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Sabre Cat 'Nimravidae' Skull

L: 11.5 cm, H: 7.7 cm, H with stand: 19.9 cm

Fossilised Bone

USA

Oligocene, circa 33.7 to 23.8 million years ago

This is the skull of a member of the genus *Dinictus*, of the Nimravidae species – commonly known as the Sabre Cat (though it is distinct from the scientifically known 'Sabre-toothed Cat' of the family Felidae). Sabre Cats occupied a crucial niche in the carnivorous mammalian ecosystem during the Eocene (55.8 million to 33.9 million years ago), Oligocene (33.9 million to 23 million years ago) and Miocene (23 million to 5.3 million years ago) epochs. Fossils can be found in areas of North America and Eurasia, and it is believed their main habitats were vast ranging forests and woodlands.

Visually the skeleton structure suggests that they would have looked like a large cat, although there are important differences between the Nimravidae family and the Felidae (Feline) family to which modern cats belong. Members of the *Dinictis* family (like *Hoplophoneus*, *Nimravid*, and *Pogonodon*) all belonged to the order Carnivora.

Nimravidae were hypercarnivorous, with meat comprising their entire diet. The skull of Nimravidae, predominantly characterised by its elongated, sabre-like maxillary canines, exhibits unique cranial and dental adaptations. Using their characteristic long, sharp teeth, Nimravidae would hunt for their food, and some (like *Hoplophoneus*) were likely solitary ambush predators. Like Felids, the nimravids exhibit diverse size and bone structures, meaning that some were the size of a large house cat, while other

variations were similar to today's lions and tigers. Their large size enabled them to hunt large prey – sheep-sized oreodonts, small horses, and small rhinocerotids were most likely all targets of the Sabre Cat. The robust nature of the limb bones suggests powerful musculature, indicative of a formidable predatory lifestyle. Cranial analysis shows a pronounced sagittal crest (the ridge of bone running lengthwise along the midline of the top of the skull), possibly serving as an attachment site for strong jaw muscles, emphasizing its specialised biting capabilities.