

A RECREATIONAL FISHERY SURVEY OF PORT, EAST, AND BLIND SODUS BAYS



Matthew Sanderson
Sr. Aquatic Biologist



NYS Department of Environmental Conservation
Region 8 Bureau of Fisheries
6274 East Avon-Lima Road
Avon, New York 14414



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ABSTRACT

A one year roving-roving recreational fishery survey was conducted on the Lake Ontario embayments of Port, East, and Blind Sodus Bays from April 2, 2012 to March 29, 2013. The survey permitted the examination of the current levels of angling effort and success on these Wayne County, New York bays. During a total of 232 survey days, creel survey agents conducted 776 interviews comprised of 1,453 individual anglers who fished 3,828 hours. The average party size was 1.9 anglers. Anglers interviewed from complete trips on average fished for 3.2 hours.

It was estimated that anglers fished Port Bay for approximately 14,198 hours from 3,419 boat trips, and 14,811 hours from 5,737 shore trips; East Bay for approximately 4,459 hours from 1,634 boat trips, and 2,484 hours from 1,346 shore trips; and Blind Sodus Bay for approximately 5,175 hours from 2,472 boat trips, and 862 hours from 655 shore trips. An estimated 82,038 panfish (*Centrarchids*, *Perca*, and *Ictalurids*) were caught from Port Bay for a catch rate of 2.83 fish per angler hour. Most of the estimated panfish catch was bluegill sunfish. An estimated 15,119 warm water gamefish (*Micropeterus*, *Esocids*, and *Sander*) were caught from Port Bay for a catch rate of 0.52 fish per angler hour. Ninety-five percent of the estimated warm water gamefish catch was largemouth bass. An estimated 45,700 panfish were caught from East Bay for a catch rate of 6.58 fish per angler hour. Most of the estimated panfish catch was bluegill sunfish. An estimated 8,803 warm water gamefish were caught from East Bay for a catch rate of 1.27 fish per angler hour. Ninety-one percent of the estimated warm water gamefish catch was largemouth bass. An estimated 6,497 panfish were caught from Blind Sodus Bay for a catch rate of 1.08 fish per angler hour. About one half of the estimated panfish catch was comprised of pumpkinseed and bluegill sunfish. An estimated 2,436 warm water gamefish were caught from Blind Sodus Bay for a catch rate of 0.40 fish per angler hour. Eighty-five percent of the estimated warm water gamefish catch was largemouth bass.

Port, East, and Blind Sodus Bays provide excellent year-round panfish and bass, and good northern pike, fishing opportunities for those anglers who prefer to fish smaller, less heavily fished water bodies in Wayne County. Panfish catch rates were above those observed on other nearby Lake Ontario bays. Largemouth bass was the favorite open water gamefish target on the bays, consistent with the preferences of anglers surveyed during a recent statewide survey. The directed effort catch rates for largemouth bass in the bays greatly exceeded the average directed effort catch rate of all size largemouth bass from selected waters in New York State of 0.24 bass per hour. The high release rate of bass, particularly legal sized bass, observed on these bays is consistent with the "catch and release" ideology practiced by most bass anglers today. Similarly high release rates of legal sized bass were observed on other nearby Lake Ontario bays. No bass were harvested from the bays during the catch and release season from December through May. The Port and Blind Sodus Bay walleye catch rates are well below the statewide objective of 0.2 walleye per hour. Based on this measure, it appears that when compared to other New York waters, walleye in Port and Blind Sodus Bays may be difficult to catch, not highly targeted, or abundance is low, despite modest walleye CPUEs from assessment surveys.

INTRODUCTION

Port Bay is a 475 acre embayment of Lake Ontario located north of the town of Wolcott (Figure 1). It is a relatively shallow, eutrophic to hypereutrophic water body with a maximum depth of 30 ft (9.1 m) and a mean depth of 16.5 ft (5 m). It has a relatively expansive littoral zone (depths less than or equal to 6.6 ft (2 m)), comprising an area of 132 acres or 27.7% of the total bay area. Thermal and dissolved oxygen stratification persists from late June through late August with strong temperature and dissolved oxygen differences throughout the water column. By mid July, dissolved oxygen concentrations are anoxic at depths of 5 m and lower. Port Bay has an extensive watershed encompassing 14,377 acres, giving a watershed to bay ratio of 30:1. Extending along the majority of the shoreline areas to depths of approximately 2 m are dense beds of Elodea (*Elodea canadensis*), eelgrass (*Vallisneria americana*), water stargrass (*Zosterella dubia*), Richardson's pondweed (*Potamogeton richardsonii*), coontail (*Ceratophyllum demersum*), and Eurasian watermilfoil (*Myriophyllum spicatum*). Land use within this watershed is primarily agricultural, with a mix of orchards, dairy farms, poultry farms, row crops, and cover crops, in addition to mixed deciduous forests and the Village of Wolcott. In the late 1800's and early 1900's the shoreline of Port Bay was dotted with resort hotels associated with orchard land that ran down to the shoreline of the Bay. With two public concrete boat launches maintained by the New York State Department of Environmental Conservation (DEC), Port Bay is one of the more heavily utilized embayments of Wayne County. The bay serves as the year round home for the many residents that live along the shoreline and also serves as a summertime recreation center both for those that live throughout Wayne County and for visitors from around the country. People venture to Port Bay for its excellent warm-water fishery, scenic views, and excellent access to Lake Ontario (Princeton Hydro LLC 2007, Gillman and Smith 1988).

Located west of Chimney Bluffs State Park, East Bay is a 189 acre embayment of Lake Ontario. It is an extremely shallow, hypereutrophic water body with a maximum depth of 9 ft (2.75 m) and mean depth of 4 ft (1.22 m). An expansive littoral zone occupies 92% of the total bay area. East Bay is shallow enough that it never experiences thermal stratification. This lack of thermal stratification allows the entire water column to come into contact with the atmosphere through wind driven mixing which allows the constant replenishment of dissolved oxygen. East Bay has an expansive watershed of 16,401 acres, giving a watershed to bay ratio of 87 to 1. This extremely high ratio of watershed to bay area is almost three times as large as either Port or Blind Sodus Bay. The entire surface area of the bay is dominated by dense stands of Eurasian watermilfoil and coontail, with areas of water lilies (*Spatterdock* spp.) and Elodea. With public boat access at the northwestern shoreline and a DEC maintained gravel ramp on Mudge Creek, East Bay has historically been a popular location for angling, boating, and birding. In addition to the bay proper, the surrounding area boasts a large area of wetlands immediately to the south of the bay surrounding the inflow of Mudge Creek. The expansive watershed is dominated primarily by mixed forests and agriculture with orchard land representing a large portion of the overall land use. The least developed of the three embayments, East Bay has a relatively small population of year-round residents who reside primarily on the steeply sloped western shore. A quiet bay in relation to Sodus Bay to the west, East Bay offers a much more laid back setting along the southern coastline of Lake Ontario (Princeton Hydro LLC 2007, Gillman and Smith 1988).

Blind Sodus Bay is a 240 acre embayment of Lake Ontario located at the eastern edge of Wayne County that is historically named for the sandbar that stretched across its mouth from the western shoreline. Classified as mesotrophic to eutrophic, it has a maximum depth of 26 ft (7.9

m) and a mean depth of 15.9 ft (4.8 m). The littoral zone comprises an area of 46 acres or 21% of the total Bay area. Blind Sodus Bay is thermally stratified from mid July through late August. Stratification of dissolved oxygen concentrations follows the same pattern, and by mid July there is a lack of oxygen at depths 5 m and greater. Associated with the embayment is an expansive watershed of 8,670 acres, for a watershed to bay ratio of 36:1. The watershed is dominated by a mosaic of mixed forests and agricultural land. Extending along the majority of the shoreline areas to depths of approximately 2 m are dense beds of eelgrass, water stargrass, Richardson's pondweed, coontail, and Eurasian watermilfoil. Blind Sodus Bay offers those who utilize it excellent fishing, camping, boating, swimming, and wildlife watching opportunities along the southern coast of Lake Ontario. While residential land is most dense along the western shoreline of the bay, the largest area is occupied by Holiday Harbor campground, which is only occupied on a seasonal basis. The southeastern and southwestern shorelines comprise the remainder of housing areas surrounding the bay and are of medium density (Princeton Hydro LLC 2007, Gillman and Smith 1988). There is no publicly owned access to the bay, but boat launching is provided at Holiday Harbor and Shady Shores campgrounds for a nominal fee.

The bays are primarily warm water fisheries composed of walleye (*Sander vitreus*), northern pike (*Esox lucius*), chain pickerel (*Esox niger*), smallmouth bass (*Micropterus dolomieu*), largemouth bass (*Micropterus salmoides*), pumpkinseed (*Lepomis gibbosus*) and bluegill sunfish (*Lepomis macrochirus*), yellow perch (*Perca flavescens*), white perch (*Morone americana*), gizzard shad (*Dorosoma cepedianum*), and brown bullhead (*Amerius nebulosus*). Because they are connected to Lake Ontario by dredged channels, and because the bays lie between Lake Ontario and spawning tributaries, migratory species such as Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*Oncorhynchus kisutch*), brown trout (*Salmo trutta*), and rainbow trout (*Oncorhynchus mykiss*) are found in the bays at certain times of the year.

The Region 8 Fisheries Unit has intensively managed Port and Blind Sodus Bays for walleye. Intensive management includes stocking hatchery reared fingerlings and regulating the recreational harvest (18 inch minimum size, three per day creel limit). In all three bays, black bass, black crappie (*Pomoxis nigromaculatus*), pumpkinseed and bluegill sunfish, and yellow perch are managed by regulating the recreational harvest under statewide size and creel limits. Northern pike is managed by regulating the recreational harvest under Great Lakes regulations (22 inch minimum size and five per day creel limit). Electrofishing surveys were conducted by the DEC Region 8 Fisheries Unit in Port Bay in the fall of 1981 (W. Abraham NYSDEC unreported data) and Blind Sodus Bay during the fall of 1996 (Lane 1998). A fish community assessment using standard gang gill nets and electrofishing was conducted on Port Bay in the fall of 2012 (Sanderson in preparation). These surveys were conducted in accordance with DEC standard sampling protocols (Forney et al. 1994; Green 1989). Cornell University conducted annual fall electrofishing surveys in Port Bay from 1989 to 1994 as part of a statewide effort to evaluate the success of stocked fingerling walleye. Substantial fingerling walleye survival was noted from all years stocked, but no natural reproduction was noted (Brooking et al. 1995). A long-term monitoring program has been maintained on Port Bay for a number of limnological variables such as temperature, nutrients, chlorophyll *a*, and zooplankton (Princeton Hydro LLC 2007). The data sets for the bays lack up to date information on the human use of the resource, as angler creel surveys have never been conducted on the bays. According to the 2007 New York Statewide Angler Survey, 19% (3,563,072 angler days) of all angler effort was associated with Great Lakes waters in 2007. Great Lakes waters were defined as the New York portion of Lake Erie, the Niagara River, Lake Ontario and its embayments, and the portions of major Lake Ontario tributaries in the counties closest to the lake before the first barrier impassable to fish. In Region 8, 826,931 angler days were spent fishing Lake Ontario and 463,964 angler days were

spent fishing Lake Ontario for bass, yellow perch, sunfish, and northern pike (Connelly and Brown 2009).

There is a need to examine the effects of angling, including catch rates, harvest rates, and effort, on the warm water fishery of these Lake Ontario bays, because the stocking of pond reared walleye fingerlings under a cooperator program from 1987 to 1993 and the experimental stocking of DEC hatchery raised advanced walleye fingerlings from 1992 to 1997 has resulted in the restoration of a once-popular fishery to Port and Blind Sodus Bays. A plan for biannual plantings of walleye fingerlings in Port and Blind Sodus Bays began in 2001, and fingerlings were stocked in 2003, 2009, 2011, and 2013. Also, new bass fishing regulations were implemented, beginning on October 1, 2006, to allow an early (December 1 – the Friday before the 3rd Saturday in June), artificial lure only, catch and release season. Lastly, expanding double-crested cormorant (*Phalacrocorax auritus*) colonies located along the southern and eastern Lake Ontario shoreline are now causing some concern about their potential impact on warm water fish populations.

METHODS

A one year recreational fishery survey was conducted on Port, East, and Blind Sodus Bays from April 2, 2012 to March 29, 2013. The survey permitted the examination of the current levels of angling effort and success on the bays. Since fisheries management is evaluated based on deliverable quantities, such as catch rates and angling hours, the following outputs of the survey included all game and pan fish with emphasis on the walleye and black bass fisheries:

1. Total effort
2. Total catch and harvest
3. Catch and harvest rates
4. Species targeted
5. Origin of fishing trips (dock/cottage on bay vs. boat launch or marina)
6. Directed effort, catch, and harvest
7. Directed catch and harvest rates

The survey was designed to estimate angling effort, catch, and harvest for two fishing seasons during the 2012-13 fishing year. Combining the results from these time periods provided total annual estimates. Periodic measurement of angling effort, catch rates, and harvest rates supplied the required data. The survey consisted of two parts: boat and shoreline angler counts and angler interviews. Primarily roving counts and interviews were conducted.

Pollock et al. (1994) recommends the use of a roving survey method for obtaining catch rate information from lakes with multiple access points, particularly lakes where, despite well developed public access facilities, a substantial amount of angling originates from private docks and shorelines. Because the shoreline of each of the bays is heavily developed with seasonal and permanent residences, where a large amount of fishing effort could originate, this was the method chosen for the survey. The boat roving survey, for safety reasons, required two creel agents.

Fishing Seasons

The creel survey covered twelve months over two fishing seasons: Spring/summer/fall open water daytime (April 1 to December 31, 2012), and winter daytime (January 1 to March 31, 2013). Because nighttime fishing made up only 2.1% and 2.5% of the total open water fishing effort on Irondequoit and Sodus Bays, respectively (Sanderson 2009, 2010); and because the fisheries of all of these bays are similar, no night surveys were conducted during this survey.

Census Days

Open water daytime survey effort was evenly divided among four time periods: 1. Weekend/holiday morning (0800-1400), 2. Weekend/holiday afternoon (1400-2000), 3. Weekday morning, and 4. Weekday afternoon (Table 1). Three randomly selected weekday days and two weekend/holiday days per week were surveyed, allowing five daytime periods per week to be surveyed. Only one daytime period (0930-1730) during the winter was surveyed. Two randomly selected weekday days, and two weekend/holiday days per week were surveyed, allowing four daytime periods per week to be surveyed.

One bay per daytime period was surveyed. Based on anticipated fishing activity, survey effort was divided among the bays as follows: Port Bay 40%, East Bay 35%, and Blind Sodus Bay 25%. A nearly equal number of time periods per bay were surveyed (Table 1).

Boat/shore Angler Count

All boats that were fishing and shoreline anglers were counted by creel agents from a boat twice during the survey time period. The first count was at zero, one, or two hours into the survey time period, randomly chosen. The second count was three hours after the first. The counting route took approximately 15 minutes or less to complete, and thus was considered instantaneous (Pollock et al. 1994). A pair of Wind River 10 X 40 binoculars aided the agents with identifying boats and people that were fishing. Additional data recorded include: air temperature, wind direction and relative magnitude, precipitation, and cloud cover. Ice fishing anglers were counted in the same manner during the winter, except that counts were made from access points on the shoreline (Figure 1).

Roving Survey

The roving-roving survey design as described in Pollock et al. (1994, Chapters 11, 15) was used. Between counts, angler interviews were conducted by two creel agents in a boat during the open water season and by one agent on foot during the winter. Creel agents were instructed to intercept as many boats or anglers as possible. The date and interview time was recorded. Interview questions included: time fishing began, origin of trip (launch/access point or dock/cottage on bay), fishing method, number of anglers in boat, targeted species, what Town/County the party was from, number of each species kept, number of each species released, and number of legal sized fish released. Any comments the interviewee made were also recorded.

Non-uniform Probability Access Point Survey

The roving-access survey design as described in Pollock et al. (1994, Chapters 10, 15) was used when hazardous weather or ice conditions prevented a roving survey. Counts and interviews were conducted at access points (Figure 1). Boats and/or anglers were counted at each area. At Port Bay, the creel agent conducted interviews for 180 minutes at the south boat

launch and for 180 minutes at the barrier bar boat launch. At East Bay, the creel agent conducted interviews for 270 minutes at the northwest boat launch and for 90 minutes at the Slaughter Road boat launch. At Blind Sodus Bay, the creel agent conducted interviews for 180 minutes at the Holiday Harbor campground boat launch and for 180 minutes at the Shady Shores campground boat launch. During the ice season, the creel agent conducted interviews for the same amounts of time at the same access sites. At Port Bay, interviews were conducted at an access site near Tompkins Point instead of the west boat launch. The same interview as the roving survey was conducted, except that the ending time and trip origin was known.

Total Effort, Catch, and Harvest Calculations

In the field, data were entered directly into a Microsoft Access electronic database using a handheld Hewlett-Packard iPaq Pocket PC, and these were later transferred to a desktop PC. Using the desktop PC, the data were tabulated by month and weekend/weekday. Boat and shoreline angling was treated separately. Catch and harvest results were further stratified by fish species. Daily effort was calculated with the following equation:

$$(1) \quad E = I \times T$$

where I is the mean of the two instantaneous counts of boats or shore/ice anglers for that day and T is the fishing hours for that day. Daily estimates of effort for the open water season in boat hours was multiplied by the daily mean number of anglers (from interviews) per boat for each day to determine daily effort as angler hours. Shore and ice fishing effort is expressed as angler hours. Angling effort was converted from hours to trips by dividing the total hours expended by the mean trip length, calculated from complete trips, through the open water or ice season.

Since the interviews from the boat roving survey and from shoreline anglers recorded mostly incomplete trips, the average of the individual catch rates for each angler-group for each day was used, and all trips less than 0.5 hr were ignored to eliminate the potential bias from short trips (Pollock, et al.1994). This catch rate estimator is expressed as:

$$(2) \quad R2 = \frac{\sum_{i=1}^n c_i/L_i}{n}$$

where c_i is the catch for the i th sampling unit, L_i is the length of the fishing trip at the time of the interview, and n is the number of sampling units in the sample.

Access point survey and most ice angler interviews recorded complete trips, so the ratio of the means was used to calculate the catch rate:

$$(3) \quad R1 = \frac{\sum_{i=1}^n c_i/n}{\sum_{i=1}^n L_i/n}$$

Catch was calculated with the following equation:

$$(4) \quad C = E \times R$$

where R is the appropriate catch rate estimator from equation (2) or (3), above. Harvest was calculated using the same rate estimators using creel fish and equation (4).

Monthly total effort, catch, and harvest and their associated standard errors were calculated in accordance with procedures outlined in Pollock et al. (1994). Monthly catch and harvest estimates and associated standard errors for walleye, northern pike, smallmouth bass, largemouth bass, yellow perch, and panfish (bluegill sunfish, pumpkinseed sunfish, rock bass, black crappie, and bullhead) were also calculated.

Lastly, directed angler catch rates by month were calculated using interview data from trips during which the species in question was targeted (Malvestuto 1996). The ratio of the means catch rate estimator (equation 3) was used as the measure of angling success (Grosslein 1961, Malvestuto 1996, Pollock et al. 1994) and expressed as catch per angler-hour. Rates for each period and species were calculated separately.

RESULTS

Interview Statistics

During a total of 232 survey days from April 2, 2012 to March 29, 2013 creel survey agents conducted 776 interviews of 1,453 anglers who fished 3,828 hours. The average party size was 1.9 anglers. Anglers interviewed from complete trips on average fished for 3.2 hours (Table 2). Port, East, and Blind Sodus Bays were surveyed 97 (42%), 78 (34%), and 57 (25%) days respectively. Five hundred forty seven (70%), 122 (16%), and 107 (14%) interviews were conducted at Port, East, and Blind Sodus Bays, respectively. Since a roving survey was conducted on most survey days, the majority of the interviews (54%) came from incomplete trips. About one half (52%) of the interviews came from anglers fishing from a boat, 41% came from shore anglers, and 7% came from ice anglers. The majority of the anglers' trips originated from a public access point (70%), rather than a private residence (24%), or marina (6%, Table 3). Most of the anglers interviewed were still fishing (43%), casting (37%), a combination of still fishing and casting (9%), or jig fishing (8%). Thirty six percent of the anglers interviewed were not fishing for anything in particular, followed by bass (29%), yellow perch (17%), and panfish (12%, Table 4). Most of the anglers fishing the bays resided in the immediate area (49% from Wayne County, 30% from Monroe County, and 3% from Cayuga County). Anglers came from 22 New York counties, including a fair number from the Syracuse area (3% from Onondaga County, 5% from Oswego County), or from out-of-state (4%, Table 5).

