Evidence Of Past Life: Fossil Day [B2]

Questo mese si celebra la paleontologia: i fossili sono testimoni della vita sulla Terra e della sua evoluzione... compresa quella degli esseri umani!

Described as “a celebration of the scientific and educational value of palaeontology,” International Fossil Day is an unofficial **yet** important global event that takes place this year on 15th and 16th October. The word ‘fossil’ originates from the Latin word ‘fossilis’, meaning ‘**dug up**’. Fossils can be many things, from **shells**, bones, certain corrals or stone **imprints** of animals or microbes to objects preserved in amber, petrified wood or **coal**.
DNA **remnants** are also considered fossils.

WHAT ARE FOSSILS?

Fossils are remains or **traces** of plants, animals and other life forms that have been **buried** in sediment under ancient seas, lakes or rivers. While soft body **tissue** **decays** fast, harder **tissue**, such as bones or teeth, can be preserved. Over thousands or millions of years, these hard parts are slowly replaced by minerals and gradually transformed into rock. Fossils are vital in understanding the history of the Earth. They can reveal where life came from or how the planet and its env**iron**ment have changed over time.

UNDISCOVERED

Fossils are usually found along **cliffs** and coastlines, where erosion has exposed them as they lay compressed in **layers** of sedimentary rock. However, they are still quite rare: of the many billions of creatures and plants that have lived on Earth, only a **tiny** fraction survive. Scientists estimate that fewer than 1 per cent of species can be found as fossils, and that many of these are undiscovered.

MICROORGANISMS

Some of the oldest fossils in the world have been found in Quebec, Canada. This is due to ancient geological formations, favourable preservation conditions and the effects of glaciation. Fossils here are **tiny** filaments and tubes formed by bacteria that lived on **iron** and were found encased in quartz **layers** in the Nuvvuagittuq Greenstone **Belt**. Scientists believe that they once formed part of an **iron**-rich deep-sea **hydrothermal vent system** — fissures on the **seabed** from which geothermally heated water discharges. Between 3.77 and 4.3 billion years ago these provided a habitat for Earth's earliest life forms.

DINOSAURS

The most famous fossils are dinosaurs. We know these **fearsome** creatures existed because some of them turned into fossils when they died. Dinosaur fossils have been found on every continent; however, they are associated with particular places. The remains of marine dinosaurs, for example, are often found in Dorset on the UK's so-called Jurassic Coast, a World Heritage Site on the south coast of England. Fossils of giant beasts such as Tyrannosaurus rex are also found in the western part of the US. The largest dinosaur fossil discovered to date is Patagotitan mayorum, a titanosaur. This enormous herbivore lived in what is now Argentina some 101 million years ago. It is estimated to have been more than thirty-seven metres long, weighing around seventy metric tonnes.

HOW DO YOU SAY...?

Morto stecchito. As dead as a doornail.

Glossary

- **coal** = carbone
- **tissue** = tessuto
- **decays** = deteriorarsi
- **layers** = strati
- **yet** = ma, tuttavia
- **shells** = conchiglie
- **remnants** = resti, residui
- **traces** = tracce
- **imprints** = impronte, tracce
- **hydrothermal vent system** = sistema di sorgenti idrotermali
- **fearsome** = temibili
- **iron** = ferro
- **Belt** = cintura
- **seabed** = fondale marino
- **dug up** = dissotterrare
- **buried** = sotterrare, seppellire
- **cliffs** = scogliere
- **tiny** = minuscola