

Temperature Data Collecting Steps

Tips:

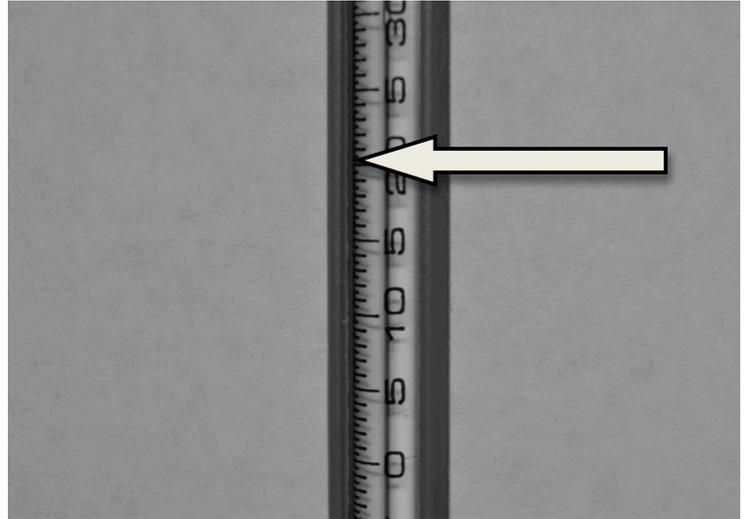
- Time of day - highest temperatures are typically around 4- 6 pm; lowest are in early morning.
- Location of measurement - measure in the middle of the stream in fast moving water. Pools (stagnant water) can have a different temperature than a riffle (wavy water) and try to take the temperature readings as far apart as possible.
- Shallow versus deep water – try to take your sample in a part of the stream that is representative of the stream at your site.
- Streamside vegetation – lack of overhanging vegetation can lead to higher stream temperatures – so take the temperature in a non-shaded location.
- Tributary or groundwater influence – try not to sample near where a tributary comes into your stream. You have no control over groundwater!
- Try not to do the test downstream from others.

Steps:

1. Remove thermometer from wrapping and allow to sit out for five minutes (make sure to hang from a branch or somewhere not touching the ground or yourself).
2. Record air temperature.
3. Determine three safe places to take stream temperature and get your teachers approval. Never enter the stream or river if you can't tell how deep it is!



4. Start at the most downstream location.
5. Wade into the water so that it is possible for the thermometer to be roughly four inches below the surface (or as deep as you can without touching the bottom).
6. Hold thermometer under water for two minutes.
7. Read and record what you see!
8. Repeat at least three times (in order to get an average).



Temperature Data Sheet

Step #1: Fill out all the information below.

School: _____
 Teacher: _____
 Names of Monitors: _____
 Stream Name: _____
 Test Location: _____

Weather: _____
 Time: _____
 Therm. Brand: (Hach, LaMotte) _____
 Date: _____

Step #2: Record air temperature.

Test Results		Comments: _____
Date: _____	_____ °C	_____

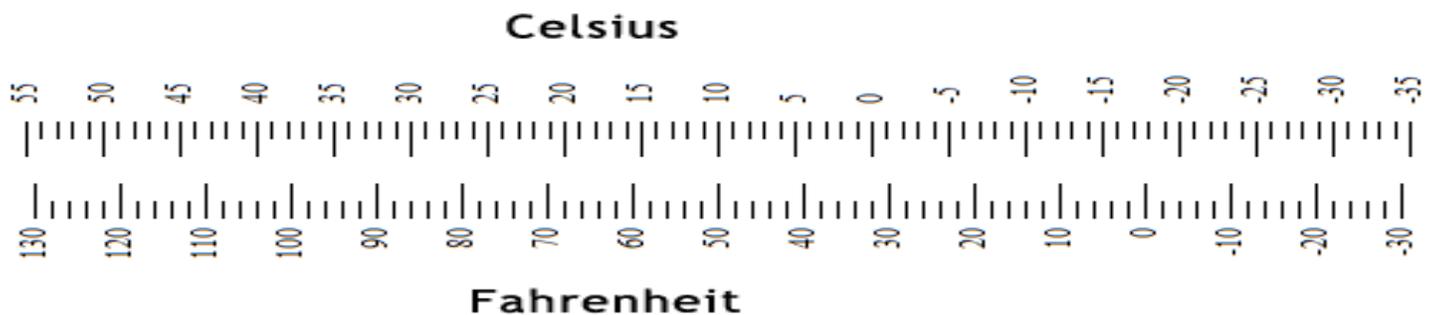
Step #3: Record at least 3 replicate sample values in the chart below. Values should be similar, re-test any samples with values at least 10 degree difference.

Replicate #1	Replicate #2	Replicate #3	Replicate #4 (if needed)
_____ °C	_____ °C	_____ °C	_____ °C

Step #4: Record the **average** of your 3 replicate samples in the box below. Record any comments or observations.

Test Result (record the average)	_____ °C	Comments: _____

Step #6: Draw the average for what you found!



Optimal Levels:

Hatching Salmon	Adult Salmon	Aquatic Insects	Not Acceptable
< 48°F or 9°C	< 54°F or 12°C	< 50°F or 10°C >	65°F or 18°C

< less than, > greater than

Nisqually River and South Sound GREEN Site Survey - Temperature

1- Weather - Check one box

Storm

Overcast

Rain

Clear

Showers

Stream Description

2- Depth: feet measured estimated

Width: feet measured estimated

3- Check the box if these stream features are present:

- Pools** -where the water is deep and slow moving
- Riffles**- shallow water that's fast moving and shows whitecaps
- Runs** - deeper than a riffle with fast moving water but no whitecaps showing