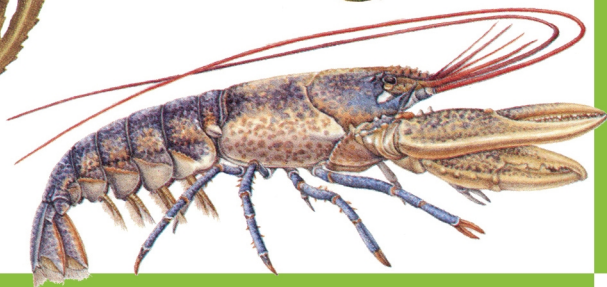
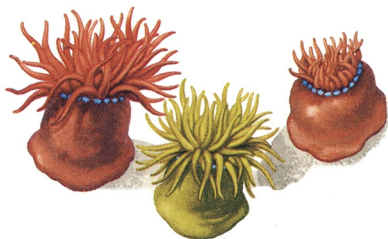


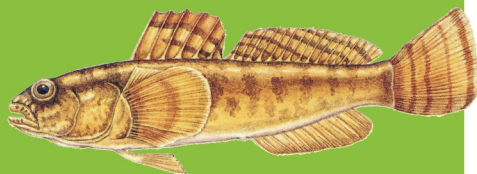
BOB GIBBONS
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GREEN GUIDE TO

seashore life

of Britain and Europe



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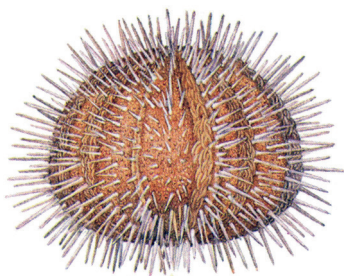
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Seashore Life

OF BRITAIN AND EUROPE

Bob Gibbons

Illustrated by Denys Ovenden
Melanie Perkins and Helen Senior



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Frontispiece: Murex, p.63

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Introduction

This book is a simple colour guide to 150 of the plants and animals most likely to be seen in the intertidal areas around the coasts of Europe; it can be taken in a pocket on to the shore, where the animals themselves can be compared directly with the paintings. Many more than 150 species occur in this narrow band where land meets sea and we have therefore had to be highly selective. First, we have excluded mobile species that move in from other habitats, such as sea birds, or terrestrial birds like herons, that regularly feed on the seashore, or mammals like the otter; second, we have excluded rarities, unless they are exceptionally conspicuous or interesting; and third, we have generally excluded species that are difficult to identify, or we have featured one species as a representative of a large similar group. The selection includes a good range of the species that people are likely to find and be able to identify.

There are two ways in which the book can be used to identify any new species. First, as it is relatively small, a search can be made through all the illustrations for something similar, and then the text can be checked to confirm details such as the distribution, or structural details not visible. Alternatively, the classification guide at the end of this introductory section can be used to try to narrow down the possibilities to one main group, which can then be checked in the main illustrated section. The species are laid out in taxonomic order – i.e. with all related species together – rather than by habitats, colour, or any other criteria. If a species resembles an illustration, but is not quite like it, check the text for information on variability that is not illustrated, or for similar species.





▲ Rough Periwinkle, [p.57](#)

In either event, always remember to take the book with you to the shore. If you take organisms away to identify, it may not only be harmful to the individuals concerned (and anything living on them), but you may also find that you do not have all the information that you require. With a seaweed, for example, you may need the shape of the holdfast, or you may need to search around for an example with fruiting bodies – these will be missed if just one frond is brought home to look at.

Looking at seashore life

The seashore is quite unlike any terrestrial habitat, and the plants and animals that occur there are generally very different in form from their land-based relatives. Many of the straightforward structural and behavioural differences that allow us to distinguish plants from animals break down on the seashore; plants are no longer just green, but all sorts of colours; there are animals that look like plants, and vice versa, and complex colonies of creatures of which the basic units are quite obscure to the casual observer. It is for this reason that the normal restriction of field guides to one biological group – e.g. birds, insects, or flowers – is not followed here, and the whole habitat is covered instead.

