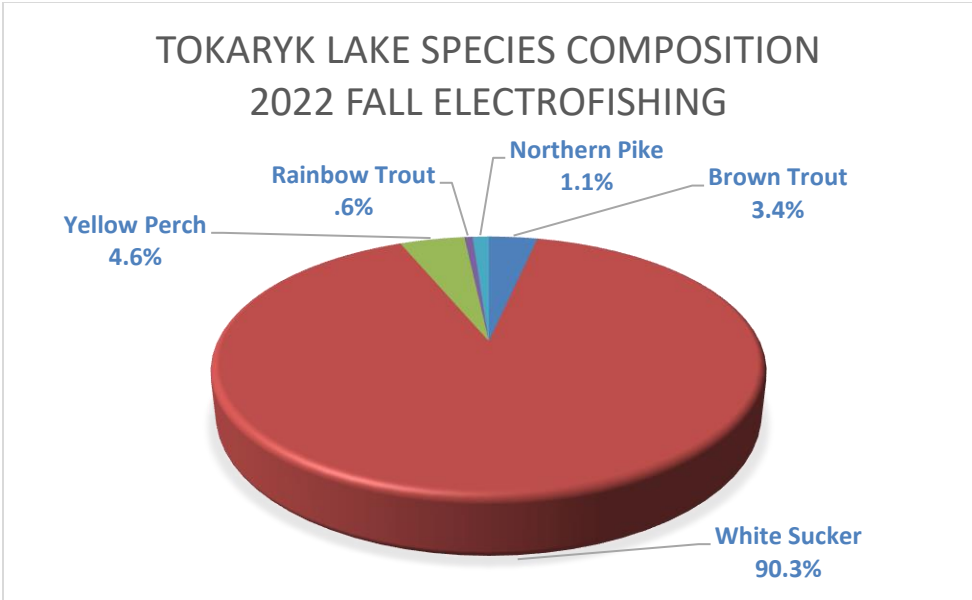


Figure 11. Tokaryk Lake Species Composition

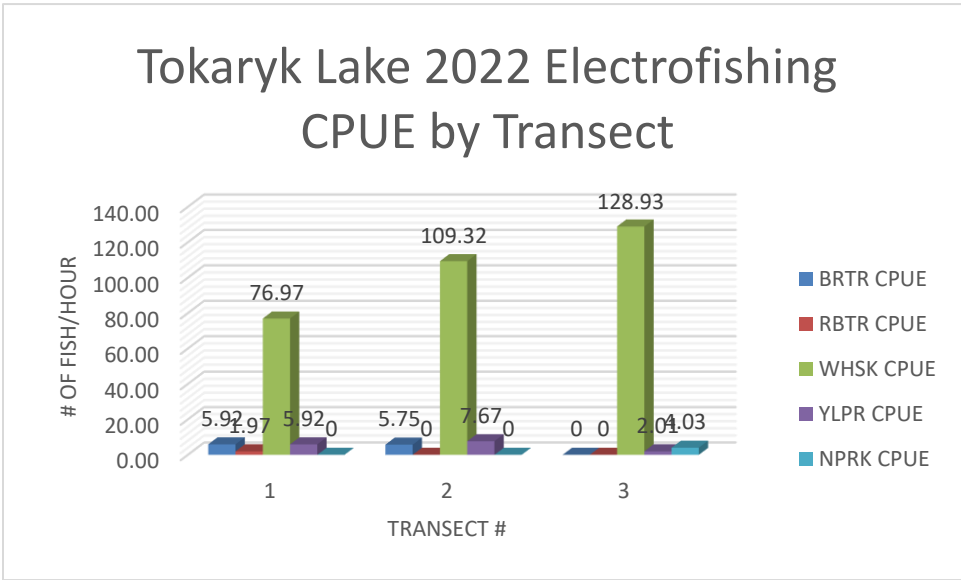


Figure 12. Tokaryk Lake Catch-Per-Unit-Effort

Master Angler Results

Manitoba’s Master Angler (MA) Program offers valuable information to help assess fisheries performance and a lakes ability to produce large fish. Many factors affect the number of fish reported in the program: increased knowledge of the program, ease of reporting, the minimum size standard; and the number of trophy fish in a population, their catchability, and the amount of effort directed at those fish. The size standard for rainbow trout and brown trout in the MA Program is 51cm (20 in). Overall, Patterson Lake has produced the most MA rainbow trout and brown trout from the lakes assessed for the past 12 years, with the most being caught in 2016 (Figure 5a and Figure 5b).

