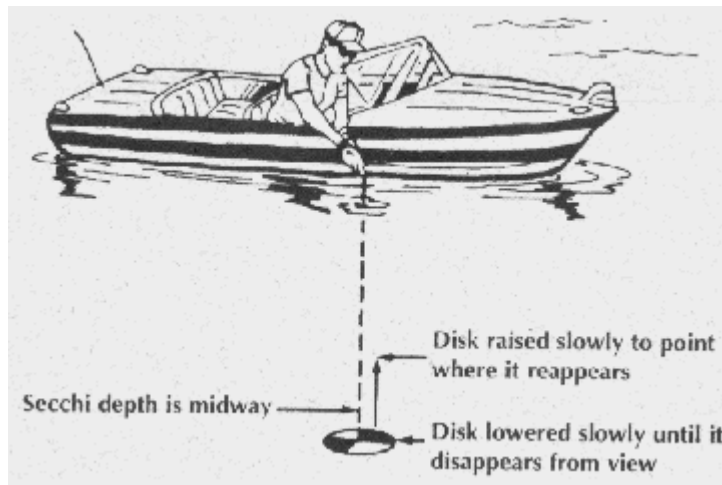


Secchi Disk Transparency Sampling Procedure

The Secchi Disk: The Secchi disk is used to measure how deep a person can see into the water. For lake monitoring, the disk is typically 8 inches in diameter and painted in alternate black and white quadrants. It is simply lowered into the lake by unwinding a calibrated line to which it is attached until the observer loses sight of it. The disk is then raised until it reappears. The average of the depth of the water where the disk disappears and reappears is the Secchi disk reading.



Basic Sampling Procedure

1. The sampling site should be near the center of the lake and/or at the deepest part of the lake. Sampling should be conducted near mid-day (between 10:00 and 3:00)
2. On the shady side of the boat (see NOTE below), lower the Secchi Disk straight down into the water until the disk just disappears from sight. Mark the depth (*of disappearance*) on the line at the water surface.
4. Lower the Secchi Disk a little further, than slowly raise the disk until it reappears. Mark the depth (*of reappearance*) on the line at the water surface.
5. The Secchi Disk transparency depth is the average of the depth of disappearance and depth of reappearance.
6. Record the Secchi Disk transparency depth on the data sheet to the nearest inch.
7. Repeat the process two more times so you have three measurements. The average of the three measurements is the final Secchi Disk Transparency measure for that sampling site.

NOTE: An inescapable error of approximately 10-15% is introduced when the shady side of the boat is used. If the disk itself is shaded by the boat, contrast is lowered and the reading is less than it should be. If the surface is in shade but the disk is in sunlight, then contrast is enhanced, and the reading is greater than it should be. However, to view the disk on the sunny side of the boat, without a viewscope, increases surface glare, which lowers the ability to see the disk disappear.