

# Dorset and East Devon Coast World Heritage Site

## Management Plan 2014-2019

### APPENDIX 3: Fossil Collecting



United Nations  
Educational, Scientific and  
Cultural Organization



**Dorset and East Devon Coast**  
• inscribed on the World  
• Heritage List in 2001

## **ACCESSIBILITY**

If you require a copy of this document in a different format, please contact us and we will do our best to provide it in a way that meets your needs

## **YOUR VIEWS**

The most important people for the future protection, conservation and use of the Dorset and East Devon Coast are those who live or work on or near it, and visit and enjoy it. Please let us know your views on the Site and its management through the contact details below.

## **CONTACT DETAILS**

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## **A3-1          The West Dorset Fossil Collecting Code of Conduct**

The West Dorset Fossil Collecting Code of Conduct was developed in the late 1990's and reviewed in 2011/13. The revised 2013 Code is the product of that review, details of which can be found under the management section of the Jurassic Coast web site at [www.jurassiccoast.org](http://www.jurassiccoast.org).

This Code, though specifically aimed at professional and dedicated amateur collectors, also applies to all those who come here to collect fossils, whether for study or recreation. The safest and best advice, particularly for inexperienced collectors and educational groups, is that they should restrict their activities to the beaches alone. Advice to this effect is provided by interpretation signs, leaflets and the services of the Charmouth Heritage Coast Centre and Lyme Regis Museum.

### **The Geology and Fossils of the West Dorset coast**

The West Dorset coast contains one of the finest exposures of rocks from the Lower and Middle Jurassic Period to be found anywhere in the world. High erosion rates, particularly in the winter, ensure a plentiful supply of fossils onto the beaches. This coast is one of the best sources of marine Jurassic aged fossils in the world and numerous important finds have been and continue to be made here. Geological Conservation Review (GCR) sites include: GCR number 916 for fossil reptiles, 2952 for fish, 794 for fossil insects and 87 for Lower Jurassic Stratigraphy. Geomorphological GCR sites are 1321 for Mass Movement in Black Ven and 2109 for the coast between Lyme Regis and Golden Cap. Not surprisingly this coast has been designated by Natural England as a Site of Special Scientific Interest (SSSI) for its geology, fossils and landslides. It also forms part of the Jurassic Coast World Heritage Site and this Code sits within the Management Plan for the Site (Policies 2.6 and 2.7).

### **Fossil Collecting**

On the rapidly eroding West Dorset coast, fossil collecting is essential if specimens, some of which may be of great scientific value, are to be saved from damage or destruction by the sea. Collecting also offers an opportunity for people to learn about the ancient past and to contribute to our understanding through the discovery of new finds or the development of scientific study. However, it is important that fossils are collected both responsibly and safely.

**Fossil Collectors** want to be able to collect fossils freely. For many it is both a great learning experience and recreational activity. Most collectors, both amateur and professional, have a deep-seated interest in palaeontology and a wish to contribute to the development of the science. Professional collectors have most time, are able to react quickly to the events particularly storms and landslides, that uncover the fossils, and have a great deal of local knowledge, but they need to sell their finds in order to earn a living.

As a general rule, **Landowners** own the fossils on or under their land. The National Trust is the principal landowner along the West Dorset coast. The Trust is a registered charity charged with preserving places of Historic Interest or Natural Beauty for the Nation to enjoy. All along the West Dorset coast it seeks to preserve the landscape and nature conservation interests and to provide public access over its property so far as that is consistent with its preservation.

**Natural England** is the Government's statutory advisor on conservation including the Earth sciences. It designates National Nature Reserves, Sites of Special Scientific Interest and Special Areas of Conservation and played a key role in achieving World Heritage Site designation. It promotes sustainable management of these sites.

**Museum curators and Researchers** are keen to secure key scientifically important specimens for recognised collections as part of the nation's heritage and to provide a collection upon which scientific research can be based. Curators and researchers seek to ensure that the maximum associated scientific data is gathered when specimens are collected. Some researchers require access to strata and specimens *in situ* in order to undertake their work.