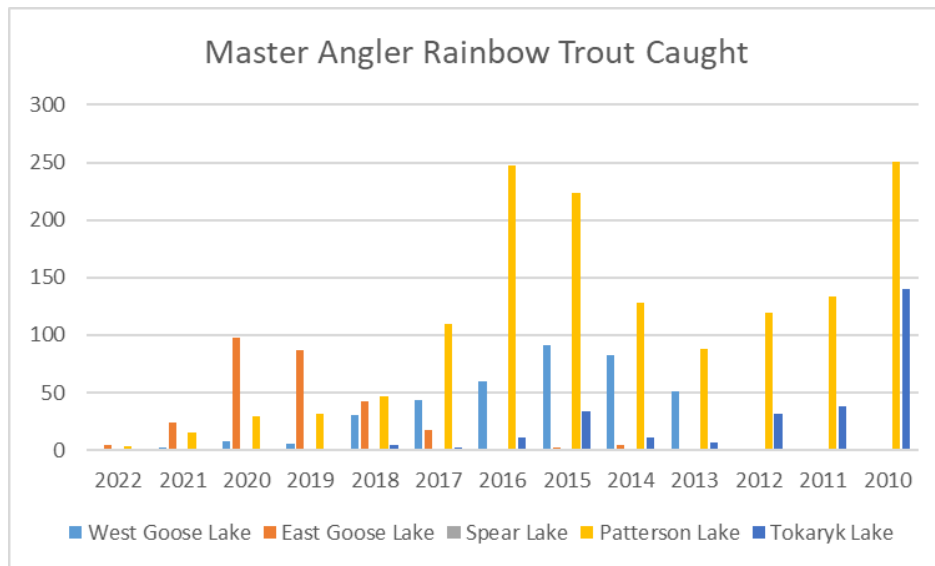


Figure 13. Master Angler Rainbow Trout recorded by lake since 2010.

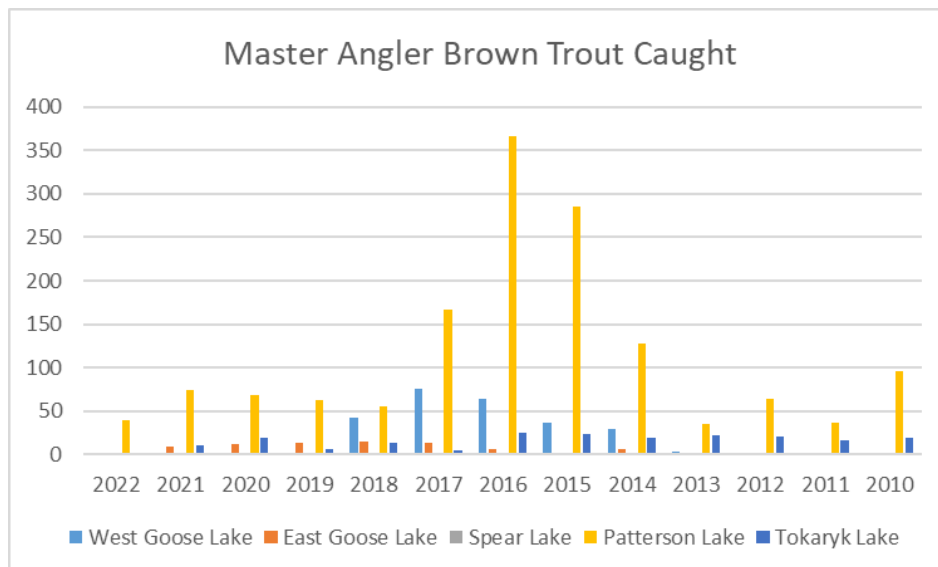


Figure 14. Master Angler Brown Trout recorded by lake since 2010.

Stocking

The stocking regime at each of the lakes assessed since 2010 is as follows:

