

Community-led marine biodiversity monitoring

The community-led marine biodiversity monitoring project encourages everyone to get involved in marine survey and raise the profile of Scotland's seas and its amazing biodiversity. Specifically, the project will help people record and monitor the marine life they discover in their local waters.

People around Scotland are keen to be involved in marine survey and promote the stewardship of our marine environment. Whether you are involved in a coastal community or local environment group, work on the sea, or visit and recreate on or near the water, this resource will provide all you need. We have created a suite of marine biodiversity survey methods and guidance, tailored to community needs, capabilities and access to survey equipment.

Engaging with marine survey and monitoring can have many benefits for participants as it does for the environment. This resource was co-created with communities and local groups to shape and deliver community-led marine surveys in Scotland.

The benefits of undertaking community-led marine biodiversity survey & monitoring include:

Environmental value

- Increasing knowledge and understanding of natural environments and processes
- Raising awareness of current issues in the marine environment
- Informing policy and management plans
- Contributing to the evidence-base to advise decision makers
- Acting as an early warning of changes to the marine environment
- Identifying threats to marine systems

Community value

- Collecting useful information about the local marine life
- It's fun
- Promoting connections with people that share similar interests
- Connecting with nature
- Providing materials to create educational resources
- Learning new skills and experiences
- Promoting ocean stewardship and builds community connections
- Participating in marine science and conservation

[The Scottish Marine Protected Areas \(MPA\) Monitoring Strategy](#) recognises the important contribution collaborative and citizen-led science programmes can make to the growing evidence base used to support good decision making for our marine environment.

The handbook is intended to be a working document which will be reviewed periodically. The project is funded by the William Grant Foundation* and we are working in partnership with Fauna & Flora International to enhance participation in community collection of marine data, through the surveying and monitoring of local coasts and inshore waters.

**The William Grant Foundation is a non-profit association established to support charitable causes in Scotland. Its work is funded by William Grant and Sons Ltd.*

Scotland's rich waters

Scotland's coasts and seas are among the most biologically productive in the world. They support an estimated 8,000 species of plants and animals – and up to 40,000 species if you include microscopic organisms. New species are still being discovered, particularly in deeper waters to the north and west.

Scotland's coastline and seas are an extraordinary environment to explore, hosting an array of wildlife – from the critically endangered flapper skate to vast kelp forests, basking shark feeding grounds and delicate maerl and flame shell beds. Our waters contain over a third of the global population of grey seals, the world's most northerly resident population of bottlenose dolphins, while our seabed habitats contain natural carbon stores and provide many life supporting functions.

The Scottish Government's vision for our seas is to have “clean, healthy, safe, productive and biologically diverse marine and coastal environments that meet the long-term needs of people and nature”. To help achieve this vision, a network of Marine Protected Areas (MPAs) has been established as part of a strategy to conserve our living seas and coastlines in Scotland and currently covers over 22% of Scottish waters. Communities have played a key role in the development of the MPA network and continue to be at the forefront of marine conservation efforts throughout Scotland.

There are over 200 sites in the Scottish MPA network for nature conservation purposes, designated to protect nationally important marine wildlife, habitats, geology and undersea landforms.

A well-managed network of MPAs will:

- *Protect important marine habitats and species*
- *Deliver benefits for our marine environments*
- *Support communities*
- *Help sustain marine industries*
- *Provide recreational uses*

Scottish Ministers adopted a list of 81 marine species and habitats characteristic of the Scottish marine environment. Collectively known as Priority Marine Features (PMFs), the list includes a wide range of habitats and species including flame shell beds found in our coastal waters, cold-water coral reefs in our deeper seas and mobile species such as minke whale and basking shark. The PMF list is used to focus conservation efforts in Scotland. You can find some information on PMFs within this handbook within habitat and species information on [page 77](#).

How to use this handbook

This handbook is split into six chapters and covers the information required to undertake marine biodiversity survey and monitoring in Scotland. In this handbook we provide a guide to survey planning and getting started safely, a range of survey methods and specific operational guidance for survey equipment and techniques.

Before you set off into the field to survey, the getting started chapter is a compulsory read to help ensure you survey safely and get the most out of your efforts. This chapter will provide guidance to build a community survey project, help you select survey methods and introduce the different survey equipment you may require.

The survey methods are focused on surveying and documenting marine life and features in the intertidal and/or subtidal zone, aimed at filling in knowledge gaps and highlighting where PMFs are found. They have been created with a range of difficulty levels, perfect for participants of all experience levels and developing your survey skills.

You can also find some information on habitats and species of interest for Scottish marine survey and monitoring, guidelines for good data management and much more. At the back of the handbook you will find the recording forms for each survey method, ready to be printed to take into the field.

Surveying anywhere along Scotland's coast will provide data to document the presence, range and extent of the marine life in our waters. The data you collect can make a valuable contribution to inform future marine management decisions.



i All pages with a print icon are designed to be printed and taken on survey with you.

▼ COAST volunteers using an ROV to survey the seabed.
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