Foras na Mara
Marine Institute

Marine Institute Job Description

Position	**Temporary Scientific & Technical Officer - Biology, and Ecology of Bivalve Molluscs**
Grade & Contract	**STO - Temporary Specified Purpose contract up to end January 2026 subject to availability of continued funding.**
Service Group	**Fisheries Ecosystems Advisory Services (FEAS)**
Location	**Marine Institute, Rinville, Oranmore, Galway** **(noting that we are piloting our blended working policy across 2023/4 which may apply to this role)**

Who will you Work With and What Will The Role Involve?

The Scientific and Technical Officer (STO) will work within the Shellfish and Environment Team in FEAS. This team provides stock assessment advice on commercially exploited species of bivalve molluscs and crustaceans and assesses the effects of fishing for such species on the environment including on benthic (seafloor) habitats and on seabirds. Environmental conditions affect the biology and productivity of bivalve molluscs including their health (disease status), growth rates, reproduction and survival. Their geographic distribution and productivity (energy budget) is determined by key environmental parameters.

The STO will work to collate existing and gather new data on distribution and biology of bivalve molluscs and the environmental conditions where they occur in a number of areas off the coast of Ireland. The data will be used to develop population estimates and distribution and habitat suitability models. The role will involve sea time on commercial vessels and traveling to ports.

The temporary role is required to service a new project (BIVALVE) funded by the Department of Agriculture Food and Marine (DAFM). The project is a collaboration between University College Cork (UCC; co-ordinator) and the Marine Institute. The objectives of the Marine Institute aspect of the project are:-

- To investigate the current status of bivalve stocks including stocks for which no information currently exists;
- Derive biological parameters for bivalve populations relevant to resource assessment from existing and new data;
- Acquire and collate key environmental data sets relevant to the distribution and productivity of bivalve molluscs;
- Develop habitat suitability and distribution models for bivalve species.

What Will You Be Doing Every Day?

Principal Tasks:

- Undertaking field surveys of commercially exploited bivalve molluscs (oysters, clams, cockles) in collaboration with project team;
- Collection of bivalves for assessment of tolerance of bivalves to parasites in collaboration with the fish health unit and external contractors

- Collating existing observed or modelled environmental data in areas where bivalve populations occur;
- Maintain and use environmental sensors for the collection of data on temperature, salinity, pH, oxygen, chlorophyll and turbidity;
- Management of data under the Marine Institute data quality management framework;
- Deriving biological parameters on bivalve growth, mortality and reproduction from existing and new survey data;
- Develop species distribution and habitat suitability models for bivalve species;
- Work generally to deliver the objectives of the BIVALVE project in collaboration with UCC and MI. This will include taking part in and co-ordinating field work with teams at UCC and MI.

What do You Need to Have Done to Apply for This role?
(Education, Professional or Technical Qualifications, Knowledge, Skills, Aptitudes, Experience and Training)

Essential / Important:

- A relevant third level degree in a marine science, ecology, renewable resource management, or related field
- Some proficiency with the R statistical programming language.
- Spatial data analysis skills in GIS, R or other relevant platforms.
- High level of experience in the use of Microsoft Office or similar applications.
- Sufficiently fit to pass an ENG II Medical and Personal Survival Training Programme.
- A full, clean drivers licence.
- Research or work experience in marine environmental surveys and methods including marine benthic surveys
- Sea going experience

Ideally Nice to Have / Desirable:

- Proven scientific report writing skills and / or published peer-reviewed papers
- Experience or knowledge of species distribution modelling
- An understanding of life-history of bivalve molluscs
- Good knowledge of inshore fisheries and aquaculture in Ireland
- Experience at collaborating with others through scientific expert groups or research.

What else do you need to know?
(Special personal attributes required for the role)

- Dynamic and reliable.
- Self-sufficient while being a good team player.
- Effective organisation and administration skills.
- Good time management and the ability to prioritise and meet deadlines.
- The ability to work unsupervised and as part of a team.
- Ability to work diplomatically in resolving issues with stakeholders.

Description of Service Group and the Wider Team

Fisheries Ecosystems Advisory Services (FEAS)
The mission of FEAS is "to assess, research and advise on the sustainable exploitation of marine fisheries resources". Currently, FEAS consists of over 70 scientists, technical, post graduate and administrative staff under the directorship of Dr. Ciaran Kelly.

The Service group operates a significant part of their services from the headquarters in Oranmore. Co Galway with additional port based facilities and a major research facility at Newport, Co Mayo. FEAS staff spend a considerable amount of time at sea on commercial fishing vessels and on research vessel surveys carried out on the RV Celtic Explorer and RV Celtic Voyager.

A key output of FEAS is the annual Stock Book and the annual Shellfisheries Stock Book. These provide the latest assessments and scientific advice for the resources exploited by Irish vessels and is a key reference for the Governments sustainability assessment presented annually to the Oireachtas.

A key element of FEAS work is the provision of scientific support for the Irish government (principally the Department of Agriculture, Food and the Marine – DAFM) on marine fisheries ecosystems related issues. FEAS also publish much of its work in peer reviewed scientific journals.

The Work of FEAS
FEAS work programmes are focused on;
Data Collection and Data Management;
Fisheries Resources Assessment and Advice;
Modelling, Simulations and Management Plans;
Fisheries - Ecosystems Interactions;
Stakeholder Engagement;
Research that supports ecosystem understanding;

Overview of M.I. Aquaculture Section
The FEAS Aquaculture Section is responsible for the operation of the National Sea Lice Monitoring Programme as described in the Irish Government's Strategy for improved pest control on Irish salmon farms. In relation to aquaculture research, the Section undertakes a range of national and internationally funded research projects based at MI facilities, including the Newport freshwater facility with hatchery capabilities, and the Lehanagh Pool Marine Research Site at Beirtreach Buí Bay in Connemara.

