

The Secchi Disk provides a very simple means of making transparency determinations in natural waters. Water that is clear has a high transparency. Transparency usually decreases in the summer when plankton, silt and organic matter are more likely to be prevalent. The most transparent lakes are usually seepage lakes as this characteristic greatly reduces the amount of silt bearing influents. Drainage lakes carry more silt and usually are less transparent. For example, a drainage lake may be in a class of 1.0 to 1.4 m but a seepage lake in the same area may give readings of 3.0 to 4.0 m. A high reading in the class of 19 to 21 m would indicate extreme clarity. That same lake in the summer may read only 10 m.

The Secchi Disk is a black and white circular plastic plate, 20 cm in diameter. A measured line is attached to the center of the disk by means of a special fitting that stabilizes the disk so that it will be parallel to the surface. Best results are obtained in the shade of a boat or dock. The best readings are usually obtained after early morning and before late afternoon.

- 1. Lower Secchi Disk into water until it just disappears. Read depth from calibrated line. The line is marked at 0.5 meter and 1 meter increments.
- 2. Raise Secchi Disk until it just appears. Read depth from calibrated line.
- 3. Add readings from Steps 1 and 2. Divide by 2. Record as Secchi Disk Transparency.

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