TEMP

TEMPERATURE

Materials Checklist

___ Power Macintosh Computer
___ Lab Pro, Power supply and cable
___ Vernier Temperature Probe

Testing Procedure

1. Prepare the computer for data collection.
   • You are using a Stainless Steel Temperature Probe (silver tip), open “Test 01 Temp-Direct Connect” from the Water Quality with Computers experiment files of Logger Pro. On the Graph window, the vertical axis has temperature scaled from 0 to 50°C. The horizontal axis has time scaled from 0 to 10 seconds. There is also a Meter window which displays live temperature readings.

2. Plug the Temperature Probe into Channel 1 of the Lab Pro.

3. You are now ready to collect temperature data.
   a. Place the tip of the probe into the tank. Submerge the probe until most of it is under water.
   b. Monitor the temperature in the Meter window for 30 seconds.
   c. If the temperature appears stable, record it on your data table.

4. If the temperature value displayed in the Meter window is fluctuating, determine the mean (or average) temperature. To do this:
   a. Click \[\text{Data} \] to begin a 10-second sampling run. **Important:** Leave the probe tip submerged for the 10 seconds that data is being collected.
   b. Click on the Statistics button, \[\text{Stats} \], to display the statistics box on the graph.
   c. Record the mean temperature on data table.