



F37 Forensic Bite Mark Identification of a Killer Alligator

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The goal of this presentation is to discuss information regarding animal bite mark identification.

This presentation will impact the forensic community and/or humanity by presenting a rare case which provides insight into the capture and bite mark identification of a killer alligator in Florida. There is limited forensic information regarding animal bite mark identification, particularly involving a fatality. There have been only 13 reported alligator related fatalities in Florida since 1948.

This paper will present the coordinated efforts of the Fifth Judicial District Medical Examiner's Office, Chief Forensic Odontologist, Florida Fish & Wildlife Conservation Commission, and the Lake County Sheriff's Department in determining the identity of an alligator responsible for the death of a 12-year-old male.

On Wednesday night June 18, 2003, a 12-year-old, 98-pound male was attacked and killed while playing with friends in the Dead River, Tavares, Florida. Factors precipitating the attack include harassment of the gator, time of day (dusk) and mating season. A consultant in reptile and alligator behavior indicated that based on the severity of the attack and because the animal was provoked the gator's intent was to kill the boy as opposed to feeding behavior. Standard procedure for the Florida Fish & Wildlife Conservation Commission following an attack of this nature is to canvas the immediate area for suspicious alligators. Trappers are sent to kill the gators with a "bang stick," a long metal pole that fires a shotgun shell or bullet when its tip is struck against the alligator. The decision to kill large gators in the area of the incident is to aggressively address a problem threatening the community.

By Friday morning the hunt was over. Eleven gators had been collected with seven of them sent to the Fisheries Lab in Gainesville, Florida for necropsies. The animals ranged in length from 7-foot 6inch to approximately 14-foot.

Eleven gator heads were delivered to the Medical Examiner's office in Leesburg, Florida for examination and potential identification. Based on the size and shape of the injuries on the decedent three gators were ruled out as too small. Tooth patterns and measurements eliminated an additional six animals leaving two suspects of the appropriate size and dentition. One gator had been seen in the area of the attack exhibiting aggressive behavior had been injured by the prop of a boat two weeks prior to the incident. This gator was the primary suspect.

Autopsy by the chief medical examiner noted numerous bite mark lacerations and abrasions on the victim's face, torso (front and back), legs and feet. There was a subtotal traumatic amputation of the left hand, 8 x 6 inch partial avulsion of the skin of the left buttock, fractured ribs #6, 7 and 9 and a deep, crushing laceration of the liver. Cause of death is drowning and multiple blunt force injuries.

After limiting the suspect gators to two animals, bite mark analysis was conducted by matching the maxillary and mandibular teeth of the gator to the wounds on the victim. The violent nature of the attack resulted in numerous, widely distributed tooth marks making it was difficult initially to align the teeth with the wounds. However, after hours of careful examination by the forensic odontologist, the chief medical examiner, and the wildlife biologist, six distinct concordant bite marks were established. Additional but less conclusive matches were also found. A positive identification was made on a 10'4", 339-pound male gator by Friday 3:30 pm. The family was immediately notified and a press release issued.

The fatal attack on the 12-year-old victim is illustrative of the increasing danger of encroachment of the more than 17 million Floridians into gator domain. With humans populating space along every river and lake the chances of deadly encounters continue to escalate. Gator complaints have jumped nearly 200 percent since 1978 to 14,798 in 2002. There have been 280 attacks since 1980. The death on June 18, 2003 marked Florida's 13th alligator related fatality since 1948. No other state in the Southeast has had more than one fatality in the past 25 years.

Odontology, Alligator Attack, Animal Bite Fatality