

BUGS!



45 - PSILOPTERA

A jewel beetle. The shiny, glittering body of these beetles inspired some Asian societies to use them as jewellery or even as decorations on buildings.

35 - PRODRYAS

As flowers became more common, butterflies which fed on their nectar began to thrive. The well-preserved fossil of this butterfly species reveals its intricately patterned wings.



55 - PALEOLOMATIA

This species drank nectar, but was not a bee. *Paleolomatia*'s single pair of wings categorises it as a species of fly.

45 - EOPHYLLUM

As plants evolved, insects developed with new forms of camouflage, helping them survive. This species is one of the oldest types of leaf insect, a disguise still seen on insects today.



45 - PALAEOVESPA

A wasp's sting first evolved as an ovipositor, for laying eggs. As wasps evolved, this adaptation became a sting, to paralyse the prey for their young to eat.

35 - CLOSTES

This spider was a species of funnel-web tarantula. It spun tube-shaped webs, or lined its burrow with silk to trap prey.



55 - PROBOMBUS

One of the earliest types of bee, *Probombus* dug holes to protect its eggs, depositing balls of pollen inside as sustenance for its offspring. This behaviour is still seen in bees today.

75 - PALEOCULICIS

This was the first species of mosquito to have the same features as mosquitoes today. It may have eaten plants, or fed on the blood of dinosaurs.



50 - TITANOMYRMA

This giant ant was 6cm long, the size of a hummingbird. Some ant species today reach similar sizes - modern driver ants grow to lengths of 5cm.



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EXPLORER BUGS!

7 - DORITITES

This species was a type of swallowtail butterfly, similar to those found today. The tiny scales on its wings form delicate patterns.

2700 BC - SILKWORM

Humans and silkworms share a close relationship. For 5,000 years, humans have treasured the silk of this species of moth as it formed a cocoon to protect its young. With the pupa still inside, the silk is harvested before being turned into a fabric.

150 BC - MEDICINAL LEECH

In the Ancient World, from Egypt to Greece to Rome, doctors recommended applying medicinal leeches to sick patients, which would suck out 'excess' blood and restore harmony to the body.

1000 BC - SCARAB BEETLE

Ancient Egyptians made jewellery and art using images of scarab beetles. Just as the scarab beetle rolls a ball of dung across the ground, they believed the god Khepri rolled the sun into the morning to start the day.

ELECTROTETTIX
Enged locust, a type
hopper. Locusts
in swarms of billions,
feeding on fields of
to feed.

AD 1348 - ORIENTAL RAT FLEA

In the fourteenth century, Europe was afflicted by a deadly plague known as the Black Death. It was transmitted by fleas, who themselves were infected by the lethal bacteria *Yersinia pestis*. These fleas had no wings but could spring great distances relative to their size.

Present day - EUROPEAN HONEYBEE

Honeybees are farmed worldwide for their honey. The bees transfer pollen from flower to flower, helping plants reproduce. Present-day environmental change is one factor threatening the honeybees' survival, and in turn the survival of many plants and crops.

AD 1910 - FRUIT FLY

Scientists use fruit flies to research genetic variation. This insect reproduces at a rapid rate, enabling researchers to see changes between generations very quickly.

Present day - MALARIAL MOSQUITO

This mosquito's bite may be irritating, but the parasite it might be carrying could be fatal. *Plasmodium* is the parasite which causes malaria, a disease which kills 400,000 people every year across infected regions.

Present day - EDIBLE SPIDER

Humans eat all kinds of animals, bugs included. Billions of people eat insects, some even eat certain spiders, but beetles are the most popular bug on the menu.

Present day - EARTHWORM

Earthworms keep plants healthy. They eat rotting organic matter, helping soil remain fertile. A single field in the countryside may contain millions of earthworms.

Present day - HUMAN BOTFLY

This fly lays its eggs on tiny ticks. The eggs may get transmitted to whom ever the tick bites. When the eggs hatch, the larvae burrow into the skin and cause infection.

Present day - HORSESHOE CRAB

Every year, in late spring or early summer, beaches in North America swarm with hundreds of thousands of horseshoe crabs coming ashore to breed, a ritual which hasn't changed for hundreds of millions of years.