



Selected results from the 2020 recreational fishing survey in Ontario: Fisheries management zones, provincially significant inland fisheries, and Great Lakes

Technical Report TR-51

Science and Research Branch

Ministry of Natural Resources and Forestry



Selected results from the 2020 recreational fishing survey in Ontario: Fisheries management zones, provincially significant inland fisheries, and Great Lakes

Len M. Hunt¹, Helen Ball², Andrew Ecclestone² and Mallory Wiebe¹

¹ Centre for Northern Forest Ecosystem Research

² Fisheries Section

2023

Science and Research Branch

Ministry of Natural Resources and Forestry

© 2023, King's Printer for Ontario

Copies of this publication are available from info.mnrfscience@ontario.ca.

Cette publication hautement spécialisée Selected Results From the 2020 Recreational Fishing Survey in Ontario: Fisheries Management Zones, Provincially Significant Inland Fisheries, and Great Lakes n'est disponible qu'en anglais conformément au Règlement 671/92, selon lequel il n'est pas obligatoire de la traduire en vertu de la Loi sur les services en français. Pour obtenir des renseignements en français, veuillez communiquer avec le ministère des Richesses naturelles et des Forêts au info.mnrfscience@ontario.ca.

Cover photo: Wayne Eardley Photography

Some of the information in this document may not be compatible with assistive technologies. If you need any of the information in an alternate format, please contact info.mnrfscience@ontario.ca.

Cite this report as:

Hunt, L.M., H. Ball, A. Ecclestone and M. Wiebe. 2023. Selected results from the 2020 recreational fishing survey in Ontario: Fisheries management zones, provincially significant inland fisheries, and Great Lakes. Ontario Ministry of Natural Resources and Forestry, Science and Research Branch, Peterborough, ON. Science and Research Technical Report TR-51. 25 p. + appendices.

Abstract

Ontario's recreational fishery consists of a diverse mix of destinations, fish species, anglers, and fishing styles. Here, we describe some of the diversity associated with destinations, which are grouped by fisheries management zones, provincially significant inland fisheries, and selected waters in or near the Great Lakes. Focusing on both fishing activity (e.g., days fished, target species, season) and outcomes (e.g., evaluation of the experience and expenditures), we demonstrate that in 2020, 3.3 times more days were spent fishing in southern than in northern Ontario. This difference was much higher in 2020 than in 2015 or 2010 (1.8 and 2.2 times, respectively) largely because most non-resident anglers could not travel to Ontario to fish in 2020 due to the COVID-19 pandemic. The pandemic also meant more resident anglers fished in southern Ontario, resulting in much higher levels of catch and harvest of some fish species and expenditures at southern Ontario destinations. Popular destinations for days fished in southern Ontario were Lake Simcoe, Rice Lake, Tri lakes (comprises Buckhorn, (Upper) Chemong, Pigeon, Big and Little Bald lakes, and Gannon Narrows), Georgian Bay, Lake Erie, the western part of Lake Ontario, and the Bay of Quinte. Lake Nipissing, Lake of the Woods, and the North Channel of Lake Huron were popular northern Ontario destinations.

We grouped destinations by the relative amount of fishing activity targeted at select fish species and groups of species. The walleye (*Sander vitreus*) group was most targeted at many destinations including almost all of northern Ontario along with the Ottawa River, the western part of Lake Erie, and the Bay of Quinte. Destinations where anglers most heavily targeted trout and salmon included lakes Ontario and Superior and their tributaries along with Lake Huron tributaries, the lower portion of the Niagara River, and St. Marys River. Fishing activity directed towards the bass, sunfish, and (black) crappie (*Pomoxis nigromaculatus*) group was concentrated in destinations in southeastern Ontario though Lake Scugog, the Grand River, and tributaries from Lake St. Clair were also popular destinations. This diversity in fishing activity and the associated outcomes from fishing in terms of catch, harvest, and expenditures demonstrate the need to move beyond average descriptions of recreational fishing for the entire province to understand angling preferences and inform fisheries management.

Résumé

Faits saillants des résultats de l'enquête de 2020 sur la pêche récréative en Ontario : zones de gestion des pêches, plans d'eau intérieurs d'importance dans la province, et Grands Lacs

La pêche récréative en Ontario est un secteur d'activité aux multiples visages, de ses adeptes et de leurs techniques jusqu'aux espèces de poissons, en passant par l'éventail des destinations de pêche. Il sera question ici de la diversité de ces destinations, qu'il s'agisse de zones de gestion des pêches, de plans d'eau intérieurs d'intérêt dans la province ou de certains secteurs de pêche des Grands Lacs et environs. Tant au point de vue de l'activité (p. ex., jours de pêche, espèces visées, saison) que de son résultat (p. ex., évaluation de l'expérience, dépenses), on constate qu'en 2020, la pêche a été pratiquée 3,3 fois plus de jours dans le Sud que dans le Nord de l'Ontario. Si l'écart est bien plus prononcé qu'en 2015 et 2010 (1,8 et 2,2 fois plus, respectivement), c'est en grande partie parce qu'il n'était pas possible pour les non-résidents

de venir pêcher en Ontario en raison de la pandémie. Les pêcheurs du Sud de la province se sont aussi vus confinés à leur secteur, ce qui a concentré la prise et la récolte sur certaines espèces et les dépenses dans les pêcheries à proximité. Les destinations de pêche les plus achalandées du Sud de l'Ontario furent le lac Simcoe, le lac Rice, les Tri-Lakes (comptant les lacs Buckhorn, [Upper] Chemong et Pigeon, le grand lac et le petit lac Bald, et le passage Gannon), la baie Georgienne, le lac Érié, le secteur ouest du lac Ontario et la baie de Quinte. Pour le Nord de l'Ontario, c'est le lac Nipissing, le lac des Bois, et le chenal du Nord du lac Huron qui furent les plus fréquentés.

Les destinations ont été regroupées selon le volume relatif d'activité visant une espèce ou un groupe d'espèces donnés. Le groupe du doré jaune (*Sander vitreus*) fut le plus ciblé à bien des endroits, notamment dans presque tout le Nord de l'Ontario en plus de la rivière des Outaouais, le secteur ouest du lac Érié et la baie de Quinte. Les destinations où les pêcheurs ont davantage ciblé la truite et le saumon comprennent les lacs Ontario et Supérieur et leurs affluents ainsi que les affluents du lac Huron, la partie inférieure de la rivière Niagara, et la rivière Ste-Marie. La pêche visant le groupe de l'achigan, du crapet-soleil et de la marigane (noire) (*Pomoxis nigromaculatus*) se concentrait dans le sud-est de l'Ontario, bien que soient également ressortis le lac Scugog, la rivière Grand et les affluents du lac Sainte-Claire. La diversité tant de l'activité que de son résultat (poissons capturés, prises conservées, dépenses) montre qu'on ne peut se contenter de moyennes à l'échelle de la province si l'on veut réellement comprendre les préférences des pêcheurs récréatifs et éclairer la gestion des pêches.

Acknowledgements

Thank you to all the anglers who, by completing the survey, provided the data for this report. A large team contributed to the design, implementation, data entry and coding, and analyses. These Ministry of Natural Resources and Forestry (MNRF) staff include: Zaur Aliyev, Lindsay Brown, Dak de Kerckhove, Sibley Duckert, Victoria Kopf, Cam Leitrants, Kristeen McGowan, Graydon McKee, Mary Garvey, Lecia Makkinga, Jenny Rodgers, Jamien Sandhu, Emma Schubert, Katie Tripp, Blair Wasylenko, and Will Wistowsky. We also appreciate the efforts by Rob Davis, Karen Hartley, and Adam Gryck from the Ministry of Environment, Conservation and Parks (MECP) to review earlier versions of the questionnaires. We thank Jeff Amos, Adam Challice, Stephen Marklevitz, and Dan Taillon for reviewing the entire report; Colin Lake, Arunas Liskauskas, and Kyle Rogers for reviewing parts of it; and Lisa Buse for editing.

Contents

Abstract.....	iii
Résumé.....	iii
Acknowledgements.....	iv
Introduction	1
Methods.....	2
Study area and populations of interest	2
Survey process and questionnaire development	5
Data comparability and non-response bias	5
Study variables and analyses	6
Results.....	8
Response rates.....	8
Selected results for fisheries management zones	8
Selected results for provincially significant inland fisheries.....	15
Selected results for Great Lakes waterbodies and tributaries	18
Discussion and conclusions.....	21
References	24
Appendix 1. Definitions.....	26
Appendix 2. Detailed results for fisheries management zones	31
Appendix 3. Detailed results for provincially significant inland fisheries.....	49
Appendix 4. Detailed results for Great Lakes and connected waters	53
Appendix 5. Reliability of survey estimates.....	60

Introduction

Since 1975, the Ontario Ministry of Natural Resources and Forestry (MNRF) has surveyed anglers every five years to help understand the people who recreationally fish and the resulting fishing activity in Ontario. Results from these surveys provide a provincial perspective of anglers (e.g., OMNRF 2020a, Hunt et al. 2022) and contribute to a national perspective of recreational fishing (e.g., Fisheries and Oceans Canada 2019).

A provincial-scale perspective of angling in Ontario does not reveal the diverse types and distributions of anglers, angling activity, and fishing outcomes. Ontario is home to more than 250,000 waterbodies, numerous rivers, and four of the five Laurentian Great Lakes (OMNDMNRF 2022a). Variations in climate, human settlements, and infrastructure across the province produce a rich mosaic of fishing resources, anglers, and access, and these drive fishing activities and associated outcomes from fishing. Understanding this mosaic and the underlying diversity are needed for effective fisheries management (e.g., Johnston et al. 2010, 2013; Arlinghaus et al. 2017).

Here, we expand on the provincial-scale results (Hunt et al. 2022) to focus on how social-ecological context shapes fishing activity and outcomes related to catch, harvest, and expenditures by anglers. We study this context through various fishing destinations that each represent complex patterns of waterbody morphology, climate, and human factors. Specifically, we report results from the 2020 recreational fishing survey (Hunt et al. 2022) for three destination groups: fisheries management zones (FMZs), provincially significant inland fisheries (PSIFs), and waters that are part of or are connected to the Laurentian Great Lakes.

Based on biological, climatic, and social considerations, Ontario is divided into 20 FMZs that are the basis for fisheries management in the province (OMNRF 2015). These FMZs were derived to help reduce the tendency for waterbody specific regulations by encouraging fisheries management at a regional landscape scale (Lester et al. 2003). This scale of management helps to standardize and simplify regulations, such as the duration of a fishing season or the number of fish one can harvest during a day of fishing, and to direct assessment activities to a broadscale zone-wide approach (Lester et al. 2021). Currently, the complexity of regulations varies, with complexity increasing among FMZs from north to south.

Despite the broadscale management emphasis embedded in FMZs, some waterbodies receive special management considerations; these waterbodies are referred to as provincially significant inland fisheries (PSIFs). These PSIFs attract substantial fishing activity that produces economic activity and social benefits for Ontario (OMNR 2015). The finer scale management efforts on the 12 PSIFs are directed to further reduce risks to the sustainability of fish populations by implementing lake-specific fisheries objectives, management actions, and monitoring programs.

The FMZs provide coarse and limited insights about recreational fishing in the Great Lakes. This limitation arises because, for example, an FMZ such as 19 includes Lake Erie, Lake St. Clair, and the St. Clair, Detroit, and upper Niagara rivers. The aggregation of these separate waterbodies can mask differences because fish communities, species abundance, and fisheries management objectives differ substantially among them (Cudmore-Vokey and Crossman 2000). Likewise, the

reporting of results for the Great Lakes at FMZ scale (e.g., OMNRF 2015, 2020b) exclude most tributaries that feed into the Great Lakes. Pacific salmonids such as rainbow trout (*Oncorhynchus mykiss*) and Chinook salmon (*Oncorhynchus tshawytscha*) migrate from many Great Lakes into rivers and creeks to spawn. Therefore, excluding fishing for migratory species in these rivers and creeks in Great Lakes' FMZ summaries underestimates the importance of the Great Lakes to angling in Ontario.

In this report, we focus on three destination groups — FMZs, PSIFs, and Great Lakes associated waterbodies — to help describe the diversity of anglers and fishing in Ontario. These descriptions include days fished and fishing outcomes related to catch, harvest, and expenditures.

Descriptions of fishing activity and angling outcomes for FMZs and PSIF equivalent reporting are available from the 2005, 2010, and 2015 surveys (Hogg et al. 2010a; OMNRF 2014, 2020b). We use this information to examine potential trends in activity and outcomes across FMZs and PSIFs.

Methods

The methods here largely follow those from the general 2020 angler survey report (Hunt et al. 2022). Rather than repeating these methods here, we provide a brief overview and encourage interested readers to consult the general report for details.

Study area and populations of interest

Our focus is the diversity of fishing destinations across Ontario. About 250,000 lakes and 490,000 km of rivers exist in Ontario (OMNDMNRF 2022a). Fish species distribution and abundance varies throughout the province, reflecting differences in lake and river resources, climate, and human settlement patterns (OMNRF 2020a).

We report results for three groups of fishing destinations. First, we focus on the 20 FMZs in Ontario (Figure 1). We excluded results for FMZ 1 (far northern area of Ontario) due to lack of data. Waterbodies were assigned to an FMZ based on their centroids. For most rivers and streams that flow into the Great Lakes, we allocated fishing to a single FMZ that almost always was the inland FMZ. Because FMZs 19 and 20 share the Niagara River, following the 2015 survey approach (OMNRF 2020b), we used respondent provided landmark information to help identify which FMZ the reported fishing activity occurred in for this river.

To allow comparisons with results from previous surveys (OMNRF 2020b), the FMZ results presented in the main body of the report include PSIFs. Management of FMZ waters exclude PSIFs and for FMZ 15, management is conducted separately for waterbodies that fall inside and outside Algonquin Provincial Park (Ontario Parks 1998). Therefore, the detailed results in the appendices (see appendices 2–4) include FMZs with and without PSIFs and results for FMZ 15 are summarized separately for Algonquin Provincial Park and other waters.

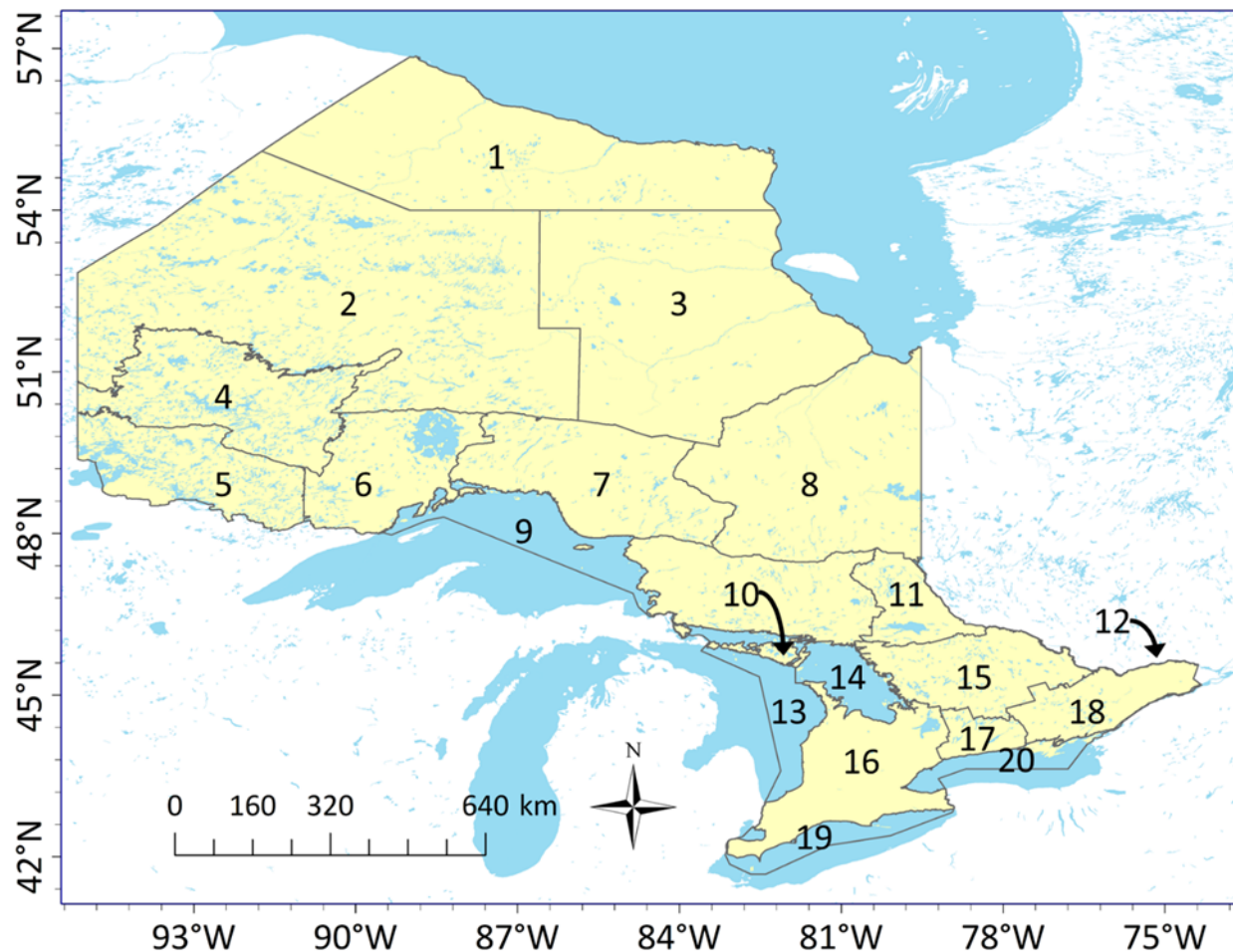


Figure 1. Fisheries management zones (FMZs) in Ontario.

A second group is PSIFs of which Ontario has 12 (Figure 2; note that the Ottawa River is both FMZ 12 and a PSIF, so it is not included in the PSIF results). These 12 PSIFs (see Appendix 1 for waterbodies associated with each PSIF) are managed more intensely than other waterbodies outside the Great Lakes.

The final group is selected Great Lakes waters (Figure 3). This grouping is a finer scale than FMZs as it includes individual waterbodies and parts of large lakes (see Appendix 1 for waterbodies associated with each selected Great Lakes waters). Likewise, we included different amalgams of rivers and creeks that flow into the Great Lakes as these types of tributaries support fish communities in the main lakes and are important for the Great Lakes fishery (Ready et al. 2018, Hunt et al. 2021). However, we included the entire reach of each tributary even though the Great Lakes influence on fish is constrained by the first impassable barrier.

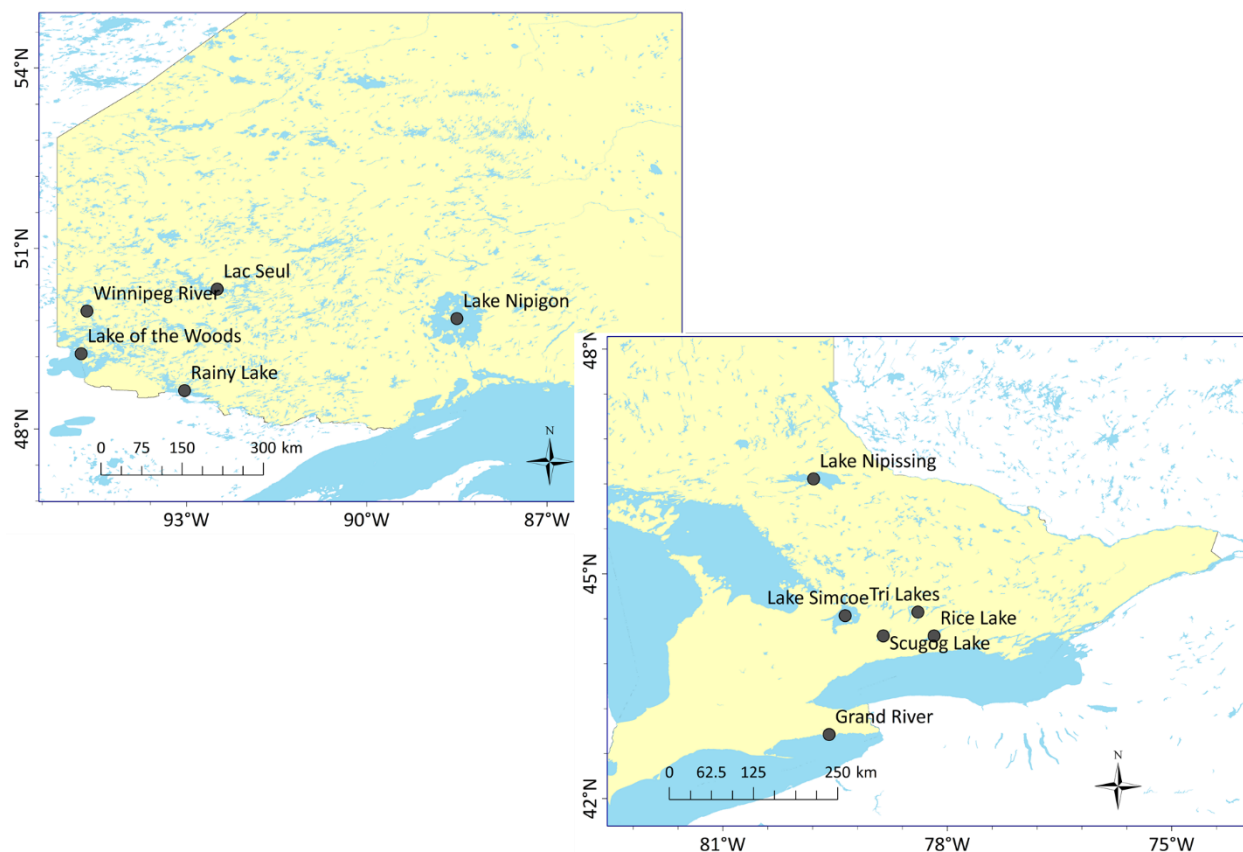


Figure 2. Provincially significant inland fisheries (PSIFs) in Ontario. (Ottawa River is excluded as it is FMZ 12.)

