

# Ants and the Fossil Record

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## Abstract

The dominance of ants in the terrestrial biosphere has few equals among animals today, but this was not always the case. The oldest ants appear in the fossil record 100 million years ago, but given the scarcity of their fossils, it is presumed they were relatively minor components of Mesozoic insect life. The ant fossil record consists of two primary types of fossils, each with inherent biases: as imprints in rock and as inclusions in fossilized resins (amber). New imaging technology allows ancient ant fossils to be examined in ways never before possible. This is particularly helpful because it can be difficult to distinguish true ants from non-ants in Mesozoic fossils. Fossil discoveries continue to inform our understanding of ancient ant morphological diversity, as well as provide insights into their paleobiology.