

Creation Forest

Fossil “Explosions of Diversity”

Many groups of organisms appear abruptly in the fossil record, often with numerous subgroups that show large morphological differences (disparity). The different groups are not linked by transitional forms, but are separated by gaps, often called “missing links.” Several examples of abrupt appearance of disparity are displayed here.

A group of species with a similar body plan may be represented by a “tree.” In many cases, a tree may represent a taxonomic family. Natural variation of a created species, with adaptation to local habitats, may be sufficient to establish a taxonomic family. The repeated pattern of clusters of similar species that are separated by gaps forms a “creation forest.”

1. Cambrian Explosion

Nearly all phyla of marine animals are first recorded in Cambrian sediments, along with several extinct types. Arthropods have especially high disparity, and an “explosion” of their own.



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2. Ordovician Explosion

Many groups of marine organisms first appear in Ordovician rocks. This includes most of the major groups of crinoids



Image: Shutterstock

3. Devonian Jawed Fish

All four classes of jawed fish appear first in Silurian rocks, but the main “explosion” of diversity is in Devonian rocks.



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4. Carboniferous Plants

Plant fossils are both abundant and diverse in Carboniferous sediments. Ferns and lycopods are especially abundant.



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5. Triassic Aquatic Reptiles

Five orders of aquatic reptiles, including ichthyosaurs and lesser-known groups, are first recorded in Triassic sediments.

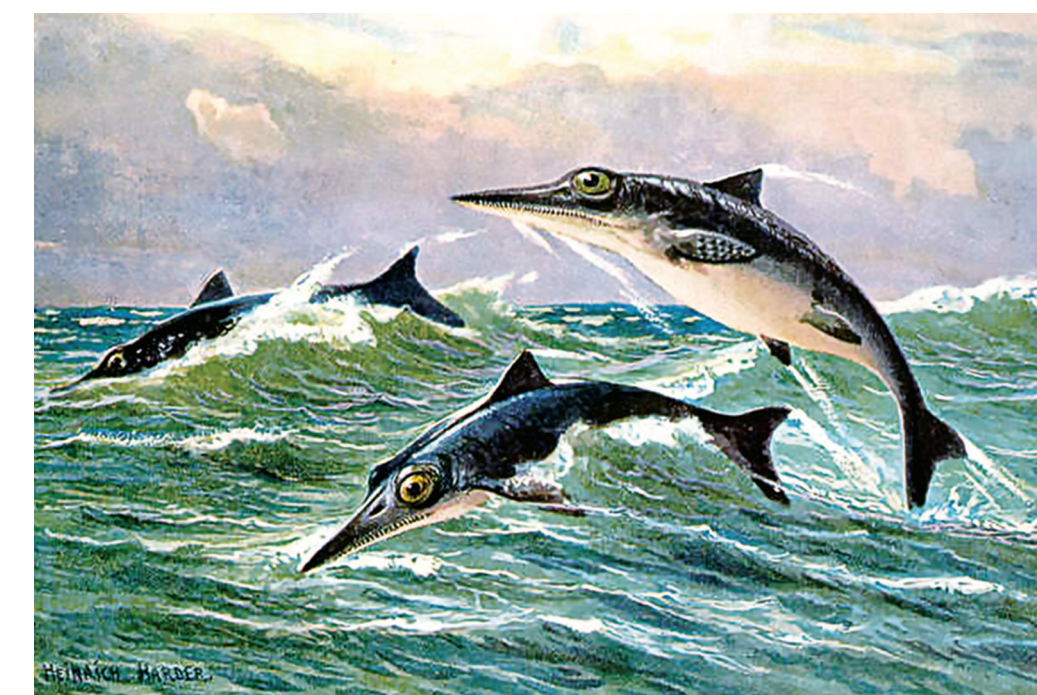


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6. Cretaceous Flowering Plants

More than 50 families of flowering plants are first recorded in Cretaceous rocks. This is one of the most enigmatic features of the fossil record.

