

## THYLACINE

WE OFTEN GET ideas in our heads and jump to conclusions based on assumptions that aren't always right. One animal about which there are a *load* of assumptions is the thylacine, or Tasmanian tiger, which was found across Papua New Guinea, the Australian mainland and Tasmania. First, when we hear the term 'extinct' it's easy to think of some poor animal that disappeared millions of years ago. When you hear that an animal is stripy and has 'tiger' in its common name, then only one animal pops into your mind. If you've heard the word 'marsupial', you might think the group is all about kangaroos and wallabies.

And if you were told that a predator was hunted into extinction because of the threat it posed to sheep and other farm animals, then you might even wonder whether that predator might have had it coming. So, tempting as it might be to think of the thylacine as a dangerous, tigerlike predator that died out millions of years ago, nothing could be further from the truth. And, as the thylacine The thylacine lived alongside a range of different plants, fungi and other animals, such as giant, bulbous-nosed wombats. Thylacines were an essential part of their ecosystem. in one. Is this the sixth mass extinction, the seventh, eighth, etc? What we can't argue with is that regardless of what number mass extinction this and how far into it we might be, one species is to blame. That's our species. Humans.

Because humans are causing such an impact on Earth's environments and the species which inhabit them, we've adopted a new name for this time period and this particular mass extinction. It's called the Anthropocene (an-throp O-SEEN) period and the Anthropocene mass extinction. The name Anthropocene comes from the Ancient Greek 'anthropos', meaning 'human', and 'cene', which means 'recent' or 'new'. The Anthropocene falls within the timeframe called the Holocene (hol-O SEEN), which started just over 11,500 years ago.

Scientists haven't yet completely accepted the Anthropocene, so there's still discussion over exactly when it started. Some believe it should be recorded as having started between 15,000 and 12,000 years ago, when we see human agriculture start. With the development of farming, habitats changed, animals which competed with farming were hunted, and livestock replaced wild animals in many places. Others believe the Anthropocene started around the year 1500, when we see an increase in the rates of extinctions in the historical records of species around the world, showing a higher count than would be expected with the normal level of everyday, 'background' extinctions. Others think that the point when the first atomic bomb was dropped in 1945, ending the Second World War, should mark the start of the Anthropocene. As discussions between scientists continue, we should have a better definition of the Anthropocene in the next few years.

The Anthropocene is the only mass extinction where we know exactly how different species, such as the thylacine (thy-la-SEEN), were affected and were, or are, being driven into the history books.

Fifty thousand years ago, a thylacine meets a *Thylacoleo* (THY-lakko-LEO), which was one of the largest marsupial predators and among the most specialised carnivorous mammals ever.

The head was large and dog-like or wolf-like, which led to its other common name, the marsupial wolf. It had 46 teeth and although it had some well-developed muscles around its jaws, the jaws did not appear to be strong enough to kill sheep, as was so often reported.

One feature for which the thylacine was famous was the ability to open its jaws ridiculously wide, perhaps to as much as 120 degrees. You get some sense of just how wide this is when you remember that the four angles of a square are each 90 degrees. The gape of the thylacine was wider than that of a lion, which has a yawn of between 65 and 75 degrees and even *Tyrannosaurus rex*, which was able to open its jaws to as much as 80 degrees, couldn't compete with the thylacine. If you're wondering, *you* can open your mouth to 26 to 30 degrees. Unlike a wolf or dog, the thylacine had a fairly stiff tail and its legs were quite short. Its hairy coat was dense but soft. The hair itself was about 15mm long. Its body grew to a maximum length of around 130cm from the tip of the nose to the base of the tail, and the tail added another 50-65cm to the total length. The usual weight was somewhere between 12 and 22kg, which is as much as a medium-sized dog breed such as a Bassett hound, dalmatian or springer spaniel, but the thylacine could reach a weight of up to 30kg, and usually, the males were bigger and heavier than the females.

