GUIDELINES FOR
COLLECTING FOSSILS
ON THE ISLE OF WIGHT
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The coastline of the Isle of Wight provides some of the richest hunting grounds for fossils in Britain and a unique training ground for a wide variety of earth science disciplines. The constantly crumbling clay, sandstone and chalk cliffs still yield a wealth of Cretaceous and Tertiary invertebrates, vertebrates and plants. However, because the island is so small and its geological heritage is so fragile, special care must be taken when collecting and removing fossils. This will prevent unnecessary erosion or damage to an important part of our natural heritage.

In recent years, increasing pressure has been imposed on the eroding coastline by growing numbers of collectors and visitors. If a responsible attitude is adopted, fossil collecting anywhere around the coast can do little harm and will help to preserve the geological heritage of the island. Indeed, new and important discoveries are being made every year, by amateur collectors, students and professional geologists. By making these discoveries known to museums and universities, such fossil collecting can make a significant contribution to science.

This booklet is aimed to be of use to all collectors and visiting geologists. Though not exhaustive, it provides useful general guidelines on ownership, safety and responsible collecting. It is emphasized that ascertaining just whose land you are on and obtaining permission to collect is your responsibility.
LAND OWNERSHIP

Below the high-water mark, many beaches are the property of the Crown. Others however, may belong to private individuals, the National Trust (see below) or borough councils. The National Trust lease stretches of foreshore from the Crown at Compton Bay, but own other areas, such as St. Catherine's Point. Permission must be obtained from the Trust for excavation or collection of larger fossils, such as dinosaur bones.

In practice, there is generally no real problem with collecting small or loose geological specimens from intertidal areas if it is evident that they are in danger of natural destruction.

Cliffs are a different issue. Permission to excavate fossils (even loose ones) from above the high water mark should be obtained from the landowner, often a farmer or the National Trust. A landowner is entitled to impose any restrictions that he or she may choose, so do not expect permission to be automatically granted.

The more fossiliferous localities around the coast are mostly incorporated into Sites of Special Scientific Interest (SSSI). A responsible approach to fossil collecting is essential to maintain the scientific value of these important sites.

There are still a small number of active and disused inland quarries on the Isle of Wight. Permission to enter these must in all cases be obtained from the landowner.

Land ownership and boundaries often change, so check each time you visit the island if you want to avoid problems.

As a landowner, you have the right to control access to your land, unless mineral rights have been assigned elsewhere. Consequently you have the right to retain the rocks or fossils found on your land. It is sensible to permit collecting only with prior written application. From the outset, it is sensible to be specific about your terms for permissible collecting.
SAFETY

This list merely provides some of the more important points. Once again, the emphasis is on you. Safety is largely provided by common sense and good planning.

1. When visiting the coast, always consult tide tables. These are available in many shops. It is strongly suggested that you only work a coastal section on a falling tide and in calm weather. If in doubt, consult the Coastguard.

2. Let somebody know where you are going, and when you expect to return.

3. Take care when walking along cliff bases as the local cliffs are very unstable. A hard hat is useful, but can give a false sense of security. These will only protect you against the smallest falling fragments.

4. Avoid walking on rock falls and keep clear of mud flows. These are especially treacherous in the winter months.

5. If your work requires the use of a hammer or other specialist tools, protect your eyes with plastic safety goggles.

For further details, consult "A Code for Geological Field Work", issued by the Geologists’ Association.
RESPONSIBLE COLLECTING

The rapid rates of erosion around the island's coast mean that collecting is essential, if new finds are not to be lost. As it is, countless millions of smaller fossils will be destroyed by erosion or washed out to sea every year. Nevertheless, collecting can be wholly detrimental to the interests of science and coastal conservation if conducted in an irresponsible way.

The basics of responsible collecting begin before setting out for the field. Less experienced visitors will probably need to consult field guides and maps or correspond with the local museum before travelling to the island. Also, getting the right wrapping, packing and writing materials together well in advance will preserve the scientific value of any specimens found.

HOW TO COLLECT

In the field, avoid the use of a hammer as much as possible. In practice, most specimens are found loose or are easily extracted from soft matrix by hand. If a hammer is used, make sure that you exercise restraint. Large quantities of freshly broken rock debris scattered along the shore are unsightly, wasteful and normally unnecessary. Let the storms and tides do the work for you.

Think about your reasons for collecting. Fossils are unique and irreplaceable evidence of the ancient past and should never be taken without good cause. If you have a private collection, take just a few representative specimens, ideally from loose pebbles or fallen blocks.

If you find something that you just cannot deal with, record the exact spot and telephone the local museum. A rushed dig with insufficient equipment will invariably damage or destroy the find.

As soon as a fossil is removed from the rock, irreplaceable scientific information is lost. This can be minimised by recording basic information at
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the time of collection. Unless this is done and records are kept permanently with the specimen, the potential scientific value of the specimen will be drastically reduced.

If you (or your descendants!) should decide to donate your collection to a museum, it will be infinitely more useful if it has been collected and documented ("curated") to the highest standards. Without associated information, your collection might be of no use to a museum whatsoever. Properly curated collections provide the basis for scientific research, sometimes decades or even hundreds of years after the specimens were collected. Old collections can tell us a lot about long-lost fossil sites, and collectors themselves.

RECORDING YOUR FIND

Basic information to record consists of the following.

