

LAKE PARTNER PROGRAM – detailed instructions

NOTE: You will need to supply some materials to make collection bottles and Secchi Disks.

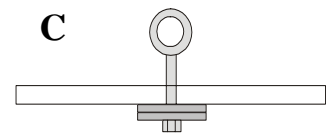
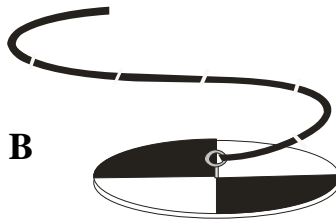
Before you go out;

1. Prepare the **collection bottle** by attaching about 6 meters of clean rope to the neck ring (**A**). Mark the rope off in metres. Duct tape the bottle to a suitable clean weight that is heavy enough to sink it. A metal *pipe cap* is shown in the photo below. Keep your ropes and weights to attach to a new bottle supplied each year.

2. Assemble the **Secchi disk**. The Secchi disk enclosed in your kit (for new volunteers) will need to have a rope attached marked in tenths of a metre (**B**). The rope length will depend on how clear the lake is. Lakes in Ontario have up to 10 metres of water clarity (usually 4-6). You will need to add an eye bolt (for the rope) and a few large washers or other suitable weight to the bottom (**C**). Some stores carry large square “dock hardware” washers that are ideal to use as weights.

Keep your Secchi Disk to use in following years.

A



General

The lake location determines the number of total phosphorus water samples collected as follows:

- **Lakes on the Canadian Shield** are sampled for total phosphorus **once per year** during May. In this case you will receive only one set of bottles
- **Off-Shield lakes** are sampled **monthly** for total phosphorus May to October. In this case you will receive six sets of bottles.

Secchi disk observations are made, ideally, twice a month (May to Oct). Record the Secchi depths on the enclosed observation sheet. There are condensed sampling instructions on the reverse side. In November, return the observation sheet to the Dorset Environmental Science Centre in the envelope provided.

Water Sampling Materials include:

- one 80 micron filter funnel (1)
- one small 100 mL sample jar (2)
- one sample collection bottle (3)
- two glass sample tubes (4)
- mailing labels, postage, etc.



At the Lake

Step 1.

Use your Secchi disk to measure the water clarity and record the depth (in **metres**) on the observation sheet (see instructions on back of observation sheet). There is a more detailed insert for new volunteers on how to use a Secchi disk).

If you have a thermometer, take the temperature from just below the surface and record this on the observation sheet. **Keep** your observation sheet to make monthly Secchi readings and return it to Dorset in November in the envelope provided.



Step 2.

Collect the water samples. First, rinse the small 100 mL jar twice with a bit of filtered surface water. Lower the weighted bottle down to the Secchi depth and back to fill it. In shallow lakes, lower the bottle no closer than **1 metre** from bottom.

Step 3.

Pour the water sample through the filter into the small sample jar. The filter components are held together by friction. If they come apart, reassemble the two halves with the filter screen between the upper and lower sections.

Write the sample date on the jar.



Step 4.

Repeat the sample process to collect water to fill the two test tubes. Rinse the tubes twice with a bit of filtered water. **Fill to 1cm above the etched line.**

Make sure the lids are screwed on snugly.



Step 5.

Place the **filter, small jar and test tubes** back into the box. Make sure the tubes are inserted back into the protective pipe wrap with the lids securely screwed on. Attach the address label and postage provided to the outside of the box. Seal the ends of the box with tape and mail to Dorset.