

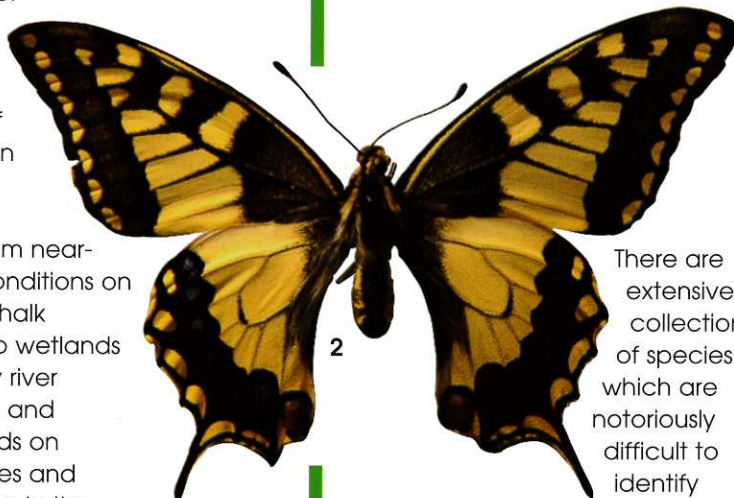


Biology is the study of living plants and animals, how and where they live, as well as their classification and relationships, the latter reflecting their evolutionary history.

Plants (botany)

Kent and its adjoining counties have a distinctive flora due to their closeness to continental Europe, long coastline and characteristic soils and topography controlled by the underlying geology. A rich diversity of plants reflect the variety of habitats in this area. Habitats range from near-Alpine conditions on the dry chalk Downs, to wetlands in muddy river estuaries, and woodlands on sandstones and mudstones in the Kentish Weald. The short turf on the chalk which grows on sunny unfertilised slopes, can support a great variety of small flowers (herbs), whereas the old oak forests may shade large stands of bluebells. These are examples of Kentish habitats which are disappearing and need conservation.

All animals (including humans) are ultimately dependent on plants for food.



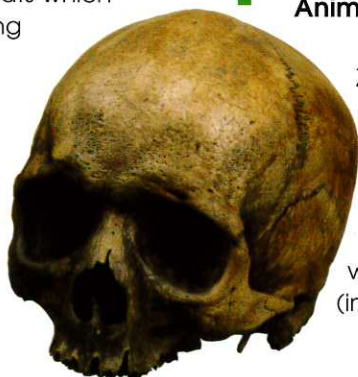
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There are extensive collections of species which are notoriously difficult to identify including

bramble, dandelions and hawkweeds. The plants are housed mainly in a special room (herbarium) which can be visited by contacting the Keeper of Natural History.

Animals (Zoology)

Zoology is the study of animals which can be divided into two main groups: those with backbones (vertebrates) and those without backbones (invertebrates).



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BIOLOGY FASCINATING FACTS

No animals on display were killed by Museum staff. The birds and mammals either died naturally, were found dead on road verges, or were shot long ago before people realised the need for conservation. They are now preserved so that we can all learn about them without harming any living animals.

Caviar is the eggs of the sturgeon fish.

There are over 20,000 different kinds (species) of plants and animals living in Kent and the surrounding sea. Some of them are so scarce now that they need protection, whilst others are new comers because of our changing environment. Recording plants and animals is a fascinating activity enjoyed by local people interested in natural history.

Previously unknown species have been recognised in this museum's collections.

ILLUSTRATIONS

- 1 - Stick Insect
- 2 - Swallowtail butterfly
- 3 - Human Skull

BIOLOGY FASCINATING FACTS



1

Invertebrates include a great variety of animals, many of them small (or even of microscopic size) such as snails, insects and woodlice. Entomology is the study of insects including dragonflies, grasshoppers, bugs, beetles, butterflies and bees. Insects have six legs compared with eight in spiders and mites. Many insects such as the Swallowtail butterfly have a pupa or chrysalis stage during which the larva or caterpillar changes into a winged adult. The Heath Fritillary is a British butterfly only found in Kent. Moths are close relatives of butterflies and the Pigmy Footman, Pale Grass Eggar and Black-veined Moth are also special to Kent.

Conchology is the study of shells and the greatest variety of shape and colour is found in snails from tropical seas.

The Museum has an especially fine collection of shells from the South Sea Islands. These were found by the great Victorian

collector, Julius Brencley, during an expedition by HMS Curaçoa in 1865.

Vertebrates include amphibians, reptiles, birds and mammals (including humans). They all have an internal skeleton made of bones (insects, in contrast, have their skeleton or hard part on the outside of the body).



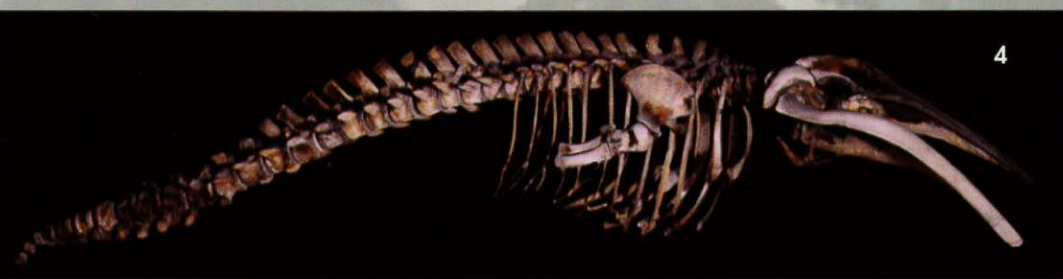
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In bats, the tiny finger bones support the wings, and birds feet are variously adapted for walking on soft mud (waders) or perching on trees (such as sparrows). Lions and crocodiles eat bone and meat so they have strong jaws and pointed teeth whereas cows have flat teeth for chewing grass. Birds have no teeth so their bills come in various shapes ranging from flat in ducks (to scoop up water



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plants) to pointed and hooked in birds of prey. Birds, like mammals, are warm blooded, which helps keep them active!



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There are more kinds of insects than all other species combined. There are more beetles than any other groups of insects. However, nobody knows the total number of living species on Earth. Estimates range from 3 to 80 million.

Whales are descended from land mammals that were rather like dogs.

Mammoths found in ice in Russia are so well preserved that the tusks are sold as ivory (sparing living elephants) and the meat has even been eaten.

The Loch Ness Monster is the only species recognised by modern scientists where there is no specimen available.

ILLUSTRATIONS

- 1 - White-tailed Eagle
- 2 - Conch Shells
- 3 - Pike
- 4 - Pike Whale Skeleton