Secchi Disc

Care and Use

Student Secchi Disc
Made by: Fieldmaster

Note: *All links are provided purely for educational purposes. No responsibility is assumed for any content on the linked site(s).*

Physical Description

Rope (20 m) attached to black-and-white patterned plastic disc, with a lead weight on the bottom.

Assembly

Tie the rope to the Secchi disc using (for example) a slip knot[1]. Tighten the knot as much as possible. Now you are ready to mark increments.

Use electrical tape to mark increments on the rope. Measure from the surface of the Secchi disc, not the knot. Alternatively: use a tape measure alongside the rope to measure depth.

Use of Secchi Disc

A Secchi disc is used to measure the turbidity of water bodies.

- Take the Secchi disc on a boat (or dock, if water is deep enough).
- Position yourself so the sun is at your back as you look into the water.
- Lower the Secchi disc into the water until you can no longer see it.
- Slowly raise the Secchi disc until you can just barely see it. Note: you are not trying to see the pattern clearly, just able to see the disc itself.
- Use the rope (or a tape measure) to measure this depth.
- Record your Secchi depth.

[1] Slip Knot: https://www.netknots.com/rope_knots/slip-knot

Handling and Storage

Rinse the Secchi disc (and rope) off with clean water (this helps to stop the spread of invasive species like milfoil).

Let the Secchi disc (and rope) dry, time permitting.

Once dry, return the Secchi disc and any other materials (rope, tape measure) back to the Secchi disc box.

Tips and Tricks

For some data collection purposes (for example, for lake water quality data collection) the use of a scope is required. A scope will negate effects of strong sunlight or light surface ripples.