Results of the Second Remote Camera Survey

by Todd Lester, ECF President

In April 2004, the Eastern Cougar Foundation began the second season of the Remote Camera Survey. The survey is being conducted in the Monongahela National Forest of West Virginia, where cougars have been reported over the years. ECF is performing this survey under the guidance of a field advisory committee that includes several ECF Board Members and representatives of the WV DNR, US Forest Service, and US Fish & Wildlife Service.

From April through September, cameras were rotated to different areas every four weeks. Due to hunting seasons running from October to March in the National Forest, we don’t set any cameras up during this time frame.

In addition to the numerous photos of deer, bear, bobcat and coyote, the camera survey took two cat photos that can not be positively identified, due to being taken at night at a considerable distance. Although we didn’t get any confirmable cougar pictures this year, we are getting a lot of valuable data concerning other animal species living in this national forest. We share all the information we get with the various wildlife agencies. We plan to continue the survey in 2005 in other areas of the one million acre Monongahela National Forest.

TOTAL of PHOTOS TAKEN:

357 White-tailed Deer
135 Black Bears
63 Coyotes
39 Wild Turkeys
30 Raccoons
27 Dogs
23 Bobcats
02 Unknown Cats
02 Opossums
02 Grouse
02 Squirrels
01 Opossum
01 Rabbit
01 Red Fox
01 Skunk
01 Crow
01 Unknown

Two photos are included in this newsletter. For more photos, and for the monthly log I kept in the field, see the ECF website under “News from the Field.”
How Do You Get a Cougar Out of a Housecat?  
by Joseph A. Lankalis

It is difficult to believe that a housecat can be confused with a cat that is ten times its size, but at a distance, size is difficult to judge and illusions will occur. To illustrate this point, the identities of the cats in the accompanying photographs are still debated. These photos do not give a clear reference to size. Either they are not sized properly or they are not sized at all. One method for verifying identity based on a cat's size requires a reliable scale indicator that must be alongside and in the same plane as the cat.

This article presents another method for identifying cats, that along with a reliable scale indicator, may lead to positive identifications without the flamboyant calculations that are really base on guesswork. This method for identifying cats at long distances is based on signature character and trait recognition—a similar method used by birdwatchers.

I live only 15 miles from Hawk Mountain Sanctuary where every year I spend hours hawk-watching. Hawks approach as far as a mile or more away, but can be identified by the angles, bends and curves of their wings, by their proportions of wing and tail lengths, and by their flight patterns. Why not apply the same techniques to identifying cats at long distances? The species of cats each have their subtle signature traits just as the various hawks do.

I spent hours at several zoos photographing the cats in different positions and watching their behaviors. I made drawings of my observations. When I applied my newfound knowledge to cat photos and videos, I discovered that I now had a new tool. Through research and observation, I have identified a set of characters that can be used to help tell the difference between cougars and housecats. These characters—along with the method of using a reliable scale indicator—will help researchers and cougar enthusiasts avoid false sightings.

Characters of Housecats

Due to the numerous breeds and variations of the domestic cat, it is difficult to pinpoint which characters exclusively belong to them. In an effort to limit the parameters of variation, only the forms most likely to be feral will be discussed. Feral cats are of the short haired varieties: American Short Hair (ASH), European Short Hair (ESH), and Oriental Short Hair (OSH).

The OSH are very slender cats whose features are elongated and angular and would never survive our cold winters. Their origins are believed to be tropical. These are not among the feral domestics.

The ESH are sometimes called British Short Hairs. But today, they are considered to be two different types of cats. They appear as muscular, compact, heavy-bodied cats with short, rounded faces. They are bred for the shape of a large, broad head attached with almost no neck to a large globose body.

The ASH are similar to the European, but with somewhat longer legs and thinner tails. It is mind boggling to try to distinguish them.

The European and American Short Hair housecats are distinguished from cougars by the following features: shorter, rounded heads with large, pointed ears, and short, tapered muzzles; a face with an abrupt change of incline between the nose and forehead; an upwardly arched spine; and a shorter tail usually tapering to a point.

Character Differences between Cougars and Housecats

This article is accompanied by a set of drawings that profile the character differences between cougars and housecats. These character differences as well as associated patterns and behaviors are summarized below. The drawings of both cougars and housecats have been adjusted to the same size to enhance their different proportions. Use the descriptions below to identify whether the silhouette is a housecat or a cougar.

