

Eastern Cougar Foundation



S U M M E R 2 0 0 4



Geneticist Dr. Melanie Culver discusses the changes in traditional cougar taxonomy that her DNA work suggests.

EASTERN COUGAR CONFERENCE 2004: An International Success!

by Helen McGinnis

After many months of planning and preparation, the 2nd Eastern Cougar Conference is now history. One hundred and four people attended all or part of the three-and-a-half day event, which was held at the Ramada Conference Center in Morgantown, West Virginia from the evening of Wednesday, April 28th to the afternoon of Saturday, May 1st. Participants came from 22 Eastern and Midwestern states, three eastern Canadian provinces, and from Wales in the United Kingdom. About a third of those attending were non-professional eastern cougar enthusiasts, 26 were wildlife professionals, and ten were professors in colleges and universities. Eighteen were students, including 16 college students. At least six writers came. Matt Clysdale of Horsepower Productions, Kalamazoo, Michigan, videotaped the event.

All day Thursday and Friday were devoted to talks and round table discussions, with time for informal discussions and display of posters outside planned events. Weeks before the conference, it was apparent that there was not enough time to accommodate everyone who wanted to speak. We ended up with 23 talks and five posters.

Everyone I spoke with agreed the conference was a success and is looking forward to the next, which hopefully will occur before 2014. (The first conference was held in 1994 in Erie, PA and was also organized by ECF Board member Jay Tischendorf). Proceedings will be published on the ECF website and, if money permits, in either hard copy or CD format for sale.

ECF Volunteers Made It All Possible!

Many, many thanks go to our hard-working, committed, indispensable volunteers: Bev Fronk, Leah Merritt, Barb Albertson, Kate Gill, Ralph Bolgiano, El Florance, who ran the registration, book, and T shirt tables during the entire conference. Helen McGinnis and Jay Tischendorf organized and publicized the conference; Chris Bolgiano added conference info and registration to the ECF website and wrote the press release; Mark Dowling of the Eastern Cougar Network established invaluable contacts with professionals in the state wildlife agencies.

Special Thanks to El Florance

When Eleonora Florance, an occupational nurse with ExxonMobil in Virginia, learned about the 2nd Eastern Cougar Conference on the Internet, she decided to offer her services as a volunteer. ExxonMobil has a program that enables employees to donate time to nonprofit organizations such as the Eastern Cougar Foundation. Money that the employee would have earned is instead donated to the nonprofit. Starting early this year, she distributed posters and brochures in the Washington DC area and then helped to contact media in the general region to publicize the conference.

El also organized the volunteers and kept things running smoothly at the registration table. Because of all the time she donated to the Eastern Cougar Foundation, ExxonMobil will donate \$1,000.00 to ECF, which will help considerably with conference expenses. Thanks, El, for everything you did to help make the 2nd ECC a success!

Outline of Conference Proceedings

Session I: Regional Updates

Prairie Panthers and Midwest Mountain Lions:

Jay Tischendorf and Kirk Johnson

Distribution of Cougar Sightings in Wisconsin 1994-2001:

Eric Anderson et al

A preliminary assessment of cougar recovery potential in

Illinois: Clayton K. Nielsen,

Evidence of Cougars in Michigan--A Historical Summary:

Pat Rusz

Puma Research in Ohio: Bill Reichling

Distribution and abundance of cougars in the Black Hills of South Dakota: Dorothy Fescke

Changes in the habitat of cougars in the East: Robert L. Downing

Biogeography of Perceived Encounters with Pumas and Other Exotic Cats in South and West Wales, United Kingdom: Alaric Smith et al

"The issues debated in the recovery of the Florida panther make it a microcosm, a "lightning rod", for similar problems facing species recovery programs around the country today. " William A. Samuels

Session II: Research Techniques

Methods for Detecting Pumas in the Great Lakes Region:

Pat Rusz

Southern Mississippi Field Test of Two Approaches for Determining the Presence of Pumas: Helen McGinnis

Leopards in America? Joseph A. Lankalis

The Eastern Cougar Network: Using Science to Assess the Status of Cougars in Eastern North America: Clayton K. Nielson, Mark Dowling, Ken Miller and Bob Wilson

Use of Camera "Traps" as a Tool for Wildlife Research:

Bob Wilson

Keeping Track: A Template for Community-Centered Conservation and Monitoring: Susan Morse

Obtaining Physical Evidence for the Presence of Pumas and Other Exotic Cats in South and West Wales, United Kingdom: Alaric Smith et al

Evaluating Puma Reports: Art, Science, Objectivity...and Diplomacy: Jay Tischendorf

Puma phylogeography and how genetics is applied to identifying pumas: Melanie Culver

