

Observation Form Guidance Notes



Welcome to the **Seasearch** Observation Form. You can use this form on any dive to record the main features of the seabed and the prominent components of the marine life.

PLEASE FILL IN THE FORM IN INK – PENCIL DOES NOT PHOTOCOPY AND INFORMATION MAY BE LOST

1 Contact details

By providing this information the person processing your completed form will be able to get back to you in order to query any parts of it or to find out more information from you. It will also enable us to send you regular updates about the project.

2 Site Details

This information is absolutely essential. If we do not have a clear idea of where the record comes from it is of no value at all and we cannot enter anything into the database.

Site Name: Most sites have a name – ask your skipper or take it down from a map or chart. If you have to invent a name please say that that is what you have done.

General

Location: Give a rough idea where the dive was by reference to a clearly identifiable point. Remember to include the county you are in.

Site Name RUNNEL STONE	Date of Dive 3/10/13
General Location (inc county) 2 MILES SOUTH OF PORTHCUKNO CORNWALL	Start of dive 13:54 (24hr)
	Dive duration 47 (mins)
Position at start of dive (degrees & decimal minutes only) or OS Grid Reference 50° 01.39' N 05° 40.45' W or E	Max depth of survey 26 m
	Sea Temperature 12 °C
Position at end of dive (if different only) 0° . N . W or E	U/W visibility 20 m
Position derived from (circle) GPS Chart OS Map Web mapping site	Drift dive? yes (no)
Did you take any photographs? (yes) / no	Night dive? yes / (no)
	or video footage? yes / (no)

Date: in dd/mm/yy format
Start of Dive: give the time you started your dive in 24 hour clock format. This enables us to relate observed depths to chart datum.
Dive duration: in minutes. This gives us an idea how thorough your survey was.
Max depth: the deepest point of your survey area.
Sea temperature: read this off your dive computer. Most record the minimum temperature.

Position: this gives the exact location of your dive. If you have a GPS or chart enter the latitude and longitude using degrees, minutes and decimals of minutes. Make sure you do not use degrees/minutes/seconds or decimal degrees. If you are using an OS map insert the 6 figure Grid Reference including the two grid square letters (1 in Ireland). Tell us where you got your position from by circling the appropriate item in the box below. Boat skippers will usually give you a position if you tell them what it is for. If your surveys finished in a different place to the start you can enter the end of dive position below the start one.

U/W visibility: estimate the horizontal visibility at the depth where you did most of your recording. Use one figure - not a range.
Drift/Night dives: if yours was a drift or a night dive we need to know because it will affect the records you make. If it was a drift dive you can give your surfacing position as well as the starting one.

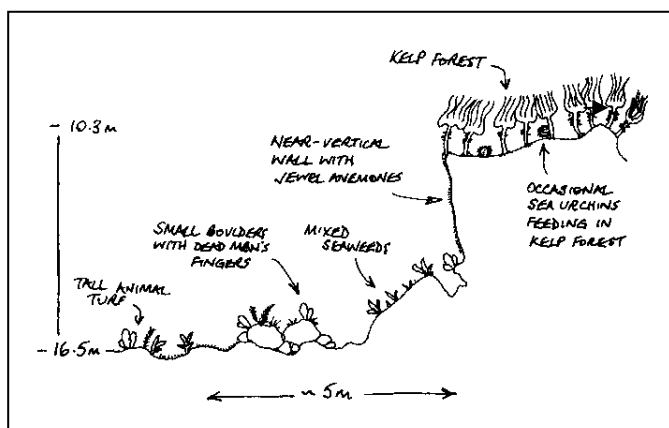
Please note: this document is currently being updated. The preference going forward is for the position to be stated in decimal degrees, as this is the most common format on mobile phones and other devices.

Photos/video: if you have taken photos or video let us know so we can come back to you if we would like to see the results.

