

SABERTOOTHED CAT CALIFORNIA STATE FOSSIL

SABERTOOTHED CAT –
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Smilodon californicus

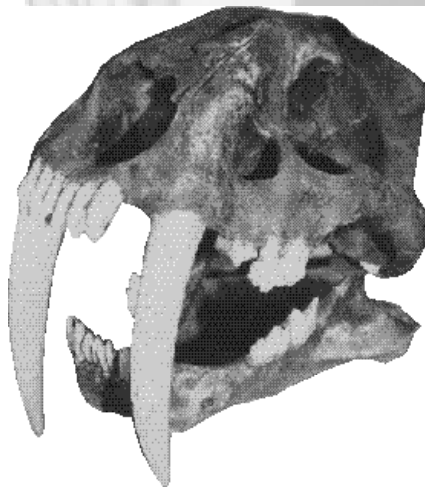
The carnivorous sabertoothed cats (extinct members of the cat family Felidae) flourished throughout North America from the late Eocene and early Oligocene (40 to 35 million years ago) until the close of the Pleistocene about 11,000 years ago. In California, the cat's fossilized remains are most abundant at the La Brea Tar Pits (late Pleistocene) in Los Angeles. Here, the sabertoothed cat, attracted by the cries of struggling creatures caught in the sticky pools of asphalt, hunted them and in turn fell into the pools.

In contrast to modern cats, sabertooths had exceedingly long upper canines used to stab and slice. The lower canines were correspondingly reduced in size and, at the front end of the lower jaw, there was often a flange used as a guard for the large upper canines. Because of the large dagger-like canines in the upper jaw, the skull of the sabertoothed cat was quite different from modern cats. Nasal openings were receded from the position in typical cat skulls and prominent bony ridges ran along the entire length of the hard palate. The lower jaw of the sabertoothed cat could open to an almost right angle when attacking. However, the biting strength of the lower jaw was not as great as in modern cats.

The body and limbs of the sabertoothed cat, though approximately the same size as the present-day African lion, were different. The sabertoothed cat's hind limbs were relatively light while the front limbs, rib cage and breastbone were strong and powerful. The short lower segments of the limbs indicate this cat wasn't a fleet-footed carnivore like the modern lion or tiger, but rather a predator of slow-moving mammals such as mammoths, mastodons and ground sloths. The sabertoothed cat probably gripped prey with its front limbs. With upper canines, it repeatedly stabbed a vulnerable spot on the victim's body. The backward nasal openings allowed the sabertoothed cat to breathe while its head was buried inside the victim. A strongly grooved gum covering the ridges of the hard palate may have aided in sucking blood.

The extinction of the sabertoothed cats may have been related to the decrease of the larger animals on which they preyed. There is some evidence that the mastodon was the favorite meal of some later-day species of the sabertoothed cats; both lasted in North America only until the end of the Pleistocene.

Sabertoothed cats are the most famous California Ice Age fossil. *Smilodon californicus* was one of the last surviving members of the formidable felines called sabertoothed cats.



A cast of *Smilodon californicus* skull from the La Brea Tar Pits. Fangs are 9 inches (23 centimeters) long. Photo by Jim Spriggs, California Division of Oil, Gas and Geothermal Resources.



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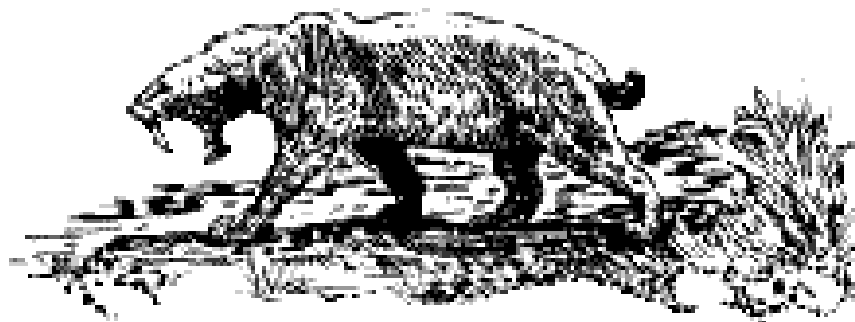
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For more information about fossils:

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The Page Museum at the La Brea Tar Pits

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