The way in which one has to look at the seashore is necessarily different from the way in which we study terrestrial habitats, too, though there are

Looking at seashore life

similarities with the study of pond life. The intertidal area allows us a fleeting glimpse of some of the creatures that live under the surface of the sea for some or all of their lives, which only become exposed as the tide goes out, twice a day. The organisms that live in the most accessible parts, near the high-tide mark, are, naturally, those that can stand most exposure to air, sunlight and fresh water in the form of rain – this area is usually the least varied and interesting part of the shore. As you go further down the beach the organisms that grow or live there are exposed for successively shorter times, until you eventually reach the low-water mark. This is the richest area of study, but of course it can be reached by normal means only for very short periods. This is further complicated by the fact that the amplitude of tides varies according to the cycles of the moon, and the time of year, and therefore the very lowest parts of the shore are exposed only once a month, or just twice a year for the extreme low-tide zone; these areas contain the most species of all the intertidal areas, but it needs planning and a knowledge of the tidal cycle to get to see them.



It is perfectly possible to see a range of intertidal animals, and washed-up marine creatures, without any special equipment or knowledge, just by following the tide out and looking in likely areas. However, you can see a much wider range of creatures, and more species, with a little planning and some simple equipment.

First, consult some tide-tables to find out when low tides are in your location. If you can possibly get information on the height of high tides, by deduction you can also discover the dates of the lowest tides, since the highest tides are accompanied by the lowest tides. If you are in an area only briefly, try to select the day which has the lowest tide, assuming that such



▲ Spiny Starfish, p.96

lows occur at a reasonable time of day. If you can choose freely when you visit the seashore, it is well worth finding out when the very lowest tides will occur, and visiting then – the best are generally around the September equinox, when extreme low tides are combined with an excellent range of organisms to be seen.

A few items of equipment make it much easier to find and see organisms. Some white plastic margarine or ice-cream containers (between 1 and 4 litres capacity) are easily stacked and carried, and ideal for examining material in. Anything emerging from, for example, some seaweed, can quickly be seen and examined, whilst larger creatures can be kept temporarily while you identify them. A strong, long-handled net is extremely useful – the mesh size will affect what you catch, though you will find that fine meshes can be a nuisance as they trap everything and are therefore slow to use and easily broken. A very small hand net is invaluable, to allow removal of items from containers, or for catching animals in small pools. Clear plastic containers are useful for examining animals from all angles, and a hand lens (about x 10 magnification) will reveal many beautiful and unsuspected details on static subjects. If you plan to take photographs protect your camera from salt water and spray by carrying it in a waterproof container, only removing it briefly for the actual exposure – salt water ruins cameras very quickly. Finally, a notebook, pencil and one or more field guides are essential.

Safety on the seashore

Looking at seashore life is safe enough if you take some reasonable precautions. The tide can advance extremely rapidly, especially over gently shelving beaches, so it is important to know the time of low tide and to check your return route. An innocent-seeming depression can quickly become an impassable barrier in areas where there is a marked tidal range. If you are working somewhere exposed, you also need to beware of sudden larger waves that may overbalance you on slippery rocks. It is best to wear plastic sandals or other suitable footwear, which not only increase your speed of movement but also protect against broken glass, sharp stones and stinging organisms like weever fish.



Zonation

Because of the regular way in which tides move in and out, exposing different parts of the shore for different times, there is a clear zonation of seashore life according to how tolerant different species are of exposure to air and sunlight. The zonation is not always clearly visible, especially on sandy shores and irregular shores with variable changes in level. At other times, it can be extremely well marked, with clearly visible bands of differently coloured plants extending down the shore – this is most easily seen on evenly sloped rocky shores. Because many species are quite precise in their requirements, a knowledge of this zonation can aid in identification if you take account of where the organism was found growing. It does not, of course, apply to washed-up or dislodged specimens, which can occur at any level.