Community project profile form

Please fill in this form at the beginning of a community marine monitoring project. Store this within your community project and email a copy to communitymarinesurvey@nature.scot.
Community group name:
Lead contact(s):
The survey or monitoring interest: **Objectives summary:**
Why do you want to survey the marine environment?

What do you want to survey or monitor?

List methods from the handbook you are likely to use:

1.

2.

What information are you going to collect and how much time do you plan to spend collecting it?

Time allocated to survey or monitoring: list dates annually

Anticipated duration: _____ years

Who will analyse and use the information you collect?

Who will analyse:

Who will use:

Will the information you collect, and the frequency with which you collect it, meet your monitoring objectives? *(if the answer is no, revise your survey plans to address this)*

Will the data you collect be in a form that others (community members, academics, government etc.) can interpret and understand?

(if the answer is no, revise your survey plans to address this)

Project area

Describe what area your survey or monitoring project will survey within:

Insert a map of your project area with a project area box drawn on:

Survey sites codes for monitoring: - *create a site code for use in file naming conventions*

Site name	Code	Description
E.g. Loch Creran	CRER	Subtidal water body of Loch Creran

Other notes:

Survey plan template

This is a guideline for what should be included in a plan for marine biodiversity surveys.

Name of survey:

Date:

Lead contacts:

1. Target area:

2. Known habitats of interest:

3. Survey objectives:

4. Scope of work – length of survey, dates, what kind of survey and where you will survey.

5. Methods – survey methods and metadata (i.e. how data will be processed and stored, when and by whom).

6. Survey overview and priorities – include a map of the survey area show all survey stations and the priority of each station.

7. Local conditions – including tidal, weather, underwater conditions, presence of obstacles (such as creels or fish farms, ferry route etc.).

8. Station locations (details of GPS positions).

Definitions of habitats and survey designs

Marine life cover descriptions:

Marine life cover type	Description
Kelp forest	Large brown seaweeds growing in dense stands with the fronds forming an almost complete canopy. Kelp forest may be formed by a number of different seaweeds but the most common is *Laminaria hyperborea*, which often has many other seaweeds and animals growing on the stalks.
Kelp park	Scattered kelp plants whose fronds do not meet to form a continuous canopy.
Mixed seaweeds	This covers all other seaweeds and is likely to be found in shallow to medium depths (depending on the water clarity) on rocks. There may well be a mixture of green, brown and red species, the reds extending into deeper water as they can tolerate lower light levels.
Seagrass bed	The seabed sediment is covered with seagrass, usually eelgrass, *Zostera marina*.
Maerl bed	Living maerl is a purple-pink hard seaweed that forms spiky underwater 'carpets' on the seabed, known as 'maerl beds'. They are small nodules the size of gravel.
Encrusting pink algae	Hard crusts on the upper surfaces of rock. Typically they are pink or purple in colour and look like a thin covering of cement.
Tall animal turf	Animal turfs consist of a mixture of plant-like animal species which are attached to the rock surface. They occur mainly below the seaweed dominated surfaces or shallower where there are shaded surfaces where seaweeds cannot grow. Tall animal turf consists of species which are more than 10cm tall and includes things like dead men's fingers, plumose anemones, tall hydroids and hornwrack.
Short animal turf	Animal turfs consist of a mixture of plant-like animal species which are attached to the rock surface. They occur mainly below the seaweed dominated surfaces or shallower where there are shaded surfaces where seaweeds cannot grow. Short animal turf is less than 10cm and includes small hydroids, bushy bryozoans, anemones, sea squirts or encrusting sponges.
Animal beds	This is where a significant area of seabed is covered by large numbers of a single species creating a living reef. Mussel and brittle star beds are the most common, but scallops, flame shells and oysters can be found as beds in some areas. Remember to specify what your animal bed is.
Sediment with life apparent	Life may not be apparent on the surface but there may be tubes, burrows, mounds or tracks in evidence. Look out for burrowing anemones or sea cucumbers, siphons of bivalve shells or lugworm casts.
Barren sediment	No life or structures apparent.
Other - specify	

Substrate descriptions:

Substrate type	Description
Rocky reef	Bedrock, whether mainly flat or much more variable – it covers all rocks including softer rocks such as chalk or clays.
Boulders	Pieces of rock which are bigger than head size and are not part of the seabed. They are often jumbled together.
Cobbles and pebbles	Pieces of rock that are between the size of a 50p coin to head sized.
Sand and gravel	From smooth texture sand to very coarse texture with small stones. Dead maerl is also in this category of gravel.
Mud	Smooth silky texture.
Mixed ground	This is when sand, gravel and cobbles are all mixed together.
Wreckage	Any kind of artificial seabed, such as concrete blocks.
Other…	Please provide further details if the seabed does not fall into one of the categories above.