**Head**

The head of the cougar, although larger than the housecat's, is smaller in proportion to the overall body size. The cougar head profile is oval, whereas, the housecat's is globose. The muzzle of the cougar is truncated and squared by the prominent chin. The housecat chin is small, making the lateral muzzle profile appear tapered. The shortness of the muzzle enhances the globose shape of the head.

Housecat ears are variable in size and shape. Many of the breeds stress bigger ears. One breed has folded ears, another has looped. But, in proportion to the size of the head, the housecat's ears are larger, more pointed, and closer together than the cougar's.
Tail
The tail is second only to the head as a feature of identification. There is so much to be said about cat tails and, in the case of cougars, not all of it can be verified due to their covert habits.

*Proportions:* Having access to a cooperative cougar and several housecats, I was able to get some tail measurements. The 7' 1" cougar was 41% tail. The range in Peterson's Field Guide to Mammals is 36% to 41%. Housecats were plentiful, but mostly uncooperative. They averaged 33% tail (plus or minus 2% due to squirming). The cougar tail is long enough to reach the ground with a few inches to spare. The housecat tail is only long enough to reach the ground with the tip. The cougar tail is proportionately longer.

*Shape:* The shape of the housecat tail is usually tapered to a long slender point, which becomes less evident as the hair length increases. The cougar tail is blunt with, or without, a strong upward terminal curl depending on its mood.

*Position:* The most flexible tail joint for both the housecat and the cougar is the basal joint. The distal joints are, in comparison, only moderately flexible. But, the cougar's terminal joints show a slight degree more flexibility. In leopards, this feature is used for grasping in a minor extent. No one has ever reported if the cougar, being also arboreal, also has the same behavior. Stanley Brock has witnessed many times that his pet cougar was superior to his pet ocelot in the trees.

I can safely say that cougars never walk with their tails held high like pantherines and housecats do. Their tails only occur in a high posture while they are running or jumping, but still are never erect. Any cat observed with an erect tail is definitely not a cougar. I have seen cougar tails in pseudo-erect postures, but the pose only lasted for a fleeting moment. While walking cougar tails are mostly carried low, almost touching the ground. Included among the drawings is a walking cougar with its tail carried to its maximum level of preferred height.

Housecats often walk with their tails in the erect position with a right angle between the base and the spine. Cougars never do this. A house cat never walks with its tail almost dragging on the ground. Cougars often do this. The cougar tail may only rise up to 45 to 50 degrees above the horizontal at the base with each distal caudal joint curving anteriad to produce the pseudo-erect tail which only curves to the upright position, and only for a short moment.

Neck
In cougars, the length of the neck is proportionately longer giving them a sleeker appearance. This is further enhanced by their cylindrical bodies, and certainly not by globose housecat bodies.

*Postures*
Both cats walk with two kinds of postures: with the spine arched upwards, or sagging downwards. However, each cat prefers the opposite posture. Cougars walk with their spines mostly straight or concave, and housecats' are mostly convexed. From my zoo experiences, I noticed and photographed cougars sitting with straight, or almost straight spines. Housecats always sit with their spines distinctly convexed.

Feet
Another thing to observe is the size of the feet. Housecats have little feet in proportion to their body sizes. The wild cats of North America all have large feet. At a great distance, this is difficult to discern. In housecats, the width of the front paw is less than half of the facial width. In the cougars, the paws are large and the width is greater than half the facial width measuring between the outer ear attachments.

Conclusion
This method will be useful only as long as it is not misused or abused. When you master these characters, simply observe them. Do not create them. I have found that novices want to see a cougar so badly that they create them, then convince themselves that have a cougar. This leads to heated arguments. Knowing the differences in proportions, profiles, and postures requires a sharper eye and much study. A skill such as this would enable the observer to recognize cat species at greater distances.

Note: For a complete copy of this article, email Joseph A. Lankalis at jalank@verizon.net
Using the techniques and characters described earlier, identify the above silhouettes as mountain lion or housecat. The answers are on the following page.
Here are some actual cats whose identities are debated.

Massanutten Panther

This is the maximum extent to which a cougar can voluntarily raise its tail above the horizontal.
New ECF Brochure Available
To obtain a copy of the ECF brochure, download a free copy from the website at www.easterncougar.org.

RENEWAL
Special thanks to all our new members and to those of you who have renewed your membership. If you haven’t renewed your membership please use the enclosed reply card and return label.