

5. DISSOLVED OXYGEN MONITORING:

Using a Digital Meter

Before you start sampling, be sure to read the following pages to familiarize yourself with the equipment and the procedures that you will be using. All of the procedures that you will follow in sampling your lake are done for specific reasons. It is very important that you follow the sampling procedures exactly as they are laid out in the following pages to ensure good, consistent, high quality data. The following pages will provide you with sufficient background on the design of the equipment and proper procedures to use.



- **NOTE:** If you are using a dissolved oxygen meter you must read the manufacturers manual before use. Some meters require regular calibration and regular membrane changes.



- After sampling, it is very important to rinse and thoroughly air dry all of the equipment that you used.
- As always keep paperwork and envelopes separate from equipment. Be sure to turn off your meter and store out of direct sunlight.

How Do You Prepare to Sample?

The Day You Sample

On the day you plan to sample, complete the top portion of your field data sheet by filling in the Waterbody # (or WBIC) and Station #. Before you launch your boat, make sure you have an anchor, sufficient gas, and personal flotation devices in your boat.

Before using your dissolved oxygen meter, be sure to read the owner's manual. In order to get accurate data from your meter, you must learn how to calibrate your meter and use your meter properly. You may wish to keep a Calibration Log.

Sampling Overview

Dissolved Oxygen Meter

The CLMN allows volunteers to use their own dissolved oxygen meter to take your readings. If you choose to collect your dissolved oxygen data using this method, it is important to remember that some meters *must* be calibrated every time they are used. Please follow all instructions for care and maintenance found in the operation manual for your particular model as maintenance of the meter is imperative to get good data. If you choose this method you should inform your CLMN coordinator so they can flag the database with this information.

ON LAKE PROCEDURES

Dissolved Oxygen Monitoring

Dissolved Oxygen Meter

STEP 1. Your regional coordinator will assign 5 to 10 depths to sample for dissolved oxygen. Your meter will also record temperature. You will collect dissolved oxygen and temperature data at the same depths.

STEP 2. Follow manufacturer's instruction for calibration and use.

STEP 3. Lower the probe to the assigned depth. Record temperature and dissolved oxygen reading from the meter onto your data sheet.



NOTE: Dissolved oxygen should be collected in the "mg/L" mode only. Some meters are calibrated in percent saturation, so be sure to use the mg/L mode while gathering data.

Record the type of meter you are using under "observations" on your data sheet.