West Goose Lake

Year	Species	Number	Size
2022	Brown Trout	2,500	18+ cm
2022	Rainbow Trout	2,500	18+cm
2021	Brown Trout	2,500	18+ cm
2021	Rainbow Trout	2,500	18+ cm
2020	Brown Trout	2,500	18+ cm
2020	Rainbow Trout	2,500	18+ cm
2019	Brown Trout	1,000	12-15 cm
2019	Brown Trout	1,600	18+ cm
2019	Rainbow Trout	2,500	18+ cm
2018	Brown Trout	2,500	18+ cm
2018	Rainbow Trout	2,500	18+ cm
2017	Brown Trout	2,000	18+ cm
2017	Rainbow Trout	2,000	18+ cm
2017	Rainbow Trout	39	>30 cm
2016	Brown Trout	75	>30 cm
2015	Brown Trout	5,000	12-15 cm
2015	Brown Trout	60	>30 cm
2015	Rainbow Trout	7,000	12-15 cm
2014	Brown Trout	2,500	12-15 cm
2014	Rainbow Trout	2,500	12-15 cm
2013	Brown Trout	2,500	18+ cm
2013	Rainbow Trout	2,500	18+ cm
2012	Brown Trout	1,000	12-15 cm
2012	Rainbow Trout	1,500	12-15 cm
2011	Brown Trout	1,500	18+ cm
2011	Rainbow Trout	2,000	12-15 cm
2011	Rainbow Trout	1,500	18+ cm
2010	Brown Trout	2,000	18+ cm
2010	Rainbow Trout	2,000	18+ cm

East Goose Lake

Year	Species	Number	Size
2022	Brown Trout	2,500	18+ cm
2022	Rainbow Trout	2,500	18+ cm
2021	Brown Trout	500	18+ cm
2021	Brown Trout	2,000	18+ cm
2021	Rainbow Trout	2,500	18+ cm
2020	Brown Trout	4,000	18+ cm
2020	Rainbow Trout	5,000	18+ cm
2019	Brown Trout	1,600	18+ cm
2019	Brown Trout	1,000	12-15 cm
2019	Rainbow Trout	2,500	18+ cm
2018	Brown Trout	2,500	18+ cm
2018	Rainbow Trout	2,500	18+ cm
2017	Brown Trout	2,000	18+ cm
2017	Rainbow Trout	112	>30cm
2017	Rainbow Trout	2,000	18+cm
2016	Brown Trout	75	>30cm
2015	Brown Trout	3,500	12-15 cm
2014	Brown Trout	2,000	12-15 cm
2014	Brown Trout	2,500	12-15 cm
2014	Rainbow Trout	2,500	12-15 cm
2014	Rainbow Trout	2,000	12-15 cm
2013	Brown Trout	2,500	18+ cm
2013	Rainbow Trout	2,500	18+ cm
2012	Brown Trout	1,000	12-15 cm
2012	Rainbow Trout	1,500	12-15 cm
2011	Brown Trout	1,500	18+ cm
2011	Rainbow Trout	1,500	18+ cm
2011	Rainbow Trout	2,000	12-15 cm
2010	Brown Trout	2,000	18+ cm
2010	Rainbow Trout	2,000	18+ cm

Spear Lake

Year	Species	Number	Size
2022	Brown Trout	3,000	12-15 cm
2022	Rainbow Trout	6,000	12-15 cm
2021	Brown Trout	3,000	18+ cm
2021	Brown Trout	3,000	12-15 cm
2021	Rainbow Trout	3,500	18+ cm
2021	Rainbow Trout	3,000	12-15 cm
2020	Brown Trout	6,000	18+ cm
2020	Rainbow Trout	6,000	18+ cm
2014	Brown Trout	6,000	12-15 cm
2014	Rainbow Trout	8,000	12-15 cm
2013	Brown Trout	3,000	12-15 cm
2013	Rainbow Trout	5,000	18+ cm
2013	Rainbow Trout	6,000	12-15 cm
2012	Brown Trout	3,000	12-15 cm
2012	Rainbow Trout	5,000	18+ cm
2011	Brown Trout	5,000	18+ cm
2011	Rainbow Trout	5,000	18+ cm
2010	Brown Trout	5,000	18+ cm
2010	Rainbow Trout	5,000	18+ cm

