

Marine Institute Job Description

Position	Temporary Scientific & Technical Officer (STO) Irish Sea-Celtic Sea - Sea Bass ecology
Contract	Temporary specified purpose contract for a maximum duration of up to three years funded via the BLUEFISH project
Service Group	Fisheries Ecosystems Advisory Services (FEAS)
Location	Marine Institute Port Facility, Dunmore East, Co Waterford, Ireland.

Brief description of the Marine Institute:

The Marine Institute (MI) 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 the national agency responsible for marine research, technology, development and innovation (RTDI). The Marine Institute seeks to assess and realise the economic potential of Ireland’s 220 million acre marine resource; promote the sustainable development of marine industry through strategic funding programmes and scientific services; and safeguard the marine environment through research and environmental monitoring. The Institute works in conjunction with the Department of Agriculture, Food and Marine (DAFM) and a network of other Government Departments, semi-state agencies, national and international marine partners.

The vision of the Marine Institute is

“ a thriving maritime economy in harmony with the ecosystem and supported by the delivery of excellence in our services “

In order to achieve this vision, the MI have six service areas; (1) Ocean Science and Information Services, (2) Marine Environment & Food Safety Services, (3) Fisheries Ecosystems Advisory Services, (4) Irish Maritime Development Office, (5) Policy, Innovation and Research Services and (6) Corporate Services.

The Marine Institute 3 Year Strategic Plan (2015 to 2018) is available on; http://www.marine.ie/Home/sites/default/files/MIFiles/Docs_Comms/MI%20Strategic%20Business%20Plan%20-%202015%20-%202018.pdf

Harnessing our Ocean Wealth (HOOW) is an Integrated Maritime Plan (IMP) for Ireland. HOOW sets out a roadmap for the Irish Government’s vision, high level goals and integrated actions across policy, governance and business to enable our marine potential to be realised. Goal 2 of HOOW focuses on healthy marine ecosystems and specifically; to protect and conserve our rich marine

biodiversity and ecosystems; manage our living and non-living resources in harmony with the ecosystem; implement and comply with environmental legislation (see <http://www.ouroceanwealth.ie/>)

Description of Service Group:

Fisheries Advisory Ecosystems Services (FEAS)

The FEAS's mission 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. Paul Connolly. 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 assessment 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 9 goals of FEAS are:

- 1) To maximise the benefits of the new EU Data Collection Framework (DCF);
- 2) To build a strong working relationship with the fishing industry and the environmental NGO's;
- 3) To build an effective working relationship with key Government Departments (principally DAFM) and other partner agencies;
- 4) To use ICES, NASCO, ICCAT, OSPAR and the EU system to support the delivery of excellence in our fisheries and ecosystems science and advisory services;
- 5) To engage in a suite of research activity that supports the evolution of scientific advice and that is in line with MI/FEAS mission, HOOW, FH2020, Horizon 2020, the new RTDI strategy and the objectives of the CFP;
- 6) To progress and incorporate the ecosystem approach to Fisheries Management (EAFM) into all aspects of our work;
- 7) To increase public awareness of the importance of the Ocean;.
- 8) To Ensure a common understanding of the "value chain" within the FEAS team and the MI;
- 9) To ensure FEAS is a rewarding place to work;

The Work of FEAS

FEAS work programmes are focused on;

- (1) Data Collection and Data Management;
- (2) Fisheries Resources Assessment and Advice;
- (3) Modelling, Simulations and Management Plans;
- (4) Fisheries - Ecosystems Interactions;

- (5) Stakeholder Engagement;
- (6) Research that supports ecosystem understanding;

FEAS staff actively participate at many meetings of the International Council for the Exploration of the Seas (ICES). ICES organises many Expert Groups, Study Groups and co-ordination Groups related to provision of scientific advice on marine ecosystems. The ICES Strategic Plan (2014 to 2018) is focused on advancing scientific understanding of marine ecosystems, providing information, knowledge and advice on the sustainable management of human activities affecting and affected by marine ecosystems. ICES is a key forum for scientific co-ordination of data collection and the provision of independent scientific advice.

FEAS also participate at other international fora including STECF (Scientific, Technical and Economic Committee for Fisheries), NEAFC (North East Atlantic Fisheries Commission) and NASCO (North Atlantic Salmon Commission). FEAS provide scientific support for DAFM at various EU meetings (e.g. the EU Norway Agreements and the EU Council of Fisheries Ministers). FEAS produce the annual Stock Book which provides the latest scientific advice on those stocks of interest to Ireland. In addition FEAS is responsible for the salmon National Coded Wire Tagging and Tag Recovery programme and work closely with IFI (Inland Fisheries Ireland) on the Standing Scientific Committees for salmon and eel.

<http://www.marine.ie/Home/site-area/about-us/fisheries-ecosystems-advisory-services>

<http://www.facebook.com/#!/marineinstituteireland?fref=ts>

Summary of the Role:

The Scientific and Technical Officer (STO) will work full time on sea bass within the FEAS team and with the project partners. The job will focus on WP 3 and specifically Activity 3.2 of the BLUEFISH project. The role will involve working closely with the BLUEFISH project partners; University College Cork, Bord Iascaigh Mhara, Marine Institute, Bangor University, Swansea University and Aberystwyth University. Activity 3.2 is a major component of the MI's delivery under the BLUEFISH project.

