Marine Biologist

Marine biologists study marine plants, animals and other organisms, both vertebrate and invertebrate, in deep oceans and shallow seas and in the laboratory. They are also called marine scientists.

The Work

You could be:

- studying the ecology and behaviour of marine organisms
- studying genetics, toxicology, cell structures or other physiological aspects of marine organisms
- observing environmental damage, effects of climate change and helping conserve and protect marine life
- helping manage and develop marine resources, for example fish stocks, to use them appropriately
- studying the effects of marine pollution and water quality on sea life
- observing and gathering samples of marine life at sea, by diving or using special submersible equipment
- identifying and studying samples, and analysing data, in a laboratory
- writing reports and making recommendations based on your research
- carrying out educational work and raising awareness of issues with the public, governments and commercial organisations.

Pay

The figures below are only a guide. Actual pay rates may vary, depending on:

- where you work
- the size of the company or organisation you work for
- the demand for the job.

Entry level salaries for marine biologists are usually in the range of £18,500 to £25,000 a year. Typical salaries for those as research fellows with a PhD can be between £39,000 and £45,000 a year.

Very senior staff can earn up to £50,000 or more. Other employers pay different rates and salaries may vary.

Conditions

You would probably work both in a laboratory and at sea.

In the laboratory:

- you may work long hours depending on the type of laboratory experiments you are working on
- you may have to wear a lab coat or other protective clothing.

At sea:

- you could be away from home, possibly for long periods, while doing field work

- you would wear protective clothing and use suitable equipment for your work
- you may have to dive – how deep would depend on the environment you are working in
- you would live in confined spaces with colleagues and crew members
- you may have to work in all weathers.

Getting In

- There are not many jobs in marine biology so entry is very competitive.
- You usually need a degree (SCQF Level 9) in marine biology, or a degree in biology or an environmental subject including specialisms in marine biology. For entry you need 4-5 Highers normally including at least 2 from Maths, Biology, Chemistry and Physics, plus Maths and sometimes English or a science subject at National 5.
- It is helpful if you can get a placement with a marine laboratory, perhaps during the summer, while you are a student.
- Voluntary work experience is also helpful – the Marine Conservation Society and Marine Biology may give you ideas of who to contact.
- Many entrants, particularly to research jobs, have a specialist postgraduate qualification (SCQF Level 11) in marine biology. For lecturing posts you need a PhD (SCQF Level 12).
- You may need to learn to dive.
- You would have to be willing to move around, even abroad, for job opportunities.

You could work in research, resource management, conservation and education, with a marine research laboratory run by a government department or by a private company. You could also work in a university, with an environmental or conservation body, in fisheries or in fish farming. Some posts may be short term contracts.

What Does It Take

You need to be:

- practical, logical and methodical
- observant
- patient and willing to persevere
- accurate and careful in recording observations and results
- able to work as a member of a team, especially at sea
- willing to travel, for field work.

You should have:

- excellent written and verbal communication skills
- an enquiring mind
- an eye for detail
- good IT skills
- good analytical skills.

Training

- If you do research at sea, you should be trained in boat handling, survival at sea, emergency procedures, first aid, health and safety and Geographical Information Systems (GIS).
- You must keep up to date with new research in your specialism. You can do this by reading reports and attending conferences and short courses.
- You can do advanced courses and workshops through various organisations, for example the Scottish Marine Institute (SAMS).

Getting On

- You may need to take a postgraduate qualification and gain professional qualifications.
- Specialisation in one particular area is usually needed to get on.
- Job opportunities may often be short term contracts (12-24 months) as projects are often funded by grants.
- You may need to be willing to move to where the jobs are to get experience, especially early on in your career. This may involve moving within the UK or moving abroad.
- With experience, you may be able to move on to lead projects or to manage a laboratory.
- You may progress to a job where you develop policies on conserving and developing marine stocks.
- You may move into marine environmental consultancy work, either with a specialist company or on a freelance basis.

Contacts

Marine Biological Association (MBA)
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National Oceanography Centre
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Statistics

Past Unemployment - Scotland

No Claimant statistics available for Scotland.

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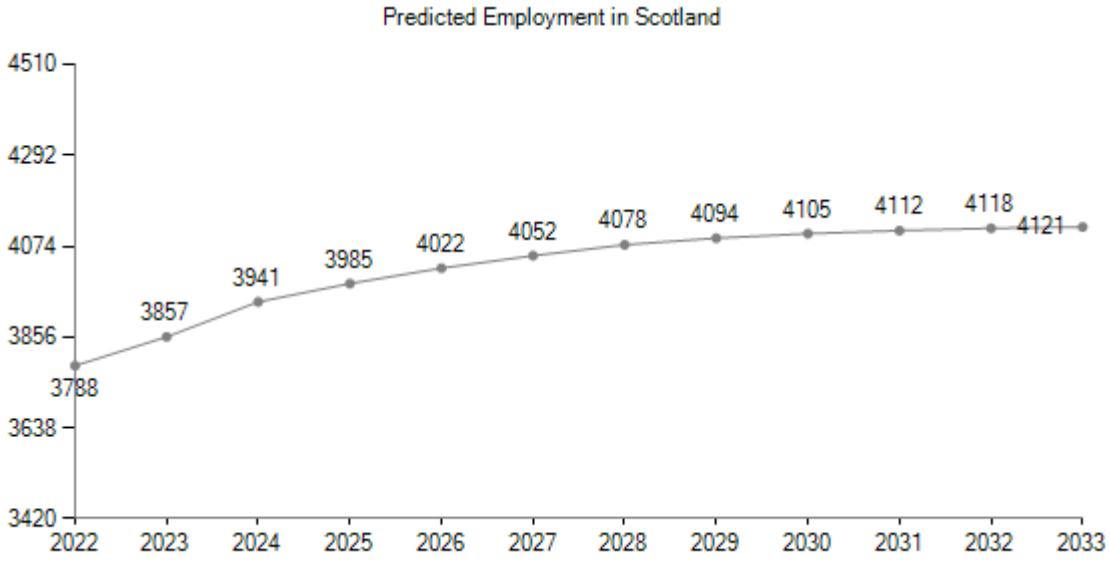

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