Effort

Port Bay

It was estimated that anglers fished Port Bay for approximately 14,198 hours (SE= 1,176) from 3,419 boat trips, and 14,811 hours (SE=1,388) from 5,737 shore trips (Figures 2 and 3 and Table 6). The open water (April through December) effort was almost equally divided between boat and shore fishing. Both peaked in June, but substantial effort continued through November. Ice fishing effort is shown as shore fishing on Tables 6 and 7. All of the ice fishing effort (2,046 hrs, 543 trips) took place during 63 days of safe ice from January 6, 2013 to March 10, 2013.

Forty-seven percent of the estimated boat fishing effort was directed at bass, accounting for most of the June through September effort (Table 7). Fishing for anything made up 21% of the estimated boat fishing, and accounted for a large portion of the May through August effort. Yellow perch and panfish fishing each accounted for about 11% of the total estimated boat fishing effort. Most of the boat fishing effort in April, October, and November, and all of the December boat fishing effort was directed at perch, while any species was sought from a boat during May. Salmonids were targeted during April boat fishing. Anglers fishing for anything accounted for the majority (56%) of the estimated shore fishing effort (Table 7). Fishing for yellow perch and panfish made up approximately 21% and 17% of the shore effort. Panfish were the second most sought species from shore in June and August. All of the ice fishing effort was directed at yellow perch. No open water or ice fishing effort was directed specifically towards walleye.

The total annual open water fishing pressure on Port Bay in 2012-2013 was estimated at 58.6 hours (18.7 trips) per acre and ice fishing pressure was estimated at 4.4 hours (1.2 trips) per acre. Daytime boat and shore fishing pressure was estimated at 30.9 hours (7.4 trips) and 27.8 hours (11.3 trips) per acre, respectively (Table 19).

East Bay

It was estimated that anglers fished East Bay for approximately 4,459 hours (SE= 822) from 1,634 boat trips, and 2,484 hours (SE=855) from 1,346 shore trips (Figures 2 and 7 and Table 6). Boat fishing accounted for most of the open water (April through December) effort. Boat fishing peaked in July, and some effort continued through October. Most fishing in April was from shore. All of the ice fishing effort (379 hrs, 91 trips) took place during February and March (Tables 6 and 8).

Fishing for anything made up 45% of the estimated boat fishing, and accounted for a large portion of the April through September effort (Table 8). Twenty six percent of the estimated boat fishing effort was directed at bass, accounting for most of the July through September effort. Pike and panfish fishing accounted for about 12% and 13 % of the total estimated boat fishing effort, respectively. Very little fishing effort was directed at perch. Anglers fishing for anything accounted for the 43% of the estimated shore fishing effort (Table 8). Fishing for yellow perch made up approximately 10% of the shore effort and they were the most sought species in April. Anglers targeting pike accounted for 14% of the shore effort, and most of the ice fishing effort was directed at pike (Table 8).

Total annual open water fishing pressure was estimated on East Bay, where 41.0 hours (18.1 trips) per acre and ice fishing pressure was estimated at 2.4 hours (0.6 trips) per acre. Daytime boat and shore fishing pressure was estimated at 27.9 hours (10.2 trips) and 13.2 hours (7.8 trips) per acre, respectively (Table 19).

Blind Sodus Bay

It was estimated that from anglers fished Blind Sodus Bay for approximately 5,175 hours (SE= 741) from 2,472 boat trips, and 862 hours (SE=183) from 655 shore trips during the daytime (Figures 2 and 11 and Table 6). Boat fishing accounted for most of the open water (April through December) effort. Boat fishing was fairly consistent from May through August. Shore fishing effort was also consistent, from May through August but at a much lower level. All fishing on Blind Sodus Bay ended by October and no ice fishing effort was observed.

Fishing for anything made up 41% of the estimated boat fishing, and accounted for a large portion of the May through August effort (Table 9). Thirty seven percent of the estimated boat fishing effort was directed at bass, accounting for most of the August effort. Panfish fishing accounted for about 13% of the total estimated boat fishing effort. Six percent and 1% of the boat fishing effort was directed at pike and perch, respectively. Anglers fishing for anything accounted for two thirds (67%) of the estimated shore fishing effort (Table 9). Fishing for bass and panfish made up approximately 14% and 11% of the shore effort, respectively. No fishing effort was directed specifically towards walleye.

Much less annual open water fishing pressure was estimated on Blind Sodus Bay, at 21.6 hours (11.2 trips) per acre. Daytime boat and shore fishing pressure was estimated at 18.5 hours (8.8 trips) and 3.1 hours (2.3 trips) per acre, respectively (Table 19).

Catch, Harvest, and Release

Port Bay

An estimated 82,038 panfish (*Centrarchids*, *Perca*, and *Ictalurids*) were caught from Port Bay for a catch rate of 2.83 fish per angler hour (Table 10). It is estimated that about 32%, or 26,272 panfish were harvested (0.91 per angler hour) and 68% or 55,767, were released (1.9 per angler hour). Most of the boat fishing panfish catch occurred in May and June (Figure 3). Although panfish harvest occurred throughout the season, most of the estimated boat fishing harvest occurred in April through June. Much of the shore fishing panfish catch and harvest occurred May through July, while most of the ice fishing panfish catch and harvest occurred in February. Most (48%) of the estimated panfish catch was bluegill sunfish, where an estimated 39,426 were caught (1.36 per angler hour), 8,471 were harvested (0.29 per angler hour), and 30,955 were released (1.07 per angler hour, Table 10). About 62% and 72%, respectively of bluegill caught (24,390) and harvested (6,000) came from shore fishing, with the peak catch occurring in July (Figure 4). The most harvested species was yellow perch, where an estimated 13,851 were creel (0.48 per angler hour), primarily in May, October, November, and February. Other fish reported caught included freshwater drum (*Aplodinotus grunniens*), white perch, white bass (*Morone chrysops*), channel catfish (*Ictalurus punctatus*), round goby (*Neogobius melanostomus*), bowfin (*Amia calva*), brown trout, Chinook salmon, white sucker (*Catostomus commersonii*), and golden shiner (*Notemigonus crysoleucas*).

An estimated 15,119 warm water gamefish (*Micropeterus*, *Esocids*, and *Sander*) were caught from Port Bay for a catch rate of 0.52 fish per angler hour (Table 11). It is estimated that only 910 warm water gamefish were harvested (0.03 per angler hour) and most (14,209) were released (0.49 per angler hour). Most of the boat fishing warm water gamefish catch occurred in June and July, and most of the harvest was in June and September (Figure 5). Most of the shore fishing warm water gamefish catch occurred June through August, and no warm water gamefish were caught while ice fishing. The vast majority (95%) of the estimated warm water gamefish catch was comprised of largemouth bass. An estimated 14,381 were caught at a rate of 0.50 per hour, only 869 were kept (0.03 per angler hour), and 6,979 of the 13,512 largemouth bass released (52%) were legal sized (>12 in, Table 11). Peak catches of largemouth bass came from boat fishing from June through September (Figure 6). Largemouth bass also were the most caught warm water gamefish species by anglers fishing from shore. No black bass were illegally harvested during the closed season. Six hundred fifty five smallmouth bass were estimated to have been caught (0.02 per angler hour) and most (93%) were released. Fifty eight percent of the released smallmouths were legal sized (>12 in). Most smallmouth bass were caught from a boat and were released (Table 11, Figure 6). An estimated 58 northern pike were caught (<0.01

per angler hour), primarily from a boat in April. No northerns were harvested and 97% of the released pike were legal sized (>22 in). An estimated 13 walleye (<0.01 per angler hour) were caught, all from a boat. All were legal sized (>18 in) and released. Boat anglers caught an estimated 12 chain pickerel, all were legal sized and released.

East Bay

An estimated 45,700 panfish were caught from East Bay for a catch rate of 6.58 fish per angler hour (Table 12). It is estimated that about 34%, or 15,501 panfish were harvested (2.23 per angler hour) and 66% or 30,199, were released (4.35 per angler hour). Much of the boat fishing panfish catch and harvest occurred in May and June (Figure 7). Most of the shore fishing panfish catch and harvest occurred in April and October, while all of the ice fishing panfish catch and harvest occurred in March. Most (73%) of the estimated panfish catch was bluegill sunfish, where an estimated 33,387 were caught (0.76 per angler hour), 13,732 were harvested (1.98 per angler hour), and 19,655 were released (2.83 per angler hour, Table 11). About 47% and 60%, respectively of bluegill caught (21,679) and harvested (9,358) came from boat fishing, with the peak catch occurring in May and June (Figure 8). An estimated 5,300 pumpkinseed (0.43 per hour), 3,800 yellow perch (0.55 per hour), and 2,997 black crappie (0.43 per hour) rounded out the bulk of the panfish catch. Other fish reported caught include white bass, bowfin, rainbow trout, and Chinook salmon.

An estimated 8,803 warm water gamefish were caught from East Bay for a catch rate of 1.27 fish per angler hour (Table 13). It is estimated that only 272 warm water gamefish were harvested (0.04 per angler hour) and most (8,531) were released (1.23 per angler hour). Boat fishing warm water gamefish catch had three peaks in April, July, and September. All warm water gamefish boat harvest was in July through October. (Figure 9). Most of the shore fishing warm water gamefish catch occurred September and October, and no warm water gamefish were kept while shore fishing. Nearly all of the ice fishing warm water gamefish catch occurred in March. The vast majority (91%) of the estimated warm water gamefish catch was comprised of largemouth bass. An estimated 8,040 were caught at a rate of 1.16 per hour, only 239 were kept (0.03 per angler hour), and 2,886 of the 7,800 largemouth bass released (37%) were legal sized (>12 in, Table 13). Peak catches of largemouth bass came from boat fishing in April, July, and September (Figure 10). Largemouth bass were the only warm water gamefish species caught by anglers fishing from shore. Many largemouths were caught in April and May and through the ice in March, but none were illegally harvested during the closed season. Seven-hundred sixty-three northern pike were estimated to have been caught (0.11 per angler hour) and most (96%) were released. Ninety-eight percent of the released northerns were legal sized (>22 in). Most northern pike were caught from a boat and all boat-caught northerns were released. All of the northern pike kept by anglers were caught through the ice (Table 13, Figure 10). No smallmouth bass, walleye, or chain pickerel were caught in East Bay.

Blind Sodus Bay

An estimated 6,497 panfish were caught from Blind Sodus Bay for a catch rate of 1.08 fish per angler hour (Table 14). It is estimated that about 16%, or 1,021 panfish were harvested (0.17 per angler hour) and 84% or 5,476, were released (0.91 per angler hour). Most of the boat fishing panfish catch and harvest occurred from May to July (Figure 11). Most of the shore fishing panfish catch occurred in May and June. About one half of the estimated panfish catch was comprised of pumpkinseed and bluegill sunfish, where an estimated 1,055 (0.17 per angler hour) and 2,217 (0.37 per angler hour) were caught, respectively. Nearly all of the pumpkinseeds (96%) and bluegills (94%) were released (Table 14). Most of the panfish caught (76%) and

harvested (95%) came from boat fishing, with the peak catch occurring from May to July (Figures 11 and 12). An estimated 1,667 yellow perch (0.28 per hour) and 1,074 black crappie (0.18 per hour) rounded out the bulk of the panfish catch. Other fish reported caught include freshwater drum, white bass, channel catfish, round goby, and bowfin.

An estimated 2,436 warm water gamefish were caught from Blind Sodus Bay for a catch rate of 0.40 fish per angler hour (Table 15). It is estimated that only 175 warm water gamefish were harvested (0.03 per angler hour) and most (2,260) were released (0.37 per angler hour). Boat fishing warm water gamefish catch peaked in August. Nearly all gamefish harvest was from a boat in July (Figure 13). All of the shore fishing warm water gamefish catch occurred in April, May, and July, and no warm water gamefish were kept while shore fishing. The vast majority (85%) of the estimated warm water gamefish catch was comprised of largemouth bass. An estimated 2,081 were caught at a rate of 0.34 per hour, only 160 were kept (0.03 per angler hour), and 1,674 of the 1,922 largemouth bass released (87%) were legal sized (>12 in, Table 15). Peak catches of largemouth bass came from boat fishing in August (Figure 14). Largemouth bass were caught by anglers fishing from shore only in July. Two hundred sixty seven northern pike were estimated to have been caught (0.04 per angler hour) and most (94%) were released. Seventy one percent of the released northern pike were sublegal sized (<22 in). Most northern pike were caught from a boat in May and June and from shore in April (Figure 14). No walleye were reported caught.

Directed Effort and Catch from Interviews

Port Bay

Most boat-caught yellow perch were caught when the angler's target was perch, and most of the boat-caught bluegill sunfish were caught when the target was panfish or anything (Table 16). Most boat-caught largemouth bass were caught when bass or anything was the target. Only two of 12 northern pike were caught while boat fishing for pike and half of them were caught while fishing for salmonids. The only walleye was caught while the angler targeted bass from a boat. The directed effort boat fishing catch rates for panfish and yellow perch were an outstanding 5.5 and 4.4 fish per angler hour, respectively. Excellent catch rates were observed for boat anglers targeting anything and bass. From shore, most yellow perch were caught when the angler's target was perch or anything, while most of the shore-caught pumpkinseeds and bluegills were caught when the target was anything or panfish. Shore-caught smallmouth and largemouth bass were primarily caught by anglers targeting anything. Like boat fishing, the directed effort shore fishing catch rate for yellow perch and panfish was a similarly outstanding 4.0 and 3.9 fish per angler hour, respectively. Very impressive catch rates were observed for shore anglers who weren't fishing for any species in particular. All of the observed ice fishing effort was directed at yellow perch, and the ice fishing directed effort catch rate was 1.3 perch per angler hour (Table 16).

East Bay

Most of the boat-caught bluegill sunfish were caught when the target was anything or panfish (Table 17). Most boat-caught largemouth bass were caught when anything or bass was the target. One half of the northern pike were caught while boat fishing for pike and the other half were caught while fishing for bass or anything. The directed effort boat fishing catch rate for panfish was an outstanding 7.0 fish per angler hour. An excellent catch rate was observed for boat anglers not targeting anything in particular. From shore, pumpkinseeds and bluegills were caught when the target was anything or panfish. Most yellow perch were caught when the angler's target was anything or panfish, and none were caught while specifically targeting perch.

Shore-caught largemouth bass were primarily caught by anglers targeting anything or panfish. Like boat fishing, the directed effort shore fishing catch rate for anything and panfish was a similarly outstanding 4.9 and 4.2 fish per angler hour, respectively. Most of the observed ice fishing effort was directed at pike; however the ice fishing directed effort catch rate was only 0.12 pike per angler hour. Ice anglers who weren't targeting any species in particular caught fish at and outstanding 14.2 fish per angler hour (Table 17).

Blind Sodus Bay

Most of the boat-caught black crappie, pumpkinseed, bluegill sunfish, and yellow perch were caught when the target was anything or panfish (Table 18). Most boat-caught largemouth bass were caught when bass or anything was the target. One half of the northern pike were caught while boat fishing for pike and the other half were caught while fishing for other species. The directed effort boat fishing catch rate for both panfish and perch was 2.0 fish per angler hour. An excellent catch rate was observed for boat anglers not targeting anything in particular. From shore, pumpkinseeds and bluegills were caught when the target was anything or panfish. All but two yellow perch were caught when the angler's target was panfish, and the two were caught by anglers specifically targeting perch. All shore-caught largemouth bass were caught by anglers targeting panfish and none by bass anglers. The directed effort shore fishing catch rate for panfish was an outstanding 11.9 fish per angler hour (Table 18).

DISCUSSION

Survey Methodology

Krueger et al. (2009) conducted concurrent access and roving interviews in the summers of 2002 and 2006 as part of the 2002-2007 Oneida Lake Creel Survey. Their comparisons of angler success rates estimated from roving and access point surveys indicated that there were no significant differences between harvest rates for either year and for catch rates in 2006. However, in 2002 there were significant differences between walleye and yellow perch catch rates. Since the majority of the interviews on the bays came from anglers whose trip originated from a public access point or marina, consideration should be given to conducting an access point survey for any future recreational fishery surveys on Port, East, or Blind Sodus Bays. Sanderson (2009, 2010) recorded similar trip origin observations during recreational fishing surveys on Irondequoit and Sodus Bays and made the same recommendation. The cost of conducting an access point survey would be considerably less, which may outweigh the relatively small bias that would arise from not interviewing anglers whose trips originated from marinas or private residences.

Effort

Table 20 provides a comparison of the estimated fishing pressure of these small bays with fishing pressure estimates from recent recreational fishery surveys on nearby larger Lake Ontario bays. Total annual open water fishing pressure in hours and trips per acre on Sodus Bay in 2008-2009 was estimated at 26.0 hours (7.0 trips) per acre and ice fishing pressure was estimated at 22.1 hours (4.1 trips) per acre. Daytime boat and shore fishing pressure was estimated at 17.7 hours (3.4 trips) and 7.0 hours (3.2 trips) per acre, respectively (Sanderson 2010). It was estimated that 58.3 hours (14.5 trips) per acre of fishing pressure occurred during the 2007 open water season on Irondequoit Bay. Daytime boat and shore fishing pressure was estimated at 43.1 hours (9.6 trips) and 56.4 hours (12.3 trips) per acre, respectively. Fishing pressure during the

2008 ice fishing season on Irondequoit Bay was estimated at 43.2 hours (8.5 trips) per acre (Sanderson 2009). Port, East and Blind Sodus Bays provide an alternative, although smaller-sized, fishing destination for anglers, especially those who may find crowded ice fishing conditions at the larger and more popular bays undesirable.

With three excellent public fishing access facilities available, fishing effort on Port Bay was nearly equally split between boat and shore fishing and nearly all of the shore fishing effort originated from a public facility. Ice fishing effort originated equally from bay shore residences and public access facilities. Two thirds of the boat fishing effort on East Bay originated from two public launch facilities. Lake Ontario and its embayments experienced lower than average water levels during the summer of 2012. Due to these low water levels, the DEC gravel launch at the south end of East Bay was unusable and most anglers (and the creel agents) used an informal launch within the right of way of a Town road that ended at the northwest corner of the bay. To alleviate launching problems during low water periods, concrete ramps should be constructed at the DEC and informal Town launches. In contrast, fishing activity on Blind Sodus Bay ceased after September, because the publicly available boat launches at the private campgrounds became unavailable once the campgrounds closed down for the season in late September. Since there is no publically accessible shoreline, shore fishing is limited to those who can fish from private property. No ice fishing activity originating from the campgrounds or bay shore residences was observed by creel agents. A boat and /or shoreline fishing access facility with parking should be acquired and developed if a suitable parcel were to become available.

Anglers fishing Port Bay in 2012-2013 for the most part did not fish for any species in particular. 11,284 angler hours, representing 39% of the total fishing effort was from anglers who said they were fishing for “anything”. This fishing effort made up 21% and 56% of the boat and shore fishing effort, respectively. Panfish and perch fishing each made up 11% of the boat fishing effort and 17% and 21% of the shore fishing effort, respectively. Most of the October – December boat and shore fishing effort was perch fishing. All of the estimated 2,046 angler hours of ice fishing effort on Port Bay was directed at yellow perch, much less than the estimated ice fishing effort for yellow perch on Sodus Bay in 2009 and on Irondequoit Bay in 2008 (Sanderson 2010, 2009). Since the surface area of Sodus Bay is larger, ice fishing pressure for yellow perch (21.0 angler hours, or 3.9 trips, per acre) is about half of Irondequoit Bay (43.3 angler hours, or 8.5 trips, per acre), and yellow perch ice fishing pressure on both of these large bays is much greater than smaller Port Bay (4.4 angler hours, or 1.2 trips, per acre).

Fishing for bass, primarily largemouth bass, accounted for 7,490 angler hours, or 26% of the estimated annual fishing effort on Port Bay. Forty seven percent of the boat fishing effort was directed at bass. Most (68%) of the boat fishing effort from June through September was for bass. Port Bay was the site of at least two locally sponsored bass fishing tournaments in 2012, which likely accounts for a portion of this effort. Only 3% of the April and May, and none of the December through March effort was directed at bass, and only 2% of the bass fishing effort occurred during the catch and release season. Anglers are generally not taking opportunity of the catch and release season for bass on Port Bay. Northern pike were targeted during only 2% of the estimated total fishing effort, or 497 angler hours. Although some anglers targeted gamefish, walleye were not specifically targeted on Port Bay. An early fall 2012 fish stock assessment survey caught an average of 0.5 walleye and no northern pike per standard gang gill net, and 1.7 walleye and 5.1 northern pike per electrofishing hour (Sanderson in preparation). Port Bay’s walleye and northern pike density is lower than Irondequoit Bay where 2005 and 2010 gill net surveys caught 9.3 and 12.3 walleye and 2.2 and 1.17 northern pike per standard gang gill net, respectively; and Sodus Bay where 2006 and 2011 gill net surveys caught 3.75 and 1.13 walleye,

and 1.63 and 0.13 northern pike per standard gang gill net, respectively (Sanderson 2010b, Sanderson in preparation). Walleye and northern pike appear to be moderately abundant in Port Bay, but like in Irondequoit and Sodus Bays, anglers aren't specifically targeting them (Sanderson 2009, 2010).

