

BACK BOX

The devil once roamed widely

The first white settlers of Tasmania found two dog-sized flesh-eating marsupial species roaming the countryside. The animals' appearance and manner moved the newcomers to christen them the Tasmanian tiger and devil.

The devil (*Sarcophilus harrisii*) still utters its whining growl and hunts at night from its dens in caves and logs. But no substantiated sighting of the tiger (*Thylacinus cynocephalus*) has been recorded since 1930, and the animal may be extinct.

If it is, the settlers helped it on its way. The Tasmanian tiger gained an early reputation as a stock-killer, and the first bounty for scalps was introduced in 1840.

Much earlier, both the devil and the tiger hunted over wide areas of the Australian mainland. There, the white man can't be blamed for their disappearance.

Radiocarbon dating gives an age of about 3300 years to the most recent mainland Tasmanian tiger skeleton uncovered. It was found in a cave on the Nullarbor Plain. In 1966 an almost complete mummified carcass of a tiger was found in a cave near Eucla, W.A. Its age has been put at about 4600 years.

Remnants of Tasmanian devils have been found in all States except Queensland, and in the Northern Territory. An age of just 600 years has been suggested for one of these, found in western Victoria. However, some scientists doubt that it is really so recent. Ages between 3000 and 4000 years have been assigned to remains



A Tasmanian devil.



Drawing from an Aboriginal painting.

found in South Australia and in Arnhem Land in the Northern Territory.

Aboriginal rock paintings, in some cases maintained in their original form for thousands of years by tribal artists, can provide an informative record of the past. In Arnhem Land, the Tasmanian tiger appears in a number of paintings. Its broad head and tapering hindquarters, and the broad dark bands across its back and rump, can be readily recognized.

Recently, Dr John Calaby of the CSIRO Division of Wildlife Research and Mr D. J. Lewis found what they believe are paintings of the Tasmanian devil. One is near Deaf Adder Creek in the Kakadu National Park, and the other is not far

from the Nabarlek uranium deposit in the Arnhem Land Aboriginal Reserve. Both are painted in a style, known as Mimi, that suggests that they are very old, but just how old can't be determined.

Both paintings are about life-size — assuming they are Tasmanian devils. Adult devils are about 65–80 cm long.

The main features of the paintings that lead the scientists to believe that they do represent these animals are the stout bodies, short legs, and broad blunt heads with short rounded ears. The build of Tasmanian devils is rather like that of small bears.

Important additional evidence in the case of the Deaf Adder Creek painting is the tail, with its row of long hairs on top and smooth underside. Devils have a dense row of hair, up to 60 mm long, on their tail tops, but the bottom of the tail is often largely naked.

The Tasmanian tiger and devil are far from the only marsupials to have become extinct on the Australian

mainland before European settlement. Fossils of many large kangaroo- and wombat-like animals that once roamed widely have been found.

But the last of these big grass- and leaf-eating species seem to have disappeared by about 10 000 years ago. The accepted explanation for their extinction is the onset of a drier era for Australia coinciding with the end of the last Ice Age.

It doesn't seem reasonable to blame a change in climate for the disappearance of the Tasmanian tiger and devil from the mainland, however. These two stong carnivores are not choosy eaters, and it is hard to imagine them suffering seriously from any change in the herbivore population brought about by a climate change.

The most likely explanation is the arrival, with Aboriginal settlers, of the dingo. When this occurred is far from certain. Some evidence suggests that the dingo was in Australia as much as 8000 years ago, but the oldest reliably dated fossil is just 3000 years old.

Possibly dingoes competed too successfully for the available food. Or they may have attacked the marsupial carnivores and won the fights. There is no evidence to indicate what happened. But the fact that the tiger and devil lived on in Tasmania is strong circumstantial evidence of the dingo's role, because dingoes did not reach Tasmania.

The Tasmanian devil in Arnhem Land rock art. J. H. Calaby and D. J. Lewis. *Mankind*, 1977, 11, 150–1.