## **Aims and Objectives of the Code**

The interests of all those involved with fossil collecting on the Dorset Coast need not be mutually exclusive. Indeed many interest groups can assist each other so long as each party is aware of, and accepts the interest of the other. The Fossil Collecting Code of Conduct is an attempt to balance those interests.

The aim of the Code is:

To encourage successful recovery of fossils so as to avoid their destruction by the sea

The objectives of the Code are to:

- ***promote responsible and safe fossil collecting***
- ***restrict the excessive digging or 'prospecting' in situ for fossils along fossil rich strata***
- ***clarify ownership of the fossils***
- ***promote better communication between all those with an interest in fossils from the West Dorset coast***
- ***promote the acquisition of key scientifically important fossils by recognised museum collections.***

Area covered by the Code

The area covered by the Code is land in National Trust and Charmouth Parish Council ownership between Lyme Regis and Hive Beach at Burton Bradstock. Discussions remain ongoing with the Crown Estate regarding their interest in fossils found in the foreshore and also with Natural England regarding proposals to extend the principles of the code into the Lyme Regis to Axmouth Undercliffs National Nature Reserve.

## **Health and Safety**

The following is a general list of practical advice aimed at all types of collector including professionals and amateurs, educational/academic visitors and the general public including holiday makers and local people.

- Always consult tide tables before collecting. It is advisable that you go collecting on a falling tide. A particular hazard is the beach immediately east of Lyme Regis, which is cut off shortly after low tide. It is advisable to walk to Lyme on a falling tide only. NOTE: the new East Cliff coast defence scheme, when completed in 2014, will greatly reduce this hazard.
- Always advise someone of where you are going and at what time you can be expected to return.
- Be vigilant and exercise common sense in the vicinity of any cliffs. Cliff falls tend to occur suddenly and without warning. Avoid cliff bases.
- Avoid walking on, and keep clear of, visibly moving rock falls and mudflows. Note particularly that the seaward edges of mudflows may be covered by shingle and can be particularly treacherous.
- If you are using a hammer or other tools, it is advisable to wear safety goggles.
- Exercise common sense when considering what clothes and safety items to wear and take with you.
- Collectors should not descend the cliffs using ropes to get to a particular level under any circumstances.

**For professional and experienced amateurs collecting from cliffs, landslides, undercliffs and the foreshore, the Code provides as follows:**

1. There should be no digging *in situ* in the cliffs without permission (except in special circumstances - see 4 below).
2. Collectors should adopt a common sense approach to their activities and not expose themselves to excessive risks. They should cease immediately on becoming aware that their activities present a risk to a third party.
3. Collectors should take particular care with the following hazards:
  - Unstable cliffs, especially in areas where recent cliff falls have occurred or are ongoing
  - Mudflows and landslides
  - Tides, rough seas and poor weather conditions
4. Cliff excavations: Collectors wishing to extract fossils from *in situ* within the cliffs should use the following procedure:
  - i. Obtain the landowner's permission before taking any action to excavate any part of the find [subject to iv. below].
  - ii. Prepare a Risk Assessment (RA) for the excavation to identify the hazards that may arise in the course of the excavation, and the precautions that should be adopted, to protect the collector and others in the vicinity. This should then be discussed with the landowner.

Items that the RA is likely to cover are as follows:

- To cordon off the area of working.
- To ensure, as far as practicable, the stability of the surrounding area during the excavation.
- Effective communication among all parties involved in the excavation (including the landowner), and a procedure for dealing with accidents or problems arising from the work.
- To ensure as far as practicable that the site is safe when left unattended, and that appropriate signing etc. is in place.

This list is by no means exhaustive and collectors should satisfy themselves that all risks have been assessed.