Targeted fishing effort on East Bay in 2012-2013 was similar to Port Bay. Anglers fishing East Bay also did not fish for any species in particular. 3,064 angler hours, representing 44% of the total fishing effort was from anglers who said they were fishing for "anything". This fishing effort made up 45% and 43% of the boat and shore fishing effort, respectively. Panfish fishing made up 13% of the boat fishing effort and 26% of the shore fishing effort. In contrast to Port Bay, very little fishing effort on East Bay was directed at perch, and all of the estimated 379 angler hours of ice fishing effort on East Bay were directed at northern pike. Fishing for bass accounted for 1,275 angler hours, or 18% of the estimated annual fishing effort on East Bay. Twenty six percent of the boat fishing effort, but only 5% of the shore fishing effort, was directed at bass. Eight percent of the April and May, and none of the December through March effort was directed at bass, and 19% of the bass fishing effort occurred during the new catch and release season. To a certain degree, anglers on East Bay are taking opportunity of the catch and release season for bass, specifically in early spring. Anglers fished East Bay for northern pike more frequently than the other two bays, as they targeted pike during 12% of the estimated total fishing effort, or 868 angler hours. Pike were targeted during 12% of the boat, and 14% of the shore fishing effort.

Like anglers fishing Port and East Bays, anglers fishing Blind Sodus Bay in 2012-2013 also did not fish for any species in particular. Two-thousand seven-hundred and two angler hours, representing 45% of the total fishing effort was from anglers who said they were fishing for "anything". This fishing effort made up 41% and 67% of the boat and shore fishing effort, respectively. Panfish and perch fishing made up 14% of the boat fishing effort and 17% of the shore fishing effort. Fishing for bass accounted for 2,027 angler hours, or 34% of the estimated annual fishing effort on Blind Sodus Bay. Thirty seven percent of the boat fishing effort, and 14% of the shore fishing effort, was directed at bass. No effort was directed at bass during April, May, and December through March. Like on Port Bay, anglers on Blind Sodus Bay are not taking opportunity of the new catch and release season for bass. Walleye were not targeted and northern pike were targeted during 6% of the estimated total fishing effort, or 332 angler hours. Lane (1998) characterized Blind Sodus Bay's walleye population as modest and its northern pike population as abundant because he caught 9 walleye and 4.9 northern pike per hour during a September 1996 nighttime electrofishing survey. Since being stocked annually from 1992-1997, walleye fingerlings have only been stocked in 2003 and 2011. It is likely that the walleye population is currently less than it was in 1996, and that likely accounts for the lack of angler interest in fishing Blind Sodus Bay for them.

Catch, Harvest, and Release

Port Bay

In 2012-2013, the recreational fishery on Port Bay was dominated by anglers seeking any species of fish, and catching panfish, particularly bluegill sunfish from shore fishing. Forty one percent of the total estimated catch and 31% of the estimated harvest was bluegill sunfish. Yellow perch was the next most caught and the most harvested species, and was the primary target and catch of ice fishermen on Port Bay. Pumpkinseed sunfish and black crappie rounded out the majority of the panfish catch. The overall bluegill sunfish estimated catch rate of 1.36 fish per hour (1.46 open water, 1.91 ice) and the overall directed effort catch rate for panfish of

4.65 fish per hour were higher than that of Sodus (0.54 overall, 0.96 open water, 0.05 ice, 3.51 panfish directed effort) and Irondequoit (0.05 overall, 0.07 open water, 0.01 ice, 3.28 panfish directed effort) Bays (Sanderson 2010, 2009). The overall yellow perch estimated catch rate of 0.99 fish per hour (0.90 open water, 2.18 ice) and the overall directed effort catch rate of 2.76 fish per hour (4.23 open water, 1.28 ice) was substantially less than that of Sodus and Irondequoit Bays (Tables 21 and 22). Bluegill sunfish and yellow perch were quite abundant in Port Bay, as 378 bluegill and 43 yellow perch per hour were caught during a September 2012 nighttime electrofishing survey (Sanderson in preparation).

The most prevalent boat fishing on Port Bay from June through September was for largemouth bass. Largemouth bass made up 15% of the total estimated catch, and 95% of the estimated warm water gamefish catch. Smallmouth bass made up only 1% of the total estimated catch and 4% of the estimated warm water gamefish catch. Ninety-four percent of both the largemouth bass and smallmouth bass caught were released, with 52% of the largemouth bass and 58% of the smallmouth bass released being legal sized. The boat fishing catch rate of largemouth bass of 0.82 per angler hour is equal to the daytime boat fishing catch rate observed on Sodus Bay in 2008 (0.83 largemouth bass per angler hour) and greatly exceeds the daytime boat fishing catch rate observed on Irondequoit Bay in 2006 (0.22 largemouth bass per angler hour, Table 21). Fishing quality for anglers targeting bass on Port Bay in 2012 was excellent, as the largemouth bass directed catch rate of 1.14 per angler hour is greater than the targeted catch rate in Sodus Bay in 2008 and Irondequoit Bay in 2007 (1.09 and 0.80 largemouth bass per hour, respectively, Table 22). Largemouth bass were very abundant in Port Bay, as Sanderson (in preparation) caught largemouth bass at a rate of 191 per hour during a September 2012 nighttime electrofishing survey.

East Bay

In 2012-2013, the recreational fishery on East Bay, like Port Bay, was also dominated by anglers seeking any species of fish, and catching panfish, particularly pumpkinseed and bluegill sunfish, from boat fishing. Seventy one percent of the total estimated catch and 92% of the estimated harvest was pumpkinseed and bluegill sunfish. Yellow perch and black crappie were the next most caught species. Unlike other Lake Ontario bays, perch was not the primary target of ice fishermen on East Bay. It is likely that most of the yellow perch caught were not quality sized, as only 16% of the perch caught were creel. The overall panfish estimated catch rate of 6.58 fish per hour (6.5 open water, 8.06 ice) and the overall directed effort catch rate for panfish of 5.18 fish per hour were higher than that of Sodus (4.85 overall, 4.16 open water, 5.78 ice, 3.51 directed effort) and Irondequoit (3.79 overall, 2.68 open water, 5.32 ice, 3.28 directed effort) Bays (Sanderson 2010, 2009). The overall yellow perch estimated catch rate of 0.55 fish per hour (0.46 open water, 2.03 ice) was substantially less than that of Sodus and Irondequoit Bays (Tables 21 and 22).

The most prevalent boat fishing on East Bay from June through September was for largemouth bass. Largemouth bass made up 15% of the total estimated catch, and 91% of the estimated warm water gamefish catch. Ninety seven percent of the largemouths caught were released, but only 37% of the largemouth bass released were legal sized. The boat fishing catch rate of 1.07 largemouth bass per angler hour was slightly higher than the daytime boat fishing catch rate observed on Sodus Bay in 2008 (0.83 largemouth bass per angler hour) and greatly exceeds the daytime boat fishing catch rate observed on Irondequoit Bay in 2006 (0.22 largemouth bass per angler hour, Table 21). Fishing quality for anglers targeting bass on East Bay in 2012 was very good, as the largemouth bass directed catch rate of 0.75 per angler hour was less than the targeted catch rate in Sodus Bay in 2008 and similar to Irondequoit Bay in 2007

(1.09 and 0.80 largemouth bass per hour, respectively, Table 22). Northern pike was the only other gamefish caught on East Bay. Although ice fishermen were targeting northern pike, more bass (0.88 per angler hour) than pike were caught through the ice. The overall catch rate was a very impressive 0.11 northern pike per angler hour (0.15 open water boat, 0.27 ice). Northern pike were caught at an overall rate of 0.02 fish per hour on Sodus Bay in 2009 and at an overall rate of 0.01 fish per hour on Irondequoit Bay in 2007 (Sanderson 2010, 2009). However, anglers catching northerns were not interested in taking fish for the table, as 91% of the northern caught were released and 96% of the released fish were of legal size.

Blind Sodus Bay

In 2012-2013, the recreational fishery on Blind Sodus Bay, like the other two bays, was also dominated by anglers seeking any species of fish, and catching panfish, particularly pumpkinseed and bluegill sunfish from boat fishing. Thirty-seven percent of the total estimated catch and 14% of the estimated harvest was pumpkinseed and bluegill sunfish. Yellow perch and black crappie were the next most caught species, and black crappie was the most harvested species. Fifty seven percent of the black crappies caught were released and 49% of the released fish were legal sized. The overall panfish estimated catch rate of 1.08 fish per hour and the overall directed effort catch rate for panfish of 2.84 fish per hour were the lowest of the Lake Ontario bays surveyed. The overall yellow perch estimated catch rate of 0.28 fish per hour and the directed effort catch rate of 1.47 yellow perch per hour were substantially less than that of the Lake Ontario Bays (Tables 21 and 22). Panfish were found to be highly abundant in Blind Sodus bay during a September 1996 nighttime electrofishing survey. Bluegill sunfish, pumpkinseed sunfish, and yellow perch were caught a rates of 340, 266, and 351 per hour, respectively (Lane 1998).

Largemouth bass made up 23% of the total estimated catch, and 85% of the estimated warm water gamefish catch in Blind Sodus Bay. Ninety two percent of the largemouths caught were released, and 87% of the largemouth bass released were legal sized. The boat fishing catch rate of 0.39 largemouth bass per angler hour was substantially lower than other Lake Ontario bays, except that it is slightly higher than the daytime boat fishing catch rate observed on Irondequoit Bay in 2006 (0.22 largemouth bass per angler hour, Table 21). Fishing quality for anglers targeting bass on Blind Sodus Bay in 2012 was good, but the largemouth bass directed catch rate of 0.37 per angler hour is less than the targeted catch rate in the other Lake Ontario bays (Table 22). Lane (1998) characterized largemouth bass as medium density because he caught 65 largemouth bass per hour during a September 1996 nighttime electrofishing survey. The overall catch rate of northern pike was 0.04 northern pike per angler hour and 0.21 per angler hour for anglers targeting pike. Northern pike were caught at an overall rate of 0.02 fish per hour on Sodus Bay in 2009 and at an overall rate of 0.01 fish per hour on Irondequoit Bay in 2007 (Sanderson 2010, 2009). Fishing quality for legal sized fish was poor, however, as 94% of the pike caught were released and only 29% of the released pike were legal sized.

Port, East, and Blind Sodus Bays provide excellent year-round panfish and bass and good northern pike fishing opportunities for those anglers who prefer to fish smaller, less heavily fished water bodies in Wayne County. Largemouth bass was the favorite open water gamefish target in the bays, consistent with respondents to the most recent statewide angler survey which found that a third of surveyed anglers indicated that black bass were their favorite species (Connelly and Brown 2009). In recent surveys of Irondequoit and Sodus Bays, Sanderson (2009, 2010) found that black bass were also the most targeted gamefish species during the open water season. The directed effort catch rates for largemouth bass of the bays greatly exceeded the directed effort catch rates of all size largemouth bass from selected waters in New York State

(0.24 bass per hour, Green et al. 1986). The high release rate of bass, particularly legal sized bass, observed on these bays is consistent with the “catch and release” ideology practiced by most bass anglers today, particularly tournament anglers. Similarly high release rates of legal sized bass were observed on Sodus Bay in 2008 and Irondequoit Bay in 2006 (Sanderson 2010, 2009). No bass were harvested during the catch and release season from December through May. The vast majority of anglers fishing on Port, East, and Blind Sodus Bays were complying with the bass regulation that became effective on October 1, 2006. The Port and Blind Sodus Bay walleye catch rates were well below the statewide objective of 0.2 walleye/hr (Festa et al. 1987). Additionally, Festa et al. (1987) suggested New York waters with catch rates >0.25 fish/hr indicated high walleye abundance while catch rates of 0.01 fish/hr suggested low abundance. Based on these measures, it appears that when compared to other New York waters, walleye in Port and Blind Sodus Bays may be difficult to catch, not highly targeted, or abundance is low, despite modest walleye catch per unit of effort from assessment surveys.

RECOMMENDATIONS

1. Continue existing fishing regulations for species, seasons, size and creel limits, and fishing methods.
2. Continue biannual stocking of 10,400 and 5,600 walleye fingerlings in Port and Blind Sodus Bays, respectively, in accordance with the current statewide walleye management plan (the current management objective for Port and Blind Sodus Bays is to restore walleye as a major fishery (Woltmann 2003)) and Lake Ontario nearshore fish community objectives (Stewart et al. 1999), until it is determined that either natural reproduction can sustain the populations, or that fingerling survival is poor.
3. Conduct a warm water fish community assessment on Blind Sodus Bay in September of 2015 using standard gang gill nets and nighttime boat electrofishing to determine the success of the 2003, 2011, and 2013 year classes of stocked fingerling walleye. If very few or no walleye are sampled, discontinue stocking fingerling walleye in 2016 and transfer the 5,600 fingerlings to Port Bay.
4. Begin a cooperating angler diary program on the bays to monitor annual trends in effort, catch, harvest, overall catch and harvest rates, directed effort catch and harvest rates, and size quality of selected species, as regional program plans allow.
5. Prepare written (i.e., press release, *Conservationist* article, etc.) and web site materials using information from the results of this survey, and the 2012 Port Bay and 2015 Blind Sodus Bay fish stock assessment surveys, to generate more interest in the northern pike fishery of the bays and the Port Bay walleye fishery.
6. Acquire and develop a Fishing Access Site on Blind Sodus Bay if a suitable parcel and funding becomes available.
7. Conduct another creel survey in 10 years to track long term changes in the fishery due to walleye fingerling stocking, catch and release bass fishing, cormorant predation, invasive species and diseases, and angler exploitation. A roving-access or access-access survey design (Pollock, et al 1994) should be conducted.

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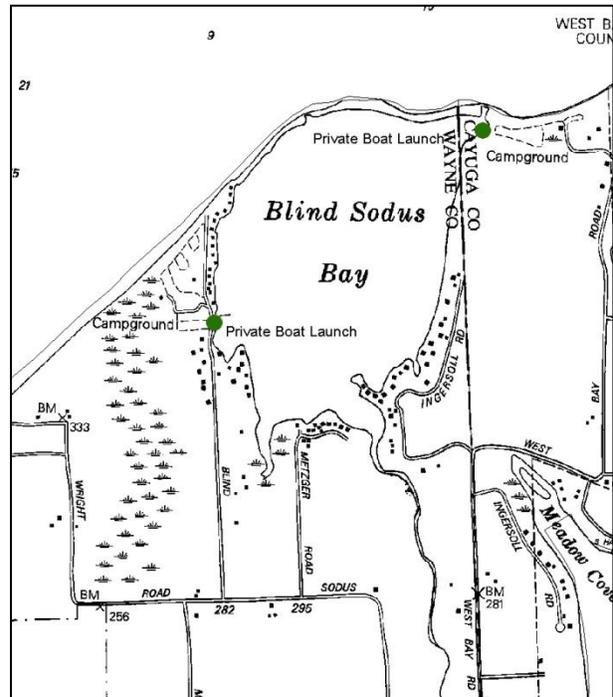
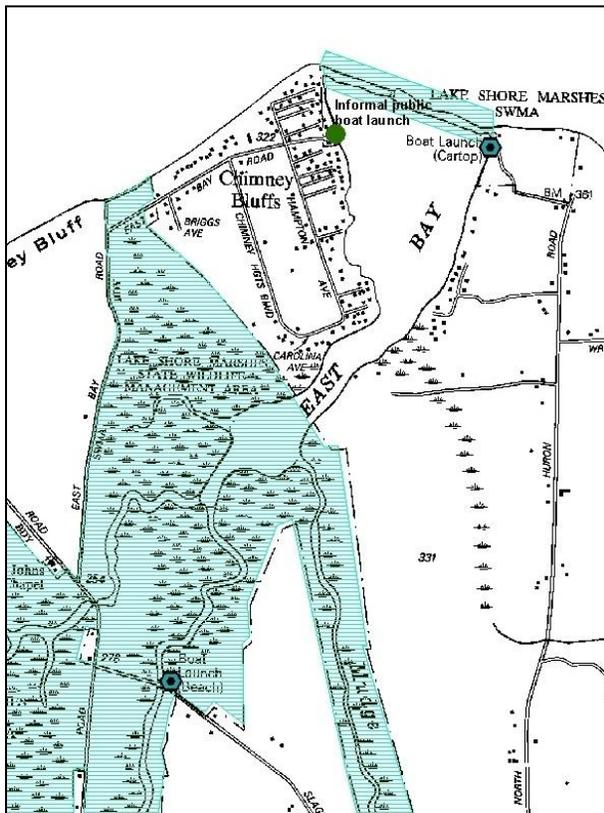
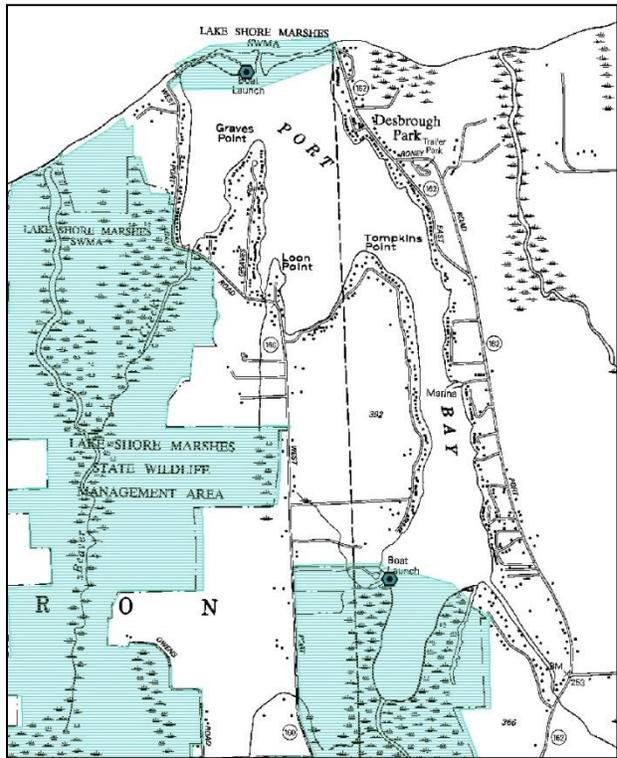
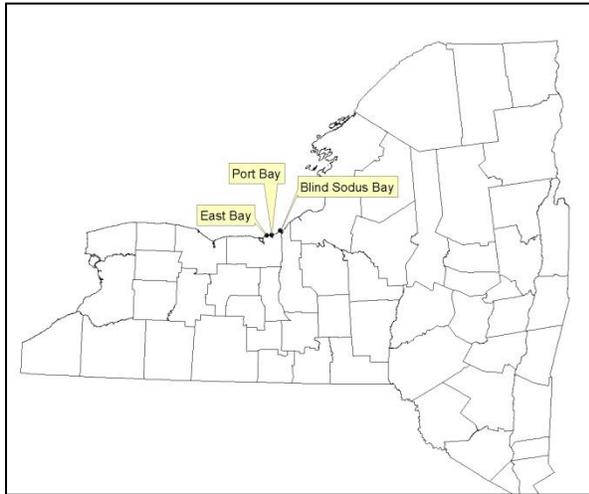


Figure 1. Location of Port, East, and Blind Sodus Bays, showing access sites. Shaded area indicates Lake Shore Marshes Wildlife Management Area which provides public fishing access.