Inside page

3 Description of the seabed

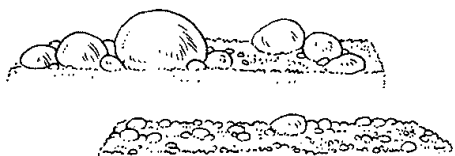
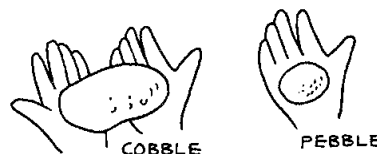
Draw a side on picture (a profile) of what the seabed looked like. It is essential that you include both maximum and minimum depths, a distance scale and a direction. Include features of the seabed itself, both hard and soft, and the main elements of the marine life. Annotate the drawing with notes to make it clear. The drawing space is landscape format as most dive sites are relatively flat. Don't exaggerate the vertical elements too much. Please note this is not a dive profile, we are only interested in the seabed.



4 Types of sea bed present

Tick all of the seabed types you saw and **circle** the dominant one. **Rocky reef** includes all areas of bedrock, whether mainly flat or much more variable – it covers all rocks including softer rocks such as chalk or clays. **Boulders** are pieces of rock which are bigger than head size and are not part of the sea bed. They are often jumbled together.

Cobbles and Pebbles are from 50p/2euro sized to head sized pieces of rock. **Sand and gravel** includes pebbles (less than 50p/2euro sized), coarse sand and fine sand. If you cannot make out individual grains it is **Mud**.



Mixed ground is a mixture of sand, gravel and cobbles. Tick here only where the different components are all mixed together – if they are in separate patches tick the individual boxes.

Wreckage is any artificial seabed, so could include piles or concrete blocks, as well as shipwrecks.

Finally if you use the **Other** category say what you think the other seabed is.

5 Noteworthy Features/Litter

We want to know if you thought there was anything unusual or noteworthy about what you saw on your dive. This can be a pointer to what is interesting about a site and can be positive or negative. Examples might be: "large numbers of spider crabs all on top of each other in a mass" or "many broken pieces of seafans and potato crisp bryozoan seen". Please list any man-made objects seen in the second box. These could include discarded fishing gear or plastic rubbish.

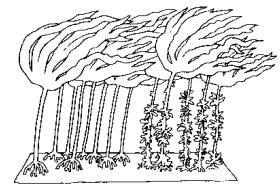
6 Marine Life

We ask about the marine life you saw in two ways. The first is by **seabed cover** which refers to broad categories of marine life covering significant areas of the seabed and secondly by **species**.

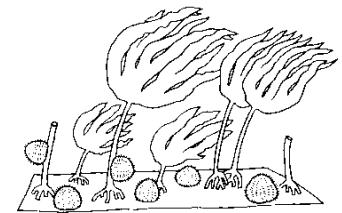
7 Seabed cover types

Tick these boxes where there is a significant amount of the seabed cover type concerned. Don't tick animal beds if you see one or two scallops but do if you see hundreds of brittlestars. Don't tick if there are scattered bits of pink encrusting algae but do if the rocks are covered in it.

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 *cuvie*, *Laminaria hyperborea*, which often has many other seaweeds and animals growing on the stalks.

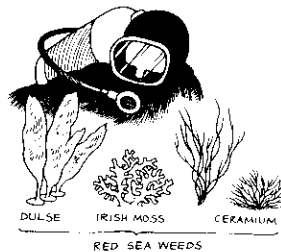
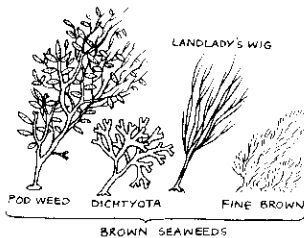
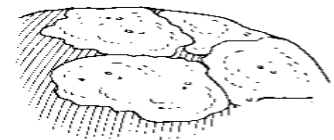


Kelp park: scattered kelp plants whose fronds do not meet to form a continuous canopy. They are likely to be found just deeper than kelp forest, or in areas where there is intense grazing by sea urchins.



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.

