DIPROTODON



There were possibly three species of Diprotodon, all living during that brief 2 million year span of time we call the Pleistocene.

Diprotodon was the world's largest marsupial, with about the same bulk as a large hippopotamus and we now believe it had a shaggy coat of hair (at least during the glacial periods). For all its bulk, its feet, known from perfectly preserved material, seem to be fragile. It was flat-footed, walking mainly on the outside of the foot. This may indicate that it was restricted to soft ground such as river flats and marshes, where most of its fossil remains are now found. One group of these animals became bogged in the soft mud surrounding Lake Callabonna in South Australia's north. A drought at the time may have made the lake edge particularly treacherous.

Diprotodon was a herbivore. Its large head had 4 molars in each jaw, 3 pairs of upper incisors and one pair of lower incisors. The molars were simple in construction, but high crowned, indicating a harsh type of food. (One specimen from Lake Callabonna seems to have had saltbush for its last meal although this was possibly during a drought.) The front incisors, which grew continuously throughout life, were well adapted to snipping off pieces of vegetation.

Marsupials are not social animals so Diprotodon was unlikely to have formed large herds. The largest group they were likely to form was a family one. However, since it is unlikely that a mother could have carried a joey for long, the young Diprotodon would have been dependent on its mother for a considerable time after it left the pouch.

Its only apparent enemies seem to have been thylacines (Tasmanian tiger) and possibly the Tasmanian devil, the marsupial lion (Thylacoleo), and in northern regions, crocodiles and the giant goanna (Megalania).

Remains are found widely in Australia, but particularly inland, suggesting they preferred the more open country that presumably existed there during the Pleistocene. Coastal occurrences are known; in South Australia, near Millicent, Flinders Chase (Kangaroo Island), near Adelaide and at Normanville. However, it must be remembered that many times during the Pleistocene Ice Ages these places were well inland because the sea levels were lower.

Diprotodon has not been found in Tasmania (although it reached King Island), in the south-west of Western Australia, the Northern Territory or New Guinea. Climate and/or vegetation must have prevented its spread there.

These animals became extinct about 10,000 - 20,000 years ago. The exact date is not known because so few remains have been found in a dateable context. It seems to have coexisted for millennia with Aboriginal people in Australia. Its extinction appears to have coincided with a major drought at the end of the last ice age and an increasing use of fire by people for hunting. (Although we have no evidence yet that Aboriginal people hunted the Diprotodons themselves.)

With the demise of *Diprotodon* and its cousins *Nototherium*, *Zygomaturus* and *Palorchestes*, a whole superfamily of large marsupials whose history can be traced back more than 23 million years into the Oligocene Epoch became extinct.



Teacher Information