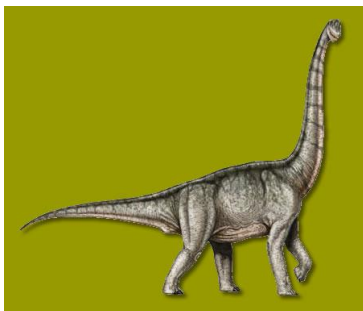


English Guide to Dinosaur Isle

Hypsilophodon was a small bipedal dinosaur measuring about 1.5 to 2.5 metres long. It had a beak for stripping vegetation, and small teeth for chewing. It had a long tail to help it balance while running. Fossil evidence show it travelled in small groups. It may have been a main source of food for carnivorous dinosaurs.

Polacanthus is an armoured dinosaur like its relatives in the Ankylosauria group. It is known from a number of partial skeletons, isolated bony spines and pieces of armour. In the museum we have a model of *Polacanthus*. Its head is based on the related dinosaur *Gastonia* because unfortunately no complete skull of *Polacanthus* has been found. *Polacanthus* walked on four legs which were covered by pointy spines. Its sides and back were also covered by bony spines and its hips were covered by bony plate armour. *Polacanthus* was probably about 5 metres long.

Eucamerotus is the name given to a Brachiosaurus-type dinosaur excavated in 1992, sometimes called the "Barnes High Sauropod". It belonged to a family of dinosaurs called sauropods which were the biggest land animals ever to have lived. They were herbivores with very long necks and tails. Their small peg-like teeth were adapted for eating plants. The length of the dinosaur from Barnes High is uncertain because the skeleton is incomplete. However, it probably measured about 15 metres long.



Other dinosaurs from the United Kingdom

Dinosaurs have also been discovered elsewhere in England, our closest being small remains from the Dorset Coast, while others are found further away in Surrey and Kent. Dinosaur footprints have also been found on the Isle of Portland, Dorset, and Skye in Scotland.

We hope you enjoy your visit to Dinosaur Isle. If you have any questions please do not hesitate to ask a member of staff. We will do our best to help.

Edited & Produced by Trevor Price, Dinosaur Isle. Issue 1, July 2015.

English Guide to **DINOSAUR ISLE** Isle of Wight, England



Edited from an early Dinosaur Isle booklet written by Martin Munt

English Guide to Dinosaur Isle

Welcome to Dinosaur Isle, the museum for the rich fossil heritage of the Isle of Wight.

Introduction

The Isle of Wight has long been considered one of the classic areas of the British Isles for the study of geology. The Island is formed from a succession of rocks dating between 126 and 32 million years in age. This spans the periods of time known as the Cretaceous, Palaeocene, Eocene and Oligocene. There are also some younger deposits dating from the last one million years (Quaternary). Throughout most of these times the area supported a wealth of different life forms, which on death were preserved within the layers of sediment that were to become the rocks we see today. Successive earth movements have brought these rocks to the surface and are now being eroded away, revealing the splendours of past life they have hidden for so long.

What is a fossil?

A fossil is the preserved remains of life from the past. They are usually parts of a former animal body or plant, but can also be records like preserved worm burrows or footprints. Fossilisation is a rare phenomenon that requires an organism to be first rapidly buried if it is to be conserved. Once buried the sediment slowly turns into rock, and minerals gradually replace parts of the dead organism. Not all parts are preserved. Eyes, internal organs, fur and feathers rarely become fossilized. The parts that are preserved then remain in the ground unless they are revealed by erosion or mining. If we are lucky we may find parts of the former skeleton of a dinosaur, an ammonite shell, a tree leaf, or a dinosaur footprint.

Ice Age Wight

The Quaternary is the most recent geological period dating from 2.6 million years ago to the present. It is sometimes called "the Ice Age". At times vast areas were covered by ice and snow. However it wasn't always cold. It has been a time of alternating periods of very cold climate called 'glacials', and warmer times between called 'interglacials'. Many of the fossils discovered from this time consist of the giant bones from bison, deer and elephant. We also find stone tools made by our human ancestors

The Last Paradise and the Shark Sea

During the periods of time called the Palaeocene, Eocene and Oligocene the area of southern England and northern France was dominated by shallow tropical seas. It was home to molluscs, crustaceans, crabs and sharks. At first the Isle of Wight was covered by sea-water; but later the southern half of the Isle of Wight was raised to form land, while the northern half formed part of a coastal lagoon that also stretched into Hampshire. After a while this northern lagoon turned into a swamp which was home to mammals, turtles, alligators and shellfish in an environment similar to the Florida Everglades today. You can see these two environments in the display cases called 'The Shark Sea', and 'The Last Paradise' at Dinosaur Isle.

The Ammonite Sea

For a major part of the time we call the Cretaceous the Island was covered by the sea. The sea floor was covered with sponge forests, oysters and sea-urchins. The ammonites, shark and fish swam near the surface. The dolphin-like marine reptiles called Ichthyosaurs hunted the ammonites, and their relatives the belemnites.

The Wealden Scene

The rocks we call the Wealden were originally deposited in rivers, lakes and ponds. The rocks exposed today were formed between 120 and 126 million years ago. They are the source of most of the dinosaur bones we find, along with pine wood and the leaves of ferns. Also found are the remains of crocodiles, turtles, pterosaurs and small mammals.

The Dinosaurs

Iguanodon is the most common dinosaur. It had a thumb spike, a horny beak and a mouth full of rows of replaceable grinding teeth. It was a herbivore, lived in groups, and grew up to 9 metres long. Dinosaurs of this type can be found on every continent during the Cretaceous.

Neovenator is the main predatory dinosaur found on the Isle of Wight. It is thought to be related to the dinosaur *Allosaurus*. Its teeth are curved and serrated. It was probably a hunter of other dinosaurs like *Iguanodon*. It measured about 7 metres long. *Neovenator* means "New hunter".

Eotyrannus is the latest dinosaur to be discovered on the Island. It was a small carnivore. Some people believe it was an ancestor of *Tyrannosaurus rex*. It may have grown to about 4 metres long.

