

## PROVINCE LAKE SECCHI CLUB

### Detailed Technique for Measuring Secchi Depths

Here is the nitty-gritty technique for measuring Secchi depths, from Bob Craycraft, edited and expanded for clarity. This technique is written for use with the viewscope, which is the more difficult measurement, logistically speaking. Following the same procedure will be that much easier without a viewscope in your hand. Each new person should do a trial run or two of this technique before recording any data.

1. First uncoil your Secchi Disc line and lay it on the boat deck so that you can lower the disc on your own (or you can have someone else handle the supply of line for you).
2. Hold the Viewscope by its handle with your non-dominant hand. While looking through the Viewscope, position the Secchi Disc line between the fingers of your other hand. Hold the Secchi Disc line right at the water line (where the tips of your fingers can feel the water) and then slowly let the line slide between your fingers to lower the disc until it disappears from view, at which time you should pinch and hold the line at that point, physically marking that depth, while still looking through the viewscope.
3. Next, lower the disc a few more inches below the point of disappearance. Then raise your hand, raising the disc until light can just be seen reflecting upward from the white surface of the disc, then pause. While holding the line at that depth, put the viewscope down (or have someone take it from you) and with your now-free hand (formerly holding the viewscope), pinch the line between your fingers at the water level where the disc reappeared. You are effectively pinching the line where the disc disappeared with one hand and pinching the point of reappearance with the other. Bring the two points together and pinch them together with one hand. Then use your other hand to put tension on the intervening line (between disappearance and reappearance points), pulling the loop out to the side to find its mid-point, to physically get the average without ever needing to measure the disappearance and reappearance points. A binder clip, spring clothes pin, or anything else convenient can then be clamped onto that average point to temporarily mark it, if you wish, or you can just hold onto it tightly.
4. Finally, measure the distance from the top of the Secchi disc to the temporarily marked average point on the line and record the value and units of measurement in the "average" column of the datasheet. If you are using a Secchi Disc line that has no permanent depth markings on it, you can use a tape measure or a yardstick to measure the full distance. If you have a permanently marked line, you can use a yardstick to measure the distance from a known mark and do the math. With a permanently marked line, you will need to do an occasional calibration to find out exactly what the distance is from your marks to your disc, because lines often shrink with repeated wetting and drying. The calibration measurement should be done when the line is wet, because you only really care about its length when you are using it wet.