



Noise & Bioacoustics

Cefas scientists are recognised experts in impact assessment of underwater noise, with capabilities ranging from marine biology and bioacoustics to sound propagation and modelling.

This breadth of expertise enables Cefas to provide holistic impact assessment solutions, informed by high quality science.

Our capability

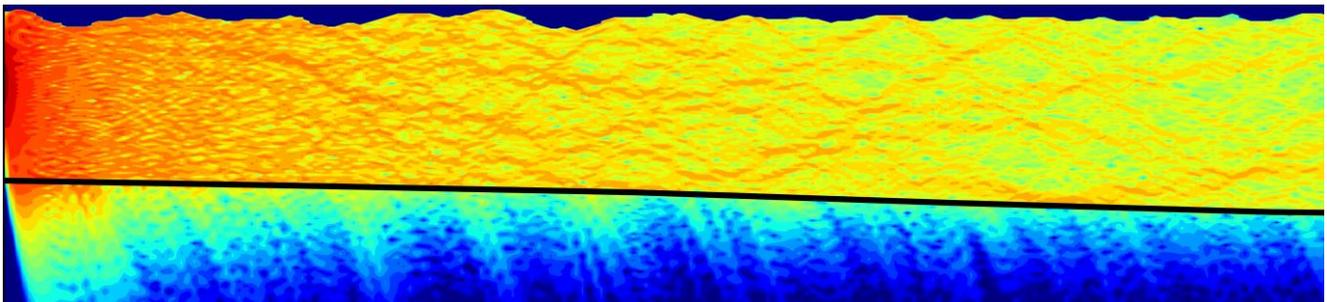
Underwater noise is increasingly recognised as an environmental concern, with potential disturbance to marine life caused by activities such as pile driving and seismic surveys.

Cefas noise modelling and mapping capabilities enable you to plan your projects while protecting marine life and meeting complex national and international regulatory requirements.

Our experts have experience working with businesses and organisations in a range of sectors, including government, offshore renewable energy, oil & gas and nuclear energy.

Our services:

- Environmental impact assessment
- Noise modelling and mapping
- Field surveys
- Bioacoustic monitoring
- Training





Field surveys and analysis of big data

Cefas conducts field surveys of underwater noise, and has the capability to carry out offshore monitoring from the RV Cefas Endeavour.

Long-term or multi-site noise monitoring can generate big data, which demands high-performance computing techniques to exploit fully. In our long-term monitoring projects, we have developed methods for detailed statistical analysis of these datasets which reduce uncertainty in baseline assessment.

Advanced noise modelling capabilities

Cefas has in-house expertise in acoustic propagation modelling, and has developed a 3D modelling suite for noise assessment under varying oceanographic conditions. This model underpins our environmental impact assessments, and is able to account for seasonal effects and wave conditions which can substantially affect predictions of risk to marine life.

Environmental impact assessment

Our scientists have experience of conducting environmental impact assessments for a range of project scales, and are familiar with the regulatory processes and legislative requirements throughout the UK.

Trusted scientific advice

Cefas is also a leading voice on policy and regulatory issues, providing scientific advice on underwater noise to Defra, the Marine Management Organisation (MMO), and Natural Resources Wales (NRW), and representing the UK in international fora such as OSPAR and the EU Technical Group on noise for the Marine Strategy Framework Directive (MSFD).

Enquiries

For further information on our noise and bioacoustics services, please contact Nathan Merchant on +44 (0) 1502 527780 or nathan.merchant@cefass.co.uk.

