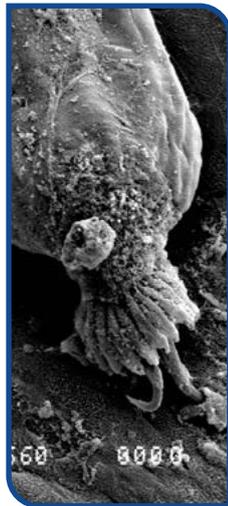


Marine Scotland Science

A world-class science asset for Scotland Providing robust research and advice to underpin the management of Scotland's marine and freshwater resources



Purpose

Marine Scotland Science (MSS) provides expert scientific and technical support to the management of activities and resources in and on Scotland's seas and freshwaters to make sure everyone benefits from them both now and in the future.

As the scientific arm of Marine Scotland, MSS works alongside policy and Compliance colleagues in Scottish Government and delivers:

- a programme of monitoring and strategic projects to provide scientific data and evidence
- regulatory and enforcement activities
- scientific advice to Scottish Ministers
- representation for the Scottish Government at national and international meetings

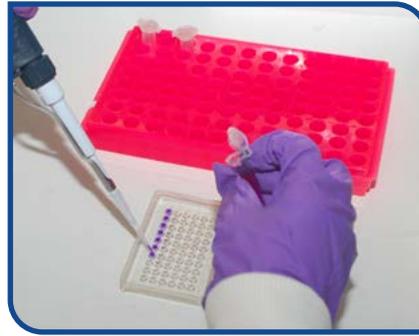
MSS monitors and samples seas, rivers and lochs and the fish and other wildlife that live there. This data and information are essential to assess the state of our aquatic environment and provide information on climate change, fish stocks, and the impact of activities on our seas and waters.

Background

Marine and freshwater science both have long traditions in Scotland. Marine Scotland Science has its origins in the marine laboratory and hatchery established in Aberdeen in 1898 and the Brown Trout Research Laboratory founded at Pitlochry in 1948.

Facilities

Marine Scotland Science has two principal sites, the **Marine Laboratory in Aberdeen**, and the **Freshwater Fisheries Laboratory** near Pitlochry and there are also smaller field stations. These laboratories have well-equipped aquaria; chemical and biological laboratories; and acoustic, mechanical and electrical engineering facilities. MSS also has specialist quality, data and information management, and statistics advice. The well-established libraries in both Aberdeen and Faskally hold some 20,000 volumes. Sea-going investigations are conducted aboard the Marine Research Vessels MRV *Scotia* (68 m) and MRV *Alba na Mara* (27 m), and from other vessels as required.



Working partnerships

Marine Scotland Science works closely with the Scottish fishing and fish farming industries, wild fish interests, renewable energy industries and other government departments.

MSS is a partner in the Marine Alliance for Science and Technology for Scotland (MASTS). MSS also works with other national and international scientific institutions through a range of collaborative research projects and studentships. MSS is active at an international level, including the International Council for the Exploration of the Sea (ICES), the OSPAR Commission, International Maritime Organisation (IMO), the European Marine Biological Resource Centre (EMBRC), and the North Atlantic Salmon Conservation Organisation (NASCO).

Areas of science

Marine Scotland Science has Science Programmes which cover:

- Environment monitoring and assessment
- Renewables and energy
- Planning and environmental advice
- Fisheries assessment and advice
- Fisheries data
- Aquaculture and fish health
- Salmon and freshwater fisheries

These are supported by the Operations Programme.

Our scientists are experts in topics from acoustics to zooplankton. They use science, technology, engineering and mathematical (STEM) techniques

in multi-disciplinary projects and surveys. Some examples of this work include:

- the oceanography of the deep waters north and west of Scotland
- ocean acidification
- micro-plastics in the marine environment
- advice on renewable energy and oil and gas developments
- long term monitoring of plankton, fish and the environment
- statutory inspection and sampling on fish farms
- development of new fishing gear
- fish stock assessment
- emergency response
- monitoring invasive non-native species
- the effects of marine protected areas

Our long-term time series are essential for understanding natural variation and human induced changes in our seas and rivers. Data from time series and surveys in seas and freshwaters are submitted to international databases and inform nationally and internationally important work on fish stocks, the marine environment and climate change.

By providing scientific evidence for policies and regulatory activities of the Scottish Government, MSS supports the Programme for Government, sustainable use of marine resources and development of Scotland's blue economy.

Our science is published in peer-reviewed journals, in several in-house [publication series](#) and in a comprehensive range of [Topic Sheets](#).

