

# READER'S GUIDE to USING this PUBLICATION

Your fishing map guide is a thorough, easy-to-use collection of accurate contour lake maps along with geographic and biologic statistical information to help you locate a lake and enjoy a successful day out on the water of one of Michigan's excellent fisheries.

The heart of this book is the **contour lake map**. Copyrighted maps are used with permission from the Michigan Department of Natural Resources and are not intended for navigation. The lakes selected for this guide are confined to those that are accessible to the public.

Each map is accompanied by a **detailed write-up**. In each piece, you'll find fishing tips and hot spots specific to the body of water you're planning to fish.

Lake **stocking records** (through June 2006) and **population survey statistics** are provided courtesy of the Michigan Department of Natural Resources and summarized to reflect management trends and objectives for each fishery represented. Please keep in mind that annual fish stocking aspirations are directly affected by state hatchery production levels and sometimes the numbers available for stocking fluctuate considerably.

Detailed **area road maps** (1:175,000 scale) and **lake access** information is provided to help you plan your route to the lake. If there is more than one access point on a body of water, the GPS coordinates refer to the primary access. To locate a lake on these road maps, simply use the alphabetical lake listing on the back cover. Turn to that page to find the area road map page and coordinates for the lake. As a cross-reference, the area road maps include numbers on or adjacent to featured lakes, which designate the pages of the lake maps and information. Streams and rivers are also referenced in these area road maps.

While every effort is made to create the most accurate maps possible, the process of merging existing DNR maps with the latest GPS information will cause some slight differences to occur. (Especially on larger, more complicated lakes.) Please use the GPS grids provided in this book only as a guideline.

## GLOSSARY OF TERMS

**Gill net:** This is the main piece of equipment used for sampling walleye, northern pike, yellow perch, cisco, whitefish, trout, and salmon. The standard gill net is 6 feet tall by 250 feet long, with 5 different mesh sizes. Gill nets are generally set in off shore areas in water deeper than 9 feet. Nets are fished for a period of 24 hours. Fish are captured by swimming into the net and becoming entangled. Fisheries workers record length and weight data from each fish, determine the sex, look for parasites or disease, and remove several of the fishes scales for determining the fishes age. Most of the fish taken in gill nets are

killed, but only a small portion of the lakes fish population is sampled during an individual survey event. The number of gill nets set during a survey is dependant on the lake acreage.

**Trap net:** This is the main piece of equipment used for sampling bluegill, crappie, and bullheads. The standard trap net is 4 feet tall by 6 feet wide with a 40 foot lead. Trap nets are generally set perpendicular to shore in water less than 8 feet in depth. Nets are fished for a period of 24 hours. Fish are captured by swimming into the lead and following it towards the trap. Most of the fish collected in trap nets are returned back to the water as soon as the necessary biological data is recorded. The number of trap net sets during a survey is dependant on the lake acreage.

**Electrofishing:** This is a specialized type of equipment that is most often used for sampling largemouth bass, smallmouth bass, and young of the year walleye. A boat-mounted generator is used to induce electrical current into the water that stuns the fish, allowing fisheries workers to net the fish for placement in live wells. Most of the fish caught by electrofishing recover rapidly and are promptly returned to the water after the necessary biological data is recorded.

**CPUE:** An acronym representing "Catch Per Unit of Effort," a way of representing the density of a species population. Readings are in fish captured per hour or minute of surveying. The higher the CPUE value, the greater the number of fish present.







































**PSD:** An acronym for "Proportional Stock Density," which is a way of representing the size structure of fish populations. It represents the percentage of "quality-size" fish within a given population. In arriving at this figure, one considers only fish of "stock" length (the size at which members of a given species reach sexual maturity) or greater. Young-of year fish are not included in the calculation. The higher the PSD number, the greater the percentage of "quality" fish within a particular population.

**RSD-12** (or -10 or -14, etc.): An acronym for "Relative Stock Density," which is yet another way of representing the size structure of fish populations. This corresponds to the percentage of fish at a given length or larger within a population. Hence, an RSD-14 reading of 25 for largemouth bass indicates that 25 percent of sexually mature bass are at least 14 inches in length. On another measurement scale, the RSD- values could be stated as "preferred," "memorable," or "trophy."

**YAR:** An acronym for "Young-(to)-Adult Ratio." This refers to the proportion of young-of-year fish in relation to adult or "quality-size" fish within a particular population. For balanced populations, the index should be about 1-to-10. In smaller waters, 1-to-3 is considered a reasonable ratio.

