

Researchers in action

Throughout history, we have found different figures whose work has enriched the field of evolution

Charles Doolittle Walcott (1850-1927)

In 1909, an American paleontologist named Charles Doolittle Walcott made an extraordinary discovery in a limestone quarry called The Burgess Shale in Yoho National Park, Canada. He found an enormous amount of fossils of soft-bodied animals, all perfectly well preserved. He found the multicellular animals that appeared during the Cambrian period which are perhaps the most astonishing example of animal diversity that evolution can produce.

The quarry is the remains of an ancient sea where an amazingly varied set of species evolved, much more diverse than whatever exists in any sea at present. All these animals appeared between 543 and 488 million years ago and almost all of them went eventually extinct. It is possible to find among them the origin of arthropods and vertebrates. Cambrian animals had already incorporated some minerals into parts of their bodies because volcanic activity had caused an increase in carbon dioxide and calcium in the oceans.

Walcott was an extraordinary geologist and an even greater administrator. He devoted the last decades of his life to support science from several government institutions. He ran the Smithsonian Institute until his death, he persuaded Andrew Carnegie to found the Carnegie Institution of Washington, and worked with Woodrow Wilson to establish the National Research Council. He served as president of the National Academy of Sciences and the American Association for the Advancement of Science.

