

## Advanced Reading About the Burgess Shale

The Burgess Shale, in Yoho National Park, British Columbia, is the most famous Cambrian Explosion fossil site. It's the first place where paleontologists found fossils from this important geologic era.

Early in the twentieth century, a paleontologist named Charles Walcott found fossils that confirm this one-of-a-kind explosion of life. In late August 1909, a horse in the party Walcott was riding with kicked off rocks from a cliff face. Walcott, one of the most famous scientists in the U.S. at the time, collected fossils he saw in those rocks. He shipped the fossils back to the Smithsonian. Walcott looked at some of the 80,000 fossils and thought that most were ancestors of current-day arthropods.

The fossils of the Burgess Shale were weird and fascinating, but scientists didn't know what they were. They remained in boxes in the Smithsonian and other collections for another sixty years before their true meaning was known. In the early 1970s, a paleontologist named Harry Wittington discovered the truth about Charles Walcott's fossils. His fascination with ancient invertebrates led him to the cabinets where the Burgess treasures were stored.

Wittington concluded that some of the creatures in the Burgess fossils were indeed arthropods. The others were ancient examples of the rest of the thirty-five body plans — or phyla — for every other animal alive today. All the animal phyla that are alive today have their roots in the Cambrian Explosion.