**Secchi Disk:** Used in measuring water clarity, it is a white-colored, plate-size device submerged on the end of a line until it reaches a point where it's no longer visible; the depth at which this occurs is measured and recorded. In this book, secchi disk readings are given in English measure. Of course, many factors influence water clarity, and secchi disk readings vary according to season, growth of vegetation, weather, location in a lake, even human activity. Hence the readings given are approximations for any lake — snapshots of the water clarity at a given time and in a given location.

## LEGEND

|   |                             |   |                       |   |                      |   |                           |
|---|-----------------------------|---|-----------------------|---|----------------------|---|---------------------------|
|  | Boat Ramp                   |  | Marina                |  | Marsh                |  | Red & Green Channel Buoys |
|  | Carry Down Access           |  | Lily Pads             |  | Emergent Vegetation  |  | White Hazard Buoy         |
|  | Access by Navigable Channel |  | Submergent Vegetation |  | Manmade Canal        |  | River Mile                |
|  | Portage Access              |  | Emergent Vegetation   |  | Marked Fishing Spots |  | Daymarker                 |
|  | Access Information Marker   |  | Stumps                |  | Submerged Rail       |  | Light & Daymarker         |
|  | Campground                  |  | Flooded Timber        |  | Submerged Road       |  | County Road               |
|  | Picnic Area                 |  | Rocks                 |  | Bridge               |  | State Highway             |
|  | Fishing Dock (Pier)         |  | Submerged Culvert     |  | Submerged Riverbed   |  | US Highway                |
|  | Shore Fishing               |  | Submerged Ruins       |  | GPS Grid             |  | Interstate                |
|  | Fish Attractors             |   |                       |   |                      |   |                           |
|  | Boat tie-up                 |   |                       |   |                      |   |                           |

# LONG LAKE

Ionia County

# CRYSTAL LAKE

Montcalm County

Montcalm County CRYSTAL LAKE

Ionia County LONG LAKE

Area map page / coordinates:

23 / E-4

Nearest town: Belding

Surface water area: 356 acres

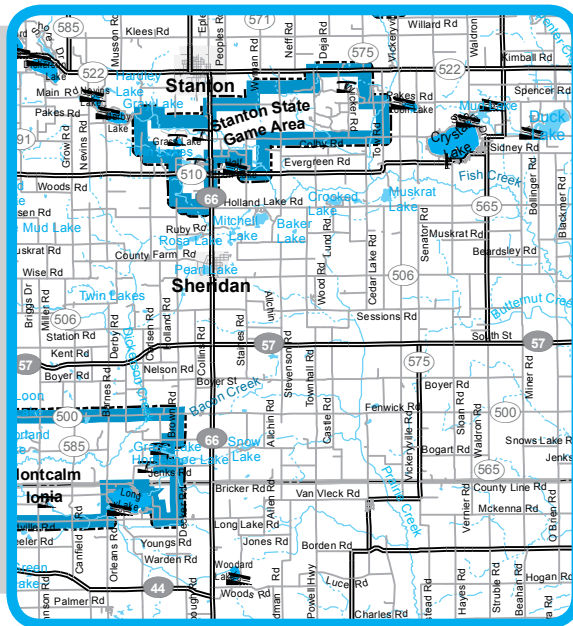
Maximum depth: 57 feet

Water clarity: NA

Accessibility: State-owned public access with hard-surfaced ramp on south shore; parking for 19 vehicles

43° 6' 34.09" N / 85° 7' 38.87" W

Accommodations: Boat rental, courtesy pier, restrooms



Area map page / coordinates:

23 / C-6

Nearest town: Stanton

Surface water area: 724 acres

Maximum depth: 70 feet

Water clarity: Clear

Accessibility: State-owned public access with hard-surfaced ramp on north shore; parking for 46 vehicles