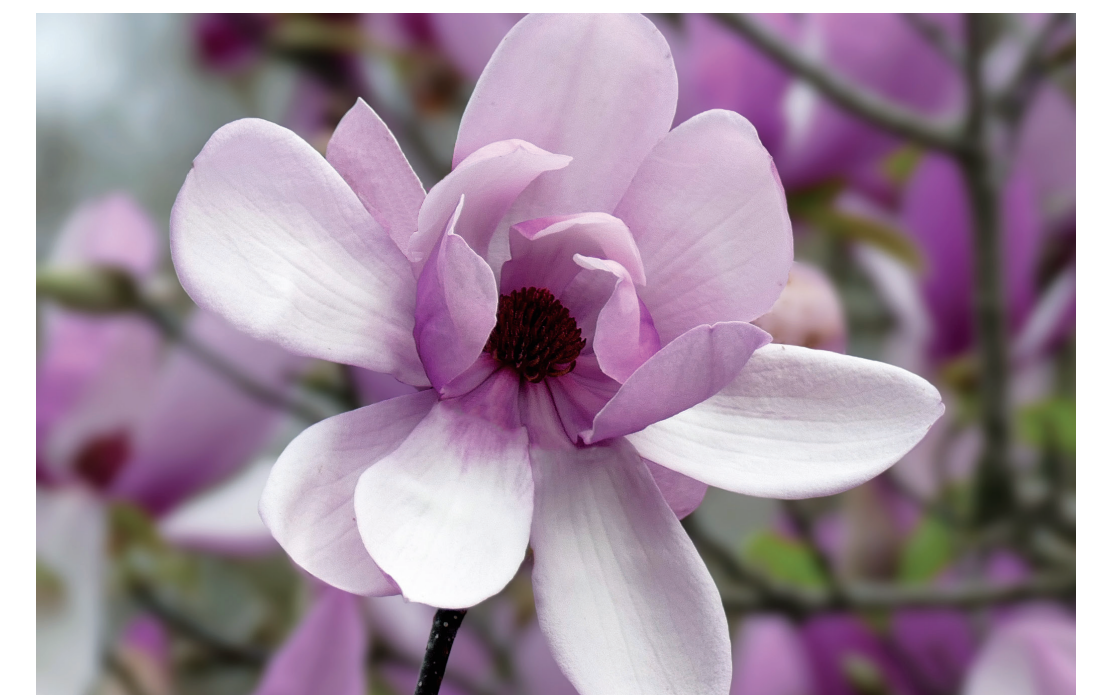


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7. Paleogene Mammals

All but one of the living orders of mammals are first recorded in Paleogene rocks, along with at least eight extinct types.

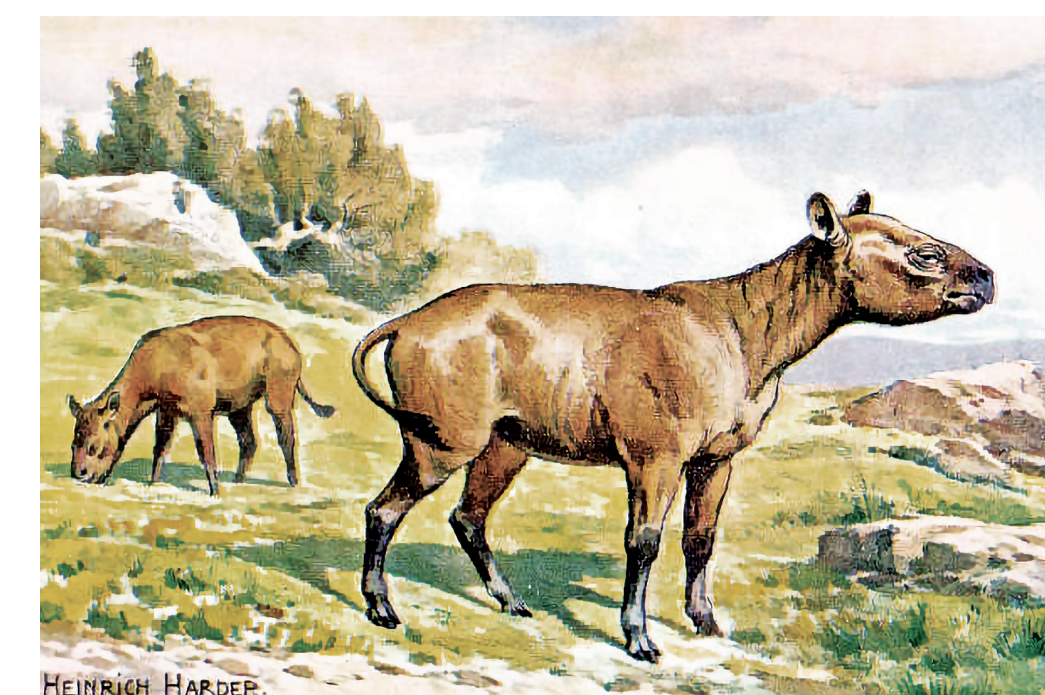


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