

## H65 Cassowary Fatally Attacks Its Owner

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**Learning Overview:** The goal of this presentation is to illustrate the type of injuries inflicted by a large wild bird. Presented here is a systematic postmortem examination of the injuries caused by wild giant birds. Specific anatomic features of wild animals will serve as weapons either for predation or for defense. This presentation describes the lethal injuries a cassowary owner sustained after being attacked by one of his birds during an attempt to retrieve one of her eggs. The specific anatomy of the dagger-like second claw of the cassowary's second digit allows this animal to cause deadly sharp force trauma to vital parts of a human in an attack.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by informing attendees of the challenges of safely keeping wild animals. When working or interacting with kept wild animals, the perception of the danger inherently associated with these animals may decrease with time, and humans are likely to take fewer safety measures when interacting with these wild, non-domesticated animals. This in return can lead to incidences that may end in death, as it does in this case. Attendees will also learn some anatomic features of wild large birds that serve as weapons and the type of resulting lesions that are inflicted during a lethal attack.

A 75-year-old Caucasian male was the owner of an exotic animal and bird farm. Among the bird species, he kept cassowaries, which are giant terrestrial omnivorous birds, related to ostriches and emus.

Rheas and kiwis are native to the tropics of Australia and New Guinea. In Florida, possession of cassowaries requires a permit from the Wildlife Commission, which classifies them as "Class II wildlife" and together with ostriches, they are known to be dangerous, representing the only two bird species of the Family *Casuariidae* known to have fatally attacked and killed humans. Some physical characteristics of cassowaries are their height (growing up to 1.90m), their weight (up to 60kg), their rather short but strong beaks, their keratinized head crest, as well as their three-digit feet. Each digit is equipped with a large sharp claw. The claw of the medial digit (digit II) is dagger-like, nearly 13cm in length, and serves as a primary weapon. Digit I is absent and the reduced wings exhibit spine-like quills. Although cassowaries cannot fly, they can run up to 50km/h and jump up to 1.5m high. When startled or provoked, they can inflict serious injuries by kicking in a forward and downward direction, pecking, barging, or head-butting, causing puncture wounds, lacerations, and even bone fractures. Attacks are mostly due to association of humans with food, or territorial reactions where humans are present in areas where the cassowary is feeding or areas where it was defending itself, its eggs, or chicks.

In the past, the owner had been injured by one of the large birds with wounds to his leg. Normally, when entering the pen of a pair of cassowaries, he would hold a "shock stick" and had a second person with him. On that day and for unknown reasons, he was alone and had entered the pen to retrieve one of the female's eggs. The eggs sell for a substantial amount of money to other breeders. When the male cassowary saw his attempt to retrieve an egg, he attacked. During the attack, the owner had fallen down but was able to call for help; by the time he was pulled to safety, he had sustained numerous injuries and had lost a substantial amount of blood. He was rushed to the hospital.

There, the most significant injury identified was a brachial artery laceration with avulsion of the profunda brachii artery that was repaired along with other superficial to deep skin lacerations. The patient did not survive his injuries and his death was reported to the medical examiner in accordance with Florida Statute 406.

At autopsy, multiple, irregular, linear, and curvilinear abrasions, superficial punctures, and lacerations were randomly distributed on the face, neck, anterior and posterior trunk, arms, and legs. Numerous injuries were sutured or stapled shut. Long sutured or stapled surgical incisions were across the chest (clam shell incision) extending from right to left axilla, on the right upper arm, and the mid abdomen. The left lung lobe was completely collapsed, airless and hemorrhagic. Additional findings unrelated to the incident were aortic atherosclerosis with mural thrombi, moderate nephrosclerosis, and prostatic nodular hyperplasia.

The most probable cause of death was numerous sustained injuries in attack by cassowary and the manner of death was an accident.

The patterned injuries are consistent with the attacking behavior of cassowaries where the "daggered-claw" most likely caused the right arm injury and the brachial laceration injury of the chest in a forward kick of the bird followed by stomping or barging, as well as pecking of the victim. The latter three likely caused the numerous more superficial punctures and lacerations. After the victim fell to the ground, the attack continued for an unknown period of time until his outcries alerted his wife who entered the enclosure and repelled the female cassowary with a "stun gun."

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### Cassowary, Wild Animal Fatalities, Sharp Force Trauma