

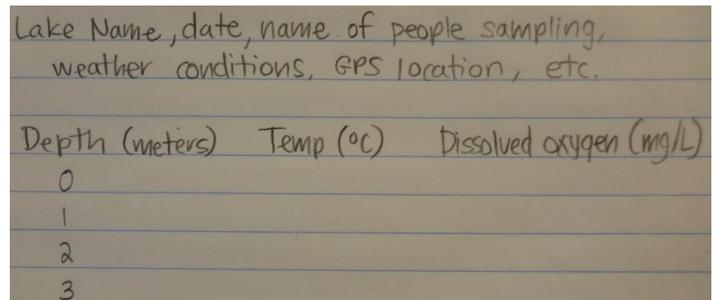
Dissolved oxygen and temperature probe

Before going into the field, determine the location of the deepest spot on the lake.

- Visit <http://dnr.wi.gov/lakes/lakepages/>
- Click on the **Search** tab and type in the name of the lake
- The search can be limited by choosing **Polk County** under **Location**
- Click on the **Search** icon and a list of lakes will appear on the screen
- Select the lake from the search results
- Under the **Overview** tab, scroll down to find the **Maps** heading and click on the **Contour (Bathymetric) Map** link
- Use the map to determine the location of the deepest spot on the lake
- Print the map and bring it into the field as a reference

1. Boat to the deepest part of the lake and confirm the depth with a depth finder. Remember, safety first and always wear a life jacket.

2. Record key information (lake name, date, names of people sampling, weather conditions, GPS location, etc) in a notebook with a pencil.



Lake Name, date, name of people sampling, weather conditions, GPS location, etc.

Depth (meters)	Temp (°C)	Dissolved oxygen (mg/L)
0		
1		
2		
3		

3. Begin a data collection table with the following information: depth (meters), temperature (°C), and dissolved oxygen (mg/L).



4. Turn the probe on by pressing the green power button.

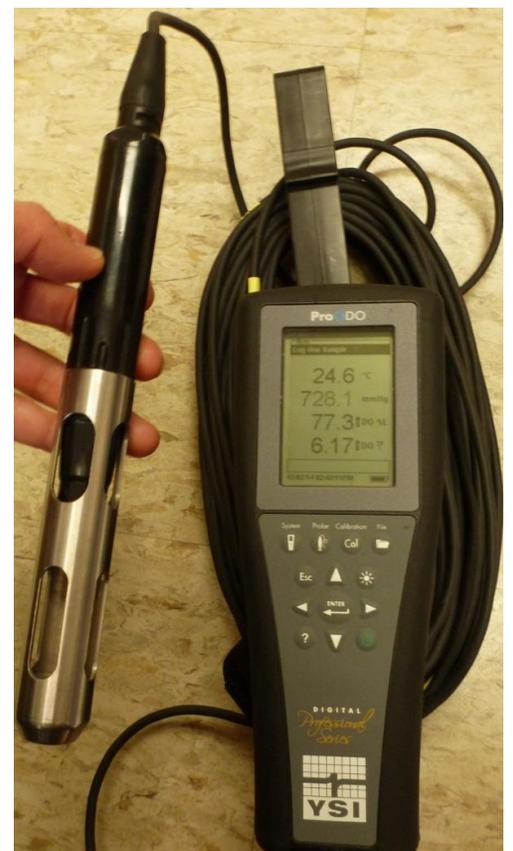
5. Remove the gray cover from the probe sensor and check that the metal probe cover is tightly attached.

6. Insert the entire probe sensor into the lake. The first reading is taken at the surface of the lake (depth = 0 meters on the data collection table). Hold the cable steady and wait 20-30 seconds for the readings to stabilize.

7. Record the first value on the screen as temperature and the last value as dissolved oxygen.



8. The cable is marked with yellow tape at meter increments. Lower the cable until the probe sensor is located one meter from the surface of the lake. Record temperature and dissolved oxygen.



9. Continue lowering the cable and recording temperature and dissolved oxygen at each meter increment until the bottom of the lake is reached (slack will develop in the line).
10. Once the data is collected, rewind the cable, replace the gray cover for the probe sensor, and hold the green power button to turn off the probe.
11. Enter data into the WDNR Statewide Database SWIMS. Information can be found at:
<http://dnr.wi.gov/topic/surfacewater/swims/>
12. Return rinsed (tap water) and air dried equipment to the Land and Water Resources Department, Polk County Government Center, 100 Polk County Plaza, Ste 120, Balsam Lake, WI, 54810 Monday-Friday from 8am-4:30pm. Questions: call 715-485-8699.
13. A demonstration video can be found online at: <http://www.co.polk.wi.us/>, Departments, Land and Water Resources, Equipment Policies and Use.