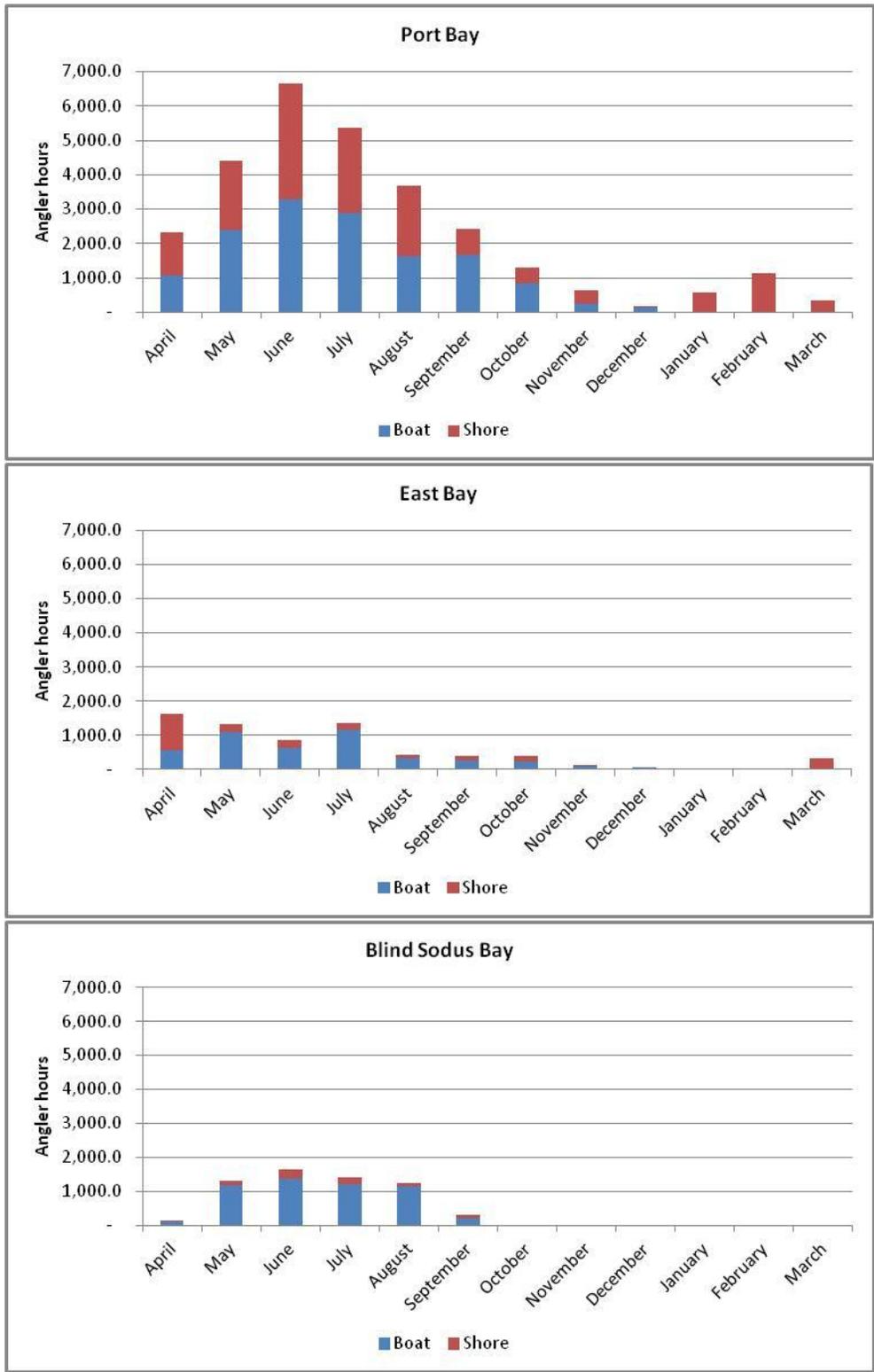


Figure 2. Estimated fishing effort (angler hours) on Port, East, and Blind Sodus Bays from April 1, 2012 to March 31, 2013.

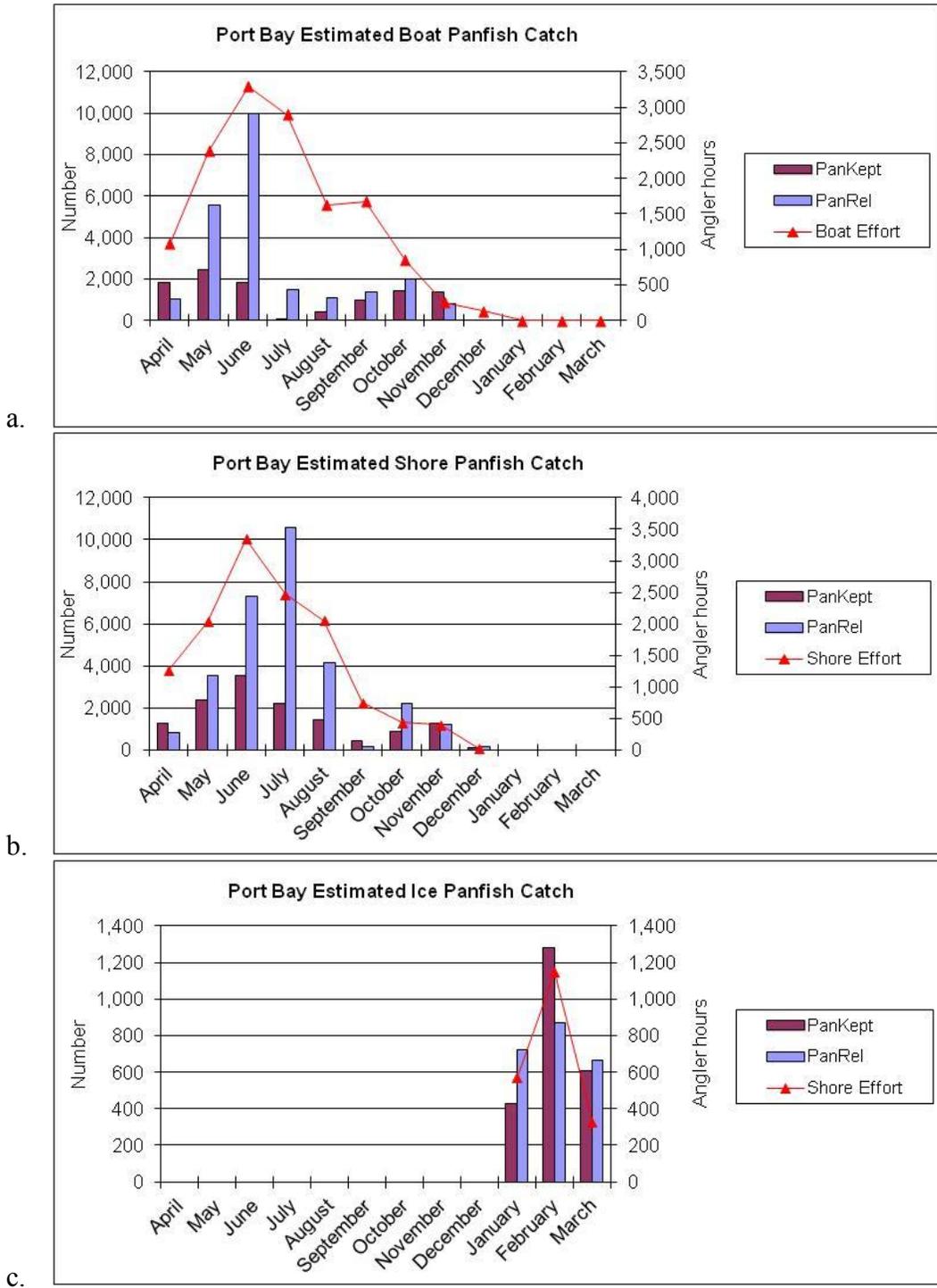


Figure 3. Estimated number of panfish harvested and released on Port Bay from 4/1/2012 to 3/31/2013. Note different y axis scale in c.

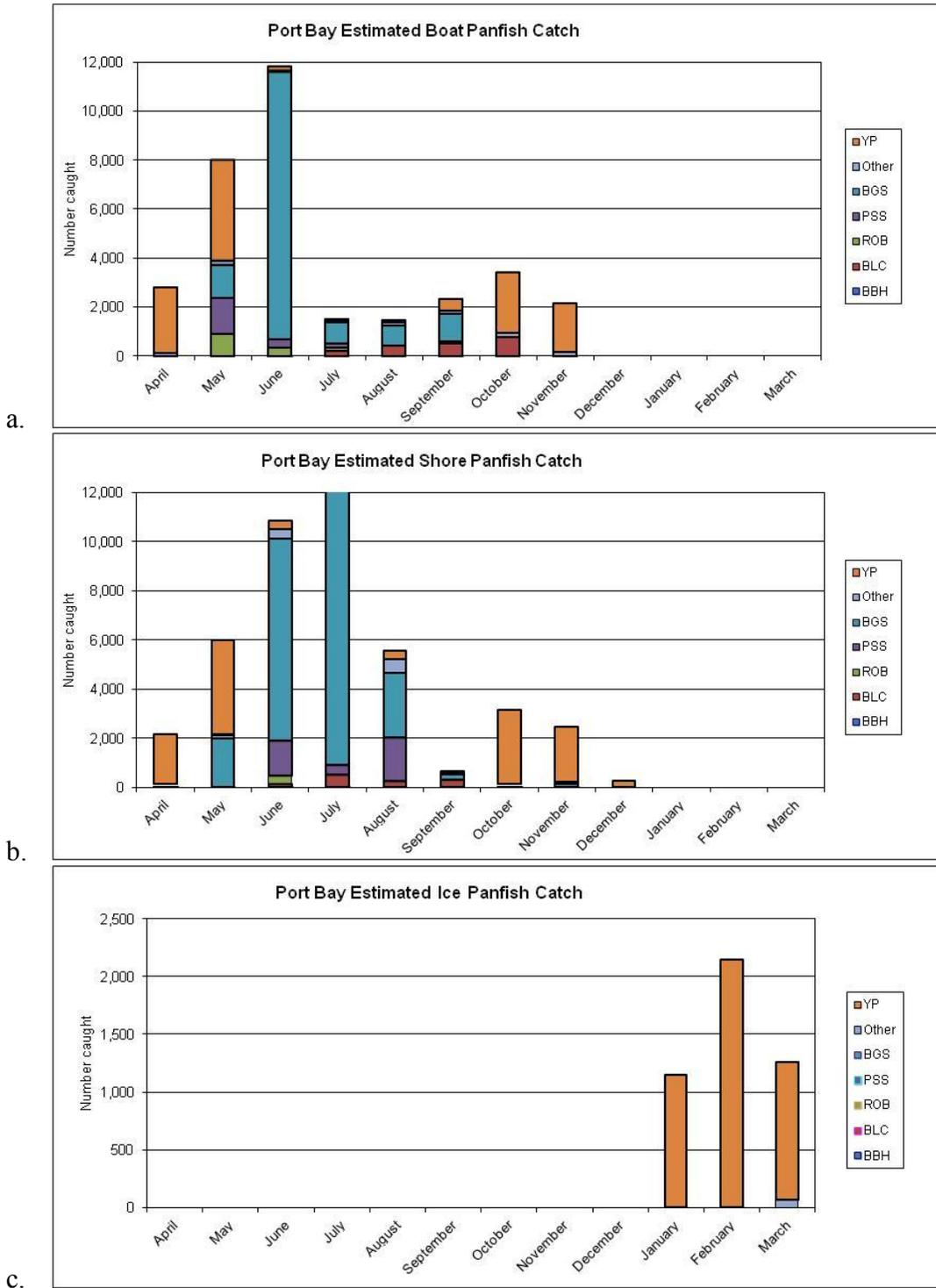


Figure 4. Estimated panfish catch on Port Bay from 4/1/2012 to 3/31/2013. Note different y axis scale in c. YP= yellow perch, BGS=bluegill sunfish, PSS=pumpkinseed sunfish, ROB=rock bass, BLC=black crappie, and BBH=brown bullhead.

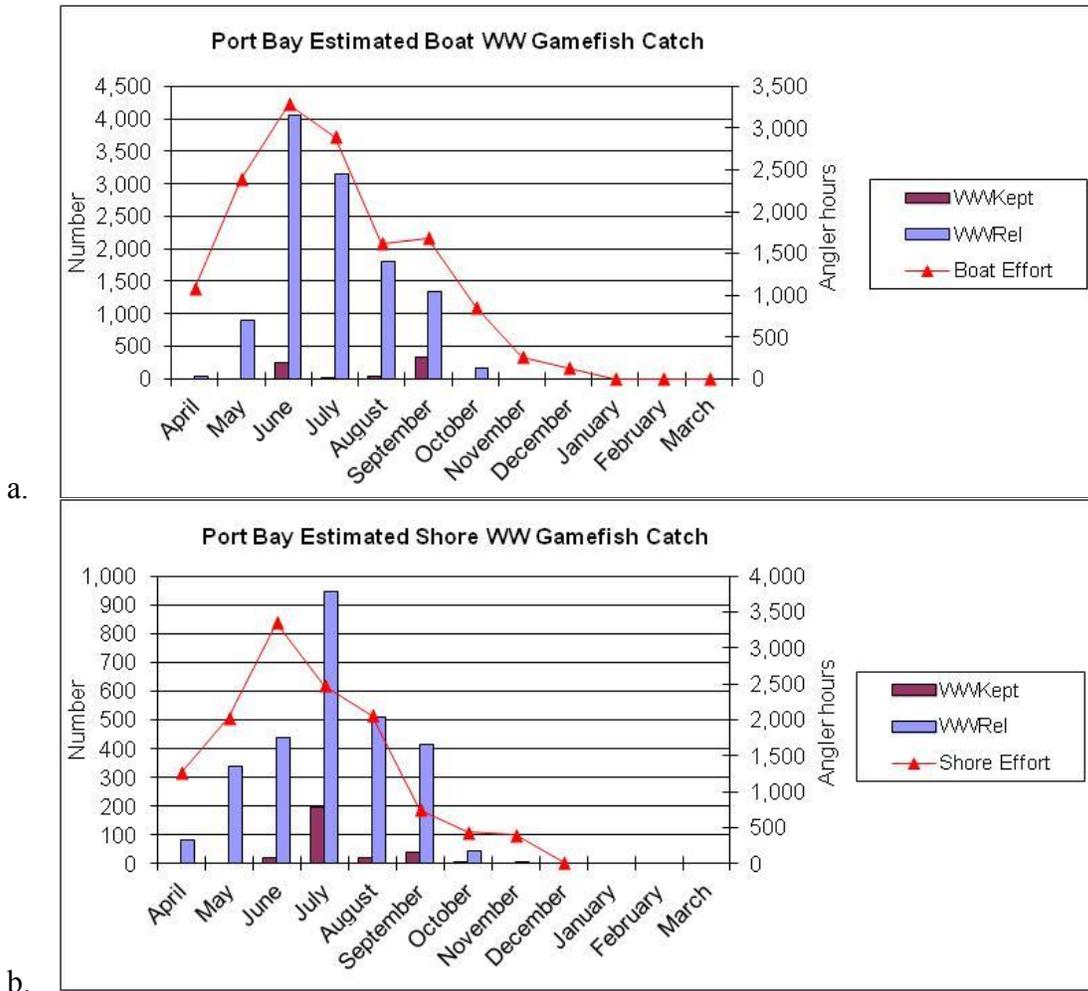
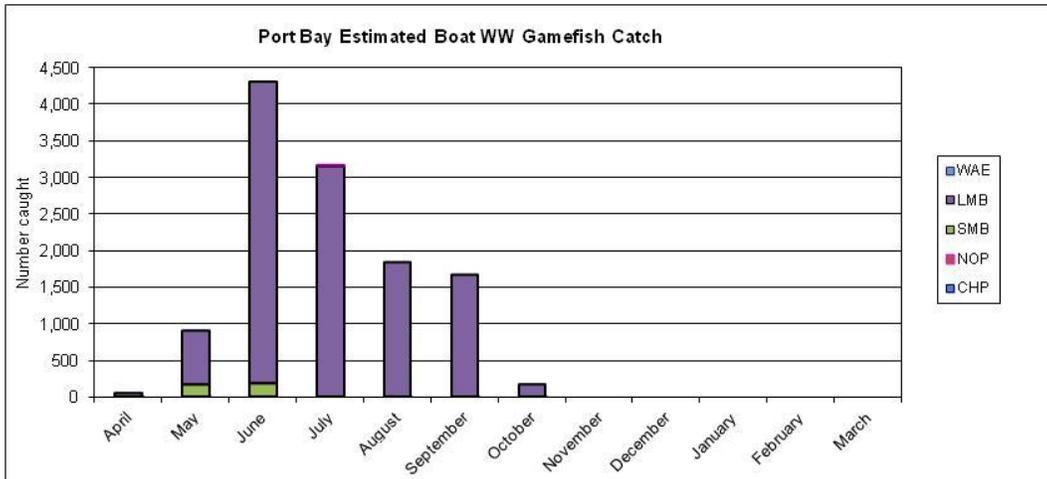
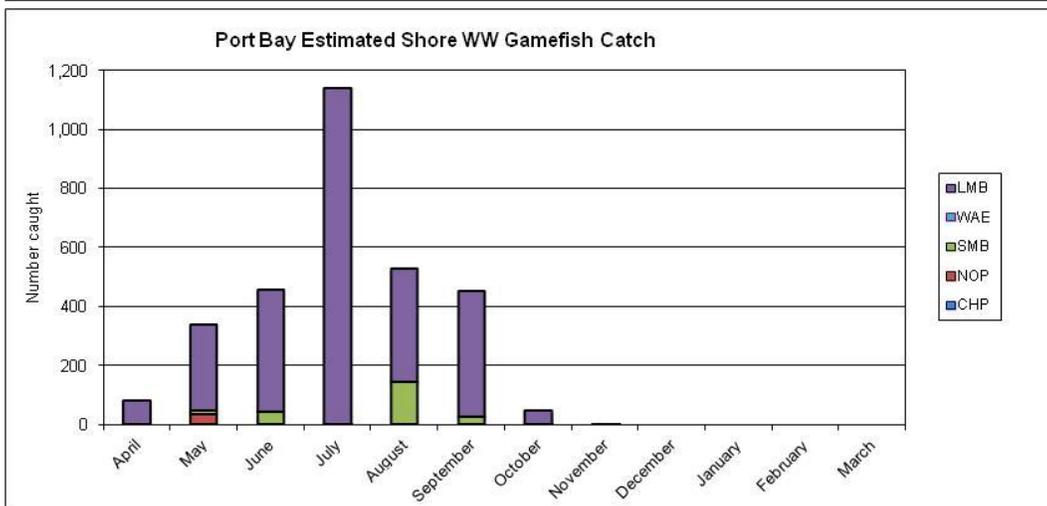


Figure 5. Estimated number of gamefish harvested and released on Port Bay from 4/1/2012 to 3/31/2013. No gamefish were caught through the ice. Note y axis scale difference.



a.



b.

Figure 6. Estimated gamefish catch on Port Bay from 4/1/2012 to 3/31/2013. No gamefish were caught through the ice. Note y axis scale difference. LMB=largemouth bass, WAE=walleye, SMB=smallmouth bass, NOP= northern pike, CHP=chain pickerel.

