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Otodus-bitten sperm whale tooth from the Neogene of the Coastal Eastern United States

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A description and analysis is given of a single physeteroid tooth, from the Neogene of the Nutrien Aurora Phosphate Mine (formerly known as the Lee Creek Mine, Aurora, North Carolina, USA), that was bitten either by the extinct megatoothed shark *Otodus chubutensis* or *Otodus megalodon*. The tooth shows three gouges, one of which also preserves raking bite traces, made as the serrations on the *Otodus* sp. tooth struck and cut into its surface. We do not know if these bite traces came about as a result of scavenging or active predation. However, because the bite traces occur on part of the skull, this suggests a predatory interaction. This tooth preserves the first evidence in the fossil record of a predatory/antagonistic interaction between a sperm whale and a megatoothed shark.

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