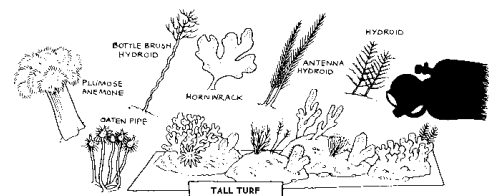
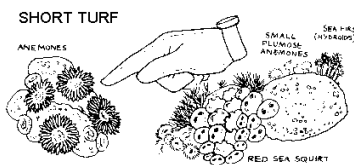
Encrusting pink algae: some seaweeds grow as hard crusts on the upper surfaces of rock. Typically they are pink or purple in colour and feel like a thin covering of cement.



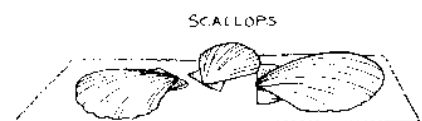
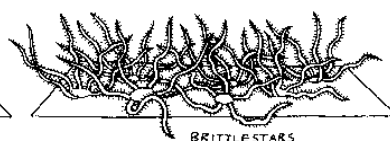
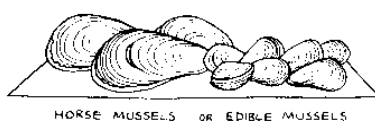
Seagrass bed: this is where there is a sediment seabed covered with Seagrass, usually eelgrass, *Zostera marina*.



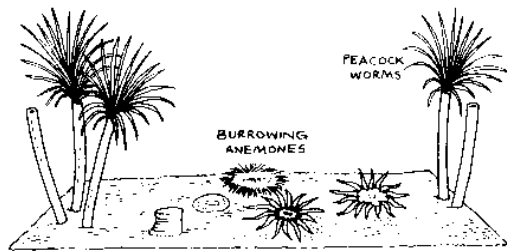
Animal turf on rocks: animal turfs consist of a mixture of plant-like animal species which are attached to the rock surface. They occur mainly below the seaweed dominated surfaces or shallower where there are shaded surfaces where seaweeds cannot grow. **Tall animal turf** consists of species which are more than 10cm tall and includes things like dead men's fingers, plumose anemones, tall hydroids and hornwrack. **Short animal turf** 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: the term 'sediment' here can include mud, sand, gravels or pebbles, or any mixture of these. 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: areas of sand, gravel or mud which appear completely lifeless



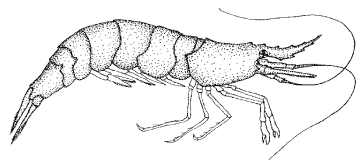
8 Species

This section of the form gives you an opportunity to record the species you saw. Only include names for things you are sure about, if you have any doubts give a generalised term instead – for instance only record *Pagurus bernhardus* if you are sure you can distinguish it from other hermit crabs. If in doubt just put hermit crabs.

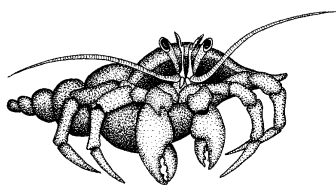
It is important to give an idea of how common each species was. Do this using the following categories:

- R** **Rare** – only one or two seen in the whole dive or less than 5% cover,
- O** **Occasional** – quite a few seen or 5-40% cover,
- C** **Common** – many individuals seen or 40-100% cover

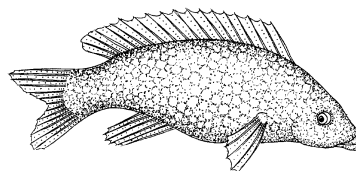
Species you may see and record could include – seaweeds, sponges, anemones, hydroids, worms, shells, sea slugs, bivalves, crabs, bryozoans, starfish, brittlestars, sea urchins, feather stars, sea cucumbers, sea squirts and fishes.



common prawn



hermit crab



ballan wrasse

Dive Planning

Before you go on your dive note on your slate what you need to remember to record (printed on the Seasearch slates already) or take a laminated promptsheet with you.



After the dive make sure you return the form either to the dive organiser before you leave, or to MCS in the post.

Text by Chris Wood and Robert Irving
 Drawings by Bob Foster-Smith, Sue Daly and Robert Irving