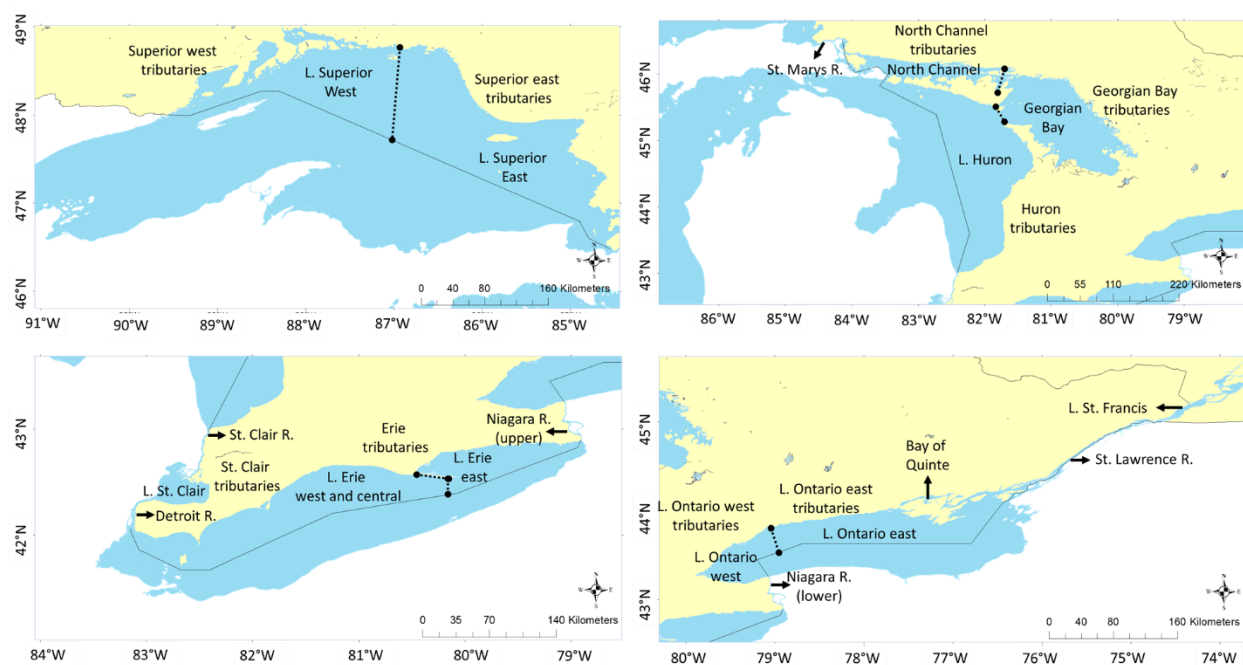


Figure 3. Selected Great Lakes waters in Ontario. (Black dashed lines indicate a division in the main basins; tributaries include the full extent of the waterbody that flows into the Great Lakes.)

We summarized the 2020 results for three angling populations: (i) *Ontario resident* anglers who purchased a fishing licence for 2020, (ii) *other Canadian* anglers who purchased an Ontario fishing licence for 2020, and (iii) *Ontario senior* anglers who previously purchased an Ontario fishing licence and were between 65 and 70 years old; these anglers are deemed licence holders (see Appendix 1 for these and other relevant definitions). We do not include information about other deemed licence holders (e.g., individuals less than 18 or more than 70 years old, military veterans, individuals with a disability) or Indigenous rights-based holders. Additionally in 2020, most U.S. anglers could not access Ontario because of the closure of the Canada/U.S. land border to non-essential travel. For this reason, *non-resident* anglers were not sampled.

A total of 32,000 samples were drawn from the three populations: 2,000 samples were randomly drawn for *Ontario senior* anglers and 30,000 samples were drawn in exact proportion to the number of licensed anglers and license types in the *other Canadian* and *Ontario resident* angler populations. For *Ontario resident* anglers, the sample sizes were also stratified by origin (i.e., postal code), with oversampling of licensed anglers who resided in northwestern Ontario because this population was relatively small. This oversampling enabled us to obtain reliable estimates for individuals from this group without increasing overall sample size and survey cost.

Survey process and questionnaire development

The survey process followed Dillman's (2000) Tailored Design Method, and we used up to three contacts with selected anglers by mail. All contacts were made between January and March 2020. Individuals were given opportunities to complete the questionnaire using print or online modes.

The questionnaires were revised from the 2015 survey to facilitate comparison with past survey results while addressing concerns with response rates, content, and costs. The final questionnaires were developed into two versions of which any single respondent would only be given one. The content was determined based on feedback from potential users of the information along with advice and suggestions by focus group attendees from MNRF audiences of avid and casual anglers.

Data comparability and non-response bias

The analytical approach here differs slightly from the FMZ reports of the 2005 to 2015 surveys (OMNRF 2014, 2020b). The main difference is balancing FMZ results (and other destinations) for the 2020 survey to the overall results from Hunt et al. (2022). For example, we ensured that the sum of all fishing activity from the 20 FMZs equalled the total amount reported for the entire province for *Ontario resident*, *Ontario senior*, and *other Canadian* anglers. No similar effort was made for the previous reports, which results in a slight underreporting in previous results of fishing activity and expenditures (e.g., estimates of days fished were about 8% lower in 2015 for the FMZ than provincial reporting though less than 1% for 2010). For the 2020 survey, we processed the data by first estimating averages for each population (strata) based on valid responses. Next, we weighted these averages by the population size. This approach allowed us to make effective use of all provided data without making assumptions about instances with item non-response.

As described in Hunt et al. (2022), a general non-response bias test revealed a slight overestimate in the rate of Ontario anglers who fished in 2020 and a slight underestimate of the rate for other Canadian anglers. Consequently, we adjusted the rates downward by 2.23% for Ontario resident anglers and upwards by 4.53% for other Canadian anglers. No evidence of non-response bias was present for estimates of average days fished by active anglers or expenditures for any of the populations.

The availability of FMZ level data for 2005, 2010, and 2015 enables comparisons over time for key statistics such as number of days fished, catch and harvest rates of fish species, expenditures, and evaluations of the overall fishing experience. Directly comparing the estimates from these surveys is cautioned as the 2005 survey excluded *Ontario senior* anglers, the 2020 survey excluded *non-resident* anglers, adjustments for non-response bias varied among survey years, and some methods differed slightly across surveys (e.g., expenditures in 2020 and estimated days fished in 2015). Consequently, and except for angling intensity (i.e., annual hours fished per available hectare), we only examined trends for key variables of (i) proportion of overall days fished, (ii) proportion of expenditures in an FMZ, (iii) catch and harvest of fish per day of fishing, and (iv) overall evaluation score of the fishing experience.

Although questions about the comparability of the estimates exist, we provide estimates of angling intensity for FMZs and PSIFs for 2005, 2010, 2015, and 2020. These estimates help to illustrate differences across time and space.

Study variables and analyses

We produced fishing activity and catch and harvest estimates by estimating an average for each combination of strata and destination and multiplying these averages by the estimated number of active anglers for each stratum. This same basic approach was used to estimate days fished by season, target species, and mode.

We estimated outcomes of catch and harvest of fish species, expenditures on fishing, and evaluations of the fishing experience from fishing activity. We also examined anglers' preferences for different groups of fish species. The reporting for PSIFs and the Great Lakes excluded evaluations and angler preferences and the Great Lakes reporting also excluded expenditures. These exclusions were necessary because of reliability and validity concerns (e.g., anglers provided too few fishing reports for certain waterbodies, or it was unreasonable to assume that responses to general questions such as evaluation of the overall fishing experience in Ontario could be successfully attributed to specific destinations).

The attribution of expenditures was more complicated than that for estimating fishing activity. The extra complications arose because expenditures were recorded for the entire year rather than a destination and were reported at the household rather than individual level. To attribute expenditures to specific destinations, we followed the procedures for estimating days fished, and further weighted these results by the proportion of fishing activity that an individual directed to a destination. For example, if a respondent spent seven days fishing FMZ 20 and three fishing FMZ 18, 70% of their expenditures were attributed to FMZ 20 and 30% to FMZ 18.

This household scale resulted in us obtaining expenditure information from four types of respondents: (i) active anglers who provided information about where and how often they fished in 2020, (ii) active anglers who did not provide this information, (iii) non-active anglers who reported someone in their household fished in 2020, and (iv) non-active anglers who reported no one fished in their household. Our efforts began by estimating total expenditures for group (iv) and subtracting those estimates from the overall expenditure estimates as reported in Hunt et al. (2022). Next, we estimated the expenditures for group (i) using the methods for estimating days fished, with the caveat that the strata weights were based on estimated households and not active anglers. We then assumed that these average expenditures for destinations from group (i) were identical to those for groups (ii) and (iii). We next scaled the expenditure estimates from group (i) such that they would equal the overall expenditures minus expenditures by group (iv). For day licence holders who were resident Ontario anglers, we balanced their expenditures only by licence type and not both licence type and origin, as respondents were too few to provide reliable estimates for this finer scale strata.

Some respondents reported spending money on angling packages without specifying the waterbody where these expenditures occurred. In these instances, we allocated the expenditures in proportion to the amount of fishing activity that the individual reported for fishing destinations in general.

For the FMZ analyses, we reported evaluations of the fishing experience and preference for fish species. As with expenditures, the responses for evaluations and preference were not tied to a specific fishing destination. However, unlike the expenditure analysis, we did not weight the response by the proportion of reported fishing activity at the destination. Rather, we included all responses by individuals who reported fishing at the destination in question. When estimating the average hours fished at a destination during the open water and ice fishing seasons, we multiplied the days fished by a respondent for a given destination by the average number of hours reported fishing for any open water or ice fishing day. We then summed these products for all respondents and divided that total by the sum of all days fished at the given destination by the respondents.

The results for targeted species are aggregated into groups of fish instead of fish species. This aggregation of fish species to groups was undertaken to (i) help the reader contrast targets among different populations and strata of anglers, (ii) address the tendency for respondents to report general names (e.g., bass, trout, salmon) rather than fish species, (iii) report multiple species in the same family (e.g., largemouth bass (*Micropterus salmoides*) and smallmouth bass (*Micropterus dolomieu*)), and (iv) report the wrong species (e.g., confusing smallmouth, largemouth, and rock bass (*Ambloplites rupestris*)). For species preferences, if an angler reported more than one species, we selected the first species mentioned.

Comparisons with survey data from 2005, 2010, and 2015 were limited to angling intensity for FMZs and PSIFs and to relative measures of key variables for FMZ. Trends were inferred using Pearson product moment correlation coefficients between survey year and the key variable. Increasing and decreasing trends are defined as situations when the correlation coefficient is >0.5 or <-0.5 , respectively. Because this 0.5 threshold is arbitrary and we define trends from only four survey years, readers are cautioned to interpret the characterization of trends as suggestive. For the overall experience variable, we transformed the ratings into an average

score by applying the following weights for responses: excellent = 3, very good = 2, good = 1, fair = 0, poor = -1, and very poor = -1. Scores for poor and very poor were the same as very poor was not provided as an option in all surveys.

For tables of FMZ results in the main report, we also provide provincial estimates for comparison. The provincial estimates here are based only on *Ontario resident*, *Ontario senior*, and *other Canadian* anglers, excluding any inferred contributions by non-resident anglers that are part of the provincial report (Hunt et al. 2022). The expenditure estimates also exclude individuals who reported expenditures but that no one from their household fished in Ontario in 2020.

We communicate the reliability of the survey estimates through relative standard errors (RSE). As with the previous survey reports (OMNRF 2014, 2020a), the RSEs are estimated without accounting for the stratified sample or that the same respondent can provide multiple records for fishing activity, catch, and harvest. Following past efforts (OMNRF 2014, 2020a), we define reliable estimates as having an RSE less than 16.5%, somewhat reliable as having an RSE between 16.5 and 33%, and unreliable as having an RSE higher than 33%. Estimates for RSEs for key statistics are provided in Appendix 5. Note that RSEs may be a poor measure of the reliability of estimates when the average value for a statistic is near zero.

Results

Response rates

A total of 14,561 individuals from the initial 32,000 provided at least some usable responses. After accounting for the 1,341 individuals who were removed because of either an undeliverable address or being deceased, the final response rate was 47%. This response rate is much higher than the rates for comparable samples from the 2015 (18%) and 2010 (36%) surveys.

In 2020, *Ontario senior* anglers had the highest (64%) while *other Canadian* anglers had the lowest (38%) response rates. The rate for *Ontario resident* anglers was 47%. About 75% of all responses were received online. This rate of online response was highest for *other Canadian* (81%) and lowest for *Ontario senior* anglers (62%).

Selected results for fisheries management zones

Fisheries management zones 15 and 16 each had more than 160,000 active anglers in 2020 from the population of *all sampled* anglers (Table 1; Table A2.1). This number of active anglers was more than 14 times that for each of FMZs 2, 3, 4, and 9. Among these active anglers, *other Canadian* anglers represented a relatively large proportion in many northwestern FMZs (2, 4, and 5) and Lake Ontario (FMZ 20).

Table 1. Active anglers from different populations in 2020 by fisheries management zone (FMZ). (Note: Anglers can be active in more than one FMZ; All=provincial total for *all sampled* anglers; FMZ with + includes provincially significant inland fisheries)

FMZ	Active anglers (#)	Ontario resident (%)	Ontario senior (%)	Other Canadian (%)
2	4,478	82.1	1.7	16.2
3	1,964	88.3	11.7	0.0
4+	10,971	78.8	2.8	18.4
5+	41,002	47.9	4.5	47.6
6+	23,324	87.9	7.2	4.9
7	15,710	87.6	8.3	4.1
8	32,947	88.2	7.4	4.4
9	11,548	88.2	9.3	2.5
10	61,240	92.0	7.0	1.0
11+	67,252	94.4	4.8	0.8
12	27,230	92.5	4.8	2.7
13	20,241	94.3	5.3	0.4
14	59,823	93.6	5.6	0.7
15	164,604	93.5	5.5	1.0
16+	167,761	95.2	4.1	0.7
17+	110,313	93.8	5.3	0.9
18	80,644	91.7	6.3	2.0
19	91,682	93.0	6.5	0.5
20	86,789	83.9	5.1	11.0
All	795,733	89.1	5.8	5.1

Fisheries management zone 16 was the most fished representing over 15% of all fishing activity in Ontario in 2020 among *all sampled* anglers (Table 2; see tables A2.2-2.3 for details). Fishing activity was much higher in southern Ontario including the Great Lakes FMZs (19 and 20). Fishing activity in far northern FMZs (2 and 3) was much lower and when combined represented less than 0.5% of all fishing activity. When controlling for the number of active anglers, FMZs 4, 5, and 10 had the highest per capita rates of fishing activity at about 15 or more days fished per year.

Fishing activity through the ice represented a greater share of total activity — often over 20% for all northeastern FMZs (3, 7, 8, 10, and 11) and FMZ 9 — than most other FMZs (Table 3; see Table A2.2 for details). The percentage of all fishing activity that was conducted through the ice was lowest in FMZs 13, 17, 19, and 20.

Only a small percent of open-water fishing activity was conducted by fishing solely from the shore including wading methods (Table 2; see Table A2.4 for details). The notable exception was FMZ 16, which had most fishing activity only from the shore. The large share of fishing activity in FMZ 16 that occurred outside lakes or ponds (i.e., in rivers, streams, and creeks) helps to explain this result. FMZ 12 had minimal fishing activity at lakes or ponds.

Species targeted by anglers included a mixture of individual species and groups. Walleye (*Sander vitreus*) was the primary target fish species group for both open and ice fishing seasons in northwestern and much of northeastern Ontario FMZs (i.e., 2, 3, 4, 5, 6, 7, 8, and 11; Table 2; see tables A2.5-2.7 for details). Trout and salmon were often targeted in Great Lakes' FMZs and during the ice fishing season in FMZs 10 and 15 albeit mainly trout species. In southern Ontario, bass, sunfish, and crappie were primarily targeted during the open water season while yellow perch (*Perca flavescens*) were often targeted during the ice fishing season. Although the primary targets for FMZ 13 were pike and muskellunge (*Esox masquinongy*), northern pike (*Esox lucius*) was the main target.

Fisheries management zone 16 had the highest reported catch of fish followed by FMZ 19 (Table 3; see Table A2.8 for details). In general, catch was more uniformly distributed among FMZs when compared to fishing activity. Harvest rates were highest for two of the Great Lakes FMZs (19 and 13) along with many FMZs in northern Ontario (3, 6, 7, 8, 9, and 10; Table 3; see Table A2.9 for details).

Table 2. Fishing activity during ice season, exclusively shore fishing during open water season, lake or pond fishing, and primary targeted species by season in 2020 by fisheries management zone (FMZ). (~=unreliable estimate; Bass and sunfish* group includes crappie; All=provincial total for *all sampled* anglers; FMZ with + includes provincially significant inland fisheries.)

FMZ	Fishing activity (days)	Ice season (%)	Shore only (%)	Lake or pond (%)	Primary target (open)	Primary target (ice)
2	47,551	15.1	12.1	97.6	Walleye	Walleye
3	15,656	~18.4	8.1	84.8	Walleye	~Walleye
4+	180,030	13.2	10.8	98.9	Walleye	Walleye
5+	657,520	14.9	2.6	85.2	Walleye	Walleye
6+	314,859	13.1	7.5	89.2	Walleye	Walleye
7	207,029	22.4	6.7	86.0	Walleye	Walleye
8	415,838	18.8	10.8	83.4	Walleye	Walleye
9	120,192	22.8	12.0	100.0	Trout and salmon	Trout and salmon
10	931,892	22.7	7.1	89.7	Walleye	Trout and salmon
11+	764,595	22.7	5.6	81.0	Walleye	Walleye
12	362,571	19.5	24.1	13.0	Walleye	Walleye
13	208,055	8.3	23.7	100.0	Trout and salmon	Walleye
14	755,227	10.3	19.8	93.3	Trout and salmon	Pike and muskellunge
15	1,757,853	13.4	10.1	93.4	Bass and sunfish*	Trout and salmon
16+	2,035,608	15.5	51.1	56.3	Bass and sunfish*	Yellow perch
17+	1,325,371	5.9	19.1	79.1	Bass and sunfish*	Yellow perch
18	1,071,838	12.2	14.6	79.5	Bass and sunfish*	Walleye
19	1,112,546	5.6	17.8	81.9	Walleye	Yellow perch
20	1,082,182	9.7	27.3	80.6	Trout and salmon	Walleye
All	13,366,413	13.5	19.9	79.5	Walleye	Walleye

Catch rates (catch divided by fishing activity) were highest for northwest FMZs such as 2, 4, and 5 followed by FMZ 19 with all above five fish caught per fishing day. The lowest catch rates (<3 fish per day) were reported for FMZs 3, 10, 12, 13, and 14.

Walleye was the most often caught and harvested species in all northwestern Ontario FMZs (2, 4, 5, and 6) and many FMZs in northeastern Ontario (3, 7, 8, and 11). Smallmouth bass were caught most in many southern FMZs (13, 14, 15) along with 10, though yellow perch (FMZs 16, 19, and 20) were also most caught for some FMZs. The most harvested species tended to match the most caught species across the FMZs. Some exceptions existed (i.e., FMZs 10 and 13) where walleye were most harvested even though smallmouth bass were most caught.

Total expenditures on fishing for FMZs 15, 16, and 17 each exceeded CAD 165 million in 2020. These three FMZs accounted for about one-third of all fishing related expenditures in Ontario in 2020 (Table 4; see Table A2.10 for details). In northern Ontario, FMZs 5, 10, and 11 had the highest expenditures at more than \$100 million each. When controlling for the number of active anglers, expenditures tended to be highest throughout most of northern Ontario with per angler expenditures above \$2,000 for FMZs 5, 7, 8, 9, and 10 and above \$3,000 for FMZ 6.

Table 3. Total catch of fish, harvest rate of caught fish, and most often caught and harvested species by fisheries management zone (FMZ) in Ontario in 2020. (~=unreliable estimate; All=provincial total for *all sampled* anglers; FMZ with + includes provincially significant inland fisheries.)

FMZ	Catch (000s)	Harvest (%)	Most caught species	Second most caught species	Most harvested species	Second most harvested species
2	~573	8.2	~Walleye	~Northern pike	Walleye	Northern pike
3	40	36.2	Walleye	Northern pike	Walleye	Yellow perch
4+	1,382	17.5	Walleye	Northern pike	Walleye	Northern pike
5+	4,002	17.3	Walleye	Smallmouth bass	Walleye	Black crappie
6+	1,317	28.0	Walleye	Northern pike	Walleye	Yellow perch
7	773	33.9	Walleye	Northern pike	Walleye	Yellow perch
8	1,479	29.3	Walleye	Northern pike	Walleye	Northern pike
9	468	28.7	Yellow perch	Lake trout	Yellow perch	Lake trout
10	2,665	25.5	Smallmouth bass	Walleye	Walleye	Smallmouth bass
11+	3,245	14.5	Walleye	Smallmouth bass	Walleye	Yellow perch
12	913	17.0	Walleye	Smallmouth bass	Walleye	Yellow perch
13	439	34.9	Smallmouth bass	Yellow perch	Walleye	Yellow perch
14	1,818	20.9	Smallmouth bass	Northern pike	Smallmouth bass	Walleye
15	5,402	10.8	Smallmouth bass	Largemouth bass	Smallmouth bass	Walleye
16+	7,082	15.9	Yellow perch	Sunfish	Yellow Perch	Smallmouth bass
17+	5,326	12.5	Sunfish	Yellow perch	Sunfish	Yellow perch
18	3,996	12.4	Largemouth bass	Sunfish	Largemouth bass	Smallmouth bass
19	6,101	37.5	Yellow perch	Walleye	Yellow Perch	Walleye
20	3,539	17.4	Yellow perch	Sunfish	Yellow Perch	Walleye
All	50,599	19.4	Walleye	Yellow Perch	Walleye	Yellow Perch

The preferred fish species were estimated from general preferences for fish species in Ontario so they may not represent the specific preferences for destinations. Walleye was consistently the most preferred species by all sampled anglers fishing in every FMZ (Table 4) though the strength of this preference varied (see tables A2.11-2.13 for details). When comparing walleye to general responses of bass (i.e., largemouth, smallmouth, and generic bass responses), bass is more preferred in many southern Ontario FMZs (15, 16, 17, and 18). The second most preferred species varied across the province with northern pike being associated with many northern FMZs (2, 3, 5, 7, 8, and 11), smallmouth bass with many southern FMZs (13, 14, 15, 16, and 20) and FMZ 10, largemouth bass with FMZs in southeastern Ontario (17 and 18), lake trout (*Salvelinus namaycush*) with FMZs 4 and 9, and yellow perch with FMZ 19.

The overall evaluation of the fishing experience among FMZs was good with over 60% of all sampled respondents stating their experience was excellent, very good, or good (Table 4; see Table A2.14 for details). These evaluations were most positive among anglers fishing in many northwestern FMZs (2, 4, and 5) along with FMZs 7 and 9. The variations in fishing experience evaluations were positively associated ($r=0.68$) with FMZ catch rates (i.e., total catch divided by days fished).

Table 4. Expenditures, preferred fish species, and angler evaluation with overall fishing experience and catch rate for their most preferred species by fisheries management zone (FMZ) in Ontario in 2020. (*=% of respondents who provided an excellent, very good, or good evaluation; All=provincial total for *all sampled* anglers; FMZ with + includes provincially significant inland fisheries.)

