

Fisheries Research & Development



AquaBioTech Group is an international consulting, engineering and R&D company with over 20 years of experience in aquaculture, fisheries and other aquatic sciences. Located in the centre of the Mediterranean on the island of Malta, although operating globally with clients and projects in over fifty-five countries. The vast majority of the organisation's work is related to the marine or aquatic environment, encompassing aquaculture developments, market research/intelligence through project feasibility assessments, finance acquisition, project management, technology sourcing, technical support and training.



ABT Fisheries is part of **AquaBioTech Group** and offers a broad range of services in fisheries science. Our expertise encompasses several disciplines enabling us to carry out research, conservation, and commercial activities. We undertake projects in collaboration with international research institutions, governmental agencies, NGOs, and the private sector. We provide a complete set of multilevel field surveys, and is specialised in offshore and inshore collection, processing, and analysis of fisheries data and samples, including:

- Biometric data and biological samples: length, weight, sex, gonad maturity, tissues, and stomach contents.
- Tissue samples for genetic analysis, environmental samples for eDNA analysis and for stable isotope analysis (SIA).
- Fish population surveys using various sampling techniques such as, trawling and gill netting.
- Underwater visual census and camera census surveys to monitor fish assemblages.
- Data analysis using a range of analytical techniques and statistical methods to address fisheries management and conservation issues.
- Local ecological knowledge (LEK) and socio-economic surveys to improve fisheries knowledge and provide informed advice to research institutions, governmental agencies, and NGOs.



Wild Atlantic Bluefin tuna.

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STEREOCAMERA FOOTAGE ANALYSIS

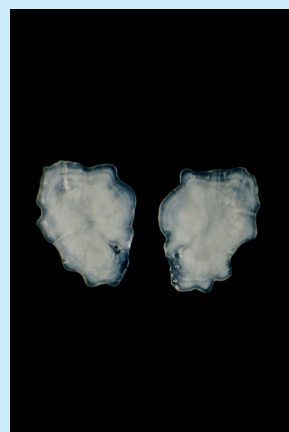
ABT Fisheries has experience analysing stereocamera footage to estimate fish biometric parameters. This is an innovative method that allows non-invasive, rapid, accurate size measurements, and can be used for aggregations of aquatic organisms. The data can be used for fisheries stock assessment.

OTOLITH AND SPINE EXTRACTION FOR AGE READING

Offering a full service of otolith and spine extraction for age reading, and determination of population structures and dynamics.

PHYSIOLOGICAL EXPERIMENTS AND TAGGING

Collaborating with international research institutions, conducting physiological experiments and tagging of cage reared Atlantic bluefin tuna. This work aims to study the impact of climate change on migratory patterns and the changes in the environmental parameters on population dynamics.

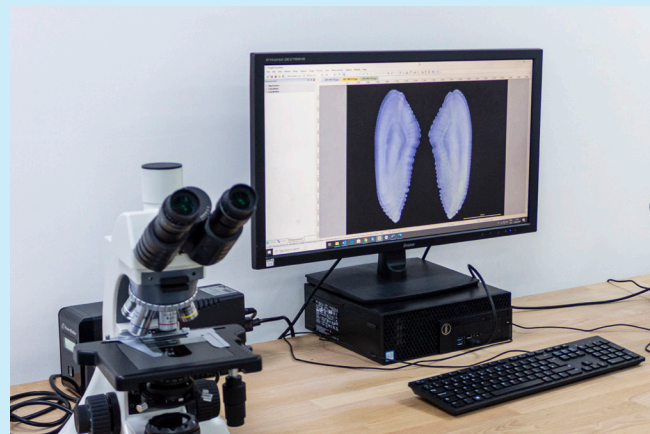


Otoliths processed for age reading.

MARINE BIOTECHNOLOGIES

ABT Fisheries is involved in research to increase sustainability in the fisheries sector by developing techniques utilising fish waste for the production of bioactive products and fish feed formulations,

thereby valorising and minimising waste. These feeds and other products are tested with **commercially important** fish species in our **ABT Innovia** wet lab facilities. Moreover, providing market analyses to ensure successful commercial exploitation of these resources and products.



Fisheries research activities in the Ecology Laboratory at AquaBioTech Group.



Fish samples processing in the Ecology Laboratory at AquaBioTech Group.