Patterson Lake

Year	Species	Number	Size
2022	Brown Trout	10,000	12-15 cm
2022	Rainbow Trout	10,000	12-15 cm
2021	Brown Trout	5,000	12-15 cm
2021	Brown Trout	13,000	12-15 cm
2021	Brown Trout	4,000	18+ cm
2021	Rainbow Trout	4,000	18+ cm
2021	Rainbow Trout	5,000	12-15 cm
2020	Brown Trout	4,000	18+ cm
2020	Brown Trout	10,000	12-15 cm
2020	Rainbow Trout	6,000	12-15 cm
2020	Rainbow Trout	4,000	18+ cm
2019	Brown Trout	4,000	18+ cm
2019	Brown Trout	4,500	12-15 cm
2019	Brown Trout	3,000	18+ cm
2019	Rainbow Trout	4,000	18+ cm
2019	Rainbow Trout	4,500	12-15 cm
2018	Brown Trout	4,500	12-15 cm
2018	Brown Trout	4,000	18+ cm
2018	Rainbow Trout	2,500	18+ cm
2018	Rainbow Trout	4,500	12-15 cm
2018	Rainbow Trout	2,000	18+ cm
2017	Brown Trout	14,000	12-15 cm
2017	Rainbow Trout	14,000	12-15 cm
2017	Rainbow Trout	2,000	18+ cm
2016	Brown Trout	7,000	12-15 cm
2016	Rainbow Trout	18,000	12-15 cm
2015	Brown Trout	18,000	12-15 cm
2015	Rainbow Trout	9,000	12-15 cm
2014	Brown Trout	16,000	12-15 cm
2014	Rainbow Trout	16,000	12-15 cm
2013	Brown Trout	10,000	12-15 cm
2013	Rainbow Trout	25,000	12-15 cm
2012	Brown Trout	10,000	12-15 cm
2012	Brown Trout	6,000	12-15 cm
2012	Rainbow Trout	10,000	12-15 cm
2011	Rainbow Trout	10,000	Fingerling
2010	Brown Trout	3,000	Fingerling
2010	Brown Trout	6,750	Fingerling
2010	Rainbow Trout	10,000	Fingerling

Tokaryk Lake

Year	Species	Number	Size
2022	Brown Trout	4,500	18+ cm
2022	Rainbow Trout	4,000	12-15 cm
2022	Rainbow Trout	6,000	18+ cm
2021	Brown Trout	5,000	18+ cm
2021	Brown Trout	4,000	12-15 cm
2021	Rainbow Trout	5,000	18+ cm
2021	Rainbow Trout	4,000	12-15 cm
2020	Brown Trout	10,000	12-15 cm
2020	Brown Trout	5,000	18+ cm
2020	Rainbow Trout	5,000	12-15 cm
2020	Rainbow Trout	5,000	18+ cm
2019	Brown Trout	5,000	12-15 cm
2019	Brown Trout	4,500	18+ cm
2019	Rainbow Trout	6,000	18+ cm
2019	Rainbow Trout	5,000	12-15 cm
2018	Brown Trout	5,000	18+ cm
2018	Brown Trout	5,000	12-15 cm
2018	Rainbow Trout	5,000	12-15 cm
2018	Rainbow Trout	5,000	18+ cm
2017	Brown Trout	8,000	12-15 cm
2017	Rainbow Trout	10,000	12-15 cm
2016	Brown Trout	7,000	12-15 cm
2016	Rainbow Trout	15,000	12-15 cm
2015	Brown Trout	7,000	12-15 cm
2015	Rainbow Trout	7,000	12-15 cm
2014	Brown Trout	12,000	12-15 cm
2014	Brown Trout	12,000	12-15 cm
2014	Rainbow Trout	6,000	12-15 cm
2013	Brown Trout	8,000	12-15 cm
2013	Rainbow Trout	15,000	12-15 cm
2013	Rainbow Trout	5,000	18+ cm
2012	Brown Trout	10,000	12-15 cm
2012	Brown Trout	6,000	12-15 cm
2012	Rainbow Trout	10,000	12-15 cm
2011	Rainbow Trout	10,000	Fingerling
2010	Brown Trout	3,000	Fingerling
2010	Brown Trout	6,750	Fingerling
2010	Rainbow Trout	10,000	Fingerling

Appendix

Table A.1. Raw catch data.

Species	FL (mm)	TL (mm)	WT (g)	Age
West Goose Lake				
WALL	538	564	1690	6
SMBS	328	344	840	2
SMBS	348	366	900	3
SMBS	436	458	1590	7
SMBS	324	338	740	2
SMBS	244	256	290	1
SMBS	378	398	1130	3
SMBS	164	170	90	1
YLPR (3)			250	
Common Shiner (40)			100	
RNTR	238	246	210	0
RNTR	394	410	760	1
RNTR	272	284	320	0
YLPR (2)			200	
East Goose Lake				
WALL	598	630	2610	6
WALL	412	436	990	2
YLPR	204	212	140	
WALL	650	680	3500	8
WALL	578	606	2450	6
WALL	538	572	2100	7
Spear Lake				
RNTR	518	544	1740	2
RNTR	336	350	520	1
BRTR	438	450	1150	2
BRTR	272	286	200	1
BRTR	402	412	950	2
RNTR	334	342	540	1