FMZ	Expenditures (000s CAD 2020)	Most preferred species	Second most preferred	Overall evaluation* (%)	Catch rate evaluation* (%)
2	4,784	Walleye	Northern pike	87.7	78.3
3	~2,499	Walleye	Northern pike	79.0	54.2
4+	18,345	Walleye	Lake trout	91.3	80.2
5+	112,843	Walleye	Northern pike	88.1	73.1
6+	71,652	Walleye	Lake Trout	77.0	59.6
7	37,812	Walleye	Northern pike	86.4	69.9
8	65,976	Walleye	Northern pike	79.4	55.6
9	25,943	Walleye	Lake trout	82.1	55.2
10	143,032	Walleye	Smallmouth bass	75.8	49.0
11+	113,087	Walleye	Northern pike	74.2	48.5
12	31,336	Walleye	Northern pike	73.7	45.9
13	20,261	Walleye	Smallmouth bass	72.3	48.8
14	92,202	Walleye	Smallmouth bass	76.7	49.6
15	197,499	Walleye	Smallmouth bass	72.3	45.4
16+	173,268	Walleye	Smallmouth bass	72.0	45.1
17+	169,677	Walleye	Largemouth bass	65.8	41.7
18	93,535	Walleye	Largemouth bass	74.4	47.7
19	126,796	Walleye	Yellow perch	78.4	57.8
20	117,668	Walleye	Other	76.3	51.0
All	1,618,217	Walleye	Smallmouth bass	72.5	48.4

Evaluation of the catch rate was based on the most preferred species indicated by an angler, and thus, it is affected by angler species preferences (Table A2.11). Anglers' evaluations of the catch rate for their most preferred species were much lower than those for overall fishing, with 41.7 to 80.2% of respondents rating catch rate as excellent, very good, or good (Table 4; see tables A2.15-2.18 for details). Again, the evaluations tended to be most positive in many northwestern Ontario FMZs (2, 4, and 5) along with FMZ 7. Variations in evaluations for the catch rate of the most preferred species were strongly and positively associated ($r = 0.79$) with FMZ catch rates.

When comparing results from 2020 to those from past surveys, we focused on relative and not absolute comparisons. The relative share of days fished in Ontario increased from 2005 to 2020 for three Great Lakes (FMZs 9, 19, and 20) along with FMZs 11, 15, and 16 (Table 5). Declines were observed for all northwestern Ontario FMZs (2, 4, 5, and 6) along with FMZ 17.

For most FMZs, catch and harvest rates declined from 2005 to 2020 (Table 5). If these trends were based only from 2005 to 2015, harvest rate results would remain largely unchanged while the catch rates for many northern FMZs (2, 4, 5, 6, 7, and 8) would change from declining to no trend.

Table 5. Relative changes to key fishing and outcome statistics in Ontario from 2005 to 2020 by fisheries management zone (FMZ). (Activity share is days fished in FMZ divided by all days fished, catch (harvest) rate is FMZ total catch (harvest) divided by FMZ fishing activity; expenditure share is expenditures for FMZ divided by all expenditures; overall evaluation is score for overall fishing experience; FMZ with + includes provincially significant inland fisheries;  and  indicate correlation coefficient >0.5 and <0.5, respectively, while none indicates no trend.)

FMZ	Activity share	Catch rate	Harvest rate	Expenditure share	Overall evaluation
2					
3	none	none	none	none	none
4+					
5+				none	none
6+				none	none
7	none			none	
8	none				none
9		none			none
10	none			none	
11+		none		none	none
12	none				none
13	none				
14	none	none	none	none	
15					none
16+					
17+				none	none
18	none				none
19				none	
20				none	

The share of expenditures declined from 2005 to 2020 for two northwestern Ontario FMZs (2 and 4) along with FMZs 8, 13, and 18 (Table 5). Shares of expenditures increased for FMZs 9, 12, 15, and 16.

The overall evaluation of the fishing experience improved from 2005 to 2020 for almost all Great Lakes (FMZs 13, 14, 19, and 20) along with FMZs 7, 10, and 16. These evaluations declined for two northwestern Ontario FMZs (2 and 4) though if 2020 was excluded, no trend was apparent.

Fishing activity varied between 2005 and 2020 across FMZs. The activity, when expressed as annual hours fished per hectare (angling intensity) was higher in southern FMZs than northwest or Great Lakes FMZs (Figure 4; Table A2.3). Angling activity declined from 2005 to 2020 in northwestern FMZs with a sharp decline between 2015 and 2020. By contrast, angling intensity was similar from 2010 to 2020 across many other FMZs. Increases for 2020 from 2015 were notable for FMZs 17 and 14.

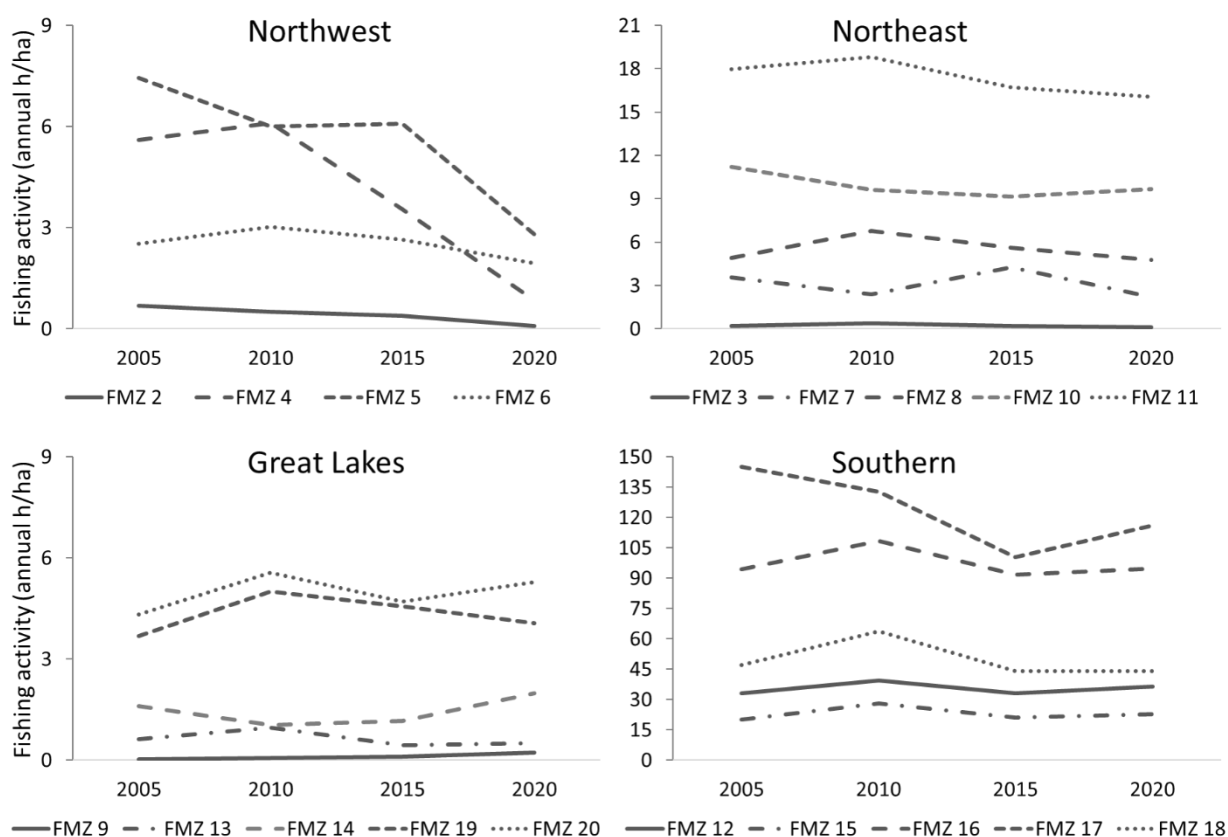


Figure 4. Angling intensity (annual hours per hectare) across fisheries management zones (FMZ) including provincially significant inland fisheries by geographic region and for the Great Lakes from 2005 to 2020. (Note: Vertical scales differ among regions.)

Selected results for provincially significant inland fisheries

Lake Simcoe had almost twice the number of active anglers as any other PSIF (Table 6). By contrast, most PSIFs in northwestern Ontario (Winnipeg River, Rainy Lake, Lac Seul, and Lake Nipigon) had the fewest active anglers. Lake of the Woods was an exception as many anglers were attracted to the lake in 2020 though much of that was due to high number of *other Canadian* anglers.

Table 6. Active anglers by population type in 2020 by provincially significant inland fishery (PSIF). (Note: Anglers can be active in more than one PSIF.)

PSIF	Active anglers (#)	Ontario resident (%)	Ontario senior (%)	Other Canadian (%)
Lake Simcoe	58,299	95.4	3.9	0.6
Lake Nipissing	26,436	96.2	3.5	0.3
Rice Lake	29,949	94.8	4.9	0.3
Tri Lakes	20,222	93.2	6.4	0.4
Lake of the Woods	17,663	33.0	3.5	63.5
Grand River	23,590	97.3	2.3	0.4
Lake Scugog	12,151	97.5	2.5	0.0
Winnipeg River	4,711	31.1	3.2	65.6
Rainy Lake	3,482	92.9	4.4	2.7
Lac Seul	2,639	83.1	5.8	11.1
Lake Nipigon	1,324	100.0	0.0	0.0

The pattern of fishing activity among PSIFs was almost identical to that for active anglers (Table 7; see Table A3.1 for details). Ice fishing made up much of the fishing activity for Lake Simcoe and Lake Nipissing but much less of it for the Grand River and Tri Lakes (comprises Buckhorn, (Upper) Chemong, Pigeon, Big and Little Bald lakes, and Gannon Narrows). Most of the open water fishing activity for the Grand River was conducted exclusively from shore (Table 7; see Table A3.2 for details). By contrast, PSIFs in northwestern Ontario had minimal fishing activity exclusively from shore.

Fishing activity per active angler at a PSIF (expressed as days) was highest for Rainy Lake (18.1) and Winnipeg River (16.3) and lowest for Rice Lake (9.4), Grand River (9.4), and Lake Nipigon (9.5). Days spent ice fishing per active angler was highest for Rainy Lake (4.4), Lake Simcoe (3.9), and Lake Nipissing (3.9).

Species groups targeted by anglers during the open water season were mostly split between walleye and the bass, sunfish, and crappie group (Table 7; see tables A3.3-3.5 for details). During the ice fishing season, walleye and yellow perch tended to be the primary targeted species though it was lake whitefish (*Coregonus clupeaformis*) at Lake Simcoe.

The number of caught fish in Lake Simcoe was twice that for any other waterbody (Table 8; see tables A3.6-3.7 for details). Rates of harvesting caught fish were highest for Lake Simcoe, Lake of the Woods, and Lake Nipigon and lowest for Lac Seul.

When comparing catch by average per day, catch rates were highest for Lac Seul (12.9) followed by Rainy Lake (8.1), and Lake of the Woods (7.2). Harvest of fish per day of fishing was highest for Lake Seul (1.5), Lake Simcoe (1.3), and Lake of the Woods (1.3).

Table 7. Fishing activity, during ice season, exclusively shore fishing during open water season, and primary targeted species in 2020 by provincially significant inland fishery (PSIF). (Bass and sunfish* group includes crappie; ~=unreliable estimate.)

PSIF	Fishing activity (days)	Ice season (%)	Shore only (%)	Main target (open)	Main target (ice)
Lake Simcoe	602,331	38.1	19.0	Bass and sunfish*	Whitefish
Lake Nipissing	321,614	31.9	5.6	Walleye	Walleye
Rice Lake	281,697	7.2	19.2	Bass and sunfish*	Yellow perch
Tri Lakes	279,803	3.7	9.1	Bass and sunfish*	Yellow perch
Lake of the Woods	231,324	13.7	1.0	Walleye	Walleye
Grand River	222,092	3.8	59.6	Bass and sunfish*	Walleye
Lake Scugog	121,726	12.3	19.2	Bass and sunfish*	Bass and sunfish*
Winnipeg River	76,982	8.9	4.2	Walleye	Walleye
Rainy Lake	63,122	24.0	0.0	Walleye	Walleye
Lac Seul	33,823	~9.0	1.2	Walleye	~Walleye
Lake Nipigon	12,604	~8.5	2.3	Walleye	~Multi groups

Table 8. Fish catch, harvest rate, and most often caught and harvested species by provincially significant inland fishery (PSIF) in Ontario in 2020. (*=% of PSIF total catch; ~=unreliable estimate.)

PSIF	Catch (000s)	Harvest* (%)	Most caught species	Most harvested species
Lake Simcoe	3,914	20.6	Yellow perch	Yellow perch
Lake Nipissing	1,755	13.3	Walleye	Yellow perch
Rice Lake	968	14.0	Sunfish	Sunfish
Tri Lakes	1,606	12.2	Sunfish	Sunfish
Lake of the Woods	1,655	18.1	Walleye	Walleye
Grand River	414	15.7	Smallmouth bass	Walleye
Lake Scugog	413	~16.4	Sunfish	~Sunfish
Winnipeg River	379	16.0	Walleye	Walleye
Rainy Lake	512	13.5	Walleye	Walleye
Lac Seul	~435	11.4	~Walleye	Walleye
Lake Nipigon	73	18.1	Walleye	Walleye

Lake Simcoe was estimated to have generated the most angling-related expenditures in 2020 at about CAD 85 million (Table 9). Lake Nipissing was second in expenditures followed by Lake of the Woods. Expenditures were lowest for Lake Nipigon, Lac Seul, and Rainy Lake.

Table 9. Fishing-related expenditures (000s CAD) attributed to provincially significant inland fisheries (PSIF) in Ontario in 2020. (See Appendix 1 for definitions of packages, consumables, and investments.)

PSIF	Packages	Consumables	Investments	Total
Lake Simcoe	2,348	25,231	57,520	85,099
Lake Nipissing	3,954	19,235	30,715	53,905
Rice Lake	605	13,620	18,744	32,969
Tri Lakes	~525	14,599	12,683	27,808
Lake of the Woods	1,252	14,006	27,315	42,573
Grand River	113	6,646	~9,334	16,092
Lake Scugog	~171	6,032	4,266	10,469
Winnipeg River	~146	4,188	~18,412	~22,747
Rainy Lake	~20	2,269	~5,929	8,217
Lac Seul	~650	1,541	1,710	3,901
Lake Nipigon	~168	1,154	~2,224	~3,546

We compared angling intensity from 2005 to 2020 for PSIFs (Figure 5; see Table A3.1). Angling intensity varied among PSIFs, with southern Ontario PSIFs often having angling intensity estimates that were more than 10 times higher than those from northern Ontario PSIFs (Figure 5). Angling intensity declined sharply between 2015 and 2020 for the four northwestern Ontario PSIFs (i.e., Lake of the Woods, Rainy Lake, Lac Seul, and the Winnipeg River) while angling intensity on Lake Nipissing remained stable. By contrast, angling intensity increased between 2015 and 2020 for Rice Lake, the Tri lakes, and Lake Scugog although the increases for Rice Lake and Lake Scugog did not reverse longer-term downward trends.

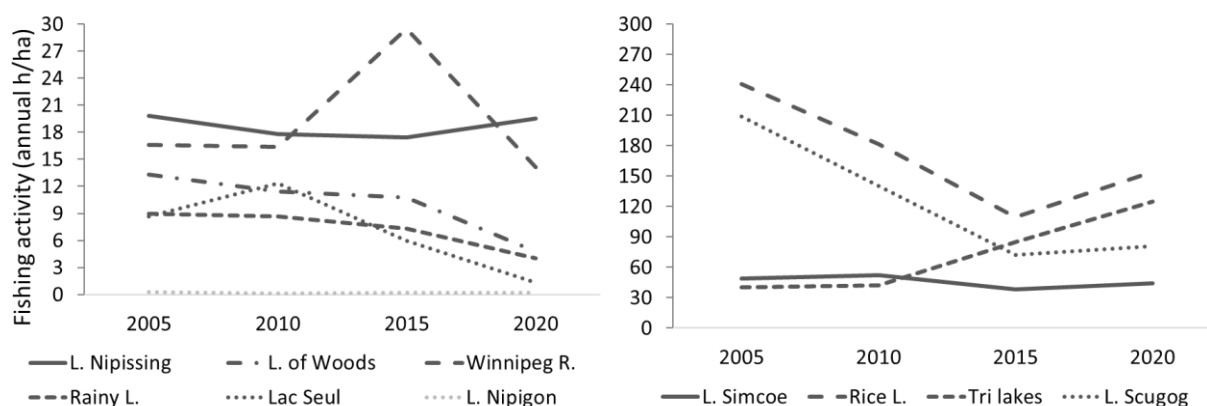


Figure 5. Angling intensity (annual hours per hectare) across provincially significant inland fisheries by geographic region in Ontario from 2005 to 2020. (Note: Vertical scales differ by an order of magnitude among regions; Grand River angling intensity estimates are excluded, these estimates are 308.6, 374.0, 480.6, and 329.9 for 2005, 2010, 2015, and 2020, respectively.)

Selected results for Great Lakes waterbodies and tributaries

Great Lakes destinations attracting the most active anglers in 2020 were Georgian Bay, Lake Erie (east and west/central), and Lake Ontario (east and west; Table 10). For tributaries, Georgian Bay tributaries were fished by the most anglers followed by both Lake Ontario east and west and Lake Huron tributaries.

Most anglers who fished these destinations were from Ontario although *other Canadian* anglers comprised relatively large shares of anglers in Lake Ontario east and Lake St. Francis. *Ontario senior* anglers were relatively most prominent for the Detroit River and Lake Superior west.

Table 10. Active anglers by population type in Ontario in 2020 by Great Lakes, connecting waters, and tributaries. (Note: Anglers can be active in more than one area; tribs is tributaries; N Chan is North Channel; G Bay is Georgian Bay.)

Great Lakes and connected waters	Active anglers (#)	Ontario resident (%)	Ontario senior (%)	Other Canadian (%)
L. Superior west	7,558	88.7	11.3	0.0
L. Superior east	5,062	94.0	6.0	0.0
L. Superior west tribs	3,506	83.9	8.7	7.3
L. Superior east tribs	3,872	90.4	4.0	5.6
St. Marys River	3,137	90.3	9.8	0.0
North Channel	11,046	93.6	5.6	0.8
North Channel tribs	4,545	89.8	8.4	1.8
Georgian Bay	46,424	94.3	4.8	0.8
Georgian Bay tribs	26,172	94.7	5.3	0.0
L. Huron	20,166	94.3	5.3	0.4
L. Huron tribs	14,050	95.0	4.4	0.7
St. Clair River	7,395	97.9	2.1	0.0
L. St. Clair	14,649	95.3	4.7	0.0
Detroit River	6,326	84.2	14.5	1.3
St. Clair tribs	9,649	93.5	5.6	1.0
L. Erie west/central	34,436	93.0	6.1	1.0
L. Erie east	34,926	93.4	6.6	0.0
L. Erie tribs	4,201	94.1	3.6	2.2
Niagara River (upper)	1,576	90.3	9.7	0.0
Niagara River (lower)	4,348	96.1	1.8	2.1
L. Ontario west	31,396	95.3	3.4	1.3
L. Ontario east	23,322	63.3	3.6	33.1
Bay of Quinte	18,134	90.4	7.6	2.0
L. Ontario west tribs	12,831	94.0	6.0	0.0
L. Ontario east tribs	18,911	92.1	5.7	2.2
St. Lawrence River	11,990	87.8	6.4	5.8
L. St. Francis	2,406	79.5	6.4	14.1

The areas with the most fishing activity tended to mirror those with the most anglers, with Georgian Bay, Lake Ontario (west), Lake Erie (east and west/central), and Lake Huron being highest (Table 11; see Table A.4.1 for details). The one notable exception was the Bay of Quinte, which had proportionally more fishing activity than active anglers.

Ice fishing was relatively popular on both sides of Lake Superior and the Bay of Quinte. As expected, fishing exclusively from shore was much more prominent among tributaries than lakes although over 40% of fishing on Lake Ontario (west) was conducted only from shore (Table 11; see Table A4.2 for details).

Table 11. Fishing activity during ice season, exclusively shore fishing during open water season, and primary targeted species in 2020 by Great Lakes, connecting waters, and tributaries. (Bass and sunfish* group includes crappie; ~=unreliable estimate; tribs is tributaries; N Chan is North Channel; G Bay is Georgian Bay.)

Great Lakes and connected waters	Fishing activity (days)	Ice season (%)	Shore only (%)	Primary target	Secondary target
L. Superior west	77,649	22.7	11.8	Trout and salmon	Walleye
L. Superior east	41,217	~23.7	6.8	Trout and salmon	Yellow perch
L. Superior west tribs	30,674	~3.8	44.0	Trout and salmon	Walleye
L. Superior east tribs	73,213	~20.6	5.0	Walleye	Whitefish
St. Marys River	53,653	~4.9	46.3	Trout and salmon	Walleye
North Channel	141,055	14.0	7.8	Walleye	Pike and muskellunge
North Channel tribs	44,192	~8.0	26.9	Walleye	Bass and sunfish*
Georgian Bay	556,052	9.6	19.3	Trout and salmon	Bass and sunfish*
Georgian Bay tribs	231,638	5.4	32.0	Walleye	Trout and salmon
L. Huron	207,889	8.3	23.8	Trout and salmon	Bass and sunfish*
L. Huron tribs	209,070	~3.4	65.6	Trout and salmon	Bass and sunfish*
St. Clair River	82,797	~5.8	27.5	Walleye	Yellow perch
L. St. Clair	193,645	10.7	15.0	Bass and sunfish*	Walleye
Detroit River	100,483	~3.0	38.8	Walleye	Yellow perch
St. Clair tribs	91,152	~1.2	80.7	Bass and sunfish*	Walleye
L. Erie west/central	346,627	4.1	13.7	Walleye	Bass and sunfish*
L. Erie east	373,647	5.2	13.7	Walleye	Bass and sunfish*
L. Erie tribs	48,513	~1.8	90.4	Trout and salmon	Bass and sunfish*
Niagara R. (upper)	14,465	0.0	37.7	Trout and salmon	Walleye
Niagara R.(lower)	49,966	2.2	34.7	Trout and salmon	Bass and sunfish*
L. Ontario west	354,602	3.0	42.0	Trout and salmon	Bass and sunfish*
L. Ontario east	160,942	~8.6	34.9	Trout and salmon	Bass and sunfish*
Bay of Quinte	241,675	22.9	8.4	Walleye	Bass and sunfish*
L. Ontario west tribs	111,919	~3.7	78.6	Trout and salmon	Bass and sunfish*
L. Ontario east tribs	198,842	4.1	53.7	Trout and salmon	Bass and sunfish*
St. Lawrence River	154,035	7.1	20.5	Bass and sunfish*	Yellow Perch
L. St. Francis	35,873	~6.6	5.9	Walleye	Bass and sunfish*

The primary target species and groups varied among destinations (Table 11; see Table A4.3 for details). Walleye was most targeted in the Bay of Quinte, Lake St. Francis, the North Channel, Lake Erie (east and west/central) along with Detroit River and the tributaries from St. Clair River, Georgian Bay, the North Channel, and Lake Superior east. Trout and salmon were targeted most on the west and east sides of Lake Ontario, Lake Huron, Georgian Bay, both sides of Lake Superior along with the upper and lower Niagara and St. Marys rivers and tributaries from Lake Huron, Georgian Bay, both sides of lakes Ontario, Lake Erie, and the west side of Lake Superior. Bass, sunfish, and crappie were most targeted in the St. Lawrence River, Lake St. Clair, and the St. Clair River.

Most fish were caught and harvested on both Lake Erie areas, followed by Lake St. Clair and the Bay of Quinte (Table 12; see tables A4.4-4.5 for details). Catch rates (catch divided by days fished) were highest for Lake St. Clair, the west side of Lake Erie, the lower portion of the Niagara River, and the St. Lawrence River. The most often caught fish species tended to come from warmwater and coolwater species such as walleye, yellow perch, and smallmouth and largemouth bass. Chinook salmon (*Oncorhynchus tshawytscha*) was caught more than other species on the west and east sides of Lake Ontario while rainbow trout (*Oncorhynchus mykiss*) was caught most often in the lower Niagara River and Lake Huron and Lake Erie tributaries.