In order to develop adaptation strategies for the sustainability of the sea bass stocks in the Irish Sea-Celtic Sea area under future predicted environmental change, it is essential to build a baseline picture of present stock distribution and biology. The present stock picture will then be combined with dispersal/ connectivity and distribution projections modelled under future climate change scenarios (BLUEFISH WP 5) to give recommendations for adaptive strategies.

The work is funded by the EU under the Ireland – Wales Programme (2014 to 2020).

Background to Requirement:

Climate change is already affecting the world's oceans and coasts, with European regional seas showing some of the most pronounced and rapid impacts. Under predicted future scenarios the functionality of shallow marine ecosystems is likely to change, with impacts on species of food or commercial relevance to coastal communities. The consequences of present and predicted climate effects to fish, shellfish and aquaculture in the Irish and Celtic Seas is poorly understood.

The BLUEFISH project will develop knowledge and understanding of the marine resources of the Irish Sea and Celtic Seas by addressing knowledge gaps regarding the effects on and potential vulnerability of selected commercial fish and shellfish from predicted climate change. Through the transfer of knowledge, transnational expertise and best practice with respect to study and management of commercial fish, shellfish and aquaculture under a climate change context, and through the strong marine science partnership of the consortium (4 Irish and Welsh HEIs, the Marine Institute and BIM), the aim is to provide region-wide adaptation strategies for the benefit of coastal communities.

BLUEFISH will assess and disseminate knowledge of risks and opportunities for commercial fish and shellfish under predicted climate change impacts to our stakeholder groups, SMEs, coastal communities and interested parties in both Ireland and Wales using a variety of mediums that will appeal to all sectors.

Applicants are advised to read the BLUEFISH project proposal which is available from the MI on request.

Principal Tasks:

- Carry out a literature review on our current knowledge on sea bass;
- Increase understanding of the seasonal and spatial movements of sea bass in the Celtic Sea - Irish Sea area;
- Provide deeper insight into the stock structure of sea bass from tagging, genetic and stable isotope analyses;
- Map spawning areas from egg and larval surveys;
- Increase knowledge on the biology and ecology of sea bass;
- Increase knowledge of by-catch of sea bass in commercial fisheries;
- Investigate seasonal / spatial closures that help stock recovery;
- Develop plausible scenarios on the impact of climate change on sea bass;
- Develop proposals that strengthen existing management measures for sea bass;
- Reduce knowledge gaps and sharing knowledge on sea bass;
- Participate in Research Surveys at sea as required.
- Carry out any other duties assigned from time to time, appropriate to the position.

Reporting Structure:

The successful candidate will be based at the MI port facility at Dunmore East, Co. Waterford, Ireland.

The Sea Bass STO will report to the Dr Niall Ó Maoiléidigh, FEAS Section Manager.

Contacts:

Within the Marine Institute

FEAS Demersal Fisheries Team Lead; FEAS Director, Managers and Team members; Marine Institute colleagues across other service groups, BLUEFISH project partners.

Outside the Marine Institute

Department of Agriculture Food and Marine (DAFM), peers in other fisheries assessment and advisory groups, BLUEFISH Project partners, fishing Industry in Ireland and Wales and NGO stakeholders in Ireland and Wales.

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).

Education, Professional or Technical Qualifications, Knowledge, Skills, Aptitudes, Experience, and Training

Essential:

- A relevant third level degree in a marine science, ecology, mathematics, renewable resource management, or related field, with at least one year of work experience in a relevant scientific area.
- Demonstrated relevant data handling and statistical skills.
- Some experience with statistical analysis skills (e.g. R, Matlab, S, SAS).
- Demonstrated fish tagging experience.
- Proven ability to work at sea on research vessels and commercial fishing vessels.
- Demonstrated experience with fisheries surveys and sampling programmes.
- Population or resource modelling background.
- High level of experience in the use of Microsoft Office or similar office applications.
- Proven scientific report writing skills and / or published peer-reviewed papers.
- Good written and verbal communication skills.
- Sufficiently fit to pass an ENG II Medical and Personal Survival Training Programme.
- Full clean driving licence and access to own transport.

Desirable:

- Demonstrated understanding of fisheries sampling design and parameter estimation for stock assessment purposes.
- Fish stock assessment modelling experience.
- An excellent understanding of management strategy evaluation in fisheries.
- Good knowledge of the fishing industry and the management framework within the CFP.
- Experience at collaborating with others through scientific expert groups or research.
- Demonstrated experience dealing with commercial fishermen or recreational anglers.
- Understanding of fish and shellfish biology.

Special personal attributes required for the position:

- 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.
- Experience in collaborating with scientists and members of a technical team.
- Ability to work diplomatically in resolving issues with stakeholders.
- The ability to work to deadlines and manage time effectively.
- An ability to maintain work output under difficult conditions whilst at sea.

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for the Scientific & Technical Officer (Engineer III grade) with a salary of €30,376 per annum pro-rated with time worked. You will become a member of the Single Public Service Pension Scheme.

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, by your manager or their authorised representative.

Duration of Contract:

The maximum duration of this temporary specified purpose BLUEFISH funded contract of employment will be for up to three years. The successful candidate will be on probation for the first six months of this contract.

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. All correspondence for this post should quote reference **FEAS/STO BLUEFISH SEABASS/May 2017**

All applications for this post should be received by the Marine Institute in advance of **12:00 noon Tuesday 6th June 2017**. Please note that late applications will not be accepted.

The Marine Institute is an equal opportunities employer

