



Connecticut Lake Watch

Field Quick Reference Guide

Secchi Disk Depth & Temperature Readings

Equipment List:

- 8-inch Secchi disk attached to a metered Line
- Viewing tube
- Clothespins or similar marking device
- Field thermometer
- Field datasheet and pencil (or use the Lake Observer mobile app)
- GPS unit, bathymetry map, and/or depth finder
- Boat anchor(s)
- Camera or smartphone (waterproof case is recommended)

General Reminders:

- Monitor sites weekly between 10:00 a.m. and 4:00 p.m.
- Make sure the disk is securely attached to the line before lowering!
- Anchor your boat to prevent drifting; do not monitor if strong winds or currents.
- Remove sunglasses and hats before monitoring.
- Measure secchi disk depth from the shady side of the boat
- Take a reading with the view scope, then take a second reading without

Instructions:

Step 1: Navigate to your sampling site using a GPS unit, depth finder and/or field map. Securely anchor your boat and wait for the boat to settle into its orientation. If needed, set a second anchor to prevent drifting.

Step 2: With the viewing tube held to your eye, lean over the shady side of the boat and lower the disk into the water until it disappears (looking through the view scope). Slowly raise the disk back up until just visible, then lower again to the point of just disappearing. Hold there and mark the line at the water surface with a clothespin. Record this value (to the nearest cm) on the datasheet.

- Make sure the disk lowers straight down. If not, add additional weight or pull the line close to the boat and take the reading quickly.
- If the disk was on the bottom (i.e., you could see to the lake floor), note this on the datasheet and skip to step 4.

Step 3: Repeat step 2 above, this time *without the viewing tube*.

Step 4: Slowly lower the disk in the water until it reaches the bottom. Mark the metered line at the water surface with a clothespin. Record this total depth value (to nearest cm) on the datasheet.

Step 5: From the sunny side of the boat, use a field thermometer to measure the temperature of the air; record this on the datasheet. Place the thermometer elbow deep into the water, hold in place for several seconds to allow the thermometer to stabilize, then record the water temperature on the datasheet.

Step 6: Record weather and surface water conditions on the datasheet in the space provided. Take photographs of any unusual water quality conditions.