River observations

Temperature

What's the issue?

Temperature affects a number of aquatic ecosystem processes and is particularly stressful to fish. This is due to the reduced saturation, and availability, of dissolved oxygen associated with warmer water temperatures, exacerbated by rising metabolic rates for aquatic life forms. *A lack of oxygen kills most higher organisms, especially fish.*

Taking the measurement

Who? Registered users with a thermometer issued by the iDee program

Your safety Remember DO NOT go alongside the river or loch if: you can't swim, the water is too deep or fast moving, or if you are alone.

How long does it take? 5 minutes

Equipment needed A thermometer capable of measuring water temperature with a suitable scale.

How to measure Hold the thermometer in the water if safe to do so, or fill a cup to take the measurement, record when the temperature reading is stable.

Tips If you are aiming to return to one place to make repeat measurements the data is more useful if you can sample from exactly the same spot each time.

Tell me more about the problem?

Climate extremes cause greater water temperatures but also a lack of shade from water margin trees, low flows and excess sediments make water warm up more quickly with rising air temperatures.

For example fish species:

Atlantic salmon

Brown trout

Normal ranges

Maximum tolerance