



A56 The Scavenging Patterns of Feral Cats on Human Remains in an Outdoor Setting

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Learning Overview: After attending this presentation, attendees will better understand the pattern of feral cat scavenging on human remains.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing examples of feral cat scavenging to help distinguish between postmortem artifact and peri-mortem injury that may be associated with cause of death.

Scavenging of human remains by the Felidae family is documented, but case reports are rare. Rather than scavenge, Felids prefer to hunt. When scavenging occurs, Felids prefer to exploit fresh tissue across several days.¹ In the only published case of bobcat scavenging in North America, the bobcat focused on the tissues of the arms, hips, and thighs. However, in this case, the remains were autopsied, resulting in penetrating trauma and visceral loss that may have affected the pattern of consumption.

Scavenging by domestic cats (*Felis catus*) is also rarely reported.¹ The rarity of domestic cat scavenging may be explained by two well-documented selection mechanisms rooted in the sensory characteristics of food sources: (1) neophobia, the rejection of foods not previously encountered; and (2) “the novelty effect,” a preference for previously familiar foods that are spatially or temporally limited in availability.² Additionally, the smaller size, strength, and bite force of *Felis catus* may preclude the ability to open the human thoracic cavity, and so their pattern of scavenging may differ from the pattern observed in larger cats.¹

Two separate incidents of feral cat scavenging of human remains occurred at the Forensic Investigation Research Station (FIRS), Whitewater, CO. The outdoor facility is fenced to keep out large scavengers but does not restrict the access of small mammals and avian scavengers. In both cases, the remains were refrigerated between time of death and placement.

Case 1: A 79-year-old female was placed 13 days after death. Subcutaneous needles were inserted as part of an unrelated research study and the decomposition accelerated at the needle insertion sites. Scavenging began approximately five days after placement, near two of the needle insertion sites and presented as small circular defects on the distal upper arm, proximal to the elbow. A game camera photographed a striped cat scavenging the donor. The cat consumed tissue from the left arm and adjacent chest. To stop the scavenging, a cage was placed over the donor. The cage deterred the cat and when the cat had not appeared for approximately one week, the cage was removed. Shortly thereafter, the cat returned to the body. The cat did not demonstrate an interest in any of the 40 adjacent donors. The cat continued to scavenge almost nightly for approximately 33 days.

Case 2: A 70-year-old autopsied male was placed approximately 11 days after death. Scavenging began approximately six days after placement at the lateral left shoulder along the autopsy incision, the lower lateral abdomen, and the proximal arm. A game camera observed a black cat scavenging the donor. No attempt was made to prevent scavenging. The cat returned most nights for 16 nights, then returned for two nights one week later. On each night, the cat visited the body multiple times. The same cat returned to the body for approximately 25 days.

In the few reported cases of indoor domestic *Felis catus* scavenging, the target was the face (primarily the mouth and nose), hands, and feet.³ In both cases reported here, feral cats targeted the arms and chest. Secondary areas of interest included the abdomen. In both cases, patterns of feral cat scavenging more closely paralleled the pattern of bobcat scavenging than the domestic *Felis catus*. Differences in feeding behavior between domestic and feral cat groups are reported and are most often attributed to both neophobia, and the need for reflexivity in the feral cat diet as they work to meet nutritional needs.² The novelty effect may partly explain the propensity for a specific human tissue source.

Tissue damage due to postmortem scavenging can be confused with peri-mortem trauma. Recognizing the scavenging patterns of a variety of animals is important for investigators to determine the origin of the damage.

Reference(s):

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2. Bradshaw J.W.S., Healey L.M., Thorne C.J., Macdonald D.W., Arden-Clark C. Differences in Food Preferences between Individuals and Populations of Domestic Cats *Felis Silvestris Catus*. *Applied Animal Behaviour Science*. 2000; 68:257–68.
3. Rossi M.L., Shahrom A.W., Chapman R.C., Vanezis P. Postmortem Injuries by Indoor Pets. *Am J Forensic Med Pathol*. 1994;15(2):105-9.

Cat Scavenging, Taphonomy, Postmortem Scavenging