- iii. Keep the landowner informed of progress with the excavation, and advise when completed. As a matter of courtesy it is recommended that EN is informed.
- iv. In the event of a fossil being located which is at immediate risk of being lost or damaged, the collector may proceed with the excavation provided that he gives full consideration to the risks and takes appropriate action to alleviate them, and is satisfied that the work will present no risk to any third parties. The collector should notify the landowner at the next available opportunity.

If a specimen is found close to a coastal defence or other structure, West Dorset District Council engineers should be consulted before undertaking any excavation.

## Scientifically Important Fossils Recording Scheme

There are two categories of fossils recognised within the Recording Scheme; **Category I, Key Scientifically Important Fossils**, and **Category II** for fossils of **some (but not key) importance**.

**Category I** fossils include new species or those specimens which may represent new species, fossils which are extremely rare such as the Charmouth dinosaur *Scelidosaurus* and fossils that exhibit exceptional preservation.

**Category II** fossils include vertebrates such as reptiles and fish, partial or complete, especially where the horizon of origin can be identified. Nautiloids and certain ammonites together with unusual assemblages of fossils are also included.

A full list of both categories can be found at the end of this document and on a new database that can be accessed at [www.palaeodata.dorset.org](http://www.palaeodata.dorset.org) or [www.dorset.fossilcode.org](http://www.dorset.fossilcode.org)

To comply with the Code, all Category 1 fossils are to be recorded at the Charmouth Heritage Coast Centre or recorded on line, in the database. Specimens taken to the centre for recording will be handed back to collectors. Certain restrictions apply if the collector wishes to sell or otherwise dispose of them (see 5 below). To comply with the code it is not obligatory to record Category 2 fossils although it is strongly recommended. As with Category 1 fossils, all Category 2 fossils are handed back to the collector after being recorded. (With regard to transfer of ownership, see under Fossil ownership below).

1. All Category I records should include an identification of the specimen (if known), a photograph, the exact location of the find together with the scientific horizon (if known), the date of the find and any other relevant observations. The name of the collector will be kept with the record but may not be available directly within public records depending upon the wishes of the individual.
2. The Charmouth Heritage Coast Centre will photograph the specimen and the record will be kept in paper form and on the online database. It is now also possible to record specimens on line and a scale bar has been produced, free for collectors, to use when taking photographs. The Centre will, as and where necessary, act as an intermediary between collectors and other interested parties.
3. Where a specimen is being recovered over a protracted period there is now provision in the database to record the multiple finds as one while still retaining details of the finders of each piece.
4. The preparation of Category I specimens should only proceed after consultation with appropriate academics or museum curators unless preparation is clearly straightforward or work needs to be carried out urgently.
5. Under the Code, collectors who intend to sell or otherwise dispose of their Category I specimens must first offer them to UK registered museums for a period of six months. If no purchase has been agreed by this time, the collector will be free to offer the specimen elsewhere. The recording scheme should be updated accordingly. Where an important specimen has been found by a number of collectors, it is permissible for one of those collectors to take a lead and acquire the other parts in order to reunite the specimen. Each finder's name should still be recorded in recognition of their contribution. The priority here is to offer the best chance of that specimen being reunited.
6. Those individuals with private collections that contain Category I specimens are encouraged to make provision for the ultimate placement of such specimens within UK registered museums.
7. The scheme offers a channel of communication for curators and researchers to convey their interests to collectors. The Charmouth Heritage Coast Centre staff will convey this information to collectors and generally promote communication between all parties.

## **Fossil ownership**

At present the Code as outlined above applies to National Trust and Charmouth Parish Council land only. Both landowners wish to make clear their ownership of these fossils but they are willing to see ownership transferred to those collectors who follow the Fossil Collecting Code of Conduct and record their key scientifically important fossils.

The Crown Estate own most, but not all of the foreshore and agree with the Fossil Collecting Code with one exception; they may require a proportion of the value of the specimens under the conditions of their Royal Charter which include an obligation to recover money from operations generating income on their land.

Some areas of the foreshore are attributed to owners whose modern day relatives are unknown. The collector and/or purchaser are advised to satisfy themselves that everything reasonable has been done to track down the present owner prior to collection and any subsequent sale/purchase.