Survey quality descriptions:

To fill this in consider what the conditions were on the day (i.e. temperature, rain, water clarity, wind speed and direction, swell, shore exposure and human effort) as this will have an impact on the survey quality.

Survey quality	Description
Thorough	All species that can be clearly seen have been recorded.
Adequate	A high proportion of species were recorded (a few more would be found given extra time) or that some species may have been overlooked due to lack of expertise but the habitat was recorded to a good standard.
Incomplete	Insufficient time, expertise or lack of enough surveyors. The marine species were recorded to a basic standard and the survey forms are incomplete.

Species checklist template

Participants:

Survey type:

Survey name:

Location: **Date:**

Common name	Scientific name	Count	Image time taken

Notes:

Risk assessment template

RISK ASSESSMENT		
TASK		Date
Other information relevant to this task		
Identified hazards and risk ratings (without control measures)		**Insert score from matrix** S X L = R
Who might be harmed and how		
Control measures for identified hazards with new risk-rating		**Insert score from matrix** S X L = R
Emergency Arrangements (where risk rating remains 6 or more after all possible control measures have been taken)		
Further action (if applicable)		
Assessment by / date		

Advice and instructions on calculating the Risk Rating (S x L = R) are below.

Risk Rating

This is the numerical value derived from multiplying the **Hazard Severity** by the **Likelihood of Incident Occurring**.

This calculation will enable you to quantify the risk potential either actual or perceived, having first examined, reviewed and assessed existing controls; information available; and or best practices demonstrated.

Hazard Severity (S) - Explanation

A hazard is something with the potential to cause harm, which can vary in severity of outcome. The severity of a hazard should be rated according to the following table:

S4	A fatal injury or illness.
S3	A major injury or serious illness may occur eg fractures or loss of consciousness.
S2	Outcomes where persons are likely to be off work for more than three days or where there may be recurring injury or ill-health.
S1	All other outcomes, including where persons may incur injuries resulting in periods of absence from work for up to three days.

Likelihood of Incident Occurring (L) - Explanation

This is the consideration of how likely an incident is to occur, and should be rated according to the following table:

L4	High - Where it is certain that an incident will occur.
L3	Medium - Where it is probable that an incident will occur.
L2	Low - Where an incident is possible.
L1	Very Low – Where an incident is unlikely.

Calculating a Risk Rating (R)

This matrix shows how the Risk Rating is then calculated:

	L1	L2	L3	L4
S1	1	2	3	4
S2	2	4	6	8
S3	3	6	9	12
S4	4	8	12	16

The aim is to reduce the Risk Rating to as low as is reasonably practicable - a score of 3 or less is usually regarded as acceptable and scores of 12 or above are clearly unacceptable. Where the risk rating is greater than 3, consider again if all possible controls have been utilised. If not, then you need to consider carefully whether the activity should go ahead or not by analysing and comparing the benefits of carrying out activity against the actual or potential costs associated with the increased risk. Where risk ratings are 6 or above, emergency/contingency arrangements need to be included in the section of the risk assessment detailed for this purpose.

Photo quadrat label template

Quadrat label protocol

Use the following naming protocols to make photo labels for your quadrats. These should be included in photographs of the quadrat, but placed out with the quadrat frame. This can be created on laminated sheets with a marker pen or using a dive slate.

Rocky shore quadrats

Use the following naming protocol:

Site name, Zone, Quadrat number

e.g. Clachan Bridge (Isle of Seil), Lower shore, Q1

Feature focus: habitat quality quadrats

Use the following naming protocol:

Site name, Station/Transect, Quadrat distance number

e.g. Merkinch Nature Reserve (Inverness), Transect 2, Q3 at 15m

Naming conventions

File and photo naming protocols

Files and images should comply with a naming convention for ease to store, reference, find and use your survey data.

Clearly name images and files with the site and date details and the survey method completed.

E.g. an image of Loch Creran from a video transect on 27th August 2019, at survey station 5.

Format:

Site code_method code_station_date (YYYY MM DD)

CRER_VT_St05_2019 08 27

Site codes:

Please refer to your completed **community project profile** for the site code. In your project profile you should have determined what sites you would like to monitor and assigned a code to this site.

If a new site it created, your project profile should be updated accordingly.

Survey method codes:

Method	Code
Species Image Library	SIL
Photo Station	PS
Rocky Shore Zonation	RSZ
Rocky Shore Profile	RSP
Rocky Shore Quadrat Sampling	RSQ
Underwater Marine Life Observation	MLO
Underwater Video Transect	VT
Feature Focus: Habitat Mapping	HM
Feature Focus: Habitat Quality	HQ

Storing images and footage

Photographs and video footage can be a large file size and cause problems with storage. Where possible, images can be compressed to keep file sizes small.

Clapperboard template

Date	**Station number**
Survey name	**Location** (e.g. Loch Linnhe)