(a) date of collection
(b) site of collection

The latter must be precise. On the Isle of Wight, merely naming the broad coastal stretch or bay is not really sufficient, as a single stretch can include a variety of fossil beds, formed at greatly varying times and in different ancient environments. Try and pinpoint the precise site, to the nearest ten metres by using long-term landmarks (for instance chines, headlands, farms) or ideally, eight-figure grid references. Site sketches and photos are also useful, as long as they are also kept with the specimen, or linked to it by an index number.

If your specimen was dug from the actual rock of a cliff or foreshore, try and measure the approximate vertical distance from the cliff base or better still, a
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distinct rock bed or horizon. Once again, sketches and notes will help with
this. In addition, professional geologists should be able to record details of
associated features such as sedimentary structures.

In the field, attempt to keep your notes well-ordered. A hard-backed
notebook is useful. Remember that from a scientific point of view, your
efforts will have been largely wasted unless the data is transferred and
permanently kept with the specimen.

If you cannot identify your fossils, do not worry! This is quite low on the list
of priorities and can be tackled by experts at a later date. Knowing and
recording just where the specimen was from is much more important.

HOW TO LOOK AFTER YOUR FOSSILS

Most island fossils are pretty fragile, irrespective of where they were
collected. Consequently, wrap fossils individually (newspaper is ideal) before
putting them into a bag and transporting them.

Most island fossils are saturated with salt, and need several days soaking in
freshwater before slowly drying. Pyrite ("fools gold") is present in many local
fossils: staff of any museum with a geological collection will tell you how best
to stop this material decaying.

Fossils should be stored in a dust-free environment, away from sources of
direct heat or damp. Drawer cabinets and sealable boxes of wood, metal or
plastic are useful. Avoid oak and birch cabinets, as these can affect your
specimens. Labels incorporating locality and geological details should be kept
with the specimens at all times. You can mark weathered or damaged areas
of your specimens with a number, which should duplicate details of the find
in your notebook.

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SPECIALIST GROUPS

COMMERCIAL COLLECTING

It is generally agreed amongst museum geologists and researchers that commercial collectors can play a vital part in geological conservation. Professional collectors invariably have more time for field work, and their experience often results in spectacular finds. In the interests of good relations, staff of the Museum of Isle of Wight Geology urge any visiting commercial collectors to contact the museum before or during their visit. We like to see just what is being found around the coast as this helps us to keep up-to-date records. Sometimes we can afford to purchase rare finds. Please collect in a responsible way and document your specimens, so that the scientific value of finds is retained.

LARGE FIELD PARTIES

If at all possible, please try and limit hammers to two or three per group. Excessive hammering increases the rate of erosion and is usually entirely unnecessary. If students require hand specimens, please try to break up just one or two loose blocks. If you find anything unusual, please notify the Museum of Isle of Wight Geology.

RESEARCHERS

If possible, please make your activities known to the Museum of Isle of Wight Geology. It is quite likely that we will have unpublished data which could be of considerable use to you. Please follow the advice given in this booklet and avoid disfiguring rock surfaces with marker paint or by coring (see "Take Care when you Core"; a leaflet issued by the Geologists' Association).
USING THE MUSEUM

The collections of the Museum of Isle of Wight Geology belong to the people of the Isle of Wight. As such, they are freely available for inspection by prior appointment. The collection is almost entirely local, with chief strengths being Wealden and Tertiary vertebrates, Cretaceous and Tertiary molluscs and Tertiary insects and plants.

The museum sees itself as an advice centre for all collectors, as well as an institution committed to the preservation of island geology. Please contact the museum for advice concerning coastal access, details of geology or coastal safety. Similarly, please bring in your finds for identification or advice on documentation or conservation. We readily accept donations of fossils if they fall within the targets of our collecting policy. By bringing your finds in for us to see, we can maintain our records and a balanced picture of our geology.

Above all we want to help maintain good relations between collectors, the museum and landowners through mutual co-operation and continued adoption of considerate attitudes towards the island’s coastline. Responsible collecting will help maintain the island as a unique area for geological study.
FURTHER READING

English Nature issue a leaflet entitled "Fossil collecting and conservation". This is available from the Publicity and Marketing Branch of English Nature, at the address given below.

The Geologists' Association issue "A Code for Geological Field Work" and "Take Care when you Core" (address below).

Magazines such as "Geology Today" (available from the Geologists' Association) or "Earth Heritage" (available from English Nature) frequently contain useful articles on collecting, and conservation issues. In particular, the "local geologist" feature in Geology Today is aimed at keen amateur collectors.

For details of basic collection care and a background to museum geology, see "Geology and the local museum" by S.J. Knell and M.A. Taylor. This was published by HMSO in 1989.

Currently, the best account of local geology is "A short account of the geology of the Isle of Wight", by H.J. Osborne White. This was first published in 1921, but has been recently reprinted by HMSO.


Specialist articles on aspects of conservation and collection care are available from the Museum of Isle of Wight Geology.
USEFUL ADDRESSES

Coastguard, Maritime Rescue Sub Station, Lee-on-Solent. Tel. Lee-on-Solent 552100.

English Nature, Northminster House, Peterborough PE1 1UA.

Geological Curators’ Group, c/o The Geological Society, Burlington House, Piccadilly, London W1V 0JU.

Geologists’ Association, Burlington House, Piccadilly, London W1V 9AG. Tel. 071-434 9298.

Museum of Isle of Wight Geology, High Street, Sandown, PO36 8AF. Tel. Isle of Wight 404344.

National Trust, Information Office, 35a St. James Street, Newport, Isle of Wight PO30 1LB.

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