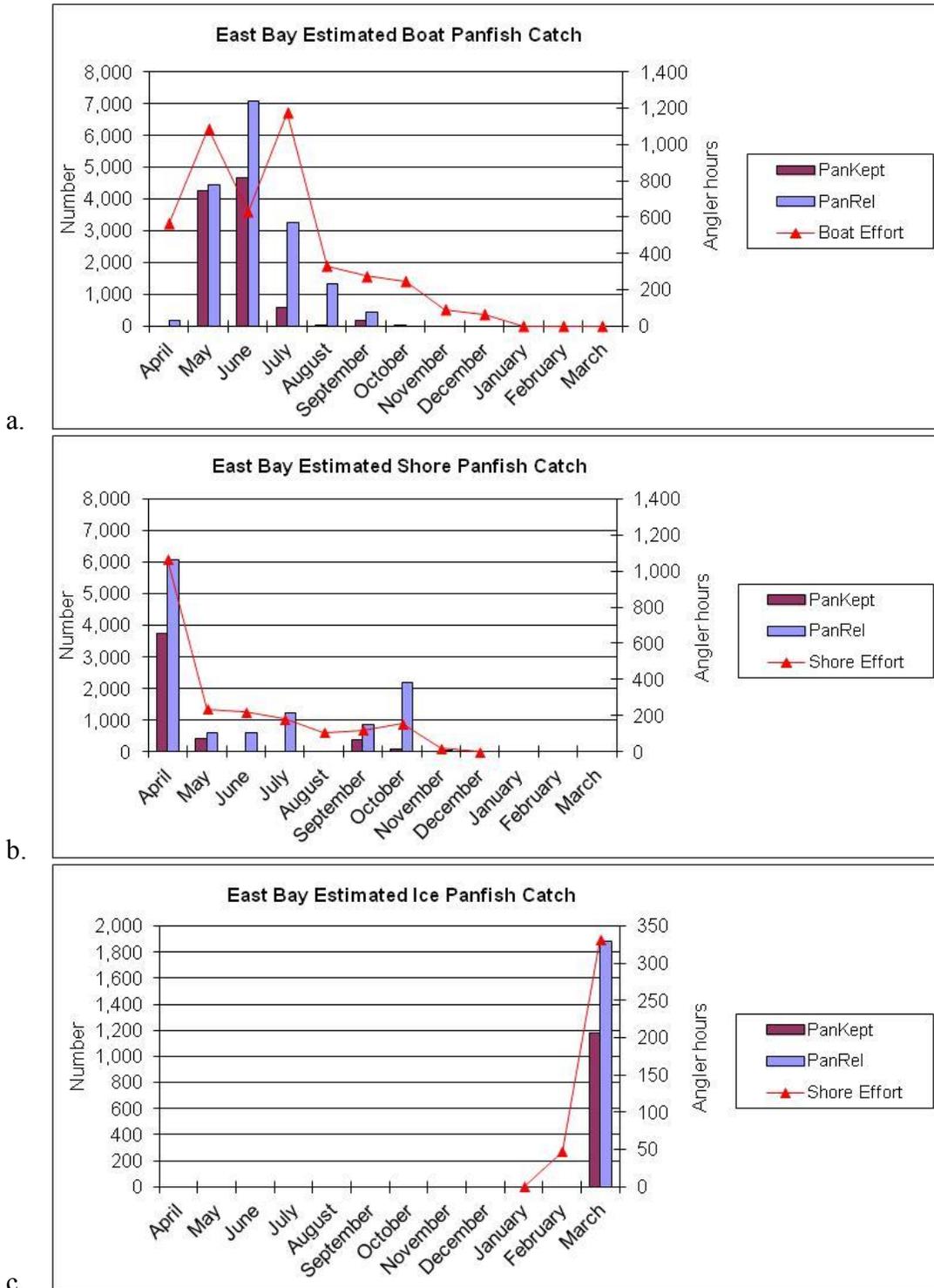
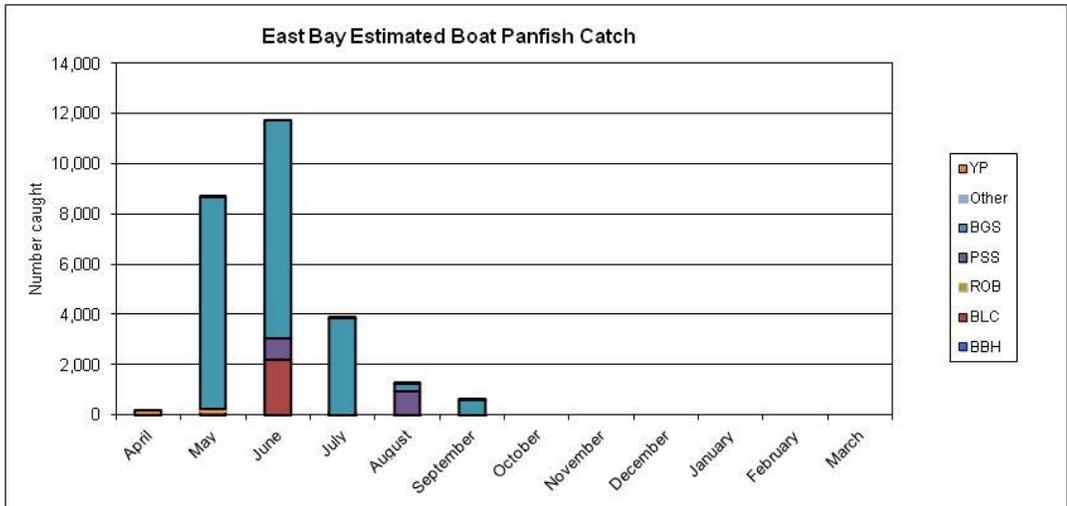
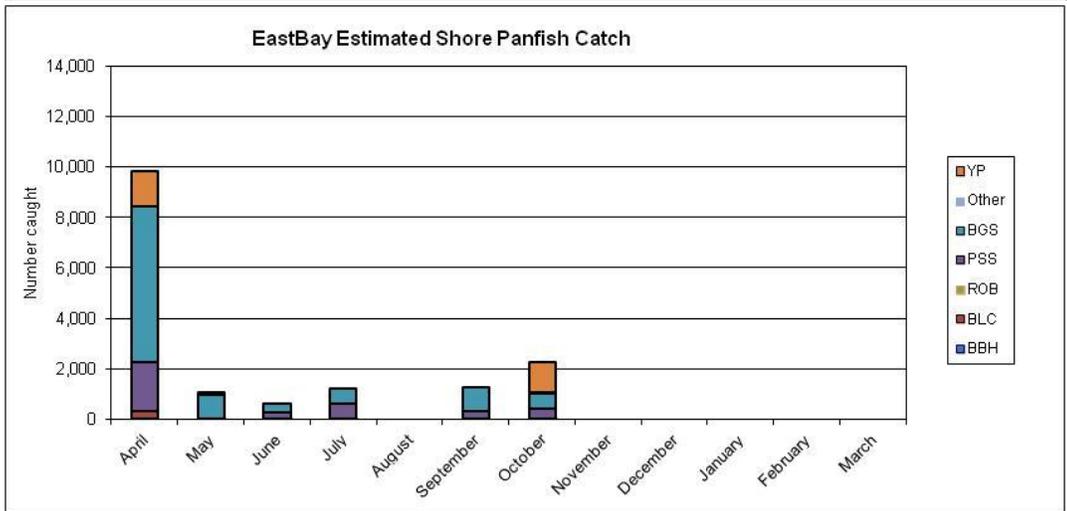


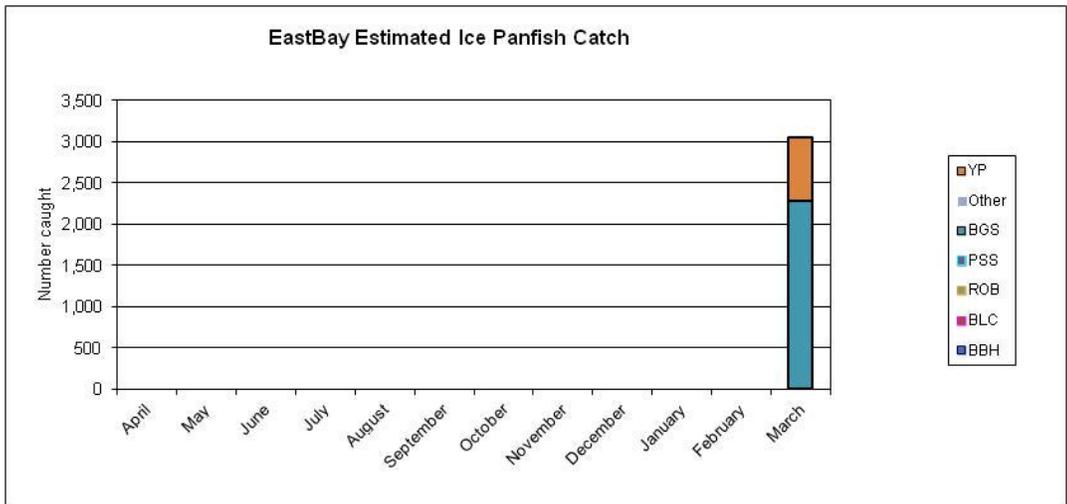
Figure 7. Estimated number of panfish harvested and released on East Bay from 4/1/2012 to 3/31/2013. Note different y axis scale in c.



a.



b.



c.

Figure 8. Estimated panfish catch on East Bay from 4/1/2012 to 3/31/2013. Note different y axis scale in c. YP= yellow perch, BGS=bluegill sunfish, PSS=pumpkinseed sunfish, ROB=rock bass, BLC=black crappie, and BBH=brown bullhead.

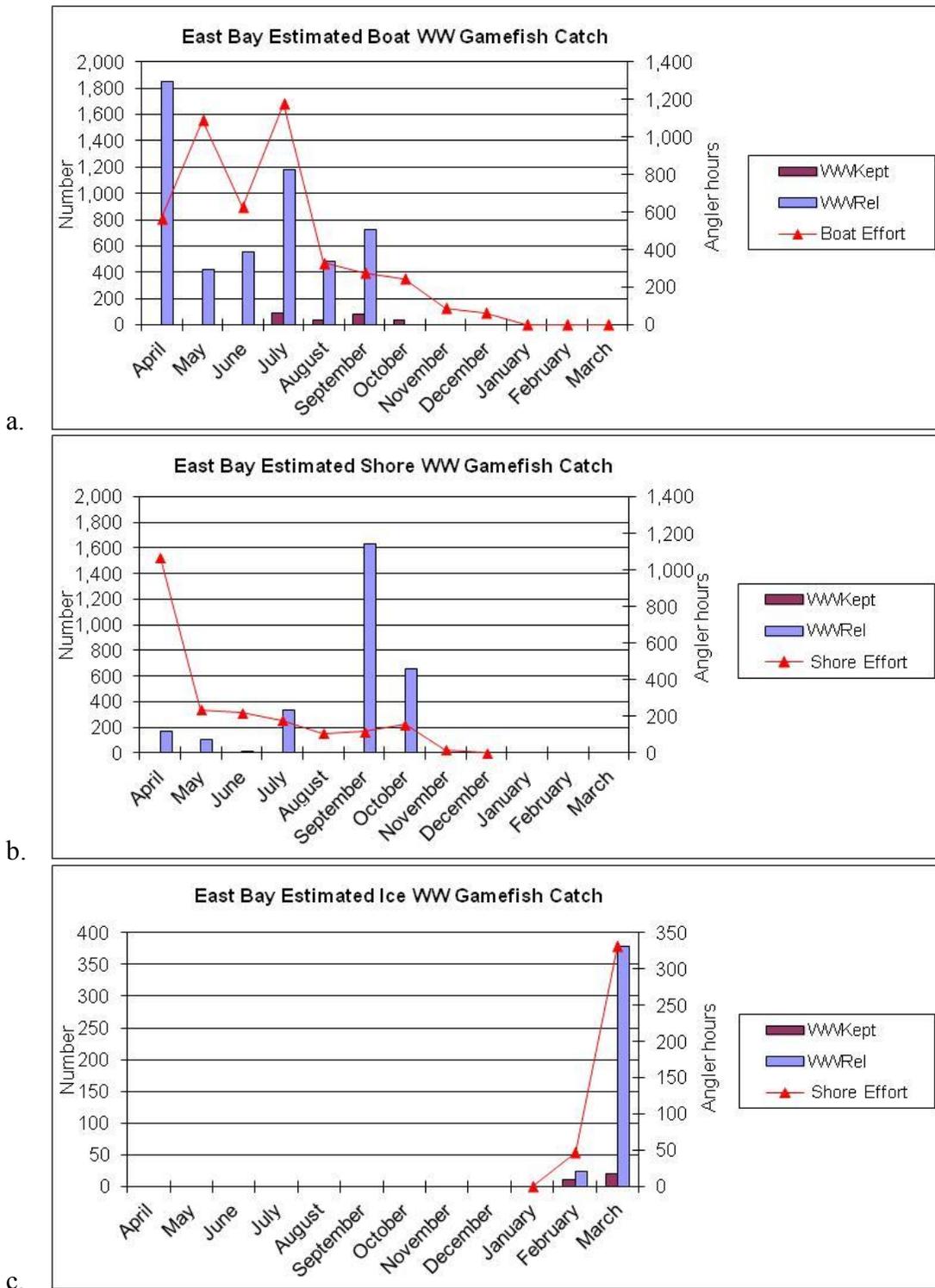
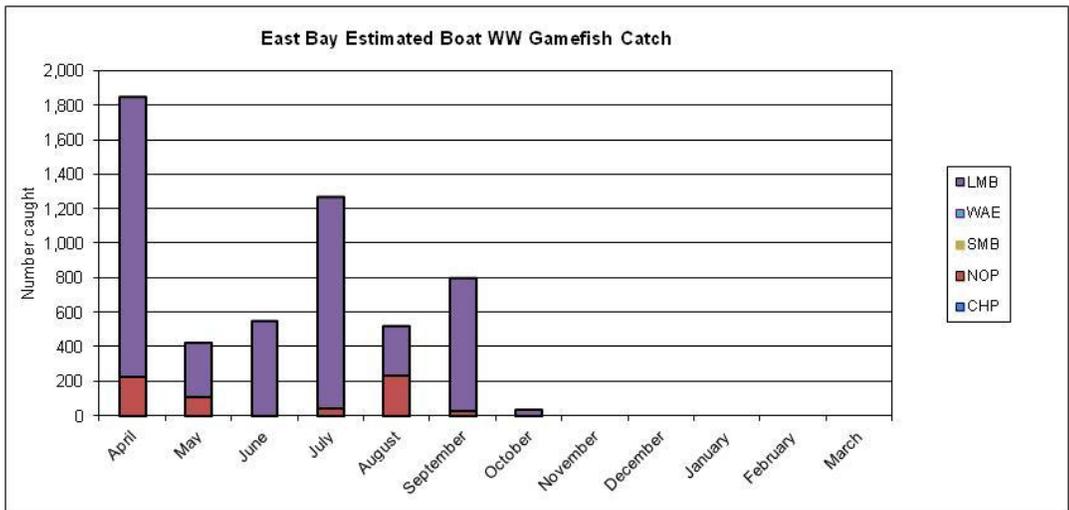
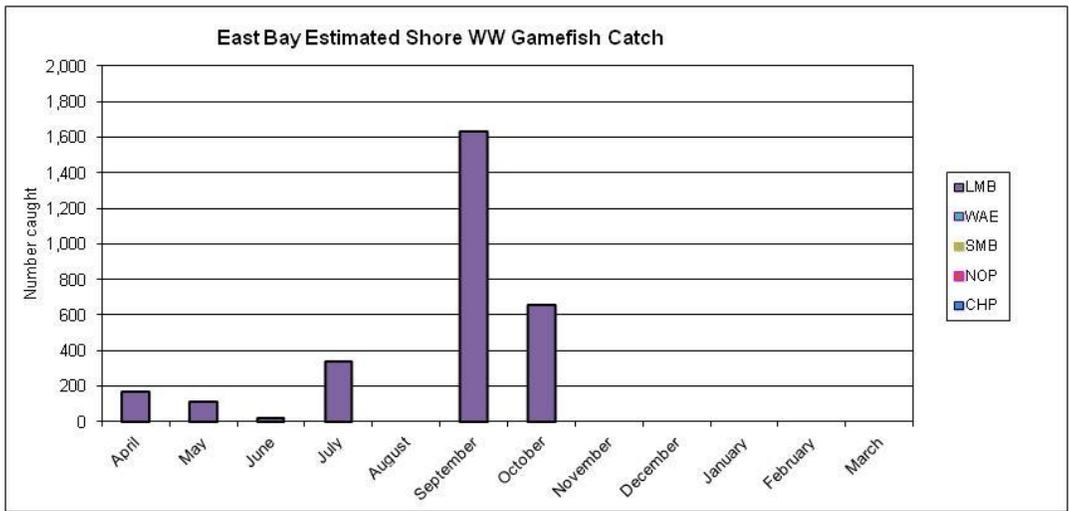


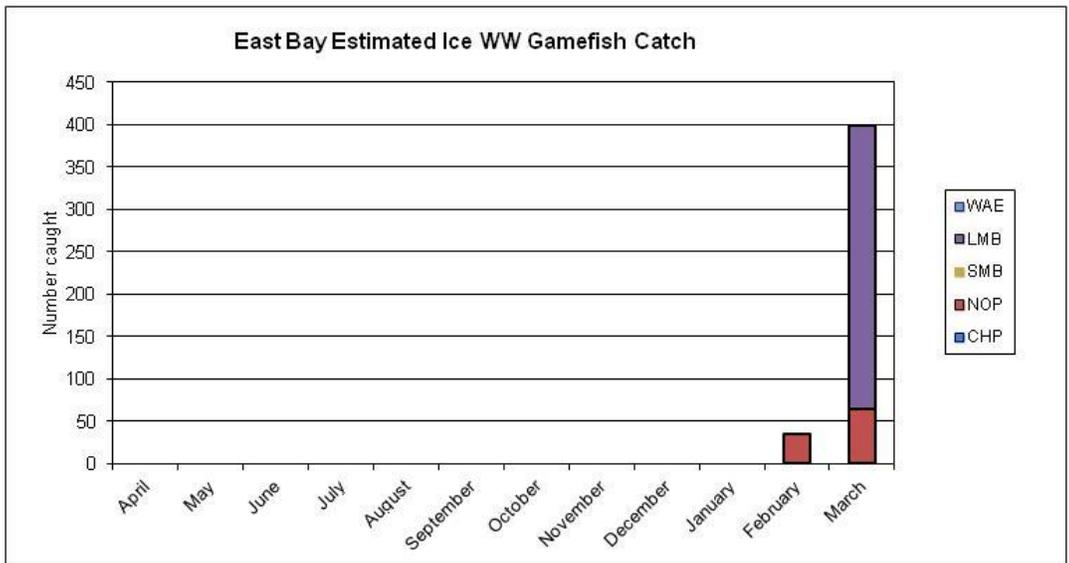
Figure 9. Estimated number of gamefish harvested and released on East Bay from 4/1/2012 to 3/31/2013. Note different y axis scale in c.



a.

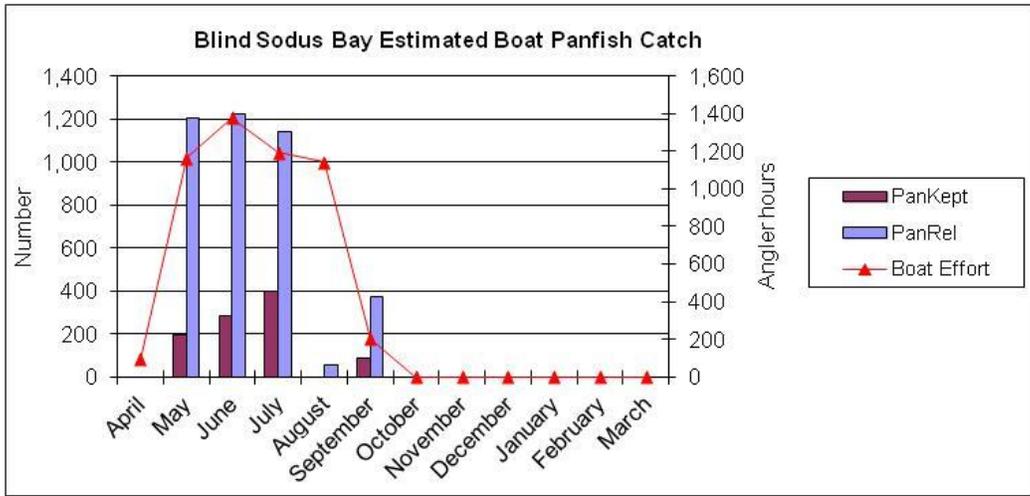


b.

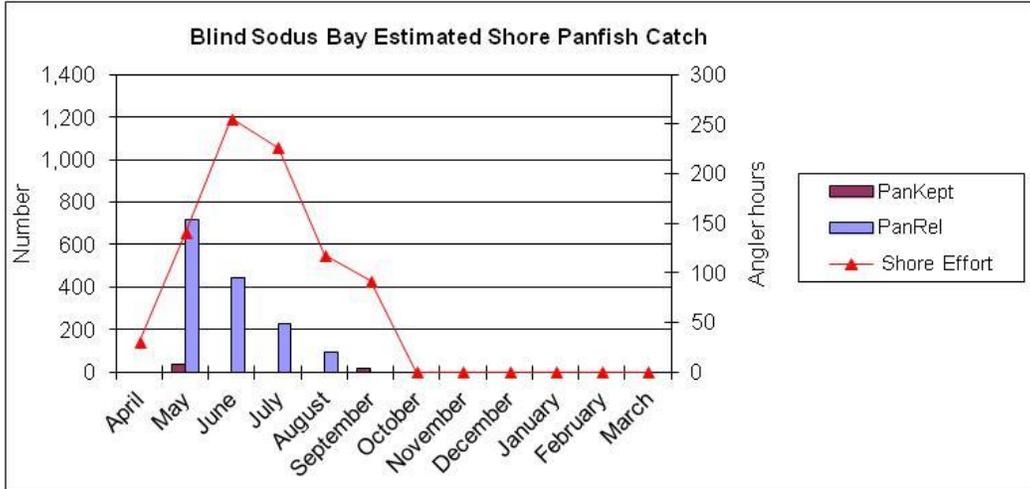


c.

Figure 10. Estimated gamefish catch on East Bay from 4/1/2012 to 3/31/2013. Note different y axis scale in c. WAE=walleye, LMB=largemouth bass, SMB=smallmouth bass, NOP= northern pike, CHP=chain pickerel.



a.



b.

Figure 11. Estimated number of panfish harvested and released on Blind Sodus Bay from 4/1/2012 to 3/31/2013. No ice fishing occurred on Blind Sodus Bay.