Species	FL (mm)	TL (mm)	WT (g)	Age
Patterson Lake				
RNTR	302	316	300	1
WHSK (79)				
BRTR	470		1400	2
WHSK (68)				
BRTR	414	420	900	1
WHSK (20)				
BRTR	532		1960	3
BRTR	456		1420	4
BRTR	506		2060	3
BRTR	462		1350	2
BRTR	582		2250	4
WHSK (25)				
RNTR	430	440	1070	2
WHSK (44)				
Tokaryk Lake				
BRTR	408		950	2
BRTR	406		830	2
BRTR	480		1410	3
RNTR	304	312	390	2
WHSK (37)				
YLPR (3)				
BRTR	360		900	1
BRTR	410		950	2
BRTR	420		1100	3
WHSK (57)				
YLPR (4)				
WHSK (64)				
YLPR	336	346	520	
NRPK	250	262	80	
NRPK	294	312	110	

Table A. 2. Electrofishing Effort

Transect	Date	Time	Effort	Total Catch	Water (°C)	Pulse/ Second	Volts	%	Amps
West Goose Lake									
1	2022-08-29	21:00	2,492	11	19.71	60	360-500	40	10.2-13.4
2	2022-08-29	22:15	1,562	1	19.71	60	360-500	40	10.2-13.4
3	2022-08-29	22:50	1,971	4	19.71	60	360-500	40	10.2-13.4
East Goose Lake									
1	2022-08-30	20:15	2,444	3	20.1	60	360-500	40	9.8-12.7
2	2022-08-30	21:20	2,372	3	20.1	60	360-500	40	9.8-12.7
Spear Lake									
1	2022-08-31	12:32	3,756	77	19.8	60	360-500	40	9.7-12.9
2	2022-08-31	14:00	1,337	40	19.8	60	360-500	40	9.7-12.9
Patterson Lake									
1	2022-09-06	19:25	4,817	80	19.88	60	240-340	45	11.5-13
2	2022-09-06	20:55	2,129	69	19.88	60	240-340	45	11.5-13
3	2022-09-06	21:25	944	21	19.88	60	240-340	45	11.5-13
4	2022-09-06	22:00	1,337	30	19.88	60	240-340	45	11.5-13
5	2022-09-06	22:45	1,553	45	19.88	60	240-340	45	11.5-13
Tokaryk Lake									
1	2022-09-07	11:15	1,824	46	18.7	60	360-500	45	9.9-12.6
2	2022-09-07	12:05	1,877	64	18.7	60	360-500	45	9.9-12.6
3	2022-09-07	13:00	1,787	67	18.7	60	360-500	45	9.9-12.6

West Goose CPUE

Transect	Effort	RNTR	RNTR CPUE	WALL	WALL CPUE	SMBS	SMBS CPUE	YLPR	YLPR CPUE	Total Fish
1	0.69	0	0	1	1.44	7	10.11	3	4.33	11
2	0.43	1	2.30	0	0	0	0	0	0	1
3	0.55	2	3.65	0	0	0	0	2	3.65	4
Total	1.67	3	1.80	1	0.60	7	4.19	5	2.99	16

East Goose CPUE

Transect	Effort	WALL	WALL CPUE	YLPR	YLPR CPUE	Total Fish
1	0.68	2	2.95	1	1.47	3
2	0.66	3	4.55	0	0	3
Total	1.34	5	3.74	1	0.75	6

Spears Lake CPUE

Transect	Effort	BRTR	BRTR CPUE	RNTR	RNTR CPUE	WHSK	WHSK CPUE	Total Fish
1	1.04	2	1.92	2	1.92	73	69.97	77
2	0.37	1	2.69	1	2.69	38	102.32	40
Total	1.41	3	2.12	3	2.12	111	78.46	117

Patterson Lake CPUE

Transect	Effort	BRTR	BRTR CPUE	RNTR	RNTR CPUE	WHSK	WHSK CPUE	Total
1	1.34	0	0	1	0.75	79	59.04	80
2	0.59	1	1.69	0	0	68	114.98	69
3	0.26	1	3.81	0	0	20	76.27	21
4	0.37	5	13.46	0	0	25	67.31	30
5	0.43	0	0	1	2.32	44	102.00	45
Total	2.99	7	2.34	2	0.67	236	78.93	245

Tokaryk Lake CPUE

Transect	Effort	BRTR	BRTR CPUE	RNTR	RNTR CPUE	WHSK	WHSK CPUE	YLPR	YLPR CPUE	NRPK	NRPK CPUE	Total
1	0.51	3	5.92	1	1.97	39	76.97	3	5.92	0	0	46
2	0.52	3	5.75	0	0	57	109.32	4	7.67	0	0	64
3	0.50	0	0	0	0	64	128.93	1	2.01	2	4.03	67
Total	1.52	6	3.95	1	0.66	160	105.26	8	5.26	2	1.32	177