Table 12. Fish catch and harvest and most often caught and harvested species by Great Lakes, connecting waters, and tributaries waters in Ontario in 2020. (~=unreliable estimate; tribs is tributaries; N Chan is North Channel; G Bay is Georgian Bay.)

Great Lakes and connected waters	Catch (000s)	Harvest (000s)	Most caught species	Most harvested species
L. Superior west	359	101	Yellow perch	Yellow perch
L. Superior east	~103	33	~Yellow perch	Yellow perch
L. Superior west tribs	69	17	Walleye	Walleye
L. Superior east tribs	198	54	Walleye	Walleye
St. Marys River	~82	~28	~Yellow perch	~Yellow perch
North Channel	443	110	Smallmouth bass	Smallmouth bass
North Channel tribs	129	41	Walleye	Walleye
Georgian Bay	1,276	242	Smallmouth bass	Smallmouth bass
Georgian Bay tribs	710	94	Smallmouth bass	Walleye
L. Huron	441	154	Smallmouth bass	Walleye
L. Huron tribs	340	62	Rainbow trout	Smallmouth bass
St. Clair River	315	114	Walleye	Walleye
L. St. Clair	1,590	~590	Yellow perch	~Yellow perch
Detroit River	437	182	Yellow perch	Walleye
St. Clair tribs	217	~10	Smallmouth bass	~Walleye
L. Erie west/central	1,913	799	Walleye	Walleye
L. Erie east	1,834	621	Yellow perch	Yellow perch
L. Erie tribs	88	~6	Sunfish	~Rainbow trout
Niagara R. (upper)	28	~7	Smallmouth bass	~Walleye
Niagara R. (lower)	83	8	Rainbow trout	Rainbow trout
L. Ontario west	686	117	Chinook salmon	Chinook salmon
L. Ontario east	376	96	Chinook salmon	Chinook salmon

Great Lakes and connected waters	Catch (000s)	Harvest (000s)	Most caught species	Most harvested species
Bay of Quinte	947	133	Yellow perch	Walleye
L. Ontario west tribs	163	20	Other	Yellow perch
L. Ontario east tribs	527	74	Smallmouth bass	Walleye
St. Lawrence River	812	150	Yellow perch	Yellow perch
L. St. Francis	164	41	Yellow perch	Yellow perch

Discussion and conclusions

We illustrated that fishing destinations in Ontario attracted different numbers and types of anglers, fishing activity, and target species. These differences were accompanied by differences in catch and harvest of fish species, expenditures, and evaluations of fishing quality. The results demonstrate that efforts to describe Ontario's recreational fishery with averages hides relevant details and diversity.

The amount of fishing activity in 2020 in southern Ontario (i.e., FMZs 12 to 20) was about 3.3 times higher than that in northern Ontario (i.e., FMZs 2 to 11). This difference was much higher in 2020 than in 2015 or 2010 when the corresponding ratios were 1.8 and 2.2, respectively. These results are consistent with the higher number of Ontario's licenced anglers who reside in southern Ontario (Hunt et al. 2017) and a disproportional increase of 2020 licence sales to southern over northern resident anglers (Hunt et al. 2022). This increase meant larger differences in fishing activity between 2015 and 2020 for some southern Ontario destinations such as Rice Lake, Lake Scugog, and the Tri lakes. These increases are consistent with reported increases in fishing activity in the United States during the COVID-19 pandemic (Midway et al. 2021). By contrast, northern Ontario lost about 89% of U.S. anglers (Hunt et al. 2022) in 2020 with areas in northwestern Ontario (e.g., FMZs 2, 4, 5 and Lake of the Woods, Lac Seul, Winnipeg River, and Rainy Lake) most affected (see figures 4 and 5). These results suggest a disproportional effect from the COVID-19 pandemic on northern and southern Ontario recreational fisheries and anglers.

The overall expenditure estimates were deflated in 2020 because of the loss of non-resident anglers. Like fishing activity, this deflation was especially prominent in many fishing destinations in northwestern Ontario such as Lake of the Woods, Rainy Lake, Winnipeg River, and Lac Seul and FMZs 2 and 4. For example, relative changes in angling-related expenditures in 2020 with inflation-adjusted estimates from 2015 indicated a 51 to 88% decrease for Rainy Lake, Lake of the Woods, Winnipeg River, and Lac Seul. In fact, while expenditures associated with fishing Lake of the Woods were highest for any PSIF in 2015, they fell to third in 2020 behind the southern destinations of Lake Simcoe and Lake Nipissing. Angling-related expenditures increased for both Lake Simcoe and Lake Nipissing in 2020 compared to 2015 (24% and 15% respectively).

The absence of *non-resident* anglers in 2020 also contributed to trends of decreasing evaluations of the fishing experience in northwestern Ontario, especially for FMZs 2 and 4. *Non-resident* anglers typically provide higher ratings of their Ontario fishing experience than do

resident anglers (OMNRF 2020a) so the loss of these anglers who typically fish in northwestern Ontario (OMNRF 2020b) results in a lower overall evaluation. Despite this fact and lower reported catch and harvest rates over time, evaluations of the fishing experience increased from 2005 to 2020 for many destination areas including four of the five FMZs associated with the Great Lakes (FMZs 13, 14, 19, 20).

With declining numbers of *non-resident* anglers from 2005 to 2015 and especially in 2020, some destinations attracted a greater share of fishing activity over time. These areas were southwestern Ontario (FMZ 16), Lake Erie and Ontario FMZs (19, and 20), along with FMZs 15, 9 (Lake Superior), and 11 (near North Bay). These southern Ontario increases may reflect nearby increases to human populations and resident anglers, which in part were due to increased fishing licence sales during the pandemic (Hunt et al. 2021). The other increases cannot be understood without more information.

The trends for catch rate (catch per day) and harvest rate (harvest per day) consistently decreased from 2005 to 2020 for almost every FMZ. The decreasing catch rate for northwestern Ontario was influenced by the loss of *non-resident* anglers who, on average, catch more fish per day than do resident Ontario anglers (Hunt et al. 2022). The decline in southern Ontario and the overall decline to harvest rates throughout the province are not likely from the loss of *non-resident* anglers. More research is needed to understand reasons for these trends, including the possibility that respondents now provide more accurate information. It is known that catch and harvest estimates from the 2005 recreational fishing survey in Ontario were 4.5 and 2.7 times greater, respectively than comparable estimates from creel surveys (Hogg et al. 2010b). Thus, declines to catch rates and harvest rates from 2005 to 2020 could result in better congruence between survey and creel-based estimates.

Even analyses at the FMZ scale are too coarse to reveal all interesting patterns of diversity in fishing destinations in Ontario. For example, consider FMZ 20 that includes Lake Ontario, the Bay of Quinte, the lower Niagara River, the St. Lawrence River, and Lake St. Francis. The primary targeted fish species group in 2020 for FMZ 20 was mixed, with about one-third of fishing days targeting trout and salmon, one-quarter targeting walleye, and one-fifth targeting the bass, sunfish, and crappie group. When disaggregating FMZ 20 into parts and tributaries that feed Lake Ontario, a much more interesting pattern emerges. Trout and salmon were targeted for over 70% of days fished on the lower Niagara River and western Lake Ontario tributaries and over 55% of days fished on both the east and west sides of Lake Ontario. By contrast, over 60% of days fished in the Bay of Quinte targeted walleye while 98% of days fished at Lake St. Francis targeted walleye, bass and sunfish, and/or yellow perch. Thus, the overall estimates for target fish species groups for FMZ 20 hide the very diverse fisheries embedded in this zone. Also, the large share of fishing activity on the west side of Lake Ontario that was conducted exclusively by shore suggests that this part of FMZ 20 is dominated by an urban fishery.

Here, we provide a synthesis of the diversity of Ontario's recreational fisheries in 2020 using results from all three destination groups (i.e., FMZs, PSIFs, and select Great Lakes waters). Using already presented results on rates of targeting different fish species and species groups, we provide further insights about destinations with similar emphasis on walleye; trout and salmon; bass, sunfish, and crappie; and yellow perch targets. For each of these groups, we characterize its importance to a destination using labels of dominant (>67% of fishing activity is targeted to a

single fish species group), majority (50 to 67%), and leaning (40 to 50%) along with a mixed target group (<40%). Given that the Great Lakes select waters are at a much finer scale than FMZs, we do not include Great Lakes FMZs (9, 13, 14, 19, and 20) below.

1. Walleye fisheries:

- Dominant: much of northern Ontario (FMZs 2, 3, 4, 5, 6, 7, and 8), Bay of Quinte, west/central Lake Erie, St. Clair River, Lake Nipissing, Lac Seul, Lake of the Woods, and Winnipeg River
- Majority: FMZ 11, Ottawa River (FMZ 12), Detroit River, North Channel tributaries, eastern Lake Superior tributaries, Lake Nipigon, and Rainy Lake
- Leaning: FMZ 10
- For ice fishing only: FMZ 11 and 12 become dominant; FMZ 18 and Georgian Bay tributaries become majority; Lake Ontario east, Lake Huron, and Lake Superior east tributaries become leaning

2. Trout and salmon fisheries

- Dominant: Lake Ontario west tributaries, Lake Huron tributaries, and Niagara River (lower)
- Majority: Lake Ontario east and west, Lake Superior east and west, Lake Superior west tributaries, and St. Marys River
- Leaning: Lake Erie tributaries and Niagara River (upper)
- For ice fishing only: FMZ 10 becomes majority and FMZ 15 (Other) becomes leaning with emphasis on trout species

3. Bass, panfish, and crappie fisheries

- Dominant: Lake Scugog (walleye fishery was closed in 2020)
- Majority: Southeastern Ontario (FMZs 17 and 18), Rice Lake, Tri Lakes, and tributaries from Lake St. Clair
- Leaning: FMZ 15, Lake St. Clair, and Grand River

4. Yellow Perch (for ice fishing only):

- a. Majority: Lake Erie east, Tri Lakes, Lake St. Clair, and Rice Lake
- b. Leaning: Lake Simcoe, Lake Superior west, Lake St. Francis, Lake Erie west

5. Mixed fisheries: FMZ 16, Lake St. Francis, St. Lawrence River, Lake Ontario east tributaries, Lake Erie east, Lake Huron, Georgian Bay and tributaries, North Channel, and Lake Simcoe

The classification of destinations above arises from the availability and abundance of fish species and angler preferences, which in turn relate to waterbody morphology (number, type, size, and depth), climate and other habitat considerations, and past fishing activity by anglers. Therefore, monitoring changes in targeted species groups among destinations can provide important clues about human population and climate change effects on recreational fisheries in Ontario.

References

- Arlinghaus, R., J. Alós, B. Beardmore, K. Daedlow, M. Dorow, M. Fujitani, D. Hühn, W. Haider, L.M. Hunt, B.M. Johnson, F. Johnston, T. Klefoth, S. Matsumura, C. Monk, T. Pagel, J.R. Post, T. Rapp, C. Riepe, H. Ward and C. Wolter. 2017. Understanding and managing freshwater recreational fisheries as complex adaptive social-ecological systems. *Reviews in Fisheries Science & Aquaculture* 25(1): 1–41.
- Cudmore-Vokey, B. and E.J. Crossman. 2000. Checklists of the fish fauna of the Laurentian Great Lakes and their connecting channels. Fisheries and Oceans Canada, Great Lakes Laboratory for Fisheries and Aquatic Sciences, Burlington, ON. 46 p.
- Dillman, D.A. 2000. Mail and internet surveys: The tailored design method. John Wiley & Sons, Toronto, ON. 464 p.
- Fisheries and Oceans Canada. 2019. Survey of recreational fishing in Canada, 2015. Fisheries and Oceans Canada, Ottawa, ON <<https://waves-vagues.dfo-mpo.gc.ca/Library/40753220.pdf>>. Accessed August 2022.
- Hogg, S.E, N.P. Lester and H. Ball. 2010a. 2005 Survey of recreational fishing in Canada: Results for fisheries management zones of Ontario. Applied Research and Development Branch. Ontario Ministry of Natural Resources. Peterborough, Ontario. 32 p. + appendices.
- Hogg, S.E., N.P. Lester and H. Ball, 2010b. The effectiveness of the 2005 recreational fishing survey to deliver spatially explicit estimates of fishing effort and harvest: Analysis for selected Ontario lakes. Ontario Ministry of Natural Resources, Applied Research and Development Branch. Peterborough, Ontario. 23 p. + appendices.
- Hunt, L.M., H. Ball, A. Ecclestone and M. Wiebe. 2022. Selected results from the 2020 recreational fishing survey in Ontario. Ontario Ministry of Natural Resources and Forestry, Science and Research Branch, Peterborough, ON. Science and Research Technical Report TR-50. 33 p. + appendices.
- Hunt, L. M., A.E. Bannister, D.A.R. Drake, S.A. Fera and T.B. Johnson. 2017. Do fish drive recreational fishing license sales? *North American Journal of Fisheries Management*, 37(1): 122–132.
- Hunt, L.M., D.J. Phaneuf, J.K. Abbott, E.P. Fenichel, J.A. Rodgers, J.D. Buckley, D.A.R. Drake and T.B. Johnson. 2021. The influence of human population change and aquatic invasive species establishment on future recreational fishing activities to the Canadian portion of the Laurentian Great Lakes. *Canadian Journal of Fisheries and Aquatic Sciences* 78(3): 232–244.
- Johnston, F. D., R. Arlinghaus and U. Dieckmann. 2010. Diversity and complexity of angler behaviour drive socially optimal input and output regulations in a bioeconomic recreational-fisheries model. *Canadian Journal of Fisheries and Aquatic Sciences* 67: 1507–1531.

- Johnston, F. D., R. Arlinghaus and U. Dieckmann. 2013. Fish life history, angler behaviour and optimal management of recreational fisheries. *Fish and Fisheries* 14: 554–579.
- Lester, N.P., T.R. Marshall, K. Armstrong, W.I. Dunlop and B. Ritchie. 2003. A broad-scale approach to management of Ontario’s recreational fisheries. *North American Journal of Fisheries Management* 23: 1312–1328.
- Lester, N.P., S. Sandstrom, D.T. de Kerckhove, K. Armstrong, H. Ball, J. Amos, T. Dunkley, M. Rawson, P. Addison, A. Dextrase, D. Taillon, B. Wasylenko, P. Lennox, H.C. Giacomini and C. Chu. 2021. Standardized broad-scale management and monitoring of inland lake recreational fisheries: An overview of the Ontario experience. *Fisheries Magazine* 46: 107–118.
- Midway, S. R., A. J. Lynch, B. K. Peoples, M. Dance and R. Caffey. 2021. COVID-19 influences on US recreational angler behavior. *PLOS ONE* 16(8): e0254652.
- [OMNRF] Ontario Ministry of Natural Resources and Forestry. 2014. 2010 Survey of recreational fishing in Canada: Selected results for Ontario fisheries. Ontario Ministry of Natural Resources and Forestry, Biodiversity Branch, Peterborough, ON.
- [OMNRF] Ontario Ministry of Natural Resources and Forestry. 2015. Ontario’s provincial fish strategy: fish for the future. Ontario Ministry of Natural Resources and Forestry, Species Conservation Branch, Peterborough, ON. 63 p.
- [OMNRF] Ontario Ministry of Natural Resources and Forestry. 2020a. 2015 Survey of recreational fishing in Canada: Selected results for Ontario fisheries. Ontario Ministry of Natural Resources and Forestry, Fish and Wildlife Branch, Peterborough, ON. 47 p. + appendices.
- [OMNRF] Ontario Ministry of Natural Resources and Forestry. 2020b. 2015 Survey of recreational fishing in Canada: Results for fisheries management zones of Ontario. Ontario Ministry of Natural Resources and Forestry, Fish and Wildlife Policy Branch, Peterborough, ON. 61 p.
- [OMNDMNRF] Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry. 2022a. Ontario’s State of Natural Resources Report 2021. Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry, Peterborough, ON. <<https://www.ontario.ca/files/2022-03/ndmnrf-state-of-natural-resources-report-2021-en-2022-03-11.pdf>>. Accessed April 2022.
- Ontario Parks. 1998. Algonquin Provincial Park management plan. Ontario Parks, Algonquin Provincial Park, Whitney, ON. 94 p.
- Ready, R.C., G.L. Poe, T.B. Lauber, N.A. Connelly, R.C. Stedman and L.G. Rudstam. 2018. The potential impact of aquatic nuisance species on recreational fishing in the Great Lakes and Upper Mississippi and Ohio River Basins. *Journal of Environmental Management* 206: 304–318.

Appendix 1. Definitions

Listed are definitions to ensure common understanding of terms as used in this report.

An **angler** is an individual who participates in recreational fishing regardless of method.

An **angling package** consists of purchases made for fishing from or through a lodge, outfitter, or their agent that includes services such as lodging, food, transportation, and guiding.

An **active angler** is a person who fished in Ontario in the year they were surveyed.

The **bass, sunfish, and crappie** group consists of all fish species from the Centrarchidae family.

The **catfish** group consists of all fish species from the Ictaluridae family.

Consumables are expenditures on goods and services (e.g., food, accommodation, licence fees) incurred during the process of fishing in Ontario.

Days fished represents a day, or any part of a day, during which an angler fished in Ontario.

A **deemed licence holder** is a person who did not purchase a fishing licence, but who is considered licensed given age (<18 years or >64 years) or other criteria (e.g., disability status).

Fish caught equals the total number of fish caught in 2020.

Fisheries management zone is one of 20 areas into which Ontario is divided to support fisheries management.

The **Great Lakes select waters** are used to provide finer scale results for parts of Great Lakes. The following lists provide water identification numbers (WBY LID) only for waterbodies where fishing activity was reported by a respondent in 2020. Waterbody identification numbers, geographic coordinates, and names are available in the Ontario Waterbody Location Identifier data set in [Ontario GeoHub](#).

- Bay of Quinte: 17-7415-48483 (landmarks of Bath, Picton, and Trenton), and 18-3201-48909
- Detroit River: 17-3221-46574
- Georgian Bay tributaries: 17-4974-49568, 17-5053-49346, 17-5663-49257, 17-5843-49628, 17-5907-49797, 17-6069-49540, 17-5040-49346, 17-5078-50864, 17-5116-50975, 17-5181-50848, 17-5207-50809, 17-5298-50680, 17-5481-50440, 17-5535-50295, 17-5331-49384, 17-5338-50533, 17-5437-49347, 17-5449-47173, 17-5451-47163, 17-5623-49275, 17-5795-49314, 17-5799-49980, 17-5831-49574, 17-5876-49167, 17-5910-49557, 17-6003-49540, 17-6015-49614, 17-6056-49540, 17-5350-50680, 17-5769-49520, 17-5894-49778

- Georgian Bay: 17-5196-50105 (Port Severn and south)
- Lake Erie east: 17-5000-46773 (Turkey Point and east)
- Lake Erie west/central: 17-5000-46773 (Port Burwell and west)
- Lake Erie tributaries: 17-3537-46529, 17-4699-47199, 17-4822-47199, 17-5000-47217, 17-5150-47218, 17-5328-47144, 17-5369-47218, 17-5609-47335, 17-5655-47370, 17-6588-47698, 17-6604-47588, 17-5763-47370, 17-3303-46553
- Lake Huron: 17-4006-49280
- Lake Huron tributaries: 17-3846-50635, 17-4013-50576, 17-4142-50500, 17-4417-48355, 17-4520-48903, 17-4269-47869, 17-4378-47961, 17-4411-48590, 17-4413-48812, 17-4646-49866, 17-4893-48828, 17-4423-48441, 17-4435-48238, 17-4480-48922, 17-4503-48404, 17-4521-49033, 17-4529-48218, 17-4544-48403, 17-4557-48422, 17-4638-48514, 17-4709-49273, 17-4733-48791, 17-4775-49439, 17-4787-49050, 17-4787-49069, 17-4815-49476, 17-4973-48883, 17-4979-48866
- Lake Ontario east: 17-7415-48483 (Ajax and east excluding Bay of Quinte)
- Lake Ontario west: 17-7415-48483 (Scarborough and west)
- Lake Ontario east tributaries: 17-6575-48531, 17-6648-48570, 17-6741-48591, 17-6874-48613, 17-6874-48615, 17-6931-48629, 17-7167-48696, 17-7260-48700, 17-7407-48723, 18-2674-48739, 18-2946-48860, 18-3094-48912, 18-3202-48945, 18-3389-48958, 18-3829-48989, 17-6661-48571, 17-6861-48613, 17-6941-48615, 18-2728-48756, 18-3218-48618, 18-2894-48802, 17-7193-48697, 18-3602-48954
- Lake Ontario west tributaries: 17-5871-47913, 17-5906-47927, 17-5984-48131, 17-6039-48058, 17-6079-48096, 17-6144-48227, 17-5899-47922, 17-6015-47873, 17-6040-48040, 17-6171-48265, 17-6354-47823, 17-6551-48572, 17-6178-47838, 17-6328-47804, 17-6368-47823, 17-6489-48474, 17-6529-47901, 17-6219-47839, 17-6236-48475, 17-6237-48321, 17-6331-48341, 17-6395-47824, 17-6455-47668, 17-6465-47733, 17-6515-48512, 17-6575-47680
- Lake St. Clair: 17-3630-47027
- Lake St. Francis: 18-5459-49977
- Lake Superior east: 16-5000-53161 (Marathon and east)
- Lake Superior west: 16-5000-53161 (Terrace Bay and west)

- Lake Superior east tributaries: 16-5269-54051, 16-5516-53830, 16-6736-52520, 16-6966-52008, 16-7019-51954, 16-5540-53867, 16-5541-53775, 16-6606-53109, 16-6618-53109, 16-6632-52609, 16-6709-52557, 16-6779-52336, 16-6788-52466, 16-6814-52429, 16-6839-52022, 16-6878-51986, 16-6949-51766, 16-6954-52007, 16-7008-51916, 16-6763-52020, 16-6983-51879, 17-6175-52209
- Lake Superior west tributaries: 16-3084-53897, 16-3085-53193, 16-3322-53632, 16-4208-54278, 16-3175-53282, 16-3341-53630, 16-3360-53666, 16-3709-53824, 16-3796-53860, 16-3886-54061, 16-3899-54079, 16-3359-53629, 16-3386-53684, 16-3560-53773, 16-3943-53801, 16-3985-54096, 16-4097-54224, 16-4268-54240, 16-4292-54221, 16-4365-54202, 16-4438-54183, 16-4699-54090, 16-4914-54032, and 16-5073-54013
- Niagara River: 17-6583-47921 (separated into lower and upper portions based on provided landmarks by respondents)
- North Channel: 17-5196-50105 (Killarney and west including Manitoulin Island)
- North Channel tributaries: 16-7147-51569, 16-7186-51570, 17-3022-51248, 17-3443-51143, 17-3482-51161, 17-3598-51158, 17-3984-51150, 17-3740-51173, 17-4031-50853, 17-4420-51015
- St. Clair River: 17-3632-47120
- St. Clair tributaries: 17-3408-46902, 17-3585-46843, 17-3667-46841, 17-3805-46858, 17-3837-47116
- St. Lawrence River: 18-5524-50052
- St. Marys River: 16-7158-51580, 16-7228-51461, 17-2867-51253

A **household** consists of individuals residing in the same dwelling.