There is a close working relationship with the University of Galway Carna Research Station, Udarás na Galteachta, Atlantic Technical University (ATU) and An Bord Iascaigh Mhara (BIM). These research projects include integrated multi-trophic aquaculture (IMTA), sensor technology to assist monitoring, cleaner fish welfare, alternative feeds and innovative technologies from other sectors that disrupt and enhance current fish farming practices.

A fundamental requirement for all research and monitoring programmes is the production of information of the highest quality. In this regard staff are trained and qualified in a range of skills covering legal and ethical considerations, food safety, animal welfare, environmental safety, data integrity and analytical techniques.

Who Will You Report to / Who will Manage and Support You?:

The successful candidate will be based at the Marine Institute, Rinville, Oranmore. Direct reporting will be to the Team Leader responsible for Shellfish and Environment advice.

What we offer

We value our staff, and we value their contribution to the work of the Marine Institute. In return for this, we provide benefits that promote a healthy work-life balance and which we hope will help them to develop professionally. These include personal and career development, work/life balance policies, an employee assistance programme, "Bike to Work" Scheme, staff medicals and annual flu vaccination.

Training

A full range of training will be provided as required, on the job and through appropriate courses. Training needs will be identified through the MI Performance Management Development System (PMDS).

Contacts:

Within the Marine Institute:

FEAS Director, FEAS Section Managers, FEAS Team leads and team members; Marine Institute colleagues across other service groups.

External:

University College Cork, Inshore Fishing industry, Aquaculture producers

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for Scientific & Technical Officer, with a full time salary scale running from €36,086- €74,094 per annum, pro-rated with time worked. You will commence on the first point of the scale becoming a member of the Single Public Service Pension Scheme unless currently working or having worked in the pubic or civil service within the past six months with access to alternate pension etc.

Annual Leave:

Annual leave entitlement for a Scientific & Technical Officer is 25 working days per annum pro-rated to reflect time worked. Annual leave entitlements are exclusive of Public Holidays. All leave must be approved in advance in line with Marine Institute leave policies and using time and leave management system in place, by your manager or their authorised representative.

Duration of Contract:

The maximum duration of this temporary specified purpose funded contract of employment will be up to January 31st 2026

Who is the Marine Institute?

The Marine Institute is a non-commercial semi-state body, which was formally established by statute (Marine Institute Act, 1991) in October 1992.

Under the Act, the Marine Institute was given the responsibility:

"to undertake, to co-ordinate, to promote and to assist in marine research and development and to provide such services related to marine research and development, that in the opinion of the Institute will promote economic development and create employment and protect the marine environment".

The Marine Institute is Ireland's scientific agency responsible for supporting the sustainable development of the state's maritime area and resources. We do this through conducting applied research and providing scientific knowledge, advice and services to government, industry and other stakeholders and users. This policy advice capacity, our broad mandate, and the research programmes we fund and undertake, give us a unique insight into the science-policy interface and make us an exemplar in the provision of integrated ocean knowledge.

The Marine Institute provides a broad range of essential scientific support to its parent department, the Department of Agriculture, Food and the Marine (DAFM). There is an increasing demand from Government for the data and evidence that are essential to inform national policy and to underpin the state's governance of our maritime area. Through laboratory, field and seagoing work, the Institute carries out statutory environmental, fisheries and aquaculture surveys, seafood testing and other monitoring programmes assigned by government. The Institute plays an important role in supporting the state's response to the impacts of our changing seas and oceans, through working with the national and international scientific community to observe, study and understand our changing oceans. This essential scientific advice supports industry, protects consumers and underpins legislative and other obligations aimed at the protection and management of the marine environment.

Our vision - *The Marine Institute is a national and international leader in ocean knowledge that benefits people, policy and planet.*

Our Mission - *The Marine Institute provides scientific, research and development services to government, agencies, industry and society that support the sustainable use of our maritime area, the protection and restoration of marine ecosystems, and promote a shared understanding of the ocean.*

There are 6 broad service areas within the Marine Institute; (1) Ocean, Climate and Information Services, (2) Marine Environment & Fish Health Services, (3) Fisheries Ecosystems Advisory Services, (4) Irish Maritime Development Office, (5) Policy, Information and Research Services and (6) Corporate Services.

The Marine Institute 5 Year Strategic Plan (2023 to 2027) is available Here

How to Apply:

A C.V. and letter of application, summarising experience and skill set applicable to the position should be emailed to recruitment@marine.ie or posted to Human Resources at the Marine Institute, Rinville, Oranmore, Galway, H91 R673. All correspondence for this post should quote reference **FEAS/STO/BIVALVE/DEC23**

Closing date for Applications:

All applications for this post should be received by the Marine Institute in advance of **12 noon Tuesday 9th January 2024.** Unfortunately, late applications cannot be accepted.

Use of Data - all personal data and the information submitted for this application will be used solely for the purpose of this campaign, after which it will be deleted in line with our General Data Protection Regulation (GDPR) Policy and data retention schedule. All information will be treated with the strictest confidence and accessed only by those involved directly in the campaign.

The Marine Institute is an organisation that champions Diversity, Inclusion & Equality for all. We encourage and welcome applications from anyone interested in this role.

Please do advise if there are any special accommodations required for the recruitment process. We are here to help you access opportunities with us.