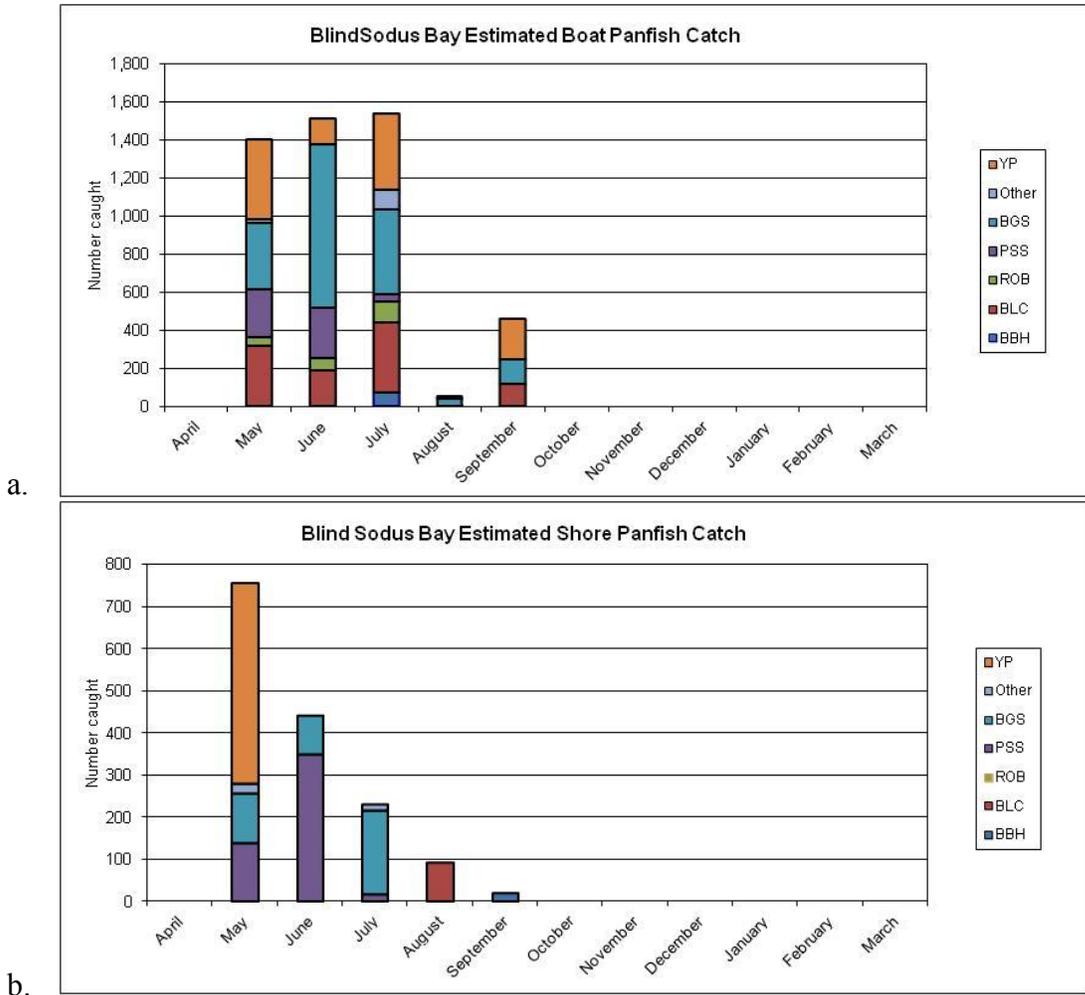
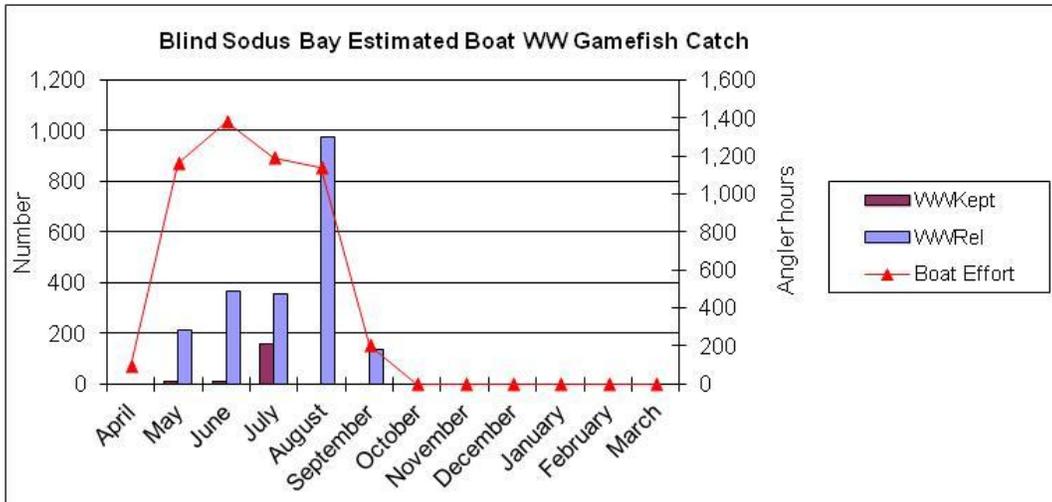
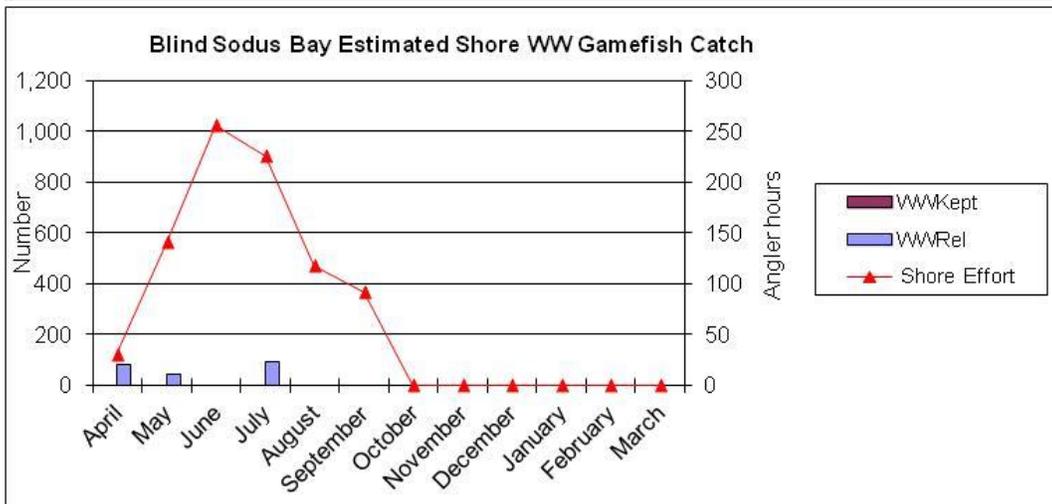


Figure 12. Estimated panfish catch on Blind Sodus Bay from 4/1/2012 to 3/31/2013. Note y axis scale difference. No ice fishing occurred on Blind Sodus Bay. YP= yellow perch, BGS=bluegill sunfish, PSS=pumpkinseed sunfish, ROB=rock bass, BLC=black crappie, and BBH=brown bullhead.

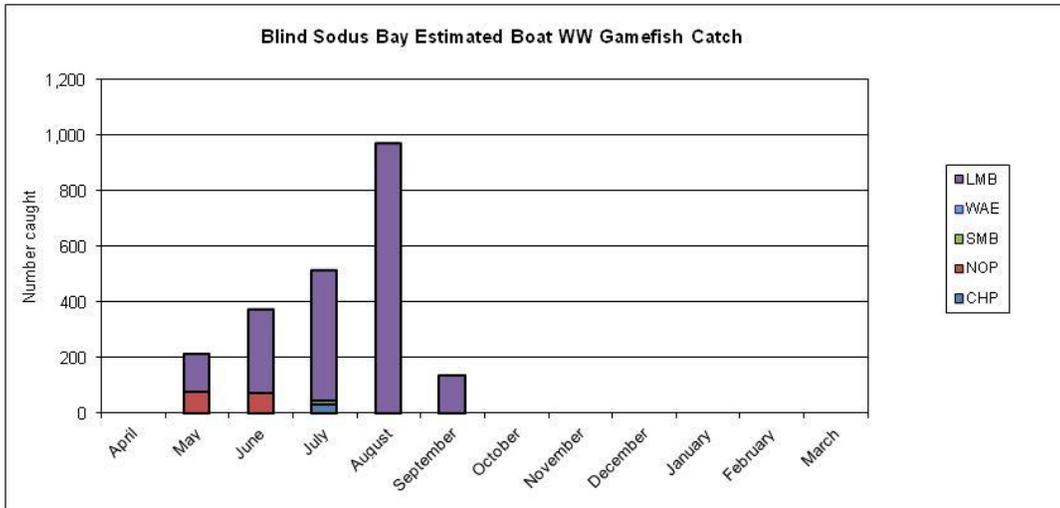


a.

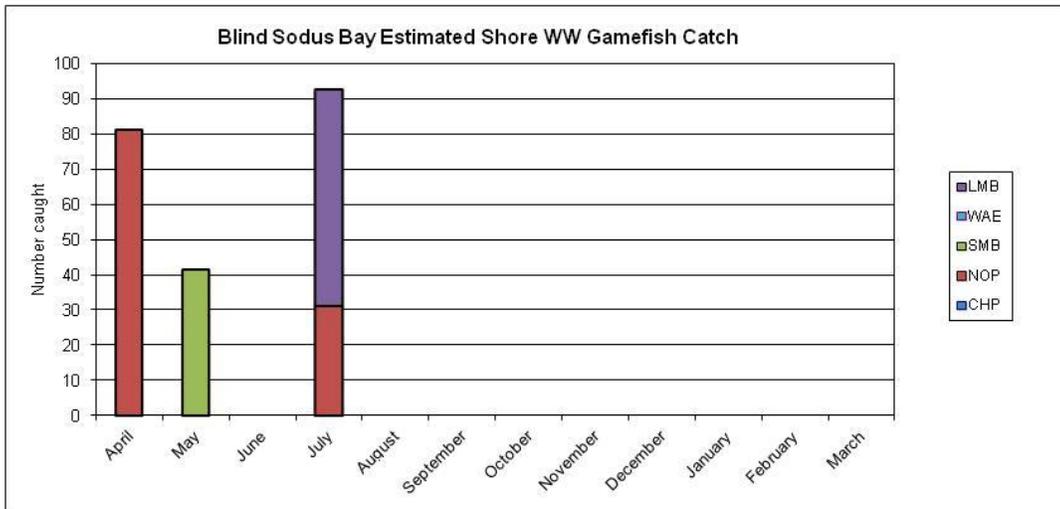


b.

Figure 13. Estimated number of gamefish harvested and released on Blind Sodus Bay from 4/1/2012 to 3/31/2013. No ice fishing occurred on Blind Sodus Bay.



a.



b.

Figure 14. Estimated gamefish catch on Blind Sodus Bay from 4/1/2012 to 3/31/2013. Note y axis scale difference. No ice fishing occurred on Blind Sodus Bay. LMB=largemouth bass, WAE=walleye, SMB=smallmouth bass, NOP= northern pike, CHP=chain pickerel.

Table 1. Sampling periods from Port, East, and Blind Sodus Bays from April 2, 2012 to March 29, 2013.

Day type	Period	Count	Percent	
			Total	Site
Port Bay				
WD	AM	15	6.5%	15.5%
WD	PM	14	6.0%	14.4%
WD	D	21	9.1%	21.6%
		50	21.6%	51.5%
WE	AM	14	6.0%	14.4%
WE	PM	12	5.2%	12.4%
WE	D	21	9.1%	21.6%
		47	20.3%	48.5%
East Bay				
WD	AM	13	5.6%	16.7%
WD	PM	14	6.0%	17.9%
WD	D	13	5.6%	16.7%
		40	17.2%	51.3%
WE	AM	9	3.9%	11.5%
WE	PM	10	4.3%	12.8%
WE	D	19	8.2%	24.4%
		38	16.4%	48.7%
Blind Sodus Bay				
WD	AM	13	5.6%	22.8%
WD	PM	14	6.0%	24.6%
WD	D	8	3.4%	14.0%
		35	15.1%	61.4%
WE	AM	10	4.3%	17.5%
WE	PM	9	3.9%	15.8%
WE	D	3	1.3%	5.3%
		22	9.5%	38.6%
Total				
		232	100.0%	

Table 2. Summary of Port, East and Blind Sodus Bay interviews from April 2, 2012 to March 29, 2013.

	Boat	Shore	Ice	Total
Port Bay				
Interviews	256	241	50	547
Anglers Interviewed	477	430	92	999
Angler Hours	1,560.2	963.0	343.3	2,866.5
Avg Party size	1.9	1.8	1.8	1.8
Avg Trip Length*	4.2	2.5	3.8	3.7
East Bay				
Interviews	59	56	7	122
Anglers Interviewed	113	112	13	238
Angler Hours	292.5	54.8	193.3	540.6
Avg Party size	1.9	2.0	1.9	2.0
Avg Trip Length*	2.7	1.7	4.2	2.5
Blind Sodus Bay				
Interviews	87	20	0	107
Anglers Interviewed	184	32	0	216
Angler Hours	379.9	41.1	0.0	421.0
Avg Party size	2.1	1.6	0.0	2.0
Avg Trip Length*	2.1	1.3	0.0	2.0
Total				
Interviews	402	317	57	776
Anglers Interviewed	774	574	105	1,453
Angler Hours	2,232.6	1,058.8	536.5	3,828.0
Avg Party size	1.9	1.8	1.8	1.9
Avg Trip Length*	3.4	2.1	3.8	3.2

* From complete trip interviews

Table 3. Interview type and location, and trip origin, of Port, East and Blind Sodus Bay interviews from April 2, 2012 to March 29, 2013.

C/I	Location	Count	Percent	
			Total	Site
Port Bay				
C	Boat	131	16.9%	23.9%
C	Ice	40	5.2%	7.3%
C	Shore	59	7.6%	10.8%
		230	29.6%	42.0%
I	Boat	125	16.1%	22.9%
I	Ice	10	1.3%	1.8%
I	Shore	182	23.5%	33.3%
		317	40.9%	58.0%
East Bay				
C	Boat	42	5.4%	34.4%
C	Ice	6	0.8%	4.9%
C	Shore	21	2.7%	17.2%
		69	8.9%	56.6%
I	Boat	17	2.2%	13.9%
I	Ice	1	0.1%	0.8%
I	Shore	35	4.5%	28.7%
		53	6.8%	43.4%
Blind Sodus Bay				
C	Boat	49	6.3%	45.8%
C	Shore	10	1.3%	9.3%
		59	7.6%	55.1%
I	Boat	38	4.9%	35.5%
I	Shore	10	1.3%	9.3%
		48	6.2%	44.9%
		776	100.0%	

Location	Origin	Count	Percent	
			Total	Site
Port Bay				
Boat	Public	184	23.7%	71.9%
Boat	Private	68	8.8%	26.6%
Boat	Marina	4	0.5%	1.6%
		256	33.0%	100.0%
Ice	Public	24	3.1%	48.0%
Ice	Private	26	3.4%	52.0%
		50	6.4%	100.0%
Shore	Private	10	1.3%	4.1%
Shore	Public	231	29.8%	95.9%
		241	31.1%	100.0%
East Bay				
Boat	Public	38	4.9%	64.4%
Boat	Marina	1	0.1%	1.7%
Boat	Private	20	2.6%	33.9%
		59	7.6%	100.0%
Ice	Public	3	0.4%	42.9%
Ice	Private	4	0.5%	57.1%
		7	0.9%	100.0%
Shore	Private	4	0.5%	7.1%
Shore	Public	52	6.7%	92.9%
		56	7.2%	100.0%
Blind Sodus Bay				
Boat	Marina	39	5.0%	44.8%
Boat	Public	7	0.9%	8.0%
Boat	Private	41	5.3%	47.1%
		87	11.2%	100.0%
Shore	Public	4	0.5%	20.0%
Shore	Private	11	1.4%	55.0%
Shore	Marina	5	0.6%	25.0%
		20	2.6%	100.0%
		776	100.0%	

Table 4. Angler target and fishing method of Port, East, and Blind Sodus Bay interviews from April 2, 2012 to March 29, 2013.

Target	Count	Percent	
		Total	Site
Port Bay			
Anything	185	23.8%	33.8%
Bass	151	19.5%	27.6%
Bullhead	1	0.1%	0.2%
Gamefish	1	0.1%	0.2%
Panfish	60	7.7%	11.0%
Perch	127	16.4%	23.2%
Pike	10	1.3%	1.8%
Salmonids	12	1.5%	2.2%
	547	70.5%	100.0%
East Bay			
Anything	45	5.8%	36.9%
Bass	34	4.4%	27.9%
Bullhead	3	0.4%	2.5%
Panfish	21	2.7%	17.2%
Perch	3	0.4%	2.5%
Pike	13	1.7%	10.7%
Salmonids	3	0.4%	2.5%
	122	15.7%	100.0%
Blind Sodus Bay			
Anything	47	6.1%	43.9%
Bass	36	4.6%	33.6%
Panfish	12	1.5%	11.2%
Perch	4	0.5%	3.7%
Pike	8	1.0%	7.5%
	107	13.8%	100.0%
	776	100.0%	
Method	Count	Percent	
		Total	Site
Port Bay			
Cast	187	24.1%	34.2%
Cast/Troll	6	0.8%	1.1%
Drift	1	0.1%	0.2%
Jig	53	6.8%	9.7%
Still	251	32.3%	45.9%
Still/Cast	40	5.2%	7.3%
Still/Troll	2	0.3%	0.4%
Tipup	1	0.1%	0.2%
Troll	6	0.8%	1.1%
	547	70.5%	100.0%
East Bay			
Cast	50	6.4%	41.0%
Jig	3	0.4%	2.5%
Still	45	5.8%	36.9%
Still/Cast	17	2.2%	13.9%
Tipup	7	0.9%	5.7%
	122	15.7%	100.0%
Blind Sodus Bay			
Cast	46	5.9%	43.0%
Cast/Troll	5	0.6%	4.7%
Jig	6	0.8%	5.6%
Still	34	4.4%	31.8%
Still/Cast	15	1.9%	14.0%
Troll	1	0.1%	0.9%
	107	13.8%	100.0%
	776	100.0%	

Table 5. Angler residence of Port Bay interviews from April 2, 2012 to March 29, 2013.

Residence	Count	Percent	
		Total	Site
Port Bay			
Cayuga	18	2.3%	3.3%
Cortland	1	0.1%	0.2%
Herkimer	1	0.1%	0.2%
Jefferson	1	0.1%	0.2%
Livingston	1	0.1%	0.2%
Madison	1	0.1%	0.2%
Monroe	164	21.1%	30.0%
New Jersey	1	0.1%	0.2%
Onondaga	7	0.9%	1.3%
Ontario	13	1.7%	2.4%
Oswego	34	4.4%	6.2%
Pennsylvania	7	0.9%	1.3%
Seneca	6	0.8%	1.1%
Steuben	1	0.1%	0.2%
Sullivan	1	0.1%	0.2%
Tioga	1	0.1%	0.2%
Tompkins	4	0.5%	0.7%
Vermont	1	0.1%	0.2%
Warren	1	0.1%	0.2%
Wayne	282	36.3%	51.6%
Yates	1	0.1%	0.2%
21	547	70.5%	100.0%
East Bay			
Cayuga	2	0.3%	1.6%
Chemung	1	0.1%	0.8%
Erie	1	0.1%	0.8%
Livingston	1	0.1%	0.8%
Monroe	32	4.1%	26.2%
Onondaga	2	0.3%	1.6%
Ontario	2	0.3%	1.6%
Pennsylvania	1	0.1%	0.8%
Schuyler	2	0.3%	1.6%
Seneca	1	0.1%	0.8%
Wayne	77	9.9%	63.1%
11	122	15.7%	100.0%
Blind Sodus Bay			
Cayuga	2	0.3%	1.9%
Chemung	4	0.5%	3.7%
Erie	1	0.1%	0.9%
Monroe	37	4.8%	34.6%
New Jersey	1	0.1%	0.9%
Onondaga	13	1.7%	12.1%
Ontario	3	0.4%	2.8%
Orleans	1	0.1%	0.9%
Oswego	6	0.8%	5.6%
Pennsylvania	19	2.4%	17.8%
Wayne	20	2.6%	18.7%
11	107	13.8%	100.0%
	776	100.0%	

Table 6. Estimated fishing effort (angler hours) on Port, East, and Blind Sodus Bays from April 1, 2012 to March 31, 2013.

