

THE ANNUAL SECCHI DIP-IN



What is a Secchi Disk?

Father Pietro Angelo Secchi, scientific advisor to the Pope, was asked by Commander Cialdi, head of the Papal Navy, to develop and test a new water transparency instrument in the Mediterranean Sea. This instrument, now named the Secchi disk, was first lowered from the papal steam yacht l'Immacolata Concezione (The Immaculate Conception) in the Mediterranean Sea on April 20, 1865.

The typical Secchi disk used in lakes is an 8-inch disk with alternating black and white quadrants. It is lowered into the water until the observer can no longer see it. The depth of disappearance, called the Secchi depth, is a measure of the transparency of the water.



OVERVIEW:

The Secchi Dip-In is an annual event that takes place during Lakes Appreciation Month, July 1st to 31st. It is an international event where volunteer monitors across North America collect a "snapshot" of the water quality in their local lakes.

The data collected are used to assess trends in transparency of waterbodies in North America. Since 1994, more than 10,000 volunteers have generated 42,000 transparency records, giving a glimpse of lake water transparency at sites across North America and the world.

Transparency (clarity) is a good indicator of the impacts from human activity on the land surrounding a water body. If transparency is measured through the season and from year to year, trends in transparency can be observed. It can serve as an early warning that activities on the land are affecting water quality.

A goal of the Dip-In is to increase the number and interest of volunteers in environmental monitoring. Participation in BC's Dip-In has been steadily declining, but the data is more important now than ever! Please pass this information along to anyone that may be interested. Volunteer efforts are much appreciated!

How to Use a Secchi Disk

Step 1

Lower the Secchi disk over the shaded side of the boat.

Step 2

Lower the disk until the black and white pattern is no longer visible.

Step 3

Count the number of metre increments (marked on the rope) between the Secchi disk and the surface water (estimate to the nearest cm). Record this as **Distance A**.

Step 4

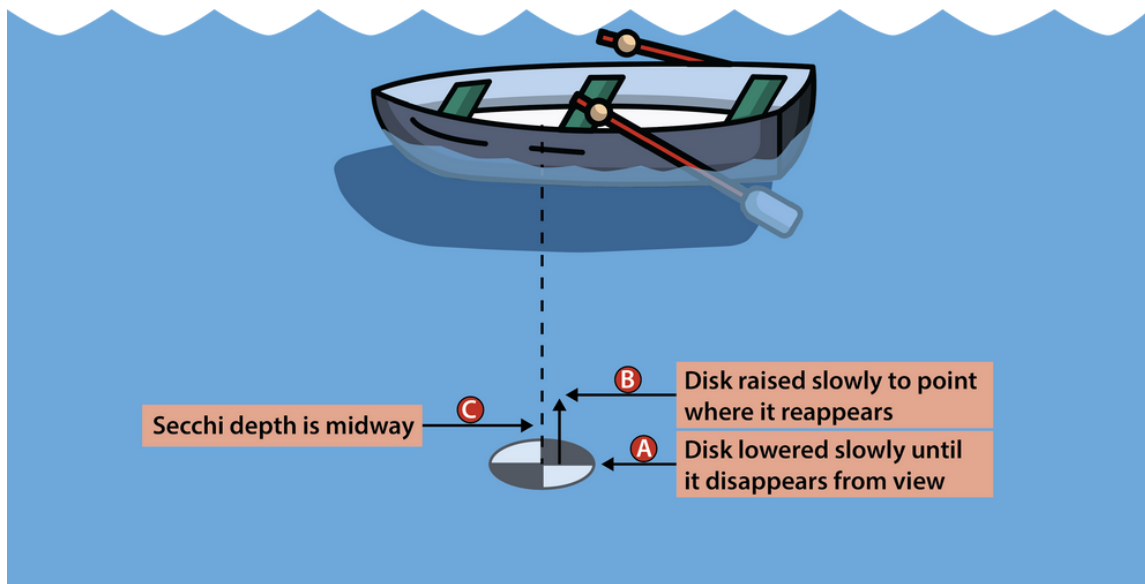
Pull the disk up until the pattern appears again and record this as **Distance B**.

Step 5

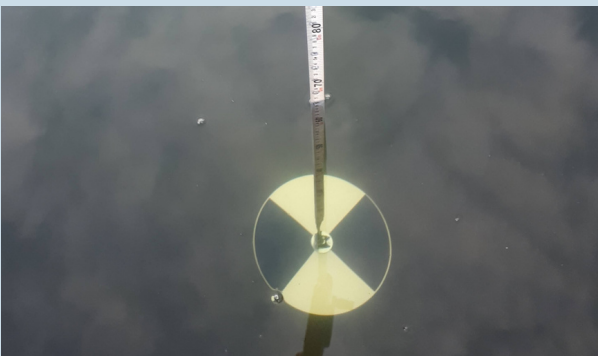
Average the two measurements and record them on the information sheet. *Record to the nearest 0.01 m.* i.e. $(\text{Distance A} + \text{Distance B}) \div 2 = \text{Secchi Depth}$

Step 6

Fill in the remainder of the information on the data sheet and submit on the [BCLSS website](http://bclss.org) or send it to: info@bclss.org.



If you need any assistance, please email info@bclss.org



Did you know?

You can also learn how to take measurements by watching the [How to Measure Secchi and Site Depth Video](#) by Lake Windermere Ambassadors.

Important Points to Remember

- Measure transparency on any day during the month of July between **10 am and 2 pm**.
- Go to the site or sites where you normally measure transparency.
- Please do not go out if it is raining, if there is abnormally high boat traffic, or if your safety would be at risk. **A clear, calm day would be best.**
- Always measure on the **shady side of the boat**.
- **Do not wear your sunglasses** while conducting the measurement.
- If you have participated in the past, please participate again so that we can examine trends in transparency.