Investments are expenditures on gear, equipment, and land that support angling activities. Only the percentage of these investments that are attributable to fishing (wholly attributable) are reported here.

The **multi species** group consists of cases where an angler targeted or preferred fish from multiple groups (e.g., walleye and yellow perch or smallmouth bass and northern pike).

A **non-resident** angler is a non-resident of Canada who purchased a fishing licence for Ontario during the survey year.

An **other Canadian** angler is a Canadian but not Ontario resident who purchased a fishing licence for Ontario during the survey year.

An **Ontario resident** angler is an Ontario resident who purchased a fishing licence for Ontario during the survey.

An **Ontario senior** angler is an Ontario resident who purchased a fishing licence for Ontario in the past but now because of their age (65 to 70 years old) are considered a deemed fishing licence holder.

The **pike and muskellunge** group consists of all fish species from the Esocidae family.

A **provincially significant inland fishery (PSIF)** is a waterbody (or waterbodies) with significant social and economic benefits and ecological importance. The following lists provide waterbody identification numbers (WBY_LID) for each PSIF.

- Grand River: Lake Belwood 17-5535-48461, D'Aubigny Creek 17-5542-47775, Moffat's Creek 17-5567-47979, Grand River 17-6171-47450, Broad Creek 17-6171-47468, and Maple Creek 17-6171-47486
- Lac Seul: Wenesaga River (portion) 15-4882-56088, Broadcast Lake 15-5244-55839, Broad Lake 15-5263-55876, Sunlight Lake 15-5305-55928, Lac Seul 15-5365-55747, Whitefish (Vaughan) Lake 15-5428-55590, Lost Lake 15-5584-55517, Root River 15-5883-56133, March Lake 15-5942-56134, and Adamhay Lake 15-6012-56172
- Lake Nipigon: Kabitotikwia River 16-3475-55109, Gull River 16-3490-55220, Poshkokagan River 16-3529-54885, Jackpot Lake 16-3553-55051, Wabinosh River 16-3604-55458, Frith Lake 16-3790-55249, Oribine Lake 16-3831-54933, Mara Lake 16-3844-54970, Lake Nipigon 16-3921-55210, Paddy's Lake 16-3977-55005, Teapot Lake 16-3989-54967, Vanooyen Lake 16-3990-55023, Rea Lake 16-4002-55023, Little Jackfish River 16-4014-55708, Forgan Lake 16-4062-54686, Bonner Lake 16-4078-54761, and Little Bonner Lake 16-4081-54725
- Lake Nipissing: Lake Nipissing 17-5770-51258
- Lake of the Woods: Shoal Lake 15-3541-54903, Cul de Sac Lake 15-3676-54993, Lake of the Woods 15-3726-54565, Rainy River 15-3765-54101
- Lake Scugog: Lake Scugog 17-6715-48930 and Scugog River 17-6792-49185
- Lake Simcoe: 17-6185-48949, 17-6186-48912, Lake Couchiching 17-6286-49481, and Lake Simcoe 17-6327-49193
- Ottawa River is FMZ 12 and is reported in the FMZ section. It consists of Lake Timiskaming 17-6178-52207, Lac La Cave 17-6731-51370, Holden Lake 17-7120-51253, Allumette Lake 18-3280-50833, Lower Allumette Lake 18-3485-50735, Lac Coulonge 18-3577-50825, Lac du Rocher-Fendu 18-3662-50545, Lac des Chats 18-3854-50393, Lac

Deschenes 18-4334-50239, Lac Dollard-des-Ormeaux 18-5390-50495, and Ottawa River 18-5481-50460

- Rainy Lake: Rainy Lake 15-4877-53939, Little Grassy Lake 15-5135-53883, Seine River 15-5135-53902, Grassy Lake 15-5221-53902, Shoal Lake 15-5270-53921, Wild Potato Lake 15-5380-53959, Sand Point Lake 15-5394-53581, and Partridge Crop Lake 15-5478-53978
- Rice Lake: Otonabee River 17-7213-48920 and Rice Lake 17-7257-48946
- Tri lakes: Pigeon Lake 17-6992-49270, Gannon Narrows 17-7015-49286, 17-7050-49386, Bald Lake Narrows 17-7038-49378, Little Bald Lake 17-7050-49386, Buckhorn Lake 17-7074-49293, Big Bald Lake 17-7074-49389, Chemong Lake 17-7076-49181, and Upper Chemong Lake 17-7107-49288
- Winnipeg River: Winnipeg River 15-3467-55666, Tetu Lake 15-3546-55607, Swan Lake 15-3634-55471, Roughrock Lake 15-3742-55518, Pistol Lake 15-3776-55397, Little Sand Lake 15-3792-55437, Muriel Lake 15-3791-55188, Gun Lake 15-3813-55351, Big Sand Lake 15-3836-55518, Middle Lake 15-3845-55146, and MacFarlane River 15-3888-55322. Note: The English River (15-3573-55626) that was part of this PSIF in 2015, was excluded as the trips to this river in 2020 were not near the Winnipeg River system.

Northeastern Ontario is defined as FMZs 3, 7, 8, 10, and 11 and excludes the Great Lakes.

Northern Ontario is defined as FMZs 2 to 11 as no information was available for FMZ 1.

Northwestern Ontario is defined as FMZs 2, 4, 5, and 6 and excludes the Great Lakes.

Recreational fishing is a non-commercial fishing activity. Ceremonial and subsistence fishing are not covered by the survey, and no attempt was made to include these fishing activities in our results.

The **trout and salmon** group consists of all species of fish from the Salmoninae family except Coregonids.

Southeastern Ontario is defined as FMZs 17 and 18.

Southern Ontario is defined as FMZs 12 to 20.

Appendix 2. Detailed results for fisheries management zones

Table A2.1. Active anglers in Ontario in 2020 by angler population and fisheries management zone (FMZ). (Note: Anglers can be active in more than one zone; FMZ with X excludes provincially significant inland fisheries; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Active anglers (#)	Ontario resident (%)	Ontario senior (%)	Other Canadian (%)
4X	9,554	78.7	2.4	18.9
5X	21,987	59.4	5.6	35.0
6X	22,555	87.4	7.5	5.1
11X	45,421	93.6	5.4	1.0
15A	16,672	93.9	5.0	1.1
15O	152,418	93.5	5.5	1.0
16X	102,255	94.8	4.5	0.7
17X	63,038	93.6	5.1	1.3

Table A2.2. Fishing activity (days) in Ontario in 2020 by angler population (#) and fisheries management zone (FMZ). (~ unreliable estimate; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; * ice fishing is essentially prohibited in FMZ 15A and is not reported.)

FMZ	Ontario resident	Ontario senior	Other Canadian	All	Open water	Ice
2	38,299	3,259	5,993	47,551	40,353	7,198
3	13,337	2,318	0	15,656	12,778	~2,877
4+	157,368	3,560	19,102	180,030	156,214	23,816
4X	125,971	2,153	18,084	146,207	125,429	20,778
5+	362,577	22,193	272,749	657,520	559,663	97,857
5X	173,427	16,520	96,145	286,092	242,000	44,092
6+	288,349	19,191	7,320	314,859	273,668	41,191
6X	275,745	19,191	7,320	302,255	262,139	40,116
7	188,245	14,995	3,789	207,029	160,662	46,367
8	357,805	41,158	16,875	415,838	337,749	78,089
9	112,844	6,336	1,012	120,192	92,847	27,345
10	872,509	56,601	2,782	931,892	720,381	211,512
11+	713,966	49,286	1,343	764,595	590,785	173,811
11X	404,197	37,534	1,251	442,982	371,744	71,237
12	331,852	22,097	8,623	362,571	291,791	70,779
13	199,451	8,344	260	208,055	190,882	17,173
14	714,388	38,430	2,409	755,227	677,480	77,747
15	1,631,710	106,674	19,470	1,757,853	1,521,444	236,409
15A	98,405	5,379	2,058	105,842	*	*

FMZ	Ontario resident	Ontario senior	Other Canadian	All	Open water	Ice
15O	1,533,383	101,294	17,412	1,652,089	1,418,938	233,151
16+	1,965,004	60,831	9,773	2,035,608	1,720,942	314,667
16X	1,167,325	35,423	8,439	1,211,186	1,134,808	76,378
17+	1,225,753	95,006	4,612	1,325,371	1,247,154	78,217
17X	596,757	43,569	1,819	642,145	609,608	32,538
18	993,958	64,753	13,128	1,071,838	940,636	131,202
19	1,000,489	110,957	1,099	1,112,546	1,050,402	62,144
20	987,132	59,018	36,032	1,082,182	977,523	104,660

Table A2.3. Angling intensity (annual hours per hectare) in Ontario in 2020 by fisheries management zone (FMZ). (~=unreliable estimate; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; *=total hours divided by waterbody area >5 ha; **=ice fishing is essentially prohibited in FMZ 15A and is not reported.)

FMZ	Open (average hours)	Ice (average hours)	Total hours	Waterbody area (lakes >5 ha)	Waterbody area (lakes >20 ha)	Effort intensity (hours/ha*)
2	4.63	5.77	228,211	2,593,990	2,376,117	0.09
3	4.18	3.61	63,837	497,216	256,166	0.13
4+	4.75	5.19	865,030	1,015,429	966,022	0.85
4X	4.63	5.27	640,186	857,281	807,874	0.75
5+	4.74	4.91	3,130,017	1,115,825	984,788	2.81
5X	4.38	4.84	1,272,065	795,216	664,179	1.60
6+	4.68	6.49	1,548,369	794,537	764,027	1.95
6X	4.61	6.56	1,360,317	337,748	307,238	4.03
7	4.42	4.58	921,962	420,555	357,250	2.19
8	4.76	5.54	2,040,635	428,451	378,528	4.76
9	5.01	5.62	618,896	2,861,560	2,861,560	0.22
10	4.48	5.14	4,317,870	446,585	363,488	9.67
11+	4.69	6.18	3,847,106	239,316	220,594	16.08
11X	4.81	6.04	2,052,110	155,832	137,110	13.17
12	4.72	5.44	1,763,418	48,303	48,179	36.51
13	4.27	5.68	911,750	1,778,863	1,778,863	0.51
14	4.66	5.80	3,607,727	1,814,159	1,814,159	1.99
15	3.97	5.44	7,318,317	321,315	275,648	22.78
15A	4.52	**	479,291	67,125	61,833	7.14
15O	3.93	5.44	6,840,231	254,190	213,815	26.91
16+	4.71	6.45	10,134,899	106,943	100,815	94.77
16X	4.70	5.54	5,355,282	103,890	97,762	51.55
17+	4.82	5.87	6,474,589	55,809	55,119	116.01
17X	4.60	6.01	2,790,272	48,989	48,299	56.96

FMZ	Open (average hours)	Ice (average hours)	Total hours	Waterbody area (lakes >5 ha)	Waterbody area (lakes >20 ha)	Effort intensity (hours/ha*)
18	4.30	4.98	4,695,445	106,394	91,988	44.13
19	4.92	5.56	5,513,813	1,357,504	1,357,504	4.06
20	5.08	5.09	5,498,315	1,040,798	1,040,798	5.28

Table A2.4. Open water fishing activity (%) by mode, waterbody type, and fisheries management zone (FMZ) in Ontario in 2020. (FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; respondents could select shore, boat or both shore and boat.)

FMZ	Only from boat	Boat and shore	Only from shore	Lake or pond	River, creek, or stream
2	75.1	12.8	12.1	97.6	2.4
3	79.2	12.7	8.1	84.8	15.2
4+	72.7	16.4	10.8	98.9	1.1
4X	70.7	16.1	13.2	98.7	1.3
5+	79.5	17.9	2.6	85.2	14.8
5X	74.0	22.1	3.9	87.2	12.8
6+	72.1	20.4	7.5	89.2	10.8
6X	72.4	19.8	7.8	88.7	11.3
7	79.6	13.6	6.7	86.0	14.0
8	68.5	20.7	10.8	83.4	16.6
9	65.4	22.6	12.0	100.0	0.0
10	72.7	20.2	7.1	89.7	10.3
11+	72.0	22.4	5.6	81.0	19.0
11X	72.3	22.2	5.5	67.0	33.0
12	51.1	24.8	24.1	13.0	87.0
13	46.3	30.0	23.7	100.0	0.0
14	55.8	24.5	19.8	93.3	6.7
15	55.9	34.1	10.1	93.4	6.6
15A	51.5	34.9	13.6	99.1	0.9
15O	56.2	34.0	9.8	93.0	7.0
16+	26.4	22.4	51.1	56.3	43.7
16X	17.7	22.8	59.5	41.2	58.8
17+	53.0	27.9	19.1	79.1	20.9
17X	50.0	26.3	23.7	65.2	34.8
18	56.5	29.0	14.6	79.5	20.5
19	57.2	24.9	17.8	81.9	18.1
20	51.6	21.1	27.3	80.6	19.4

Table A2.5. Fishing activity (%) targeted to different species and groups during the open water season for all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020.

(Multiple is multiple species and or groups were targeted; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; excludes cases where the respondent did not indicate a target.)

FMZ	Walleye	Bass, sunfish, crappie	Trout and salmon	Pike and muskellunge	Yellow perch	Multiple	Lake whitefish	Catfish	Other
2	85.8	0.2	4.6	7.8	0.0	1.5	0.0	0.0	0.0
3	80.7	2.0	10.4	6.9	0.0	0.0	0.0	0.0	0.0
4+	90.6	1.1	3.7	1.9	0.1	2.7	0.0	0.0	0.0
4X	88.8	1.4	4.7	1.5	0.1	3.5	0.0	0.0	0.0
5+	73.0	11.7	3.9	11.0	0.0	0.4	0.0	0.0	0.0
5X	64.4	14.7	7.9	12.9	0.0	0.0	0.2	0.0	0.0
6+	77.7	8.5	12.0	1.6	0.1	0.1	0.0	0.0	0.0
6X	78.6	8.9	10.9	1.5	0.1	0.0	0.0	0.0	0.0
7	81.7	1.6	11.4	5.2	0.1	0.1	0.0	0.0	0.0
8	73.2	6.5	5.9	13.0	0.3	1.1	0.0	0.0	0.0
9	12.1	2.0	73.9	2.8	3.1	3.9	2.0	0.0	0.1
10	44.6	24.5	19.3	8.3	0.8	2.2	0.2	0.0	0.1
11+	55.8	19.8	4.9	13.7	0.4	3.1	1.9	0.3	0.0
11X	52.9	20.8	7.6	11.5	0.0	3.5	3.1	0.5	0.0
12	54.9	21.7	1.0	17.4	0.2	0.6	0.0	3.3	0.8
13	17.0	32.5	34.2	3.4	6.6	5.9	0.0	0.0	0.5
14	15.6	27.4	36.1	17.9	0.9	1.5	0.3	0.2	0.0
15	22.9	52.3	10.6	9.5	1.2	2.7	0.6	0.2	0.0
15A	8.5	51.6	31.6	6.1	0.8	1.5	0.0	0.0	0.0
15O	24.0	52.6	9.1	9.8	0.8	2.8	0.6	0.2	0.0
16+	8.0	42.6	25.9	11.3	5.3	2.7	1.1	1.3	1.8
16X	6.8	39.4	34.7	13.1	1.5	2.1	0.1	0.9	1.5
17+	26.4	52.5	6.2	8.9	3.0	2.6	0.0	0.2	0.2
17X	26.6	43.5	12.7	13.1	0.6	2.7	0.0	0.5	0.2
18	15.6	62.0	8.9	9.2	1.5	2.3	0.1	0.3	0.1
19	52.9	22.6	4.2	3.8	13.8	2.2	0.0	0.1	0.5
20	23.4	23.8	36.3	6.5	3.6	3.5	0.0	1.0	1.9

Table A2.6. Fishing activity (%) targeted to different species and groups during the ice season for all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020. (Multiple is multiple species or groups were targeted; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; excludes cases where the respondent did not indicate a target; *=ice fishing in FMZ 15A is essentially prohibited and not reported.)

FMZ	Walleye	Bass, sunfish, crappie	Trout and salmon	Pike and muskellunge	Yellow perch	Multiple	Lake whitefish	Catfish	Other
2	57.9	0.0	36.9	0.0	5.2	0.0	0.0	0.0	0.0
~3	90.5	0.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0
4+	57.2	0.0	34.9	0.9	0.0	0.0	3.5	0.0	3.5
4X	56.9	0.0	38.2	0.0	0.0	0.0	1.0	0.0	3.9
5+	66.3	7.6	21.6	2.2	1.3	0.1	0.8	0.0	0.2
5X	54.4	11.9	28.5	2.5	2.8	0.0	0.0	0.0	0.0
6+	60.9	0.0	23.6	7.6	6.7	1.2	0.0	0.0	0.0
6X	62.6	0.0	23.2	7.8	6.3	0.1	0.0	0.0	0.0
7	52.0	0.0	37.8	2.0	1.9	6.1	0.2	0.0	0.0
8	61.0	0.0	17.4	17.2	2.5	0.3	0.9	0.0	0.5
9	8.2	0.7	29.7	0.0	44.1	0.0	15.2	0.0	2.2
10	30.2	0.2	50.6	10.3	5.0	1.2	1.6	0.0	0.8
11+	70.4	1.4	8.6	7.3	10.6	1.3	0.4	0.0	0.0
11X	56.3	3.4	21.0	7.1	9.5	1.6	1.0	0.0	0.0
12	73.6	4.3	4.5	10.2	3.5	3.5	0.0	0.0	0.5
13	41.4	3.1	21.8	0.0	33.6	0.0	0.0	0.0	0.0
14	25.5	0.7	27.4	30.4	13.4	0.2	1.5	0.0	0.8
15	29.4	1.6	45.9	11.8	2.4	2.1	5.8	0.0	1.0
15A	*	*	*	*	*	*	*	*	*
15O	29.4	1.6	45.7	11.9	2.4	2.2	5.8	0.0	1.0
16+	7.1	1.6	7.7	8.1	39.5	2.7	33.0	0.0	0.2
16X	19.4	6.7	5.4	32.4	33.7	1.1	1.3	0.0	0.0
17+	20.4	19.2	4.0	5.5	38.6	0.0	12.3	0.0	0.0
17X	30.4	12.3	7.1	10.4	26.0	0.0	13.8	0.0	0.0
18	56.2	5.4	16.1	14.1	5.6	2.1	0.4	0.0	0.0
19	15.1	19.9	2.9	0.9	56.8	0.3	4.0	0.0	0.0
20	76.0	2.7	7.2	3.8	10.2	0.0	0.0	0.0	0.2

Table A2.7. Fishing activity (%) targeted to different species and groups during all seasons for all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020. (Multiple is multiple species or groups were targeted; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; excludes cases where the respondent did not indicate a target.)

FMZ	Walleye	Bass, sunfish, crappie	Trout and salmon	Pike and muskellunge	Yellow perch	Multiple	Lake whitefish	Catfish	Other
2	81.7	0.2	9.4	6.6	0.8	1.3	0.0	0.0	0.0
3	81.9	1.7	10.3	6.1	0.0	0.0	0.0	0.0	0.0
4+	86.3	0.9	7.7	1.7	0.1	2.4	0.4	0.0	0.4
4X	84.3	1.2	9.5	1.3	0.1	3.0	0.1	0.0	0.6
5+	72.0	11.1	6.5	9.7	0.2	0.3	0.1	0.0	0.0
5X	62.9	14.3	10.9	11.3	0.4	0.0	0.1	0.0	0.0
6+	75.5	7.4	13.5	2.4	1.0	0.2	0.0	0.0	0.0
6X	76.5	7.7	12.5	2.3	0.9	0.0	0.0	0.0	0.0
7	75.6	1.3	16.8	4.5	0.4	1.3	0.0	0.0	0.0
8	70.9	5.3	8.1	13.8	0.7	0.9	0.2	0.0	0.1
9	11.2	1.7	64.1	2.2	12.2	3.0	5.0	0.0	0.5
10	41.4	19.1	26.3	8.7	1.8	2.0	0.5	0.0	0.3
11+	59.1	15.6	5.7	12.2	2.7	2.7	1.6	0.3	0.0
11X	53.4	18.0	9.8	10.8	1.6	3.2	2.8	0.4	0.0
12	58.4	18.4	1.7	16.1	0.8	1.2	0.0	2.7	0.8
13	18.7	30.4	33.4	3.2	8.5	5.5	0.0	0.0	0.4
14	16.6	24.7	35.2	19.2	2.2	1.4	0.4	0.2	0.1
15	23.8	45.6	15.3	9.8	1.4	2.7	1.3	0.2	0.2
15A	9.3	49.9	32.6	6.0	0.7	1.4	0.0	0.0	0.0
15O	24.8	45.5	14.2	10.1	1.0	2.7	1.3	0.2	0.2
16+	7.9	36.2	23.0	10.8	10.6	2.7	6.1	1.1	1.6
16X	7.5	37.5	33.0	14.2	3.3	2.0	0.1	0.8	1.4
17+	26.0	50.5	6.0	8.7	5.1	2.5	0.7	0.2	0.2
17X	26.8	42.0	12.4	13.0	1.9	2.6	0.7	0.5	0.2
18+	20.5	55.1	9.8	9.8	2.0	2.3	0.1	0.3	0.1
19	50.7	22.4	4.1	3.6	16.3	2.1	0.2	0.1	0.5
20	28.9	21.6	33.3	6.2	4.3	3.2	0.0	0.9	1.7

Table A2.8. Total catch of fish and catch by fish species (%) by fisheries management zone (FMZ) in Ontario in 2020. (~=unreliable estimate; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Catch (000s)	Walleye	Yellow perch	Northern pike	Smallmouth bass	Largemouth bass	Black crappie	Muskellunge	Sunfish
2	~573	74.2	1.1	21.8	0.5	0.0	0.0	0.0	0.2
3	40	50.2	6.8	39.0	0.0	0.0	0.0	0.0	0.0
4+	1,382	75.8	2.2	14.3	4.0	0.0	0.2	0.1	0.0
4X	933	72.3	2.0	15.5	5.1	0.0	0.3	0.0	0.0
5+	4,002	50.9	7.9	13.3	18.7	1.8	4.4	0.8	0.2
5X	1,454	47.2	5.8	16.7	20.0	2.3	3.4	0.6	0.4
6+	1,317	56.1	5.4	18.6	12.8	1.2	0.0	0.0	0.0
6X	1,248	56.6	5.4	18.9	13.4	1.2	0.0	0.0	0.0
7	773	60.9	5.9	20.3	3.7	0.2	0.5	0.0	0.3
8	1,479	44.4	9.8	31.0	7.5	0.8	0.1	0.0	0.6
9	468	12.4	37.6	5.8	5.2	0.4	0.1	0.0	0.0
10	2,665	26.8	11.2	14.8	29.8	3.2	0.1	0.1	3.4
11+	3,245	38.9	14.3	11.9	17.5	6.5	0.8	0.4	4.6
11X	1,525	25.7	8.4	14.7	25.1	7.9	1.7	0.3	7.3
12	913	32.8	12.0	12.0	20.2	8.0	3.4	0.8	6.2
13	439	15.7	19.7	3.1	27.9	4.9	0.5	0.1	8.7
14	1,818	11.0	14.4	15.2	30.9	7.5	0.8	0.7	5.3
15	5,402	8.0	10.1	7.9	30.6	18.2	2.4	0.3	13.2
15A	296	12.9	5.5	4.1	34.8	19.2	0.0	0.5	4.9
15O	5,105	7.7	10.4	8.0	30.4	18.1	2.5	0.3	13.7
16+	7,082	2.1	42.6	4.6	13.2	6.1	3.2	0.1	14.5
16X	2,917	2.9	13.5	8.1	18.0	10.1	4.4	0.1	22.1
17+	5,326	7.3	17.6	2.6	17.1	16.9	4.8	1.2	28.9
17X	2,337	8.9	13.3	5.4	20.6	14.6	3.8	1.3	25.4
18	3,996	4.1	12.5	8.3	20.3	24.2	4.8	0.2	21.3
19	6,101	25.5	36.3	2.4	12.5	6.2	3.2	0.7	7.3
20	3,539	10.9	23.5	6.2	13.0	11.3	1.3	0.3	13.9