Month	Port Bay												Total	
	WD Day		WE Day		WD Day		WE Day		Method Total					
	Boat	SE	Boat	SE	Shore	SE	Shore	SE	Boat	SE	Shore	SE	Total	SE
April	472.5	94.5	607.5	70.1	708.8	81.8	546.8	160.7	1,080.0	117.7	1,255.5	180.4	2,335.5	215.4
May	1,116.5	305.4	1,272.4	62.5	1,395.6	696.4	636.2	67.3	2,388.9	311.7	2,031.8	699.6	4,420.7	765.9
June	1,106.7	431.8	2,185.5	536.3	1,790.3	381.7	1,557.8	374.2	3,292.2	688.5	3,348.0	534.5	6,640.2	871.6
July	1,470.0	210.0	1,425.0	579.3	1,365.0	410.0	1,106.3	215.1	2,895.0	616.2	2,471.3	463.1	5,366.3	770.8
August	1,395.3	230.2	224.0	171.1	1,288.0	281.9	765.3	383.0	1,619.3	286.8	2,053.3	475.6	3,672.7	555.4
September	771.9	354.6	907.5	303.1	89.1	29.7	660.0	222.4	1,679.4	466.5	749.1	224.3	2,428.4	517.6
October	484.0	261.4	371.3	163.5	363.0	178.1	74.3	42.9	855.3	308.3	437.3	183.2	1,292.5	358.7
November	104.5	46.7	152.0	87.8	296.1	130.6	104.5	92.3	256.5	99.4	400.6	159.9	657.1	188.3
December	113.4	113.4	18.0	18.0	18.9	18.9	-	-	131.4	114.8	18.9	18.9	150.3	116.4
January	-	-	-	-	278.7	278.7	290.7	290.7	-	-	569.4	402.7	569.4	402.7
February	-	-	-	-	831.3	559.4	315.0	197.3	-	-	1,146.3	593.1	1,146.3	593.1
March	-	-	-	-	-	-	330.0	233.0	-	-	330.0	233.0	330.0	233.0
	7,034.8	771.3	7,163.1	887.7	8,424.6	1,151.3	6,386.7	775.2	14,197.9	1,175.9	14,811.3	1,387.9	29,009.2	1,819.1

Month	East Bay												Total	
	WD Day		WE Day		WD Day		WE Day		Method Total					
	Boat	SE	Boat	SE	Shore	SE	Shore	SE	Boat	SE	Shore	SE	Total	SE
April	283.5	283.5	283.5	225.5	803.3	733.5	263.3	263.3	567.0	362.2	1,066.5	779.3	1,633.5	859.4
May	239.3	152.7	848.3	456.8	39.9	39.9	195.8	65.3	1,087.5	481.6	235.6	76.5	1,323.1	487.6
June	162.8	162.8	465.0	202.7	81.4	81.4	139.5	80.5	627.8	259.9	220.9	114.5	848.6	284.0
July	525.0	378.6	650.0	180.3	105.0	105.0	75.0	43.3	1,175.0	419.3	180.0	113.6	1,355.0	434.4
August	161.0	161.0	168.0	56.0	80.5	80.5	28.0	28.0	329.0	170.5	108.5	85.2	437.5	190.6
September	-	-	275.0	79.4	118.8	84.0	-	-	275.0	79.4	118.8	84.0	393.8	115.6
October	48.4	48.4	198.0	151.2	72.6	48.4	82.5	43.7	246.4	158.8	155.1	65.2	401.5	171.6
November	69.7	69.7	19.0	19.0	-	-	19.0	19.0	88.7	72.2	19.0	19.0	107.7	74.7
December	63.0	63.0	-	-	-	-	-	-	63.0	63.0	-	-	63.0	63.0
January	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	47.3	47.3	-	-	47.3	47.3	47.3	47.3
March	-	-	-	-	252.0	252.0	80.0	80.0	-	-	332.0	264.4	332.0	264.4
	1,552.6	557.3	2,906.8	604.7	1,553.4	797.9	930.3	305.9	4,459.3	822.4	2,483.6	854.6	6,942.9	1,186.0

Table 6 (continued). Estimated fishing effort (angler hours) on Port, East, and Blind Sodus Bays from April 1, 2012 to March 31, 2013.

Month	Blind Sodus Bay												Total	
	WD Day		WE Day		WD Day		WE Day		Method Total					
	Boat	SE	Boat	SE	Shore	SE	Shore	SE	Boat	SE	Shore	SE	Total	SE
April	94.5	94.5	-	-	-	-	30.4	30.4	94.5	94.5	30.4	30.4	124.9	99.3
May	510.4	259.2	652.5	271.7	31.9	31.9	108.8	43.5	1,162.9	375.4	140.7	53.9	1,303.6	379.3
June	542.5	108.5	837.0	290.4	162.8	94.0	93.0	23.3	1,379.5	310.0	255.8	96.8	1,635.3	324.8
July	693.0	364.6	500.0	50.0	126.0	58.9	100.0	25.0	1,193.0	368.1	226.0	64.0	1,419.0	373.6
August	805.0	383.3	336.0	112.0	80.5	80.5	37.3	37.3	1,141.0	399.3	117.8	88.7	1,258.8	409.0
September	158.3	79.2	45.8	45.8	-	-	91.7	91.7	204.2	91.5	91.7	91.7	295.8	129.5
October	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2,803.7	611.5	2,371.3	418.7	401.2	140.7	461.2	117.4	5,175.1	741.1	862.3	183.2	6,037.3	763.4

Table 7. Estimated fishing effort (angler hours) by target and month on Port Bay from April 1, 2012 to March 31, 2013.

Target	Boat Fishing												Total	
	April	May	June	July	August	September	October	November	December	January	February	March		
Anything	25.7	1,219.9	443.6	465.8	486.7	228.4	52.7	59.5	-	-	-	-	2,982.2	21%
Bass	-	111.3	2,655.9	2,190.4	828.4	753.7	67.4	25.2	-	-	-	-	6,632.2	47%
Gamefish	-	75.2	-	-	-	-	-	-	-	-	-	-	75.2	1%
Panfish	-	378.3	136.8	238.8	162.4	476.4	134.2	-	-	-	-	-	1,527.0	11%
Perch	303.9	337.2	55.9	-	-	64.0	527.3	171.9	131.4	-	-	-	1,591.5	11%
Pike	-	141.9	-	-	141.8	133.3	43.1	-	-	-	-	-	460.1	3%
Salmonids	750.4	125.2	-	-	-	23.7	30.5	-	-	-	-	-	929.8	7%
	1,080.0	2,388.9	3,292.2	2,895.0	1,619.3	1,679.4	855.3	256.5	131.4	0.0	0.0	0.0	14,197.9	100%
	8%	17%	23%	20%	11%	12%	6%	2%	1%	0%	0%	0%	100%	
Shore Fishing (including Ice fishing)														
Target	April	May	June	July	August	September	October	November	December	January	February	March	Total	
Anything	671.4	1,315.8	1,839.2	2,136.0	1,286.1	705.6	285.1	63.0	-	-	-	-	8,302.1	56%
Bass	-	75.0	282.6	246.0	254.0	-	-	-	-	-	-	-	857.6	6%
Bullhead	-	-	26.3	-	-	-	-	-	-	-	-	-	26.3	0.2%
Panfish	117.5	432.7	1,199.9	89.2	486.9	-	129.4	-	-	-	-	-	2,455.6	17%
Perch	396.4	171.5	-	-	26.4	36.8	17.2	337.6	18.9	569.4	1,146.3	330.0	3,050.4	21%
Pike	-	36.8	-	-	-	-	-	-	-	-	-	-	36.8	0.2%
Salmonids	70.3	-	-	-	-	6.7	5.5	-	-	-	-	-	82.5	0.6%
	1,255.5	2,031.8	3,348.0	2,471.3	2,053.3	749.1	437.3	400.6	18.9	569.4	1,146.3	330.0	14,811.3	100%
	8%	14%	23%	17%	14%	5%	3%	3%	0.1%	4%	8%	2%	100%	
Total Fishing Effort														
	2,335.5	4,420.7	6,640.2	5,366.3	3,672.7	2,428.4	1,292.5	657.1	150.3	569.4	1,146.3	330.0	29,009.2	
	8%	15%	23%	18%	13%	8%	4%	2%	1%	2%	4%	1%	100%	

Table 8. Estimated fishing effort (angler hours) by target and month on East Bay from April 1, 2012 to March 31, 2013.

Boat Fishing														
Target	April	May	June	July	August	September	October	November	December	January	February	March	Total	
Anything	425.0	528.9	403.9	479.4	19.7	145.9	-	-	-	-	-	-	2,002.9	45%
Bass	142.0	96.3	54.6	592.2	136.8	129.1	-	-	-	-	-	-	1,150.9	26%
Panfish	-	252.6	169.3	103.4	59.3	-	-	-	-	-	-	-	584.5	13%
Perch	-	-	-	-	30.1	-	-	-	-	-	-	-	30.1	1%
Pike	-	209.6	-	-	83.1	-	229.8	-	-	-	-	-	522.5	12%
Salmonids	-	-	-	-	-	-	16.6	-	-	-	-	-	16.6	0%
Unknown								88.7	63.0				151.7	3%
	567.0	1,087.5	627.8	1,175.0	329.0	275.0	246.4	88.7	63.0	-	-	0.0	4,459.3	100%
	13%	24%	14%	26%	7%	6%	6%	2%	1%	0%	0%	0%	100%	
Shore Fishing (including Ice fishing)														
Target	April	May	June	July	August	September	October	November	December	January	February	March	Total	
Anything	320.3	109.0	130.2	169.5	108.5	118.8	57.1	-	-	-	-	47.7	1,061.2	43%
Bass	6.8	-	28.6	10.5	-	-	78.5	-	-	-	-	-	124.4	5%
Bullhead	34.2	5.6	-	-	-	-	-	-	-	-	-	-	39.8	1.6%
Panfish	457.4	114.4	62.1	-	-	-	19.5	-	-	-	-	-	653.4	26%
Perch	247.7	-	-	-	-	-	-	-	-	-	-	-	247.7	10%
Pike	-	6.6	-	-	-	-	-	6.9	-	-	47.3	284.3	345.0	13.9%
Salmonids	-	-	-	-	-	-	-	12.1	-	-	-	-	12.1	0.5%
	1,066.5	235.6	220.9	180.0	108.5	118.8	155.1	19.0	-	-	47.3	332.0	2,483.6	100%
	43%	9%	9%	7%	4%	5%	6%	1%	0.0%	0%	2%	13%	100%	
Total Fishing Effort														
	1,633.5	1,323.1	848.6	1,355.0	437.5	393.8	401.5	107.7	63.0	-	47.3	332.0	6,942.9	
	24%	19%	12%	20%	6%	6%	6%	2%	1%	0%	1%	5%	100%	

Table 9. Estimated fishing effort (angler hours) by target and month on Blind Sodus Bay from April 1, 2012 to March 31, 2013.

Boat Fishing														
Target	April	May	June	July	August	September	October	November	December	January	February	March	Total	
Anything	-	468.2	611.2	588.9	397.0	56.4	-	-	-	-	-	-	2,121.7	41%
Bass	-	131.3	546.7	435.5	744.0	51.4	-	-	-	-	-	-	1,908.9	37%
Panfish	-	349.6	68.6	168.6	-	96.3	-	-	-	-	-	-	683.2	13%
Perch	-	49.9	-	-	-	-	-	-	-	-	-	-	49.9	1%
Pike	-	163.9	153.0	-	-	-	-	-	-	-	-	-	316.9	6%
Unknown	94.5	-	-	-	-	-	-	-	-	-	-	-	94.5	2%
	94.5	1,162.9	1,379.5	1,193.0	1,141.0	204.2	-	-	-	-	-	0.0	5,175.1	100%
	2%	22%	27%	23%	22%	4%	0%	0%	0%	0%	0%	0%	100%	
Shore Fishing (including Ice fishing)														
Target	April	May	June	July	August	September	October	November	December	January	February	March	Total	
Anything	30.4	72.2	218.8	156.6	22.1	80.1	-	-	-	-	-	-	580.1	67%
Bass	-	-	37.0	-	81.1	-	-	-	-	-	-	-	118.1	14%
Panfish	-	-	-	69.4	14.6	11.6	-	-	-	-	-	-	95.6	11%
Perch	-	53.1	-	-	-	-	-	-	-	-	-	-	53.1	6%
Pike	-	15.4	-	-	-	-	-	-	-	-	-	-	15.4	2%
	30.4	140.7	255.8	226.0	117.8	91.7	-	-	-	-	-	-	862.3	100%
	4%	16%	30%	26%	14%	11%	0%	0%	0%	0%	0%	0%	100%	
Total Fishing Effort														
	124.9	1,303.6	1,635.3	1,419.0	1,258.8	295.8	-	-	-	-	-	-	6,037.3	
	2%	22%	27%	24%	21%	5%	0%	0%	0%	0%	0%	0%	100%	

Table 10. Estimated panfish catch, harvest, release, and rates (number per hour) on Port Bay from 4/1/2012 to 3/31/2013.

Species	Catch		Harvest		Release		Legal Release		Sublegal Release	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Boat Fishing										
Brown bullhead	23.5	0.00	19.3	0.00	4.3	0.00	4.3	0.00	0.0	0.00
Black crappie	2,071.0	0.15	692.7	0.05	1,378.3	0.10	38.2	0.00	1,340.0	0.09
Rock bass	1,526.9	0.11	91.5	0.01	1,435.4	0.10	1,435.4	0.10	0.0	0.00
Pumpkinseed	2,003.2	0.14	415.3	0.03	1,587.9	0.11	1,587.9	0.11	0.0	0.00
Bluegill	15,035.6	1.06	2,472.3	0.17	12,563.4	0.88	12,563.4	0.88	0.0	0.00
Yellow perch	12,077.7	0.85	6,321.8	0.45	5,755.9	0.41	5,755.9	0.41	0.0	0.00
Other	1,028.3	0.07	387.9	0.03	640.4	0.05	640.4	0.05	0.0	0.00
Total	33,766.3	2.38	10,400.8	0.73	23,365.5	1.65	22,025.5	1.55	1,340.0	0.09
Effort	14,197.9									
Shore Fishing										
Brown bullhead	94.1	0.01	10.5	0.00	83.5	0.01	83.5	0.01	0.0	0.00
Black crappie	1,287.6	0.10	382.7	0.03	905.0	0.07	0.0	0.00	905.0	0.07
Rock bass	367.9	0.03	287.1	0.02	80.8	0.01	80.8	0.01	0.0	0.00
Pumpkinseed	3,618.4	0.28	818.2	0.06	2,800.2	0.22	2,800.2	0.22	0.0	0.00
Bluegill	24,390.2	1.91	5,998.5	0.47	18,391.7	1.44	18,391.7	1.44	0.0	0.00
Yellow perch	12,261.9	0.96	5,243.0	0.41	7,018.9	0.55	7,018.9	0.55	0.0	0.00
Other	1,681.8	0.13	814.3	0.06	867.5	0.07	867.5	0.07	0.0	0.00
Total	43,701.9	3.42	13,554.3	1.06	30,147.6	2.36	29,242.6	2.29	905.0	0.07
Effort	12,765.7									
Ice Fishing										
Brown bullhead	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Black crappie	15.7	0.01	15.7	0.01	0.0	0.00	0.0	0.00	0.0	0.00
Rock bass	14.9	0.01	14.9	0.01	0.0	0.00	0.0	0.00	0.0	0.00
Pumpkinseed	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Bluegill	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Yellow perch	4,460.6	2.18	2,286.1	1.12	2,174.4	1.06	2,174.4	1.06	0.0	0.00
Other	78.9	0.04	0.0	0.00	78.9	0.04	78.9	0.04	0.0	0.00
Total	4,570.0	2.23	2,316.7	1.13	2,253.3	1.10	2,253.3	1.10	0.0	0.00
Effort	2,045.6									
Total Fishing										
Brown bullhead	117.6	0.00	29.8	0.00	87.8	0.00	87.8	0.00	0.0	0.00
Black crappie	3,374.3	0.12	1,091.1	0.04	2,283.2	0.08	38.2	0.00	2,245.0	0.08
Rock bass	1,909.7	0.07	393.5	0.01	1,516.2	0.05	1,516.2	0.05	0.0	0.00
Pumpkinseed	5,621.6	0.19	1,233.5	0.04	4,388.1	0.15	4,388.1	0.15	0.0	0.00
Bluegill	39,425.9	1.36	8,470.8	0.29	30,955.1	1.07	30,955.1	1.07	0.0	0.00
Yellow perch	28,800.1	0.99	13,850.9	0.48	14,949.2	0.52	14,949.2	0.52	0.0	0.00
Other	2,789.0	0.10	1,202.2	0.04	1,586.8	0.05	1,586.8	0.05	0.0	0.00
Effort	29,009.2									
Total Panfish	82,038.2	2.83	26,271.8	0.91	55,766.5	1.92	53,521.5	1.84	2,245.0	0.08

Table 11. Estimated gamefish catch, harvest, release, and rates (number per hour) on Port Bay from 4/1/2012 to 3/31/2013.

Species	Catch		Harvest		Release		Legal Release		Sublegal Release	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Boat Fishing										
Chain pickerel	12.0	0.00	0.0	0.00	12.0	0.00	12.0	0.00	0.0	0.00
Northern pike	23.5	0.00	0.0	0.00	23.5	0.00	21.5	0.00	2.0	0.00
Smallmouth bass	416.6	0.03	2.4	0.00	414.2	0.03	313.0	0.02	101.1	0.01
Largemouth bass	11,604.8	0.82	630.6	0.04	10,974.2	0.77	6,474.7	0.46	4,499.5	0.32
Walleye	12.5	0.00	0.0	0.00	12.5	0.00	0.0	0.00	12.5	0.00
Total	12,069.3	0.85	633.0	0.04	11,436.3	0.81	6,821.1	0.48	4,615.2	0.33
Effort	14,197.9									
Shore Fishing										
Chain pickerel	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Northern pike	34.9	0.00	0.0	0.00	34.9	0.00	34.9	0.00	0.0	0.00
Smallmouth bass	238.1	0.02	38.0	0.00	200.1	0.02	45.5	0.00	154.5	0.01
Largemouth bass	2,776.4	0.22	238.5	0.02	2,537.9	0.20	504.7	0.04	2,033.2	0.16
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	3,049.4	0.24	276.5	0.02	2,772.9	0.22	585.2	0.05	2,187.7	0.17
Effort	12,765.7									
Ice Fishing										
Chain pickerel	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Northern pike	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Smallmouth bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Largemouth bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Effort	2,045.6									
Total Fishing										
Chain pickerel	12.0	0.00	0.0	0.00	12.0	0.00	12.0	0.00	0.0	0.00
Northern pike	58.4	0.00	0.0	0.00	58.4	0.00	56.3	0.00	2.0	0.00
Smallmouth bass	654.7	0.02	40.4	0.00	614.3	0.02	358.6	0.01	255.7	0.01
Largemouth bass	14,381.2	0.50	869.1	0.03	13,512.1	0.47	6,979.4	0.24	6,532.7	0.23
Walleye	12.5	0.00	0.0	0.00	12.5	0.00	0.0	0.00	12.5	0.00
Effort	29,009.2									
Total Gamefish	15,118.7	0.52	909.5	0.03	14,209.2	0.49	7,406.3	0.26	6,802.9	0.23

Table 12. Estimated panfish catch, harvest, release, and rates (number per hour) on East Bay from 4/1/2012 to 3/31/2013.

Species	Catch		Harvest		Release		Legal Release		Sublegal Release	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Boat Fishing										
Brown bullhead	42.5	0.01	0.0	0.00	42.5	0.01	42.5	0.01	0.0	0.00
Black crappie	2,522.9	0.57	155.7	0.03	2,367.1	0.53	70.4	0.02	2,296.7	0.52
Rock bass	68.7	0.02	0.0	0.00	68.7	0.02	68.7	0.02	0.0	0.00
Pumpkinseed	1,742.5	0.39	144.0	0.03	1,598.4	0.36	1,598.4	0.36	0.0	0.00
Bluegill	21,679.5	4.86	9,358.1	2.10	12,321.4	2.76	12,321.4	2.76	0.0	0.00
Yellow perch	316.8	0.07	9.5	0.00	307.3	0.07	307.3	0.07	0.0	0.00
Other	24.4	0.01	17.9	0.00	6.5	0.00	6.5	0.00	0.0	0.00
Total	26,397.3	5.92	9,685.2	2.17	16,712.0	3.75	14,415.3	3.23	2,296.7	0.52
Effort	4,459.3									
Shore Fishing										
Brown bullhead	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Black crappie	474.1	0.23	140.2	0.07	333.8	0.16	109.8	0.05	224.1	0.11
Rock bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Pumpkinseed	3,556.2	1.69	708.5	0.34	2,847.8	1.35	2,847.8	1.35	0.0	0.00
Bluegill	9,424.2	4.48	3,478.6	1.65	5,945.6	2.83	5,945.6	2.83	0.0	0.00
Yellow perch	2,712.0	1.29	313.9	0.15	2,398.0	1.14	2,398.0	1.14	0.0	0.00
Other	81.1	0.04	0.0	0.00	81.1	0.04	81.1	0.04	0.0	0.00
Total	16,247.6	7.72	4,641.2	2.21	11,606.4	5.52	11,382.4	5.41	224.1	0.11
Effort	2,104.4									
Ice Fishing										
Brown bullhead	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Black crappie	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Rock bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Pumpkinseed	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Bluegill	2,283.7	6.02	895.6	2.36	1,388.1	3.66	1,388.1	3.66	0.0	0.00
Yellow perch	771.4	2.03	278.9	0.74	492.6	1.30	492.6	1.30	0.0	0.00
Other	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	3,055.2	8.06	1,174.4	3.10	1,880.7	4.96	1,880.7	4.96	0.0	0.00
Effort	379.3									
Total Fishing										
Brown bullhead	42.5	0.01	0.0	0.00	42.5	0.01	42.5	0.01	0.0	0.00
Black crappie	2,997.0	0.43	296.0	0.04	2,701.0	0.39	180.2	0.03	2,520.8	0.36
Rock bass	68.7	0.01	0.0	0.00	68.7	0.01	68.7	0.01	0.0	0.00
Pumpkinseed	5,298.7	0.76	852.5	0.12	4,446.2	0.64	4,446.2	0.64	0.0	0.00
Bluegill	33,387.4	4.81	13,732.2	1.98	19,655.2	2.83	19,655.2	2.83	0.0	0.00
Yellow perch	3,800.2	0.55	602.3	0.09	3,197.9	0.46	3,197.9	0.46	0.0	0.00
Other	105.6	0.02	17.9	0.00	87.7	0.01	87.7	0.01	0.0	0.00
Effort	6,942.9									
Total Panfish	45,700.1	6.58	15,500.9	2.23	30,199.2	4.35	27,678.4	3.99	2,520.8	0.36

Table 13. Estimated gamefish catch, harvest, release, and rates (number per hour) on East Bay from 4/1/2012 to 3/31/2013.

