Rocky Shore Invertebrates

FSC Dale Fort

Built in 1856 to protect the Milford Haven waterway from invasion, Dale Fort lies within the Pembrokeshire Coast National Park. It is ideally located close to spectacular beaches, within minutes of the Pembrokeshire Coast Path and near to the embarkation point for Skomer and Grassholm.

<table>
<thead>
<tr>
<th>Date</th>
<th>Level</th>
<th>Sole occupancy</th>
<th>Shared room</th>
<th>Non-resident</th>
</tr>
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<tbody>
<tr>
<td>Sat 26 - Tue 29 Oct</td>
<td>Intermediate</td>
<td>£370</td>
<td>£340</td>
<td>£295</td>
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Course Overview

This course will give students practical experience in the identification of common rocky shore invertebrates. Identification will be based on characteristics that would be visible in the field with nothing more sophisticated than a hand lens. Rocky shores exhibit a strong environmental gradient and the distribution of the organisms reflects this.

We will use zonation position and ecological context as identification aids, indeed the ecology of the shore is central to this course. Adaptations that enable organisms to survive in this extreme environment will form another main theme.

Marloes Sands by John Archer-Thomson
Saturday. On the first evening there will be an illustrated talk on the main invertebrate groups. We will start to explore the ways that the main groups differ in appearance and structure. Many of the examples cited will be sub-littoral but relevance to the shore will be obvious.

Sunday. The first field day will be spent looking at a sheltered rocky shore. Species identification will be a priority but the fieldwork will be structured to provide an ecological framework in which to view the organisms. All the common animals and “plants” will be recorded. The “plants” provide vital information about zonal national context and affect the distribution of the invertebrates to a great degree. Some live material will be collected and taken back to the lab for further investigation (this material will be returned to the shore in good condition at the end of the course).

Monday. On the second day I hope to visit an exposed rocky shore. This will reinforce identification skills learnt from day one and introduce course participants to the different communities encountered in response to changes in exposure to wave action. Ballantine’s Exposure Scale will be used to assess the shore’s exposure grade.

Tuesday. Departure is after breakfast. For those enrolled on the University Certificate in Biological Recording and Species Identification (please see below) on the last morning of the course there will be a short practical assessment on the key organisms of the rocky shore, features of taxonomic groups and basic marine ecology. Departing then at approx 11am. There will be one piece of written work as well.

Accreditation

This is one of a series of courses run jointly with Manchester Metropolitan University contributing to the University Certificate in Biological Recording and Species Identification. This qualification is being discontinued so is no longer open for new registration. Existing certificate students will be able to gain credits in the 2019/20 academic year. The course remains a module choice for the Masters programme. To gain university credits you must be registered for the Masters programme in advance of this course. For further details please contact:

The Division of Biology and Conservation Ecology
Manchester Metropolitan University.

E-mail: biorec@mmu.ac.uk
There is assessment of the course through, for example, identification tests, producing survey reports or field journals, working through keys and other various pieces of work.

The course is also suitable for non-credit students and for those enrolling on the new certificate course with FSC. For further details on this course please contact FSC Head Office at reception@field-studies-council.org

About the Tutor

For many years John Archer-Thomson was Assistant Head of Centre at FSC Dale Fort. He is now working as a freelance ecologist, writer and photographer and runs a number of courses at Dale Fort each year. His other interests include diving, running and travel. John has co-authored the British Wildlife Collection, volume 7, Rocky Shores published by Bloomsbury, available February 21, 2019.

About the Centre

Dale Fort is situated at the end of the Dale Peninsula and projects into the entrance of Milford Haven. It is a well-preserved example of a Palmerston Fort, completed in 1856 as a major part of the Pembroke Dock fortification against the French. Dale Fort became one of the first field centres for the FSC in 1947. Since that time the Fort has been extensively modernised to accommodate up to 130 people in residence with superb views over the sea.

What to Bring

- Warm clothing
- Waterproof jacket and trousers (can be borrowed from Centre.)
- Outdoor footwear – sturdy shoes or boots and wellies
- Day rucksack
- Warm hat and gloves for inclement weather and sunhat and sun cream for sunny days.
- Water bottles and/or thermos flask and packed lunch box

Recent Customer Feedback

“John is an excellent tutor, keen to pass on knowledge.”

“Fantastic Venue”

“John is very knowledgeable. He took account of particular interests of individuals.”

“John Archer-Thomson is an excellent course tutor. You (and we) are very lucky to have him.”
**Start and Finish Times**

Resident visitors are requested to arrive on Saturday at the office reception for registration between 4.00 – 5.30pm. Supper will be at 6.00pm. An introductory talk will follow. Breakfast will be at 8.00am. Departure will be around lunchtime on Tuesday. Non-resident guests are asked to arrive in time for the welcome talk at approximately 5.30pm.

**How to Book**

Please book online via [www.field-studies-council.org](http://www.field-studies-council.org) or contact the Centre by phone on 01646 636205 or email [enquiries.pb@field-studies-council.org](mailto:enquiries.pb@field-studies-council.org)

*Rocky shore at low tide* by John Archer-Thomson