Maps of land ownership are available at the Charmouth Heritage Coast Centre and the Code will be promoted to other landowners along the West Dorset coast.

## **Contact information**

Charmouth Heritage Coast Centre, Lower Sea Lane, Charmouth, Dorset DT6 6LL Tel 01297 560772. The web site can be found at [www.charmouth.org](http://www.charmouth.org)

Permission to undertake excavations should be sought from:

The **National Trust** wardens: The National Trust, West Dorset Office, West Dorset Office, Filcombe Farm, Muddyford Lane, Morcombelake, Dorset DT6 6EP. Tel 01297 489481.

Open hours: 10.00-1.00 and 1.30-3.30 Monday to Friday.

Property Manager: Helen Mann: 07768 065362. Head Ranger: Rob Rhodes 07747 756549

**Charmouth Parish Council**, The Elms, The Street, Charmouth, Dorset DT6 6LN tel. 01297 560826

The **Crown Estate** (currently through the World Heritage Site Team, [r.edmonds@dorsetcc.gov.uk](mailto:r.edmonds@dorsetcc.gov.uk) or Tel: 01305 224477)

**Natural England South West team:** [Dorset@naturalengland.org.uk](mailto:Dorset@naturalengland.org.uk)

Although the Lyme Regis to Axmouth Undercliffs National Nature Reserve west of Lyme Regis lies outside the fossil code area, the contact there is Natural England's Undercliffs Warden Tom Sunderland: 07899 731404 or e-mail: [Tom.Sunderland@naturalengland.org.uk](mailto:Tom.Sunderland@naturalengland.org.uk)

**West Dorset District Council Engineers Office.** Nick Browning Tel: 01305 252298 E-mail: [N.Browning@westdorset-dc.gov.uk](mailto:N.Browning@westdorset-dc.gov.uk)

In relation to foreshore excavations and the Marine Management Organisation; this is their current view:

*Under the Marine and Coastal Access Act 2009, the removal of items from the UK marine area (below mean high water springs) is only licensable if using a vehicle, vessel, aircraft, marine structure or floating container. From the information you provided, removals by hand would not require a licence however larger removals requiring vehicles would qualify for a marine licence.*

Please note:

Those collectors who do not follow this voluntary code, particularly by digging or prospecting *in situ* in the cliffs, or failing to record Category I fossils, may be regarded as stealing the fossils, and appropriate legal action may be taken against them.

### Key Scientifically Important Fossils

The Jurassic rocks exposed on the West Dorset coast contain abundant and extremely diverse fossils. Therefore the following lists aim to provide general guidance only and are not to be regarded as fully comprehensive. Wherever there is doubt about the scientific importance of any fossil finds, collectors are recommended to contact the relevant fossil group specialist(s) for assistance.

### Category I fossils

- a) Fossils which certainly represent new species. These can belong to any taxonomic group – vertebrate, invertebrate or plant.
  - b) Fossils that are thought to represent new species. Again these can belong to any group - vertebrate, invertebrate or plant. (Subsequent work may indicate that some of these are not in fact new species and provided that they do not fall within c or d below, they may be ‘downgraded’ to Category 2 fossils).
  - c) Fossils that are extremely rare. Although not necessarily new species, they are nevertheless clearly of great scientific importance. Examples include: dinosaurs, pterosaurs, sharks and rays, complete or near complete insects and arthropods (crustaceans, crabs), recognisable leaf fronds and plant cones etc. This subcategory includes forms which are very rare in certain stratigraphic levels if found *in situ*, which would particularly relate to ammonites, or where the stratigraphic horizon can be identified satisfactorily; for example, fossil echinoids or gastropods are rarely found within the clay dominated Lower Lias strata.
  - d) Fossils which exhibit exceptional preservation. For example, ichthyosaurs (or other vertebrates) showing skin texture, uncrushed skulls which could provide data on brain size or other physiological aspects etc. Among invertebrates, fossil cephalopods (cuttlefish, squids, ammonites or belemnites) showing traces of gill structures, arms and hooks etc. are of key scientific importance.
- Note: Some fossils from the Lias, such as ichthyosaurs, are not uncommonly found with traces of soft tissues preserved. These would not be regarded as Category I unless there are soft part features preserved which are particularly rare or exceptional. The same may be true for certain invertebrate groups, such as belemnite ‘ink sacs’, which are not that uncommon in the Black Ven and Belemnite Marls.