Species	Catch		Harvest		Release		Legal Release		Sublegal Release	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Boat Fishing										
Chain pickerel	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Northern pike	662.6	0.15	0.0	0.00	662.6	0.15	647.6	0.15	15.0	0.00
Smallmouth bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Largemouth bass	4,782.4	1.07	239.3	0.05	4,543.1	1.02	2,365.6	0.53	2,177.5	0.49
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	5,445.0	1.22	239.3	0.05	5,205.7	1.17	3,013.2	0.68	2,192.4	0.49
Effort	4,459.3									
Shore Fishing										
Chain pickerel	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Northern pike	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Smallmouth bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Largemouth bass	2,923.4	1.39	0.0	0.00	2,923.4	1.39	186.8	0.09	2,736.6	1.30
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	2,923.4	1.39	0.0	0.00	2,923.4	1.39	186.8	0.09	2,736.6	1.30
Effort	2,104.4									
Ice Fishing										
Chain pickerel	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Northern pike	100.6	0.27	32.2	0.08	68.4	0.18	68.4	0.18	0.0	0.00
Smallmouth bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Largemouth bass	333.8	0.88	0.0	0.00	333.8	0.88	333.8	0.88	0.0	0.00
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	434.5	1.15	32.2	0.08	402.3	1.06	402.3	1.06	0.0	0.00
Effort	379.3									
Total Fishing										
Chain pickerel	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Northern pike	763.2	0.11	32.2	0.00	731.0	0.11	716.0	0.10	15.0	0.00
Smallmouth bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Largemouth bass	8,039.7	1.16	239.3	0.03	7,800.4	1.12	2,886.3	0.42	4,914.1	0.71
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Effort	6,942.9									
Total Gamefish	8,802.9	1.27	271.5	0.04	8,531.4	1.23	3,602.3	0.52	4,929.1	0.71

Table 14. Estimated panfish catch, harvest, release, and rates (number per hour) on Blind Sodus Bay from 4/1/2012 to 3/31/2013.

Species	Catch		Harvest		Release		Legal Release		Sublegal Release	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Boat Fishing										
Brown bullhead	82.5	0.02	15.0	0.00	67.5	0.01	67.5	0.01	0.0	0.00
Black crappie	983.0	0.19	612.2	0.12	370.9	0.07	228.1	0.04	142.7	0.03
Rock bass	220.9	0.04	44.3	0.01	176.6	0.03	176.6	0.03	0.0	0.00
Pumpkinseed	556.2	0.11	43.6	0.01	512.6	0.10	512.6	0.10	0.0	0.00
Bluegill	1,804.2	0.35	85.6	0.02	1,718.7	0.33	1,718.7	0.33	0.0	0.00
Yellow perch	1,188.1	0.23	129.4	0.03	1,058.7	0.20	1,058.7	0.20	0.0	0.00
Other	126.5	0.02	35.0	0.01	91.5	0.02	91.5	0.02	0.0	0.00
Total	4,961.4	0.96	965.0	0.19	3,996.5	0.77	3,853.7	0.74	142.7	0.03
Effort	5,175.1									
Shore Fishing										
Brown bullhead	17.9	0.02	17.9	0.02	0.0	0.00	0.0	0.00	0.0	0.00
Black crappie	91.0	0.11	0.0	0.00	91.0	0.11	0.0	0.00	91.0	0.11
Rock bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Pumpkinseed	498.9	0.58	0.0	0.00	498.9	0.58	498.9	0.58	0.0	0.00
Bluegill	412.5	0.48	38.1	0.04	374.4	0.43	374.4	0.43	0.0	0.00
Yellow perch	478.5	0.55	0.0	0.00	478.5	0.55	478.5	0.55	0.0	0.00
Other	36.8	0.04	0.0	0.00	36.8	0.04	36.8	0.04	0.0	0.00
Total	1,535.6	1.78	56.0	0.06	1,479.6	1.72	1,388.6	1.61	91.0	0.11
Effort	862.3									
Ice Fishing										
Brown bullhead	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Black crappie	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Rock bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Pumpkinseed	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Bluegill	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Yellow perch	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Other	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Effort	0.0									
Total Fishing										
Brown bullhead	100.4	0.02	32.9	0.01	67.5	0.01	67.5	0.01	0.0	0.00
Black crappie	1,074.0	0.18	612.2	0.10	461.9	0.08	228.1	0.04	233.7	0.04
Rock bass	220.9	0.04	44.3	0.01	176.6	0.03	176.6	0.03	0.0	0.00
Pumpkinseed	1,055.1	0.17	43.6	0.01	1,011.5	0.17	1,011.5	0.17	0.0	0.00
Bluegill	2,216.7	0.37	123.6	0.02	2,093.1	0.35	2,093.1	0.35	0.0	0.00
Yellow perch	1,666.6	0.28	129.4	0.02	1,537.2	0.25	1,537.2	0.25	0.0	0.00
Other	163.2	0.03	35.0	0.01	128.3	0.02	128.3	0.02	0.0	0.00
Effort	6,037.3									
Total Panfish	6,497.0	1.08	1,021.0	0.17	5,476.0	0.91	5,242.3	0.87	233.7	0.04

Table 15. Estimated gamefish catch, harvest, release, and rates (number per hour) on Blind Sodus Bay from 4/1/2012 to 3/31/2013.

Species	Catch		Harvest		Release		Legal Release		Sublegal Release	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Boat Fishing										
Chain pickerel	35.0	0.01	0.0	0.00	35.0	0.01	0.0	0.00	35.0	0.01
Northern pike	154.9	0.03	15.7	0.00	139.3	0.03	71.8	0.01	67.5	0.01
Smallmouth bass	11.3	0.00	0.0	0.00	11.3	0.00	11.3	0.00	0.0	0.00
Largemouth bass	2,019.4	0.39	159.5	0.03	1,859.9	0.36	1,674.0	0.32	185.9	0.04
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	2,220.7	0.43	175.2	0.03	2,045.5	0.40	1,757.1	0.34	288.4	0.06
Effort	5,175.1									
Shore Fishing										
Chain pickerel	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Northern pike	111.8	0.13	0.0	0.00	111.8	0.13	0.0	0.00	111.8	0.13
Smallmouth bass	41.3	0.05	0.0	0.00	41.3	0.05	5.4	0.01	35.8	0.04
Largemouth bass	61.7	0.07	0.0	0.00	61.7	0.07	0.0	0.00	61.7	0.07
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	214.8	0.25	0.0	0.00	214.8	0.25	5.4	0.01	209.3	0.24
Effort	862.3									
Ice Fishing										
Chain pickerel	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Northern pike	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Smallmouth bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Largemouth bass	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Total	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Effort	0.0									
Total Fishing										
Chain pickerel	35.0	0.01	0.0	0.00	35.0	0.01	0.0	0.00	35.0	0.01
Northern pike	266.8	0.04	15.7	0.00	251.1	0.04	71.8	0.01	179.3	0.03
Smallmouth bass	52.6	0.01	0.0	0.00	52.6	0.01	16.8	0.00	35.8	0.01
Largemouth bass	2,081.1	0.34	159.5	0.03	1,921.6	0.32	1,674.0	0.28	247.6	0.04
Walleye	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Effort	6,037.3									
Total Gamefish	2,435.5	0.40	175.2	0.03	2,260.3	0.37	1,762.5	0.29	497.7	0.08

Table 16. Species caught and catch rate (number per hour) by target from interviews on Port Bay from April 2, 2012 to March 29, 2013. Bold indicates the number caught of the target species. BBH=brown bullhead, ROB=rock bass, PSS=pumpkinseed sunfish, BGS=bluegill sunfish, BLC=black crappie, YP= yellow perch, CHP=chain pickerel NOP= northern pike, SMB=smallmouth bass, LMB=largemouth bass, and WAE=walleye.

Target	Species Caught												Total	Effort (hrs)	Directed Catch Rate
	BBH	ROB	PSS	BGS	BLC	YP	CHP	NOP	SMB	LMB	WAE	Other			
Boat Fishing															
Anything	0	16	61	346	50	89	2	3	14	139	0	17	737	278.5	2.65
Bass	1	43	1	43	2	11	0	0	11	886	1	5	1,004	738.7	1.21
Gamefish	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5	0.00
Panfish	1	40	48	518	146	92	0	0	7	58	0	64	974	152.4	5.54
Perch	2	3	50	23	34	966	0	1	1	20	0	46	1,146	221.2	4.37
Pike	0	31	0	1	3	12	0	2	1	31	0	10	91	47.4	0.04
Salmonids	0	0	0	0	0	0	0	6	2	3	0	22	33	117.6	0.19
	4	133	160	931	235	1,170	2	12	36	1,137	1	164	3,985	1,560	2.55
Shore Fishing															
Anything	3	22	118	634	42	315	0	0	10	124	0	73	1,341	580.3	2.31
Bass	0	4	2	1	0	1	0	0	5	18	0	7	38	56.8	0.41
Bullhead	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	0.00
Panfish	1	7	53	566	43	92	0	0	0	13	0	18	793	193.4	3.94
Perch	2	0	0	21	4	485	0	0	0	10	0	6	528	122.0	3.97
Pike	0	0	0	0	0	1	0	1	0	0	0	0	2	3.5	0.29
Salmonids	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0	0.00
	6	33	173	1,222	89	894	0	1	15	165	0	104	2,702	963.0	2.81
Ice Fishing															
Perch	0	1	0	0	2	441	0	0	0	0	0	9	453	343.3	1.28
Total Fishing															
Anything	3	38	179	980	92	404	2	3	24	263	0	90	2,078	858.9	2.42
Bass	1	47	3	44	2	12	0	0	16	904	1	12	1,042	795.5	1.16
Bullhead	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	0.00
Gamefish	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5	0.00
Panfish	2	47	101	1,084	189	184	0	0	7	71	0	82	1,767	345.8	4.65
Perch	4	4	50	44	40	1,892	0	1	1	30	0	61	2,127	686.5	2.76
Pike	0	31	0	1	3	13	0	3	1	31	0	10	93	50.9	0.06
Salmonids	0	0	0	0	0	0	0	6	2	3	0	22	33	122.6	0.18
	10	167	333	2,153	326	2,505	2	13	51	1,302	1	277	7,140	2,866.5	2.49

Table 17. Species caught and catch rate (number per hour) by target from interviews on East Bay from April 2, 2012 to March 29, 2013. Bold indicates the number caught of the target species. BBH=brown bullhead, ROB=rock bass, PSS=pumpkinseed sunfish, BGS=bluegill sunfish, BLC=black crappie, YP= yellow perch, CHP=chain pickerel NOP= northern pike, SMB=smallmouth bass, LMB=largemouth bass, and WAE=walleye.

Target	Species Caught												Total	Effort (hrs)	Directed Catch Rate
	BBH	ROB	PSS	BGS	BLC	YP	CHP	NOP	SMB	LMB	WAE	Other			
Boat Fishing															
Anything	0	0	10	244	37	8	0	6	0	186	0	2	493	122.2	4.03
Bass	0	0	3	6	5	1	0	8	0	74	0	0	97	98.7	0.75
Panfish	0	3	6	203	21	0	0	0	0	16	0	0	249	33.3	7.00
Perch	0	0	0	0	0	1	0	0	0	5	0	0	6	3.5	0.28
Pike	1	0	20	6	1	2	0	13	0	45	0	1	89	33.7	0.39
Salmonids	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	0.00
	1	3	39	459	64	12	0	27	0	326	0	3	934	292	3.19
Shore Fishing															
Anything	0	0	96	182	6	73	0	0	0	45	0	1	403	81.6	4.94
Bass	0	0	0	0	0	2	0	0	0	10	0	3	15	12.6	0.79
Bullhead	0	0	0	0	0	1	0	0	0	0	0	0	1	3.5	0.00
Panfish	0	0	53	184	8	23	0	0	0	15	0	0	283	63.4	4.22
Perch	0	0	0	30	0	0	0	0	0	0	0	0	30	18.1	0.00
Pike	0	0	0	0	0	2	0	2	0	2	0	0	6	5.8	0.34
Salmonids	0	0	0	0	0	0	0	0	0	0	0	10	10	8.2	1.22
	0	0	149	396	14	101	0	2	0	72	0	14	748	193.3	3.87
Ice Fishing															
Anything	0	0	0	50	0	14	0	0	0	7	0	0	71	5.0	14.20
Pike	0	0	0	1	0	4	0	6	0	2	0	0	13	49.8	0.12
	0	0	0	51	0	18	0	6	0	9	0	0	84	54.8	1.53
Total Fishing															
Anything	0	0	106	476	43	95	0	6	0	238	0	3	967	208.9	4.63
Bass	0	0	3	6	5	3	0	8	0	84	0	3	112	111.3	0.75
Bullhead	0	0	0	0	0	1	0	0	0	0	0	0	1	3.5	0.00
Panfish	0	3	59	387	29	23	0	0	0	31	0	0	532	96.7	5.18
Perch	0	0	0	30	0	1	0	0	0	5	0	0	36	21.6	0.05
Pike	1	0	20	7	1	8	0	21	0	49	0	1	108	89.3	0.24
Salmonids	0	0	0	0	0	0	0	0	0	0	0	10	10	9.2	1.09
	1	3	188	906	78	131	0	35	0	407	0	17	1,766	540.6	3.27

Table 18. Species caught and catch rate (number per hour) by target from interviews on Blind Sodus Bay from April 2, 2012 to March 29, 2013. Bold indicates the number caught of the target species. BBH=brown bullhead, ROB=rock bass, PSS=pumpkinseed sunfish, BGS=bluegill sunfish, BLC=black crappie, YP= yellow perch, CHP=chain pickerel NOP= northern pike, SMB=smallmouth bass, LMB=largemouth bass, and WAE=walleye.

Target	Species Caught												Total	Effort (hrs)	Directed Catch Rate
	BBH	ROB	PSS	BGS	BLC	YP	CHP	NOP	SMB	LMB	WAE	Other			
Boat Fishing															
Anything	6	11	25	75	35	38	0	2	2	13	0	5	212	159.8	1.33
Bass	0	0	0	2	1	1	1	0	0	51	0	3	59	134.5	0.38
Panfish	1	2	3	30	64	16	0	1	0	0	0	2	119	57.5	2.02
Perch	0	0	0	0	0	10	0	1	0	1	0	0	12	5.0	2.00
Pike	0	3	0	1	0	0	0	5	0	3	0	0	12	23.1	0.22
	7	16	28	108	100	65	1	9	2	68	0	10	414	380	1.09
Shore Fishing															
Anything	3	0	41	27	2	0	0	1	2	0	0	1	77	26.9	2.86
Bass	0	0	0	0	0	0	0	0	0	0	0	0	0	4.9	0.00
Panfish	0	1	12	16	0	33	0	1	0	8	0	0	71	5.2	11.85
Perch	0	0	0	0	0	2	0	0	0	0	0	1	3	3.2	0.63
Pike	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0.00
	3	1	53	43	2	35	0	2	2	8	0	2	151	41.1	3.68
Total Fishing															
Anything	9	11	66	102	37	38	0	3	4	13	0	6	289	186.7	1.55
Bass	0	0	0	2	1	1	1	0	0	51	0	3	59	139.4	0.37
Panfish	1	3	15	46	64	49	0	2	0	8	0	2	190	62.7	2.84
Perch	0	0	0	0	0	12	0	1	0	1	0	1	15	8.2	1.47
Pike	0	3	0	1	0	0	0	5	0	3	0	0	12	24.0	0.21
	10	17	81	151	102	100	1	11	4	76	0	12	565	421.0	1.34

Table 19. Fishing pressure estimates on Port, East, and Blind Sodus Bays from April 1, 2012 to March 31, 2013.

Daytime	Ang Hrs	Ang Hrs/A	Trips	Trips/A
Port Bay				
Boat	14,197.9	30.9	3,419.0	7.4
Shore	12,765.7	27.8	5,194.2	11.3
Open water	26,963.6	58.6	8,613.2	18.7
Ice	2,045.6	4.4	543.1	1.2
Total	29,009.2	63.1	9,156.3	19.9
East Bay				
Boat	4,459.3	27.9	1,634.0	10.2
Shore	2,104.4	13.2	1,254.9	7.8
Open water	6,563.7	41.0	2,888.9	18.1
Ice	379.3	2.4	91.3	0.6
Total	6,942.9	43.4	2,980.2	18.6
Blind Sodus Bay				
Boat	5,175.1	18.5	2,472.4	8.8
Shore	862.3	3.1	655.4	2.3
Open water	6,037.3	21.6	3,127.8	11.2
Ice	-	-	-	-
Total	6,037.3	21.6	3,127.8	11.2

Table 20. Total fishing effort and pressure estimates from New York Lake Ontario bays.

Water (year)	Angler-hrs	Trips	Angler-hrs/A	Trips/A	Source
Port Bay (2012-2013)					Present Survey
Open Water ¹	26,964	8,613	58.6	18.7	
Ice	2,046	543	4.4	1.2	
East Bay (2012-2013)					Present Survey
Open Water ¹	6,564	2,889	41.0	18.1	
Ice	379	91	2.4	0.6	
Blind Sodus Bay (2012-2013)					Present Survey
Open Water ¹	6,037	3,128	21.6	11.2	
Ice	0	0	0.0	0.0	
Sodus Bay (2008-2009)					Sanderson (2010)
Open Water ²	87,214	23,365	26.0	7.0	
Ice	74,142	13,629	22.1	4.1	
Irondequoit Bay (2007-2008)					Sanderson (2009)
Open water ²	96,197	23,946	58.3	14.5	
Ice	71,303	13,981	43.2	8.5	

Notes: 1. Includes daytime boat and shore effort.

2. Includes daytime boat and shore, nighttime boat and shore effort.

Table 21. Estimated overall catch rates (#/ang hr) by species from New York Lake Ontario bays.

Water (year)	YP	LMB	SMB	WAE	Source
Port Bay (2012-2013)					Present Survey
Open Water ¹	0.90	0.53	0.02	<0.001	
Ice	2.18	0.00	0.00	0.00	
East Bay (2012-2013)					Present Survey
Open Water ¹	0.46	1.17	<0.01	na	
Ice	2.03	0.88	0.00	na	
Blind Sodus Bay (2012-2013)					Present Survey
Open Water ¹	0.28	0.34	0.01	0.00	
Ice	na	na	na	na	
Sodus Bay (2008-2009)					Sanderson (2010)
Open Water ²	2.27	0.78	0.03	0.001	
Ice	5.68	0.02	<0.01	<0.01	
Irondequoit Bay (2007-2008)					Sanderson (2009)
Open water ²	2.41	0.11	<0.01	<0.01	
Ice	5.39	<0.01	0.00	0.00	

Notes: 1. Includes daytime boat and shore effort.
2. Includes daytime boat and shore, nighttime boat and shore fishing.

Table 22. Targeted catch rates (#/ang hr) by species from New York Lake Ontario bays.

Water (year)	YP	LMB	SMB	WAE	Source
Port Bay (2012-2013)					Present Survey
Open Water ¹	4.23	1.14	0.02	0.00	
Ice	1.28	0.00	0.00	0.00	
East Bay (2012-2013)					Present Survey
Open Water ¹	0.05	0.75	0.00	na	
Ice	2.80	0.00	0.00	na	
Blind Sodus Bay (2012-2013)					Present Survey
Open Water ¹	1.47	0.37	0.00	0.00	
Ice	na	na	na	na	
Sodus Bay (2008-2009)					Sanderson (2010)
Open Water ²	6.62	1.09	0.03	0.11	
Ice	4.36	na	na	na	
Irondequoit Bay (2007-2008)					Sanderson (2009)
Open water ²	8.63	0.80	0.02	0.02	
Ice	5.39	na	na	na	

Notes: 1. Includes daytime boat and shore effort.
2. Includes daytime boat and shore, nighttime boat and shore fishing.