43° 16' 15.16" N / 84° 55' 30.09" W

Accommodations: ADA courtesy pier, restrooms

## NO RECORD OF STOCKING

Fish cover types observed: Not observed

Fish foods observed: Not observed

Survey start - end date(s): 05/17/2000

Survey objective: Special study

Gear type(s) utilized: Trap net, boomshocker

## LENGTH OF SELECTED SPECIES SAMPLED FROM ALL GEAR

Number of fish caught for the following length categories (inches):

| species          | number | length range (inches) | avg. length (inches) | percent legal size |
|------------------|--------|-----------------------|----------------------|--------------------|
| Black Crappie    | 20     | 3-11                  | 5.10                 | 0                  |
| Bluegill         | 548    | 1-8                   | 3.20                 | 1                  |
| Bowfin           | 64     | 12-24                 | 18.20                | 30                 |
| Brown Bullhead   | 37     | 10-14                 | 12.10                | 100                |
| Channel Catfish  | 69     | 21-29                 | -                    | 0                  |
| Largemouth Bass  | 50     | 1-19                  | 5.80                 | 0                  |
| Northern Pike    | 5      | 16-31                 | 16.50                | 0                  |
| Pumpkin. Sunfish | 260    | 1-9                   | 3.60                 | 3                  |
| Rock Bass        | 8      | 3-9                   | 5.50                 | 25                 |
| Yellow Perch     | 101    | 2-9                   | 3.90                 | 2                  |
| Yellow Bullhead  | 269    | 7-13                  | 10.76                | 100                |

## FISHING INFORMATION

**Long Lake** is one of the best fishing lakes in Ionia County. Charlene Beard of Brookside Grocery, 2875 Long Lake Rd., Orleans, MI 48865, (616) 761-3311, says the fish populations remain unchanged and are all in ok condition. The largemouth aren't huge but anglers can catch a few. Crappies and 'gills here run in the 8- to 10-inch margin.

For the 'gills, fish the weed edges off the sand bar which runs down the center of the lake (**Spot 1**). For largemouth, concentrate your efforts on the weedy flats in the lake's north end (**Spot 2**). Try the sand bar here as well. Toss spinnerbaits and plastic worms for best results. The pike will likely be cruising the weed edges, of course, looking for a meal. The weedy northeast bay (**Spot 3**) is a good place to start looking for them, but weed edges around much of the lake will yield pike, as well. The northerns average maybe 24 inches in this lake, so they're worth targeting. Troll small crankbaits over the steep breaks when trying to catch smallmouths, or try crawdads fished near any rocks that you find.

## FISH STOCKING DATA

| year | species | length (inches) | # released |
|------|---------|-----------------|------------|
| 00   | Walleye | 1.08            | 72,400     |
| 03   | Walleye | 0.98            | 72,456     |
| 05   | Walleye | 1.10            | 72,490     |

Fish cover types observed: Not observed

Fish foods observed: Not observed

Survey start - end date(s): 05/20/97 - 05/21/97

Survey objective: General survey

Gear type(s) utilized: Trap net

## LENGTH OF SELECTED SPECIES SAMPLED FROM ALL GEAR

Number of fish caught for the following length categories (inches):

| species             | number | length range (inches) | avg. length (inches) | percent legal size |
|---------------------|--------|-----------------------|----------------------|--------------------|
| Bluegill            | 67     | 4-9                   | 5.9                  | 33                 |
| Bowfin              | 13     | 18-26                 | 21.7                 | 100                |
| Largemouth Bass     | 37     | 8-18                  | 13.4                 | 51                 |
| Northern Pike       | 4      | 16-20                 | 19.3                 | 0                  |
| Pumpkinseed Sunfish | 2      | 6-9                   | 8.0                  | 100                |
| Rock Bass           | 122    | 4-11                  | 7.7                  | 76                 |
| Smallmouth Bass     | 9      | 9-15                  | 12.7                 | 44                 |
| Walleye             | 15     | 11-17                 | 14.0                 | 20                 |
| Yellow Perch        | 1      | 9-9                   | 9.5                  | 100                |
| Yellow Bullhead     | 7      | 10-14                 | 13.1                 | 100                |

This is currently a fairly weedy lake, but Beard says a new residential sewer system is now complete, though hasn't shown any progress in reducing the lake's weed growth.

**Crystal Lake** has a wide range of fish inhabiting its waters. Anglers can find muskies, northern pike, walleyes, rock bass, bluegills, perch, and largemouth and smallmouth bass. An area adjacent to the boat ramp (**Spot 1**) is a good place to find pike, bass, and perch. The shelves in the western half of the lake (**Spots 2**) will often produce walleyes. Sunken islands near the north and south shores (**Spots 3**) are good places to find 'eyes, pike, and bass. The deep hole with water to 70 feet (**Spot 4**) is yet another good place to locate walleyes. Several brush shelters have been put in along the lake's south and west shorelines, these are other good places to try your luck. Use your electronics to locate these piles.