Table A2.8. (Continued)

FMZ	Catch (000s)	Rainbow trout	Chinook salmon	Coho salmon	Lake trout	Brook trout	Splake	Lake whitefish	Other
2	~573	0.0	0.0	0.0	1.5	0.5	0.0	0.1	0.0
3	40	0.0	0.0	0.0	0.4	2.5	0.0	0.0	1.0
4+	1,382	0.0	0.0	0.0	1.9	0.1	0.2	0.5	0.7
4X	933	0.0	0.0	0.0	2.9	0.2	0.3	0.4	1.0
5+	4,002	0.0	0.0	0.0	1.5	0.0	0.1	0.2	0.1
5X	1,454	0.1	0.0	0.0	3.0	0.0	0.1	0.2	0.1
6+	1,317	0.4	0.1	0.0	1.9	2.6	0.3	0.3	0.1
6X	1,248	0.4	0.1	0.0	1.1	2.1	0.3	0.3	0.1
7	773	0.6	0.1	0.1	1.8	2.4	1.9	0.9	0.3

FMZ	Catch (000s)	Rainbow trout	Chinook salmon	Coho salmon	Lake trout	Brook trout	Splake	Lake whitefish	Other
8	1,479	0.1	0.0	0.0	0.7	2.3	0.4	0.3	2.1
9	468	9.2	3.3	1.9	13.3	5.2	0.5	4.3	0.6
10	2,665	0.3	0.1	0.0	5.2	2.9	0.4	0.6	1.0
11+	3,245	0.0	0.0	0.0	1.6	1.7	0.1	0.4	1.1
11X	1,525	0.1	0.0	0.0	3.3	3.6	0.3	0.4	1.4
12	913	0.2	0.0	0.0	0.2	0.1	0.0	0.3	3.7
13	439	6.5	2.3	1.8	6.7	0.4	0.0	0.3	1.4
14	1,818	6.1	2.7	0.7	2.6	0.4	0.0	0.3	1.3
15	5,402	0.2	0.0	0.0	3.2	0.9	0.4	1.8	2.8
15A	296	0.0	0.0	0.0	8.4	4.8	0.9	0.7	3.3
15O	5,105	0.2	0.0	0.0	2.9	0.7	0.4	1.9	2.8
16+	7,082	3.4	0.7	0.1	0.6	2.0	0.0	2.4	4.4
16X	2,917	7.8	1.6	0.3	0.3	4.8	0.1	0.1	5.9
17+	5,326	1.3	0.8	0.1	0.1	0.2	0.0	0.0	1.0
17X	2,337	3.0	1.8	0.3	0.2	0.5	0.0	0.0	1.1
18	3,996	0.4	0.0	0.0	1.6	0.3	0.2	0.3	1.5
19	6,101	2.1	0.1	0.1	0.2	0.0	0.0	0.9	2.6
20	3,539	4.6	8.0	1.7	1.7	0.3	0.1	0.4	2.7

Table A2.9. Total harvest of fish and harvest of fish by species (%) by fisheries management zone (FMZ) in Ontario in 2020. (FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Harvest (000s)	Walleye	Yellow perch	Northern pike	Smallmouth bass	Largemouth bass	Black crappie	Muskellunge	Sunfish
2	47	82.7	0.2	7.6	0.7	0.0	0.0	0.0	0.0
3	14	66.8	13.4	11.6	0.0	0.0	0.0	0.0	0.0
4+	242	90.1	1.8	3.1	0.6	0.0	0.6	0.0	0.0
4X	193	90.3	1.4	2.5	0.6	0.0	0.7	0.0	0.0
5+	694	76.8	4.6	2.9	3.0	0.1	9.2	0.0	0.0
5X	284	74.3	2.1	2.7	5.1	0.1	9.0	0.0	0.1
6+	368	78.5	5.9	4.1	3.5	0.7	0.1	0.0	0.0
6X	355	78.7	5.8	4.1	3.6	0.7	0.1	0.0	0.0
7	262	72.2	6.5	5.5	0.8	0.4	0.3	0.0	0.0
8	433	60.7	7.6	15.1	7.5	0.7	0.1	0.0	0.2
9	134	11.2	42.2	2.1	2.4	0.1	0.0	0.0	0.0
10	679	33.7	11.2	10.4	22.7	2.0	0.2	0.0	0.1
11+	470	32.2	28.3	12.5	11.4	3.6	2.9	0.1	0.2
11X	242	40.0	6.8	12.6	16.5	3.6	5.5	0.0	0.4
12	155	53.5	10.9	7.4	10.0	3.4	9.6	0.0	0.1
13	153	32.1	22.4	2.7	19.2	2.4	0.0	0.0	0.2
14	380	13.1	11.9	12.2	21.1	4.6	1.7	0.0	2.3
15	584	15.8	9.7	10.9	21.7	14.2	6.4	0.0	2.5
15A	36	10.2	2.6	2.9	27.3	3.0	0.0	0.0	2.3
15O	550	15.8	10.2	11.4	21.3	15.1	6.7	0.0	2.8

FMZ	Harvest (000s)	Walleye	Yellow perch	Northern pike	Smallmouth bass	Largemouth bass	Black crappie	Muskellunge	Sunfish
16+	1,128	4.1	60.3	2.7	5.7	2.1	5.5	0.0	5.2
16X	297	10.5	17.8	6.4	12.6	4.6	12.1	0.0	9.0
17+	668	11.5	15.9	3.3	11.1	11.1	10.9	0.1	32.4
17X	266	14.9	10.8	7.6	14.2	10.4	9.8	0.3	23.5
18	497	8.3	14.7	6.2	18.4	24.2	11.4	0.0	6.8
19	2,290	34.3	50.8	0.7	3.3	0.7	2.5	0.0	3.2
20	615	20.9	29.9	3.1	5.9	6.8	1.6	0.0	5.1

Table A2.9. (Continued)

FMZ	Harvest (000s)	Rainbow trout	Chinook salmon	Coho salmon	Lake trout	Brook trout	Splake	Lake whitefish	Other
2	47	0.0	0.0	0.0	2.2	6.3	0.2	0.2	0.0
3	14	0.0	0.0	0.0	1.1	7.0	0.0	0.0	0.0
4+	242	0.0	0.0	0.0	2.4	0.5	0.2	0.7	0.1
4X	193	0.0	0.0	0.0	3.0	0.7	0.3	0.4	0.1
5+	694	0.1	0.0	0.0	2.5	0.1	0.2	0.4	0.1
5X	284	0.2	0.0	0.0	5.4	0.1	0.4	0.4	0.2
6+	368	0.2	0.3	0.0	2.6	2.9	0.6	0.5	0.1
6X	355	0.2	0.3	0.0	2.5	2.9	0.6	0.4	0.1
7	262	0.7	0.1	0.3	3.2	4.0	3.6	1.9	0.6
8	433	0.2	0.0	0.0	1.8	4.6	0.8	0.7	0.1
9	134	4.5	9.5	4.2	13.1	0.8	0.3	9.2	0.5
10	679	0.6	0.1	0.1	9.8	6.0	0.7	1.6	0.8
11+	470	0.1	0.0	0.0	3.5	1.3	0.4	1.1	2.3
11X	242	0.2	0.0	0.0	6.5	2.5	0.8	0.9	3.7
12	155	0.7	0.0	0.0	0.4	0.5	0.0	0.4	3.1
13	153	6.0	5.3	4.5	3.8	1.2	0.1	0.0	0.1
14	380	13.0	9.3	1.8	5.2	0.4	0.0	1.0	2.4
15	584	0.9	0.0	0.0	7.3	4.4	1.5	3.3	1.1
15A	36	0.0	0.0	0.0	25.8	17.4	2.6	5.4	0.5
15O	550	1.0	0.0	0.0	6.2	3.6	1.4	3.3	1.2
16+	1,128	3.4	0.8	0.2	0.9	1.8	0.0	4.6	2.6
16X	297	11.8	2.6	0.7	1.4	6.8	0.0	0.4	3.3
17+	668	0.4	0.7	0.3	0.3	0.6	0.0	0.1	1.3
17X	266	1.1	1.9	0.9	0.6	1.3	0.0	0.1	2.6
18	497	1.5	0.0	0.0	4.8	1.1	1.4	0.1	1.0
19	2,290	2.1	0.1	0.1	0.2	0.0	0.0	1.0	0.9
20	615	6.2	9.0	3.4	1.5	0.5	0.3	0.9	4.9

Table A2.10. Expenditures (CAD 000s) by all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020. (~=unreliable estimate; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; unallocated is non-participants lack fishing location information while non-residents are unallocated as they were not sampled; All* excludes FMZs 4X, 5X, 6X, 11X, 15A, 15B, 16X, and 17X.)

FMZ	Angling packages	Consumables	Investments	Total
2	1,564	2,251	~969	4,784
3	~28	~797	~1,673	~2,499
4+	~1,643	7,414	9,288	18,345
4X	~993	5,873	7,579	14,444
5+	2,971	34,593	75,279	112,843
5X	~1,552	14,131	23,624	39,306
6+	~1,728	20,151	49,773	71,652
6X	~1,561	18,997	47,549	68,106
7	2,730	11,303	23,779	37,812
8	2,813	22,141	41,023	65,976
9	~187	5,473	20,282	25,943
10	6,261	41,108	95,664	143,032
11+	9,112	42,258	61,717	113,087
11X	5,158	23,023	31,002	59,183
12	1,149	11,521	18,667	31,336
13	~539	9,740	9,981	20,261
14	2,620	35,631	53,950	92,202
15	4,894	82,015	110,590	197,499
15A	228	6,757	5,486	12,472
15O	4,665	75,258	105,104	185,027
16+	4,636	65,658	102,974	173,268
16X	2,175	33,781	36,121	72,077
17+	4,209	65,973	99,495	169,677
17X	2,908	31,721	63,801	98,431
18	2,148	37,157	54,230	93,535
19	3,234	58,593	64,969	126,796
20	6,563	51,087	60,018	117,668
Unallocated to FMZ				
Non-participants	479	8	56,289	56,776
Licences (Canadian)				25,727
Non-residents		36,616	1,970	38,586
All*	59,508	641,490	1,012,581	1,739,306

Table A2.11. Most preferred fish species indicated by anglers (%) by fisheries management zone (FMZ) in Ontario in 2020. (The first mentioned species was assumed; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; WL=walleye; SMB=smallmouth bass; LMB=largemouth bass; NP=northern pike; YP=yellow perch; LT=lake trout; CS=Chinook salmon; RT=rainbow trout; BT=brook trout; BS=bass (generic); LW=lake whitefish; T=trout (generic); ANY=anything; OTH=other.)

FMZ	WL	SMB	LMB	NP	YP	LT	CS	RT	BT	BS	LW	T	ANY	OTH
2	82.7	2.0	0.0	8.8	1.5	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	4.1
3	59.7	3.9	3.9	5.0	0.0	11.0	0.0	0.0	9.3	0.0	0.0	0.0	3.5	3.5
4+	90.6	0.9	1.4	0.6	0.3	2.7	0.0	0.0	1.0	0.0	0.3	0.0	0.9	1.2
4X	89.7	1.0	1.5	0.7	0.3	2.9	0.0	0.0	1.1	0.0	0.3	0.0	1.0	1.3
5+	80.8	6.6	1.5	2.1	0.0	3.3	0.0	0.1	0.7	0.0	0.2	0.3	0.6	3.7
5X	75.4	9.3	2.3	1.8	0.0	4.6	0.0	0.0	1.1	0.0	0.0	0.5	0.4	4.6
6+	83.3	2.7	0.3	2.0	0.4	2.9	0.8	0.9	3.9	0.3	0.1	0.8	1.0	0.6
6X	83.3	2.8	0.3	2.0	0.5	3.0	0.8	0.9	3.4	0.3	0.2	0.8	1.1	0.6
7	78.0	3.2	2.2	3.5	0.0	4.8	0.2	1.6	3.5	0.0	0.5	0.5	0.2	1.9
8	75.6	3.7	2.7	7.6	0.6	2.0	0.8	1.2	2.7	0.7	0.0	0.4	1.2	0.9
9	47.3	2.4	2.7	4.4	1.5	11.9	3.7	5.3	10.6	1.4	2.2	0.3	2.1	4.3
10	49.1	11.8	4.5	6.8	2.3	8.6	1.1	2.4	6.5	2.2	0.1	0.4	1.9	2.3
11+	57.7	10.0	5.8	7.9	1.9	3.6	0.6	2.0	3.0	2.4	0.2	0.6	1.0	3.3
11X	54.2	11.6	5.5	8.3	1.6	5.0	0.7	2.5	3.9	2.1	0.2	0.7	0.8	2.9
12	55.0	7.2	11.5	5.8	0.0	1.7	0.6	1.4	3.2	3.1	0.0	1.1	2.5	6.9
13	32.0	18.0	6.6	3.9	4.6	2.8	8.8	9.4	1.6	2.7	0.4	1.2	2.8	5.0
14	29.6	16.7	8.5	9.5	2.4	4.3	6.1	8.5	2.7	2.6	0.5	0.3	2.8	5.5
15	30.0	19.3	16.7	7.0	1.2	7.1	0.6	2.7	4.4	3.0	0.7	0.7	3.5	3.1
15A	27.3	17.6	10.3	5.2	0.9	14.9	0.5	2.9	13.6	0.5	0.0	0.0	3.5	2.8
15O	30.4	19.3	17.0	7.2	1.3	6.7	0.6	2.7	3.9	3.2	0.7	0.8	3.2	3.1
16+	21.4	16.1	14.6	6.2	5.4	3.2	1.9	7.7	3.5	3.8	2.6	1.0	4.9	7.6
16X	19.1	17.1	15.7	6.8	2.9	1.8	2.2	10.2	4.7	4.4	0.5	1.4	5.1	8.2
17+	30.9	15.7	22.9	2.7	2.9	1.8	1.9	3.5	1.3	3.6	0.2	0.6	4.1	8.0
17X	29.3	15.3	20.4	2.9	2.9	1.9	2.7	5.6	1.6	3.7	0.3	0.8	3.6	9.0
18	27.4	17.7	26.3	5.1	1.6	4.3	0.4	1.8	2.0	5.0	0.1	0.6	3.4	4.1
19	45.9	11.4	7.8	2.8	15.5	0.7	1.1	3.5	0.8	2.5	0.2	0.5	3.1	4.2
20	27.8	11.8	12.5	5.6	3.8	2.4	10.0	5.1	1.0	3.0	0.2	0.7	2.8	13.4

Table A2.12. SECOND most preferred fish species indicated by anglers (%) by fisheries management zone (FMZ) in Ontario in 2020. (The first mentioned species for the question of the second most preferred was assumed; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; WL=walleye; SMB=smallmouth bass; LMB=largemouth bass; NP=northern pike; YP=yellow perch; LT=lake trout; CS=Chinook salmon; RT=rainbow trout; BT=brook trout; BS=bass (generic); LW=lake whitefish; T=trout (generic); ANY=anything; OTH=other.)

FMZ	WL	SMB	LMB	NP	YP	LT	CS	RT	BT	BS	LW	T	ANY	OTH
2	11.5	13.3	1.7	28.0	19.4	11.2	0.0	1.7	3.4	1.6	0.9	0.0	3.7	3.5
3	24.0	6.1	8.7	16.6	7.9	7.7	0.0	8.2	12.3	0.0	0.0	4.4	0.0	4.0
4+	8.7	5.4	0.4	18.8	5.4	37.6	0.0	2.2	0.7	0.0	1.9	3.7	0.4	14.7
4X	9.9	6.2	0.4	15.6	6.2	40.6	0.0	1.7	0.9	0.0	2.2	3.8	0.0	12.4
5+	11.6	17.1	3.6	21.4	5.3	15.9	0.3	1.0	1.2	2.3	0.3	2.6	1.8	15.5
5X	13.5	17.9	3.3	18.6	5.0	20.2	0.2	1.2	1.4	2.2	0.6	3.0	0.7	12.1
6+	9.3	19.2	2.7	11.5	12.3	17.5	2.7	5.2	8.0	3.5	0.7	0.8	2.6	4.0
6X	9.2	19.8	2.4	11.6	11.5	17.7	2.8	5.3	7.9	3.7	0.7	0.9	2.7	3.8
7	10.2	6.8	1.9	17.7	14.7	16.1	2.0	3.2	15.9	2.3	2.2	0.8	0.7	5.5
8	12.2	13.8	5.2	32.2	8.8	8.3	1.0	2.8	6.2	2.6	0.2	0.8	1.2	4.6
9	19.6	6.7	0.3	8.1	8.0	20.2	7.5	7.7	9.0	0.9	3.2	0.3	1.9	6.6
10	16.1	17.7	8.7	18.0	5.6	12.5	1.5	3.7	7.1	2.0	1.2	0.6	1.8	3.4
11+	16.9	16.0	11.5	17.9	10.9	6.6	1.1	3.4	4.2	3.9	0.9	0.8	1.0	5.0
11X	17.5	16.6	10.5	18.0	7.0	8.8	0.9	4.0	4.9	4.0	1.0	0.5	0.9	5.4
12	11.3	19.3	11.9	26.3	5.4	3.6	1.0	1.4	3.1	3.7	0.9	1.1	3.7	7.1
13	12.2	15.3	10.1	9.5	15.3	5.0	4.3	10.6	2.8	2.0	0.0	1.3	3.3	8.3
14	14.2	14.6	13.4	16.2	4.8	7.1	4.4	11.6	2.1	1.8	1.0	0.3	2.4	6.2
15	17.1	19.8	16.2	13.2	5.8	8.2	0.7	3.7	3.2	2.8	1.0	0.4	3.2	4.6
15A	14.2	16.4	14.0	7.8	5.7	16.8	0.6	5.4	6.8	1.4	0.8	0.0	5.1	4.9
15O	17.3	20.0	16.2	13.7	5.8	7.5	0.7	3.7	3.0	3.0	0.0	0.5	2.9	5.8
16+	12.0	16.3	13.1	13.5	10.2	4.6	2.1	6.0	2.5	2.4	2.2	1.0	5.2	9.0
16X	10.5	17.2	13.7	14.5	7.9	2.8	3.0	8.2	2.9	2.7	0.7	1.1	5.6	9.3
17+	15.8	21.9	20.4	7.2	6.9	2.9	1.7	2.6	1.2	3.2	1.0	0.9	3.0	11.3
17X	16.3	21.6	18.9	7.4	6.0	3.0	2.4	3.7	1.3	3.1	1.0	1.1	3.6	10.5
18	15.4	24.9	17.9	13.3	4.0	4.8	0.4	2.4	2.2	4.2	0.2	0.4	3.2	6.9
19	20.0	12.8	9.5	7.0	27.5	2.3	1.8	6.7	0.5	1.4	0.2	0.7	2.9	6.6
20	13.5	15.1	12.4	8.9	7.6	3.5	6.2	11.7	1.5	3.2	0.5	1.5	2.8	11.5

Table A2.13. THIRD most preferred fish species indicated by anglers (%) by fisheries management zone (FMZ) in Ontario in 2020. (The first mentioned species for the question of the third most preferred was assumed; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; WL=walleye; SMB=smallmouth bass; LMB=largemouth bass; NP=northern pike; YP=yellow perch; LT=lake trout; CS=Chinook salmon; RT=rainbow trout; BT=brook trout; BS=bass (generic); LW=lake whitefish; T=trout (generic); ANY=anything; OTH=other.)