## **Category II Fossils**

### **Reptiles: ichthyosaurs and plesiosaurs etc. Fish: including sharks, rays, coelacanths, bony fish etc.**

Fossil remains, especially fragmentary, isolated, bones or scales etc., may be relatively common in some beds. The stratigraphical range of many forms is poorly known and any data may be important to relevant specialists. It is recommended therefore that collectors do record significant, recognisable finds if found *in situ* or where the stratigraphic horizon can be identified satisfactorily.

### **Arthropods: insects**

Relatively scarce fossils, mainly recorded from the woodstone/flatstone horizons. Many insect remains are indistinctly preserved, but given their scarcity, any recognisable forms are worthy of recording.

### **Molluscs: belemnites**

Extremely common fossils in the form of isolated belemnite guards. It is not anticipated that these would be recorded, unless a particular bedding-plane concentration ('belemnite battlefield') or similar fauna was collected.

### **Molluscs: ammonites**

One of the most common and characteristic fossils from the Dorset coast occurring throughout the section. It is not anticipated that these would be recorded, although any unusual species or particularly large/mature shells showing apertural details etc are worthy of inclusion in the database. The use of these fossils to demonstrate the zonation of the strata is protected through the requirement not to dig *in situ*

### **Molluscs: nautiloids**

A neglected group of fossils, occurring throughout much of the succession. It is not expected that these would be recorded, though exceptional specimens (e.g. bedding plane assemblages or others yielding palaeoecological data) are worth considering for inclusion on the database.

### **Molluscs: bivalves**

An abundant group of fossils, occurring through much of the succession and rarely collected commercially. It is not expected that these would be recorded, although exceptional specimens (e.g. bedding plane assemblages or other preservations yielding palaeoecological data) are worth considering within the database.

### **Brachiopods**

As bivalves above

### **Echinoderms: crinoids, starfish and sea urchins**

A group of considerable interest to collectors, especially specimens from the 'Pentacrinite' and 'Eype Starfish' beds. There are many of these in public collections and it is not anticipated that specimens would normally be recorded. However, exceptional accumulations of crinoids attached to drift wood etc, or of brittle stars, are worthy of recording on the database.

NOTE: It is our intention to produce 'fossil fact sheets' providing more detailed information on each of these groups as and when we can obtain expert advice on what may be interesting, the direction of new research etc.

## **Appendix**

### **Background to the development of a Code of Conduct**

A Working Group of landowners, conservation organisations, museum curators and local fossil collectors developed this Fossil Collecting Code. The Group was established in order to address growing conflicts of interest with regard to fossil collecting along the West Dorset coast. The Group recognises the essential need for fossil collecting to continue. However, it also recognises that collecting must be carried out in such a way as to satisfy all those with an interest in our fossil heritage.

#### **The Code was developed by:**

**Jurassic Coast project (Dorset County Council)**

**English Nature**

**The National Trust**

**West Dorset Heritage Coast Project**

**Charmouth Parish Council**

**Charmouth Heritage Coast Centre**

**Dorset and Somerset Museum Services**

**Local fossil collectors**

The Code was reviewed through a wide consultation process in 2011/12 particularly with the scientific community. The Review was overseen by the Science and Conservation Advisory Group on behalf of the World Heritage Site Steering Group. The review involved a consultation document which went out to a broad range of individuals and organisations with an invitation to comment and from the responses a number of changes were identified by which the operation of the code would and should be improved, as reflected in this 2013 revision.

