FISH BIOMASS SURVEY

Infofish's advanced sampling methods can uncover everything you need to know about your water body's ecosystem! Our all-in-one survey methods map Bathymetry, Underwater Habitat, Fish Biomass and Riparian areas in a single one-pass survey process.

WHO WE ARE

Infofish is a leading expert in the field of Echosounder based surveys, having surveyed over 450,000 acres in over 50 locations for local and international clients. We work hard to deliver the most comprehensive and cost-effective ultrasonic aquatic surveys on the market, revolutionising how biomass, habitat, and bathymetry surveys are conducted.

WHY SURVEY YOUR WATER BODY

The common questions that typically prompt a survey are:

- How many fish are in the water body?
- How big or what range of sizes are the fish in the water body?
- How are fish distributed throughout the water body/what habitats are they associating with?
- Are fish mobile or relatively still?
- Which part of the water column are fish occupying?
- How many fish species comprise the assemblage or community within a site/water body?

Survey Design
Preparation and Planning

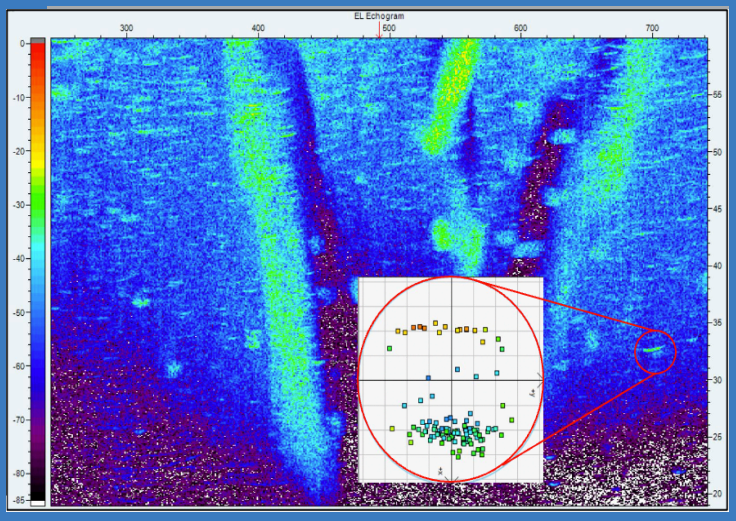
Biomass surveys use 200KHz split beam, side facing covering 200m parallel to the vessel.

Riverine:

- two longitudinal transects (one upstream and one downstream) with the vessel travelling parallel to the bank, and
- additional transects across the waterbody spaced 100m apart

Enclosed waters / impoundment:

- a number of transects across the waterbody, spaced 100m apart.



Data Collection
On the water

Fish biomass and distribution data collected with the BioSonics DT-X split beam echo sounder is generated using the Visual Acquisition[1] software package.

- the ping rate (pings per second) - can be set between 1 and 10 and is dependent on the aims of the survey and types of data being collected.
- the decibel threshold - the threshold below which echoes are rejected
- the number of echoes an object needs to return to be classified as a 'track'

Data Analysis and Outputs
Post Processing

All data is exported generating between 10,000 and 1 Million tracks depending on survey size. Tracks are assessed by the Infofish Processing system that uses Machine Learning and other Algorithms to generate over 200 datapoints per track for assessment.

- Tracks assessed and classified as bottom, habitat, fish or vegetation.
- Fish assessed for length.
- Fish biomass summary and mapping outputs generated.
- Where possible fish species assessed.