FMZ	WL	SMB	LMB	NP	YP	LT	CS	RT	BT	BS	LW	T	ANY	OTH
2	4.8	6.8	4.9	9.6	10.4	11.9	1.1	6.4	6.7	7.0	3.8	1.9	7.7	17.1
3	15.0	5.1	4.7	28.5	9.5	11.5	0.0	7.9	4.7	0.0	0.0	0.0	8.3	4.7
4+	3.9	12.5	0.5	18.3	9.7	13.1	2.6	3.2	10.0	2.8	1.9	0.0	6.0	15.4
4X	3.7	11.5	0.5	18.5	10.7	13.1	2.0	3.6	13.2	1.3	2.1	0.0	7.1	12.7
5+	4.9	13.7	5.5	22.0	7.5	11.4	0.1	0.8	2.1	2.4	0.7	0.6	9.0	19.4
5X	5.4	13.0	4.4	20.1	7.4	14.1	0.2	1.5	3.1	2.7	0.6	1.1	8.0	18.3
6+	3.0	11.4	1.4	21.3	10.0	14.0	2.4	6.0	9.5	3.2	2.1	1.2	6.5	7.8
6X	3.2	12.0	1.5	21.1	10.3	12.8	2.5	5.9	9.6	3.3	2.2	1.3	6.8	7.5
7	8.1	4.2	2.0	18.3	7.9	11.7	2.4	6.0	11.6	1.8	3.8	0.6	6.7	15.0
8	8.9	13.7	5.1	22.6	12.7	7.4	0.9	2.9	6.7	2.1	3.5	1.1	7.0	5.6
9	9.2	7.5	1.3	7.8	7.2	14.2	7.4	8.9	13.5	2.6	2.7	0.4	5.0	12.3
10	12.9	10.9	5.0	18.5	9.6	10.6	2.3	5.8	7.4	3.0	1.7	0.9	5.5	6.0
11+	8.7	16.3	8.5	22.3	8.8	7.8	0.9	3.2	3.2	4.1	1.9	0.8	4.1	9.5
11X	9.9	17.2	9.5	21.5	7.1	9.8	0.9	3.6	3.5	3.2	1.9	0.9	3.0	8.0
12	9.5	14.5	10.5	20.1	4.5	7.3	1.0	3.4	3.9	4.1	1.6	0.6	9.0	10.0
13	16.4	10.4	5.8	10.7	11.3	5.7	5.3	8.5	2.4	3.9	0.9	0.8	7.7	10.2
14	16.2	12.6	8.0	15.9	7.1	7.9	4.4	5.8	3.9	1.6	2.2	0.6	5.1	8.9
15	13.3	12.9	10.5	16.7	7.7	7.6	0.9	3.7	4.3	2.4	1.5	1.1	7.4	10.0
15A	12.8	11.0	7.8	16.4	8.0	10.2	1.5	3.2	7.9	2.1	1.6	0.0	9.7	7.7
15O	13.5	13.1	10.6	16.5	7.6	7.6	0.9	3.7	4.0	2.5	1.5	1.1	6.9	10.3
16+	11.4	9.2	9.3	15.4	10.3	4.7	2.7	5.4	2.7	2.4	2.3	1.0	9.9	13.2
16X	11.6	9.2	9.2	16.2	8.4	3.3	3.3	6.2	3.4	2.7	0.8	1.1	9.9	14.7
17+	14.3	13.2	10.6	11.5	9.8	4.1	1.9	3.5	1.9	1.9	1.3	0.7	7.4	17.9
17X	14.4	11.9	11.1	12.6	9.3	4.2	2.4	3.8	2.0	2.7	1.3	0.7	7.7	15.9
18	14.6	9.6	11.7	20.4	9.3	4.8	0.5	3.5	2.1	2.1	0.7	1.1	8.0	11.6
19	10.6	10.7	10.3	13.0	13.6	4.2	2.3	7.6	1.0	2.9	1.2	1.1	7.5	14.0
20	11.5	9.9	8.7	12.7	9.7	6.0	7.0	7.8	1.3	2.4	1.0	1.0	7.6	13.2

Table A2.14. Evaluation of overall fishing experience (%) in 2020 by all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020. (FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Very poor	Poor	Fair	Good	Very good	Excellent
2	0.0	3.8	8.6	37.1	18.0	32.6
3	4.0	0.0	17.0	45.1	15.5	18.4
4+	0.7	1.0	7.1	28.7	35.2	27.4
4X	0.8	1.2	7.0	26.2	36.6	28.3
5+	1.4	1.1	9.3	34.3	29.3	24.5
5X	1.1	0.5	8.9	36.5	27.7	25.4
6+	3.8	3.3	16.0	25.9	27.4	23.7
6X	3.9	3.5	16.4	25.8	27.4	23.1
7	1.1	1.6	10.8	26.5	34.4	25.5
8	2.1	4.8	13.8	36.2	28.4	14.8
9	2.0	4.4	11.4	34.1	31.7	16.3
10	2.6	5.1	16.6	33.5	25.9	16.4
11+	3.6	6.1	16.1	34.7	25.4	14.1
11X	3.8	5.6	15.3	34.9	25.3	15.1
12	4.0	6.2	16.1	34.1	24.3	15.3
13	4.5	6.8	16.4	36.9	24.4	11.0
14	3.6	4.9	14.7	32.5	27.2	17.0
15	3.7	7.3	16.7	34.0	24.0	14.3
15A	4.5	8.3	13.8	36.4	19.9	17.1
15O	3.6	7.3	17.1	33.7	24.3	14.0
16+	4.3	6.9	16.9	33.8	23.6	14.6
16X	3.6	7.1	17.4	33.9	24.1	13.9
17+	5.2	9.6	19.5	30.9	21.2	13.7
17X	5.3	8.1	20.5	29.8	21.7	14.7
18	2.3	5.9	17.4	36.0	24.4	14.0
19	2.8	4.7	14.1	31.0	29.6	17.8
20	3.9	5.9	13.9	31.6	26.1	18.6

Table A2.15. Evaluation of catch rate for most preferred fish species (%) in 2020 by all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020. (FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Very poor	Poor	Fair	Good	Very good	Excellent
2	1.7	6.9	13.0	30.3	26.6	21.4
3	7.4	7.5	30.8	31.5	15.6	7.1
4+	1.0	4.8	14.1	36.5	24.2	19.5
4X	1.1	4.9	11.1	38.3	24.6	20.0
5+	4.5	5.8	16.6	34.6	22.8	15.7
5X	5.0	7.2	15.2	35.5	21.4	15.7
6+	7.6	13.3	19.5	30.2	18.1	11.3
6X	7.8	13.8	19.7	29.8	18.6	10.3
7	7.4	5.4	17.4	29.9	22.7	17.3
8	5.7	14.0	24.6	33.1	17.5	5.0
9	7.6	12.9	24.4	29.6	19.1	6.5
10	10.9	15.5	24.6	28.3	15.5	5.2
11+	9.6	16.5	25.4	30.7	13.2	4.6
11X	10.5	16.5	25.5	28.9	13.4	5.2
12	11.9	16.2	26.0	26.9	12.6	6.4
13	10.8	17.9	22.5	32.3	11.5	5.0
14	11.1	15.6	23.6	29.6	13.5	6.5
15	12.6	17.5	24.5	26.4	13.9	5.1
15A	13.9	16.4	28.4	27.7	9.3	4.3
15O	12.3	17.7	24.4	26.2	14.3	5.1
16+	12.7	16.8	25.3	26.4	13.7	5.0
16X	11.4	17.2	26.2	27.2	13.1	5.0
17+	14.0	17.9	26.5	24.0	12.2	5.5
17X	13.4	17.4	25.7	24.6	12.6	6.2
18	9.6	16.5	26.1	27.3	14.9	5.5
19	8.4	12.3	21.6	29.6	18.4	9.8
20	10.7	14.3	24.0	27.5	15.2	8.3

Table A2.16. Evaluation of average size of most preferred fish species (%) in 2020 by all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020. (FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Very poor	Poor	Fair	Good	Very good	Excellent
2	0.0	2.5	16.0	43.6	28.1	9.9
3	4.2	11.8	28.0	56.0	0.0	0.0
4+	1.0	1.3	20.7	45.5	21.6	10.0
4X	1.1	0.7	20.0	45.9	22.8	9.5
5+	4.2	4.5	24.8	39.9	19.5	7.0
5X	4.9	5.0	23.2	41.6	18.7	6.6
6+	7.9	7.6	26.8	35.7	16.0	6.0
6X	8.2	7.8	27.1	35.1	16.4	5.4
7	4.2	4.4	26.4	37.1	21.9	6.0
8	4.7	12.6	37.4	31.6	11.9	1.8
9	6.7	3.6	30.9	39.1	16.8	2.8
10	9.2	14.0	33.5	29.6	10.1	3.6
11+	9.0	19.0	30.1	29.2	9.5	3.2
11X	9.7	16.3	31.5	29.7	9.5	3.3
12	11.3	17.5	30.8	27.9	9.7	2.8
13	9.3	17.0	28.1	32.8	10.2	2.7
14	9.7	11.6	28.1	33.1	12.5	5.0
15	12.0	16.1	30.2	27.9	10.2	3.6
15A	12.2	12.9	35.5	28.7	9.4	1.4
15O	11.9	16.3	30.2	27.6	10.3	3.7
16+	12.6	14.7	29.8	30.1	9.9	3.0
16X	11.9	14.3	30.1	31.6	9.3	2.8
17+	12.6	16.0	30.3	28.1	9.2	3.9
17X	11.8	15.5	29.4	28.7	10.2	4.3
18	8.7	13.1	32.2	32.3	10.9	2.7
19	7.1	8.9	23.9	36.4	18.7	5.0
20	8.9	11.5	27.7	31.3	13.9	6.8

Table A2.17. Evaluation of catch rate for second most preferred fish species (%) in 2020 by all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020. (FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Very poor	Poor	Fair	Good	Very good	Excellent
2	6.6	9.4	22.2	32.8	20.2	8.8
3	12.5	10.1	26.6	40.8	6.1	4.0
4+	7.5	7.7	24.2	36.7	16.0	7.9
4X	7.3	6.6	23.3	38.3	15.5	9.0
5+	7.3	11.2	27.6	31.8	14.4	7.7
5X	6.3	11.3	23.7	35.8	15.8	7.0
6+	10.1	13.5	26.7	28.9	14.1	6.5
6X	10.0	13.7	27.2	29.4	13.4	6.3
7	7.5	8.9	24.7	32.5	22.2	4.3
8	8.2	12.6	27.2	35.8	12.7	3.5
9	7.5	18.3	26.2	27.1	14.2	6.7
10	12.3	15.1	25.3	29.2	12.9	5.2
11+	9.9	16.3	27.4	30.1	12.9	3.4
11X	10.4	15.4	28.5	29.5	12.4	3.9
12	13.2	18.1	27.4	26.2	10.9	4.2
13	11.1	23.4	23.1	27.2	11.0	4.3
14	13.4	14.9	23.8	31.3	12.7	3.9
15	13.7	17.2	28.0	26.0	11.0	4.1
15A	16.1	16.1	25.8	26.8	11.2	4.0
15O	13.4	17.4	28.2	26.1	10.8	4.1
16+	13.9	17.2	26.5	27.7	11.1	3.6
16X	12.6	17.3	27.3	29.1	10.1	3.5
17+	14.2	18.6	27.8	26.4	10.3	2.8
17X	13.2	18.4	26.1	28.3	10.9	3.0
18	11.5	14.8	29.8	28.4	12.4	3.2
19	12.1	15.1	25.9	28.3	14.5	4.1
20	12.7	14.3	23.1	29.1	14.7	6.0

Table A2.18. Evaluation of average size of second most preferred fish species (%) in 2020 by all sampled anglers by fisheries management zone (FMZ) in Ontario in 2020. (FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Very poor	Poor	Fair	Good	Very good	Excellent
2	6.8	6.6	22.3	40.7	18.4	5.3
3	13.4	12.7	22.1	45.2	2.3	4.2
4+	5.7	4.9	24.7	39.0	18.5	7.2
4X	5.6	4.1	24.1	41.5	17.2	7.4
5+	7.2	7.8	25.4	38.8	14.1	6.7
5X	5.1	7.6	24.9	42.7	13.9	5.8
6+	9.9	10.1	26.9	35.0	12.6	5.4
6X	9.7	10.3	27.1	35.2	12.4	5.2
7	6.5	10.6	28.0	33.9	17.1	3.8
8	7.4	12.6	32.7	32.9	11.5	2.8
9	6.1	11.7	30.6	33.7	11.9	5.9
10	12.1	13.4	30.9	28.8	10.2	4.6
11+	9.6	17.7	26.9	30.9	12.2	2.8
11X	9.6	16.5	28.0	30.6	12.2	3.0
12	14.3	15.3	30.3	24.1	11.8	4.2
13	11.3	20.0	25.8	30.6	8.7	3.6
14	13.7	11.9	25.5	32.0	12.4	4.4
15	13.3	17.0	28.5	27.6	10.3	3.2
15A	14.5	18.3	22.2	28.6	13.2	3.0
15O	13.0	16.9	29.3	27.8	9.8	3.2
16+	14.1	16.3	28.1	28.7	9.6	3.1
16X	12.6	17.4	29.5	29.1	8.9	2.5
17+	13.8	17.5	30.0	26.8	9.4	2.5
17X	13.1	17.2	28.7	27.2	11.5	2.2
18	10.9	15.4	31.9	28.1	10.4	3.3
19	10.7	13.9	25.6	32.2	14.4	3.3
20	12.3	13.3	25.9	28.7	13.8	5.9

Appendix 3. Detailed results for provincially significant inland fisheries

Summary of results for provincially significant inland fisheries, except the Ottawa River which is also a FMZ for which detailed results are reported in Appendix 2.

Table A3.1. Fishing activity (in thousands of days), by season, average hours fished per day, and angling intensity for all sampled anglers by provincially significant inland fishery (PSIF) in Ontario in 2020. (~=unreliable estimate; *=expressed as total hours divided by waterbody area.)

PSIF	Open (000s)	Ice (000s)	Total (000s)	Open (average hours)	Ice (average hours)	Waterbody area (ha)	Angling intensity (h/ha*)
Lake Simcoe	373	230	602	4.90	6.73	76,778	43.9
Lake Nipissing	219	103	322	4.49	6.27	83,484	19.5
Rice Lake	261	20	282	5.35	6.42	9,900	154.4
Tri Lakes	269	10	280	4.99	5.45	11,223	124.8
Lake of the Woods	200	32	231	5.09	5.02	243,587	4.8
Grand River	214	9	222	4.45	6.56	3,053	329.9
Lake Scugog	107	15	122	4.44	5.13	6,820	80.7
Winnipeg River	70	7	77	4.95	4.85	27,064	14.1
Rainy Lake	48	15	63	4.92	4.93	77,022	4.0
Lac Seul	31	~3	34	5.18	4.78	131,084	1.3
Lake Nipigon	12	~1	13	6.24	3.85	456,789	0.2

Table A3.2. Fishing activity (%) targeted to different species and groups during all seasons for all sampled anglers by provincially significant inland fishery (PSIF) in Ontario in 2020. (Multiple is multiple species or groups were targeted; muskie* = muskellunge.)

PSIF	Walleye	Bass, sunfish, crappie	Trout and salmon	Pike and muskie*	Yellow Perch	Multiple	Lake whitefish	Catfish	Other
Lake Simcoe	3.4	31.2	6.7	5.8	28.9	3.3	19.4	0.3	0.9
Lake Nipissing	66.9	12.4	0.3	14.2	4.3	2.0	0.0	0.0	0.0
Rice Lake	35.0	55.9	0.2	2.1	4.6	0.5	1.2	0.0	0.5
Tri Lakes	26.5	55.1	0.1	5.7	6.9	5.5	0.0	0.0	0.1
LOTW	78.6	10.0	0.0	7.0	0.0	0.9	0.3	0.0	3.0
Grand River	22.3	41.7	13.9	6.3	1.0	4.7	0.7	5.0	4.4
Lake Scugog	2.4	82.4	0.3	9.6	5.4	0.0	0.0	0.0	0.0
Winnipeg River	75.8	3.8	2.2	18.2	0.0	0.0	0.0	0.0	0.0
Rainy Lake	84.7	9.3	3.6	2.2	0.0	0.0	0.0	0.0	0.3
Lac Seul	94.0	0.0	0.6	3.6	0.0	0.0	1.8	0.0	0.0
Lake Nipigon	53.1	0.0	36.3	3.8	1.9	4.9	0.0	0.0	0.0

Table A3.3. Catch by species (%) by provincially significant inland fishery (PSIF) in Ontario in 2020. (~=unreliable estimate; LOTW=Lake of the Woods; Muskie*= muskellunge.)

PSIF	Catch (000s)	Walleye	Yellow perch	Northern pike	Smallmouth bass	Largemouth bass	Black crappie	Muskie*	Sunfish
L. Simcoe	3,914	0.4	70.5	1.5	6.6	2.8	2.1	0.0	8.2
L. Nipissing	1,755	50.8	20.1	9.2	10.6	5.2	0.0	0.5	2.1
Rice Lake	968	8.6	19.6	0.9	17.8	17.2	4.4	0.7	29.3
Tri Lakes	1,606	5.3	21.2	0.2	13.5	20.4	5.5	1.5	31.5
LOTW	1,655	51.9	11.0	8.2	18.5	2.5	4.7	1.6	0.1
Grand R.	414	11.1	5.9	6.2	36.6	6.2	4.4	1.0	13.1
L. Scugog	413	3.5	27.6	0.0	9.6	16.3	9.7	1.5	31.3
Winnipeg R.	379	55.5	9.4	15.5	15.8	0.5	1.6	1.0	0.0
Rainy L.	512	50.0	4.3	13.2	20.5	0.4	11.1	0.0	0.0
~Lac Seul	435	82.6	2.8	11.9	2.0	0.0	0.0	0.1	0.0
L. Nipigon	73	46.1	5.6	12.9	0.0	1.2	0.0	0.0	0.0

Table A3.3. (Continued; the other total for the Grand River primarily consists of common carp (*Cyprinus carpio*), catfish species, and brown trout (*Salmo trutta*).)

PSIF	Catch (000s)	Rainbow trout	Chinook salmon	Coho salmon	Lake trout	Brook trout	Splake	Lake whitefish	Other
L. Simcoe	3,914	0.1	0.0	0.0	1.0	0.0	0.0	4.6	2.3
L. Nipissing	1,755	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.9
Rice Lake	968	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Tri Lakes	1,606	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9
LOTW	1,655	0.0	0.0	0.0	0.9	0.1	0.2	0.2	0.1
Grand R.	414	1.8	0.3	0.0	0.1	0.3	0.0	0.3	12.6
L. Scugog	413	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Winnipeg R.	379	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.4
Rainy L.	512	0.0	0.0	0.0	0.2	0.0	0.1	0.2	0.0
~Lac Seul	435	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
L. Nipigon	73	0.7	0.3	0.0	17.0	14.4	0.0	1.5	0.1

Table A3.4. Harvest of fish by species (%) by provincially significant inland fishery (PSIF) in Ontario in 2020. (~=unreliable estimates; LOTW= Lake of the Woods; Muskie* = muskellunge.)

PSIF	Harvest (000s)	Walleye	Yellow perch	Northern pike	Smallmouth bass	Largemouth bass	Black crappie	Muskie*	Sunfish
L. Simcoe	807	0.4	81.1	1.0	2.0	1.0	2.9	0.0	3.4
L. Nipissing	233	23.0	52.9	12.1	5.8	3.6	0.0	0.1	0.0
Rice Lake	136	15.0	13.4	1.2	9.6	15.1	11.3	0.0	33.0
Tri Lakes	196	7.5	24.8	0.0	10.7	10.4	10.9	0.1	35.3
LOTW	300	75.3	9.0	2.5	1.2	0.0	10.7	0.0	0.0
Grand R.	65	17.3	15.4	5.0	16.1	2.0	6.3	0.0	6.7
~L. Scugog	68	2.7	18.7	0.0	3.4	7.6	14.4	0.0	52.6
Winnipeg R.	61	91.1	3.3	1.4	0.8	0.0	2.8	0.0	0.0
Rainy L.	69	73.3	2.4	3.5	2.1	0.2	17.6	0.0	0.0
Lac Seul	50	88.9	3.4	5.3	0.4	0.0	0.0	0.0	0.0
L. Nipigon	13	70.7	8.4	4.9	0.0	0.4	0.0	0.0	0.0

Table A3.4. (Continued)

PSIF	Harvest (000s)	Rainbow trout	Chinook salmon	Coho salmon	Lake trout	Brook trout	Splake	Lake whitefish	Other
L. Simcoe	807	0.2	0.0	0.0	0.8	0.0	0.0	6.8	0.3
L. Nipissing	233	0.0	0.0	0.0	0.3	0.0	0.0	1.4	0.9
Rice Lake	136	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.9
Tri Lakes	196	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
LOTW	300	0.0	0.0	0.0	0.6	0.1	0.0	0.5	0.0
Grand R.	65	1.5	2.0	0.0	0.3	0.3	0.0	0.2	26.9
~L. Scugog	68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Winnipeg R.	61	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0
Rainy L.	69	0.0	0.0	0.0	0.4	0.0	0.1	0.4	0.0
Lac Seul	50	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
L. Nipigon	13	1.9	1.1	0.0	6.5	2.7	0.0	3.4	0.0

Table A3.5. Open water fishing effort for provincially significant inland fisheries by mode (%) in Ontario in 2020. (Note: Respondents could select shore, boat, or both shore and boat.)

PSIF	Only from boat	Boat and shore	Only from shore
Lake Simcoe	59.2	21.7	19.0
Lake Nipissing	71.6	22.8	5.6
Rice Lake	57.5	23.3	19.2
Tri Lakes	56.8	34.1	9.1
Lake of the Woods	81.0	18.0	1.0
Grand River	18.5	21.9	59.6
Lake Scugog	48.3	32.5	19.2
Winnipeg River	85.3	10.4	4.2
Rainy Lake	94.8	5.2	0.0
Lac Seul	81.0	17.9	1.2
Lake Nipigon	65.8	31.9	2.3

Appendix 4. Detailed results for Great Lakes and connected waters

Table A4.1. Fishing activity (in thousands of days) and average hours fished per day during the seasons for all sampled anglers by Great Lakes, connected waters, and tributaries in Ontario in 2020. (~=unreliable estimate; NA=not applicable.)

Great Lake and other	Open (000s)	Ice (000s)	Total (000s)	Open (average hours)	Ice (average hours)
Lake Superior west	60	18	78	5.08	6.05
Lake Superior east	31	~10	41	4.83	4.37
Lake Super west tribs	30	~1	31	5.53	~4.92
Lake Super east tribs	58	~15	73	5.29	6.92
St. Marys River	51	~3	54	5.49	~4.29
North Channel	121	20	141	5.06	5.52
North Channel tribs	41	~4	44	3.96	5.05
Georgian Bay	503	54	556	4.45	6.01
Georgian Bay tribs	219	13	232	4.68	5.08
Lake Huron	191	17	208	4.26	5.68
Lake Huron tribs	202	~7	209	5.89	5.50
St. Clair River	78	~5	83	4.62	6.28
Lake St. Clair	173	21	194	5.06	5.49
Detroit River	97	~3	100	4.14	3.89
St. Clair tribs	90	~1	91	4.11	6.28
Lake Erie west/central	328	14	343	5.04	5.55
Lake Erie east	354	19	374	5.04	5.87
Lake Erie tribs	48	~1	49	5.16	~4.82
Niagara River (upper)	14	0	14	5.33	NA
Niagara River (lower)	49	~1	50	7.28	~5.08
Lake Ontario west	344	11	355	5.36	5.12
Lake Ontario east	147	~14	161	5.18	5.68
Bay of Quinte	186	55	242	4.99	5.24
Lake Ontario west tribs	108	~4	112	5.27	6.15
Lake Ontario east tribs	191	8	199	4.83	5.06
St. Lawrence River	143	11	154	4.38	4.11
Lake St. Francis	34	~2	36	4.79	~4.39

Table A4.2. Open water fishing effort (%) by mode for all sampled anglers in Great Lakes, connecting waters, and tributaries in Ontario in 2020. (Note: Respondents could select shore, boat or both shore and boat modes.)

Great Lake and other	Only from boat	Boat and shore	Only from shore
Lake Superior west	64.1	24.0	11.8
Lake Superior east	69.8	23.4	6.8
Lake Superior west tribs	27.6	28.4	44.0
Lake Superior east tribs	75.2	19.9	5.0
St. Marys River	49.6	4.1	46.3
North Channel	74.9	17.3	7.8
North Channel tribs	63.9	9.2	26.9
Georgian Bay	52.2	28.5	19.3
G Bay tribs	42.7	25.2	32.0
Lake Huron	46.3	29.9	23.8
Lake Huron tribs	10.0	24.4	65.6
St. Clair River	29.0	43.6	27.5
Lake St. Clair	52.2	32.8	15.0
Detroit River	37.2	24.0	38.8
St. Clair tribs	5.4	13.8	80.7
Lake Erie west / central	65.7	20.6	13.7
Lake Erie east	65.7	20.6	13.7
Lake Erie tribs	4.9	4.7	90.4
Niagara River (upper)	19.4	42.9	37.7
Niagara River (lower)	17.2	48.1	34.7
Lake Ontario west	38.4	19.6	42.0
Lake Ontario east	48.0	17.1	34.9
Bay of Quinte	68.4	23.1	8.4
Lake Ontario west tribs	3.2	18.3	78.6
Lake Ontario east tribs	27.2	19.0	53.7
St. Lawrence River	53.2	26.3	20.5
Lake St. Francis	79.2	14.9	5.9

Table A4.3. Fishing activity (%) targeted to different species and groups during all seasons for all sampled anglers by Great Lakes, connecting waters, and tributaries (tr) in Ontario in 2020. (Excludes cases where the respondent did not indicate a target; multiple is multiple species or groups were targeted; ~=unreliable estimate; muskie*=muskellunge; c=central; e=east; w=west; up=upper; low=lower.)

