

**Phytoplankton Sampling Protocol**  
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Please make prior arrangements with the lab before bringing in samples to be examined for dinoflagellates. Samples should be transported to the lab as soon as possible.

### Sampling Supplies

The laboratory supplies the following items for sample collection:

- ❖ Glass sample bottles for phytoplankton monitoring or plastic bottles for toxicity studies (1 liter)
- ❖ Small test tube of Lugol's iodine (approx. 7 mls.)
- ❖ Sample identification tags
- ❖ Laboratory report form

You may also need the following items:

- ❖ A box and or cooler for transporting samples to the lab.
- ❖ Preserved samples may be transported at ambient temperatures or cooled.
- ❖ Live (unpreserved) samples should be cooled (not iced) over ice packs in an insulated container.
- ❖ Thermometer for hydrographic data; Salinometer or refractometer

### Sample Collection

Phytoplankton samples may be collected from the surface during mid-day hours or from multiple depths if necessary or as appropriate for a particular organism. Samples may be collected in the sample bottle (surface) or a special sampler at prescribed depths for transfer to the glass sample bottle. Identify the samples with location (site name, GPS coordinates, etc.) and other pertinent data on the tag and the report form.

### Preserved samples for identification and enumeration

Samples are preserved with Lugol's iodine immediately by pouring the contents of the small test tube directly into the sample bottle then adding sample water to fill to the top of the jar. Use care in handling to avoid contact with the iodine. Replace the cap and invert the bottle gently several times to mix the iodine into the sample. The samples should be the color of strong tea.

### Live samples for identification only

Fill sample bottles full. If lab bottles are not available, use a clear plastic "bottled water" container. Wrap bottles with damp newspaper and keep at ambient temperature. Please avoid temperature extremes. Transport to the lab within 24 hours of collection.

### Samples for Toxicity Studies

Collect 500 to 1000 mls of water in a plastic bottle (brown is preferred). Allow room for expansion because the samples will be frozen for preservation. Label appropriately.

### Salinity

Salinity is helpful in phytoplankton studies. If not measured on-site, you may collect a separate salinity sample (plastic bottle) so that the lab can perform the measurement. Please attach to the dino sample or label with the location.