

What information can we get from a fish?

ENVIRONMENTAL

Water samples: temperature, salinity, oxygen, pollutants

River connectivity: describes flow conditions, presence of barriers to migration (dams, weirs)

Ecosystem indicators: links between individual and fish population health under climate change scenarios

MOVEMENT AND BEHAVIOUR

Telemetry and tagging (acoustic, PIT, satellite tags): migration routes, habitat preferences, survival

Recapture data: growth and site fidelity information

Environmental sensors (tags with temperature/salinity): behavioural response to environmental changes

Genetic data: migration routes, connectivity and population structure



EXTERNAL

Morphology, traits, colours: species identification

Size and weight: age, growth, body condition

Reproductive biology: sex and maturity stage

Parasites, lesions, or deformities: health condition



INTERNAL AND TISSUE-BASED

Otoliths: age determination, growth rates and microchemistry

Muscle, liver, gonad samples: physiological status, contamination

Genetic samples (fin clip, muscle, scales): migration routes, connectivity and population structure

Digestive track: information of food web

Parasites, lesions, or deformities: health condition