Great Lake and other	Walleye	Bass, sunfish, crappie	Trout and salmon	Pike and muskie*	Yellow perch	Multiple	Lake whitefish	Catfish	Other
L. Sup west	15.9	1.4	62.8	3.3	12.0	0.0	3.7	0.0	0.9
L. Sup east	4.2	1.4	64.8	0.4	14.2	9.0	5.9	0.0	0.0
L. Sup w tr	39.7	2.2	54.8	2.8	0.6	0.0	0.0	0.0	0.0
L. Sup e tr	60.6	4.4	8.5	1.7	7.8	0.0	17.0	0.0	0.1
St. Marys R.	21.9	10.3	59.1	7.6	0.9	0.0	0.2	0.0	0.0
N. Channel	26.7	22.3	21.5	26.2	3.0	0.3	0.0	0.0	0.0
N. Chan tr	54.9	24.1	2.7	17.1	0.2	1.0	0.0	0.0	0.0
Georgian B.	13.5	27.2	36.1	18.8	1.6	1.9	0.5	0.3	0.2
G. Bay tr	34.0	17.7	27.6	18.0	0.2	1.9	0.0	0.0	0.4
L. Huron	18.7	30.4	33.4	3.2	8.5	5.5	0.0	0.0	0.4
L. Huron tr	6.5	14.8	74.1	3.5	0.3	0.8	0.0	0.0	0.0
St. Clair R.	77.6	1.1	3.4	2.3	11.6	4.0	0.0	0.0	0.0
L. St. Clair	28.2	43.0	0.0	8.5	19.6	0.5	0.0	0.2	0.0
Detroit R.	65.6	4.5	0.3	1.9	20.0	5.4	0.0	0.3	2.0
St. Clair tr	18.5	62.8	0.5	6.8	2.1	4.3	0.0	2.1	3.0
L. Erie w/c	69.2	13.8	2.7	0.2	12.8	1.0	0.1	0.0	0.4
L. Erie east	39.0	27.7	7.3	5.1	17.3	2.3	0.6	0.2	0.4
L. Erie tr	8.1	33.8	44.1	0.0	5.5	6.2	0.0	2.2	0.0
Niag. R. (up)	34.2	17.7	48.1	0.0	0.0	0.0	0.0	0.0	0.0
Niag. R. (low)	6.6	15.4	73.6	3.4	0.9	0.0	0.0	0.0	0.0
L. ON west	3.0	17.1	65.7	3.5	4.0	0.2	0.0	3.0	3.6
L. ON east	13.1	15.1	55.1	10.2	2.1	1.2	0.0	0.0	3.3
B Quinte	71.2	18.6	3.0	1.7	0.3	4.9	0.0	0.0	0.2
L. ON w tr	0.0	12.7	73.9	5.7	2.2	0.0	0.4	2.7	2.3
L. ON e tr	22.3	31.7	33.1	5.3	0.7	3.5	1.1	1.5	0.7
St. Law R.	21.1	37.2	0.6	19.1	10.3	11.2	0.0	0.0	0.7
L. St. Fran.	35.8	32.4	0.0	2.0	29.8	0.0	0.0	0.0	0.0

Table A4.4. Catch by species (%) by all sampled anglers in Great Lakes, connecting waters, and tributaries (tr) in Ontario in 2020. (~=unreliable estimate; Muskie*=muskellunge; c=central; e=east; w=west; up=upper; low=lower.)

Great Lake and other	Catch (000s)	Walleye	Yellow perch	Northern pike	Smallmouth bass	Largemouth bass	Black crappie	Muskie*	Sunfish
L. Sup west	359	14.1	37.5	5.9	5.6	0.1	0.1	0.0	0.0
L. Sup east	~103	3.0	47.2	4.0	2.4	1.9	0.0	0.0	0.0
L. Sup w tr	69	36.8	7.6	12.0	12.4	2.9	0.5	0.0	0.6
L. Sup e tr	198	48.2	8.3	25.9	6.2	1.8	0.8	0.1	0.1
St. Marys R.	~82	~6.5	~26.8	~25.1	~11.3	~1.8	~0.0	~0.0	~1.7
N. Channel	443	22.3	5.0	17.6	35.0	7.7	0.0	0.5	2.8
N. Chan tr	129	50.2	5.9	13.6	22.9	1.6	0.0	1.1	3.6
Georgian B.	1,276	7.3	17.5	13.8	31.1	8.0	1.1	0.9	6.2
G. Bay tr	710	16.3	6.3	19.2	21.3	8.8	3.2	0.4	12.3
L. Huron	441	15.6	20.1	3.1	27.8	4.9	0.5	0.1	8.4
L. Huron tr	340	1.5	3.2	3.3	24.5	2.4	0.0	0.6	5.3
St. Clair R.	315	41.3	37.8	1.4	9.2	2.0	0.6	0.2	4.7
L. St. Clair	1,590	13.7	42.1	2.2	18.1	8.9	4.4	2.2	5.9
Detroit R.	437	27.1	36.5	1.1	8.7	6.4	1.1	0.5	10.5
St. Clair tr	217	6.1	10.0	4.8	48.6	4.5	0.5	0.0	14.8
L. Erie w/c	1,913	45.9	22.0	1.2	3.2	5.3	4.9	0.0	5.8
L. Erie east	1,834	11.3	48.2	4.1	17.7	5.2	1.4	0.1	8.9
L. Erie tr	88	1.9	8.2	0.2	8.8	8.4	2.1	0.1	28.1
Niag R. (up)	28	17.2	18.5	0.0	40.6	1.6	0.0	0.3	0.0
Niag R. (lo)	83	10.2	4.6	1.2	14.1	3.3	0.0	0.4	1.0
L. ON west	686	3.9	9.8	3.1	6.7	5.3	0.7	0.2	6.8
L. ON east	376	4.7	10.5	5.0	15.5	10.5	0.3	0.0	9.3
B Quinte	947	18.2	28.7	4.8	9.2	15.3	2.3	0.1	17.1
L. ON w tr	163	0.6	5.4	3.1	7.2	2.8	0.6	0.1	11.8
L. ON e tr	527	8.9	10.5	7.4	19.9	10.2	1.8	1.0	15.0
St. Law R.	812	4.6	35.4	8.1	21.9	9.6	0.3	1.0	15.8
L. St. Fran.	164	26.2	44.3	3.4	10.8	6.7	5.4	0.5	0.5

Table A4.4. (Continued)

Great Lake and other	Catch (000s)	Rainbow trout	Chinook salmon	Coho salmon	Lake trout	Brook trout	Splake	Lake whitefish	Other
L. Sup west	359	8.6	2.9	1.3	13.9	5.7	0.1	3.6	0.7
L. Sup east	~103	9.9	4.2	5.1	8.6	2.1	3.0	8.7	0.0
L. Sup w tr	69	9.9	2.1	1.5	0.6	12.5	0.0	0.0	0.6
L. Sup e tr	198	1.3	0.5	0.6	0.1	1.8	0.1	1.2	2.9
St. Marys R.	~82	~8.5	~8.8	~1.9	~0.6	~0.0	~0.0	~0.1	~6.7
N. Channel	443	4.5	1.1	0.8	2.0	0.0	0.0	0.3	0.4
N. Chan tr	129	0.1	0.0	0.0	0.3	0.3	0.0	0.0	0.5
Georgian B.	1,276	5.2	2.7	0.6	3.1	0.6	0.1	0.4	1.4
G. Bay tr	710	6.7	1.4	0.2	0.1	1.9	0.0	0.1	1.8
L. Huron	441	6.6	2.2	1.8	6.8	0.4	0.0	0.3	1.4
L. Huron tr	340	29.2	3.7	1.1	0.4	14.7	0.0	0.0	10.2
St. Clair R.	315	0.8	0.0	0.1	0.0	0.0	0.0	0.1	1.8
L. St. Clair	1,590	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.3
Detroit R.	437	0.1	0.0	0.0	0.0	0.0	0.0	0.0	8.0
St. Clair tr	217	0.5	0.0	0.0	0.2	0.0	0.0	0.0	10.1
L. Erie w/c	1,913	6.2	0.1	0.1	0.4	0.0	0.0	2.8	2.1
L. Erie east	1,834	0.5	0.1	0.1	0.2	0.0	0.0	0.1	2.1
L. Erie tr	88	14.6	0.1	0.2	0.1	1.5	0.8	0.0	24.9
Niag R. (up)	28	10.4	0.6	0.3	4.9	0.0	0.0	0.0	5.5
Niag R. (lo)	83	41.9	3.0	0.0	10.7	0.5	0.0	0.0	9.1
L. ON west	686	13.9	32.3	6.3	4.7	1.3	0.2	0.5	4.3
L. ON east	376	12.6	20.9	4.6	3.8	0.0	0.3	0.0	1.8
B Quinte	947	0.4	0.1	0.3	1.1	0.1	0.0	0.1	2.2
L. ON w tr	163	15.8	13.9	0.6	0.3	14.4	0.3	0.0	23.0
L. ON e tr	527	12.6	6.9	1.0	0.1	1.4	0.0	0.0	3.2
St. Law R.	812	0.0	0.0	0.0	0.1	0.2	0.0	0.0	3.0
L. St. Fran.	164	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.7

Table A4.5. Harvest of fish caught by species (%) by all sampled anglers in Great Lakes, connecting waters, and tributaries (tr) in Ontario in 2020. (~=unreliable estimate; Muskie*=muskellunge; c=central; e=east; w=west; up=upper; low=lower.)

Great Lake and other	Harvest (000s)	Walleye	Yellow perch	Northern pike	Smallmouth bass	Largemouth bass	Black crappie	Muskie*	Sunfish
L. Sup west	101	12.7	45.6	1.9	2.3	0.1	0.0	0.0	0.0
L. Sup east	33	3.0	35.5	2.1	1.6	0.2	0.0	0.0	0.0
L. Sup w tr	17	65.5	2.9	3.2	3.2	2.3	1.7	0.0	0.0
L. Sup e tr	54	65.7	7.1	9.3	4.4	0.3	0.0	0.0	0.0
St. Marys R.	~28	~14.3	~32.7	~10.5	~1.6	~0.0	~0.0	~0.0	~0.0
N. Channel	110	21.8	8.0	17.9	26.6	4.0	0.0	0.0	2.0
N. Chan tr	41	54.7	8.1	10.4	25.3	0.0	0.0	0.0	0.0
Georgian B.	242	8.6	11.0	9.6	20.6	5.5	2.8	0.0	2.7
G. Bay tr	94	24.2	7.6	18.7	16.5	4.5	10.9	0.0	5.7
L. Huron	154	31.9	22.8	2.7	19.1	2.4	0.0	0.0	0.2
L. Huron tr	62	6.3	7.3	1.0	31.6	0.7	0.0	0.1	2.2
St. Clair R.	114	59.5	32.6	1.0	2.5	0.0	0.8	0.0	2.1
L. St. Clair	~590	~17.7	~70.1	~0.5	~3.0	~0.5	~1.5	~0.0	~5.3
Detroit R.	182	39.0	45.1	0.1	3.5	0.4	0.9	0.0	8.5
St. Clair tr	~10	~42.0	~23.0	~6.0	~21.0	~0.0	~0.0	~0.0	~0.0
L. Erie w/c	800	50.6	31.7	0.1	0.8	0.5	4.8	0.0	1.6
L. Erie east	621	22.3	62.7	1.7	6.8	1.4	1.4	0.0	1.4
L. Erie tr	~6	~12.1	~18.2	~1.5	~0.0	~0.0	~9.1	~0.0	~12.1
Niag R. (up)	~7	40.9	31.0	0.0	14.1	0.0	0.0	0.0	0.0
Niag R. (lo)	7	3.9	22.1	0.0	5.2	7.8	0.0	0.0	0.0
L. ON west	117	5.5	12.1	1.4	1.6	1.0	0.1	0.0	9.3
L. ON east	96	5.8	5.4	3.4	9.6	4.9	0.5	0.0	14.1
B Quinte	133	46.2	24.1	3.8	3.2	10.8	3.5	0.0	3.7
L. ON w tr	20	2.7	33.0	1.1	5.9	2.7	0.0	0.0	4.3
L. ON e tr	74	19.7	7.6	7.4	17.0	14.2	4.4	0.7	7.8
St. Law R.	150	11.3	57.7	4.8	8.2	3.8	0.2	0.0	1.1
L. St. Fran.	41	26.7	57.3	0.2	6.7	4.4	4.8	0.0	0.0

Table A4.5. (Continued)

Great Lake and other	Harvest (000s)	Rainbow trout	Chinook salmon	Coho salmon	Lake trout	Brook trout	Splake	Lake whitefish	Other
L. Sup west	101	2.5	9.0	2.5	13.6	0.9	0.2	8.2	0.6
L. Sup east	33	13.8	11.0	11.7	7.6	0.2	0.2	13.1	0.0
L. Sup w tr	17	4.0	4.9	3.7	0.6	7.8	0.0	0.0	0.3
L. Sup e tr	54	3.3	0.8	1.1	0.3	4.8	0.5	2.6	0.0
St. Marys R.	~28	~4.1	~23.2	~3.2	~0.6	~0.0	~0.0	~0.3	~9.5
N. Channel	110	10.6	2.4	1.8	3.9	0.0	0.0	0.6	0.5
N. Chan tr	41	0.2	0.0	0.0	0.8	0.4	0.0	0.0	0.2
Georgian B.	242	15.5	10.8	1.7	6.5	0.7	0.0	1.4	2.5
G. Bay tr	94	8.2	2.0	0.0	0.0	1.0	0.0	0.4	0.3
L. Huron	154	6.0	5.2	4.4	3.8	1.2	0.1	0.0	0.1
L. Huron tr	62	27.4	4.9	1.7	1.2	14.7	0.0	0.0	0.9
St. Clair R.	114	1.0	0.1	0.2	0.1	0.0	0.0	0.2	0.0
L. St. Clair	~590	~0.1	~0.0	~0.0	~0.0	~0.0	~0.0	~0.4	~0.7
Detroit R.	182	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.6
St. Clair tr	~10	~3.0	~0.0	~0.0	~2.0	~0.0	~0.0	~0.0	~3.0
L. Erie w/c	800	5.3	0.1	0.1	0.6	0.0	0.0	2.7	1.1
L. Erie east	621	1.0	0.1	0.1	0.2	0.1	0.0	0.1	0.7
L. Erie tr	~6	~31.8	~0.0	~0.0	~0.0	~7.6	~0.0	~0.0	~7.6
Niag R. (up)	~7	2.8	9.9	0.0	0.0	0.0	0.0	0.0	1.4
Niag R. (lo)	7	51.9	9.1	0.0	0.0	0.0	0.0	0.0	0.0
L. ON west	117	17.1	30.9	6.5	3.2	0.3	0.5	0.7	10.0
L. ON east	96	16.6	21.0	12.8	4.0	0.0	1.2	0.0	0.5
B Quinte	133	0.9	0.5	0.9	1.5	0.6	0.0	0.1	0.2
L. ON w tr	20	5.9	16.5	3.2	0.5	20.7	0.0	0.0	3.7
L. ON e tr	74	3.6	4.8	2.3	0.0	0.5	0.0	0.1	9.8
St. Law R.	150	0.0	0.0	0.0	0.1	1.1	0.0	0.0	11.6
L. St. Fran.	41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Appendix 5. Reliability of survey estimates

Table A5.1. Relative standard errors (%) for key statistics for fisheries management zone (FMZ) in Ontario in 2020. (~=unreliable estimate; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15; *=ice fishing is essentially prohibited in FMZ 15A and is not reported.)

FMZ	Days fished	Open days	Ice days	Total Catch	Total Harvest
2	13.1	13.6	29.0	~38.4	14.1
3	20.8	18.0	~48.8	24.1	29.8
4+	7.2	7.8	12.5	16.8	9.3
4X	7.9	8.6	13.0	13.5	10.6
5+	4.2	4.4	7.3	8.1	6.0
5X	5.4	5.9	9.9	8.6	6.8
6+	4.6	4.9	10.7	7.7	5.7
6X	4.7	5.0	10.9	8.0	5.8
7	6.7	6.6	15.2	9.0	8.2
8	4.8	4.9	10.7	7.3	6.8
9	8.5	9.4	15.0	22.7	14.3
10	4.3	4.7	6.7	7.3	7.1
11+	4.7	4.9	8.4	8.8	8.7
11X	6.0	6.0	13.1	7.5	7.7
12	7.7	8.2	14.4	11.3	15.2
13	9.5	9.1	29.6	13.4	17.9
14	5.0	5.1	14.1	9.7	9.0
15	2.6	2.7	7.0	4.2	6.0
15A	11.7	12.0	*	20.9	15.0
15O	2.6	2.7	7.0	4.3	6.3
16+	3.3	3.6	6.4	6.8	8.2
16X	4.8	4.8	14.5	5.0	9.6
17+	3.7	3.7	12.4	5.7	9.4
17X	4.8	4.8	19.2	7.1	10.3
18	4.2	4.2	10.6	5.5	6.4
19	4.3	4.3	13.1	8.9	11.0
20	4.6	4.6	12.7	7.9	9.2

Table A5.2. Relative standard errors (%) for key statistics for fisheries management zone (FMZ) in Ontario in 2020. (~=unreliable estimate; FMZ with + or X include or exclude provincially significant inland fisheries, respectively; 15A is Algonquin Provincial Park; 15O is other FMZ 15.)

FMZ	Angling packages	Consumables	Investments	Total
2	27.0	22.9	~34.7	18.6
3	~68.3	~37.2	~48.4	~35.5

FMZ	Angling packages	Consumables	Investments	Total
4+	~36.1	10.6	19.3	13.9
4X	~39.8	12.0	22.1	16.1
5+	29.7	7.3	19.6	13.7
5X	~51.7	9.3	20.8	15.0
6+	~35.0	7.5	18.2	12.6
6X	~37.7	7.7	18.9	13.0
7	25.7	13.4	19.6	15.1
8	19.5	8.9	17.8	12.2
9	~35.9	13.9	~39.3	31.0
10	20.7	6.3	21.4	15.0
11+	11.6	7.5	14.0	9.4
11X	16.0	9.9	19.1	12.4
12	25.8	10.6	20.9	14.6
13	~35.9	13.2	28.6	17.6
14	19.1	7.3	20.0	13.1
15	15.0	4.7	15.6	9.5
15A	27.3	24.0	29.4	19.3
15O	15.7	4.6	16.4	10.0
16+	12.6	4.7	21.0	13.0
16X	15.3	6.0	17.4	10.2
17+	21.4	6.0	21.8	13.5
17X	31.5	8.0	32.3	21.7
18	18.7	6.4	15.9	10.2
19	13.2	6.4	13.0	8.1
20	15.7	7.0	18.0	11.0

Table A5.3. Relative standard errors (%) for key statistics for provincially significant inland fishery (PSIFs) and Algonquin Park in Ontario in 2020. (~=unreliable estimate.)

PSIF	Days fished	Open days	Ice days	Total Catch	Total Harvest
Lake Simcoe	5.3	6.6	6.8	11.9	10.9
Lake Nipissing	7.4	8.3	10.7	15.2	16.0
Rice Lake	8.5	8.3	26.2	10.3	19.3
Tri Lakes	8.8	9.0	25.1	13.3	19.7
Lake of the Woods	8.4	8.7	13.5	14.0	12.7
Grand River	6.9	7.0	26.9	11.3	23.6
Lake Scugog	12.9	13.6	30.5	17.8	~45.8
Winnipeg River	11.1	10.9	28.5	21.0	15.1
Rainy Lake	13.6	13.7	20.0	29.4	17.4
Lac Seul	18.1	18.2	~39.8	~40.2	19.5
Lake Nipigon	22.9	24.9	~51.4	27.1	29.0

Table A5.4. Relative standard errors (%) for key statistics by provincially significant inland fishery (PSIFs) in Ontario in 2020. (~=unreliable estimate.)

PSIF	Angling packages	Consumables	Investments	Total
Lake Simcoe	22.2	7.2	~35.5	24.6
Lake Nipissing	14.7	11.1	19.6	13.8
Rice Lake	22.0	8.3	26.4	16.2
Tri Lakes	~36.0	12.8	24.3	14.8
Lake of the Woods	30.8	12.0	25.1	17.1
Grand River	28.3	12.1	~41.2	26.1
Lake Scugog	~48.0	21.8	27.3	17.9
Winnipeg River	~55.5	30.5	~76.0	~62.2
Rainy Lake	~36.7	14.3	~43.4	31.6
Lac Seul	~46.6	21.8	30.7	20.6
Lake Nipigon	~72.7	25.0	~46.5	~35.2

Table A5.5. Relative standard errors (%) for key statistics for Great Lakes, connecting waters, and tributaries in Ontario in 2020. (~=unreliable estimate.)

Great Lakes water	Days fished	Open days	Ice days	Total catch	Total harvest
Lake Superior west	9.8	11.2	17.1	26.4	30.3
Lake Superior east	19.7	19.0	~34.4	~35.9	16.3
Lake Super west tribs	15.0	15.3	~43.9	18.1	23.4
Lake Super east tribs	21.5	18.2	~39.1	20.7	22.0
St. Marys River	26.4	27.6	~42.8	~33.2	~52.8
North Channel	11.0	10.2	29.6	19.3	17.7
N Chan tribs	19.3	20.2	~69.5	14.7	19.9
Georgian Bay	5.8	5.8	17.2	12.2	9.9
G Bay tribs	6.1	6.1	25.5	13.3	12.8
Lake Huron	9.5	9.1	29.6	13.4	17.9
Lake Huron tribs	14.9	15.3	~37.9	13.0	27.1
St. Clair River	17.1	17.1	~57.6	22.4	22.6
Lake St. Clair	11.9	11.7	25.7	20.5	~36.1
Detroit River	13.7	13.9	~58.9	19.5	26.2
St. Clair tribs	9.9	9.9	~50.1	12.9	~36.5
Lake Erie west/central	6.4	6.4	20.7	17.6	10.8
Lake Erie east	8.2	8.5	23.2	14.0	11.8
Lake Erie tribs	17.8	18.1	~81.6	22.4	32.4
Niagara River (upper)	23.8	23.8	NA	29.1	~38.1
Niagara River (lower)	27.1	27.7	~58.4	30.1	32.5
Lake Ontario west	7.9	7.9	24.7	12.1	17.0
Lake Ontario east	10.1	9.4	~34.2	14.3	15.0
Bay of Quinte	9.7	9.1	17.9	12.7	16.4

Great Lakes water	Days fished	Open days	Ice days	Total catch	Total harvest
Lake ON west tribs	10.4	10.6	~38.8	14.7	28.4
Lake ON east tribs	8.4	8.5	30.9	12.5	16.3
St. Lawrence River	11.9	12.7	23.5	21.9	24.6
Lake St. Francis	18.4	19.0	~46.9	29.0	29.9