Session III: Human Dimensions

The Beast in the Garden, a case study of lions in suburbia: David Baron

Reducing the Impact of Puma Attack: Jay Tischendorf (for E. Lee Fitzhugh et al)

The Cougar Comes Home: Susan Morse

Voodoo Science: Tom Carney

Session IV: Predator Parallels

Eastern Cougar Recovery--Lessons From the Florida Panther: David Maehr et al

The National Wildlife Federation's Northeastern Lynx and Wolf Program: Peggy Struhsaker

The Jaguar in the Southwest--Implications for Puma Recovery in Eastern North America: Richard Greenwell and Jay Tischendorf

Posters

Prey and habitat availability to support a cougar population in the Whiskey Jack Forest (Kenora Management Unit), Ontario: Kathryn Hauck

Eastern cougar sightings: Myth or reality? Revisiting the issue: AnneSophie Bertrand, Liette Vasseur, Eric Tremblay, Renee Wissink and James Bridgland

The importance of scientific natural history collections as a repository for voucher specimens: The Massachusetts Quabbin Reservoir Puma concolor skull: Judy Chupasko

Home range characteristics of cougars in the Black Hills of South Dakota and Wyoming: Dan Thompson

Estimating puma densities using remote cameras: Marcella Kelly

Keynote Address

The many faces of eastern cougars: Chris Bolgiano

Workshop

Wildlife and Puma Tracking Workshop: Nick Wisniewski, Valerie Major, and Jay Tischendorf

Photographs

Puma tracks from the Yellowstone Area: Jay Tischendorf

How to Prepare Evidence of Cougar Sightings

by Joseph A. Lankalis

At the beginning of the 20th century, cougars were believed to be virtually extirpated east of the Rockies. Contrary to this belief, cougar sightings have been reported numerous times. Federal and state wildlife agencies refuse to acknowledge the return of the cougar to the east without undisputed proof. Visual sightings and verbal reports are not considered substantial proof.

A cougar sighting is evidence of a cougar, and it may be just visual or visual substantiated with film. Plain visual sightings are the lowest level of evidence because they are without tangible record. Anyone who sees a cougar in eastern USA is, therefore, "crazy." They are not supposed to be here. If you are fortunate enough to have a witness with you, then you both are crazy. Without a tangible record, even a hundred witnesses are considered inconclusive, or unsubstantiated.

Photographic evidence is recorded on some kind of film: motion or still. The advantage of photographic evidence is that it is a recording which can be preserved and presented in the future. This is tangible evidence. However, this is not enough. Photographic evidence needs to be supported with data and references. The data are time and location. References are the designation of size and features

Data

The data is simply listing the time and location of the photographic evidence as thoroughly as possible. If the location is well known and easily accessible, it is just as easily designated. But, the designation of remote locations requires more thought in preparation. The best way to designate a remote location is with a GPS (Global Positioning System) which indicates the latitude and longitude of a site. Anyone else with a GPS can get to within twenty feet of the site. Designate the coordinates of both the point of observation and the cat. The GPS will automatically give you an accurate horizontal distance between them. It is wise to physically mark those two points in some way. Three stacked stones or paint are good methods to use.

If the witness does not own a GPS, then physically mark the two locations as previously described, and blaze a trail leading to them. After the cat has left the scene, take a close up photograph of where the cat stood. It is important that the location can be found, again.

References

Photographic evidence must unquestionably show that the animal is a cougar. But often, the photos are of poor quality, and the cat's features are unrecognizable, fuzzy forms due to distance or poor light. Either use a telephoto lens to enhance detail, or establish proof of size.

The establishment of proof of size, or scale, is done two ways: by an object already at the primary scene (primary indicator), or by an object added to the scene afterwards (secondary indicator). The first way is preferable because it is far less complicated to deal with. The scale indicators obviously must be of known size if they are to be a reference of the cat's size. In the latter method, conditions must be maintained as close to the original setting as possible. If the locations of the observer and observee were physically marked, a second photo with the indicator added can be taken that will superimpose and be coincident with the cat photo. Thus, a comparison of the scale indicator and the cat can be accomplished. What follows then is a simple mathematical calculation of the cat's size.

The use of a size indicator sounds simple, but it really is more complicated than that. When it is included in the picture, the size indicator must have the proper orientation of its position. The reason for this is that we live in a 3D world, but the film records everything in 2D. Thus, two new concepts are confronted: actual length and apparent length.

The difference between these two concepts can be explained with a yard stick seen a short distance away. At all times, the actual length of the yard stick is 36 inches. However, if it should move farther away from your eye, it would appear to grow smaller. This shrinking of the length

continued on other side...

produces the apparent length. Even though it is 36 inches long, the eye perceives an apparent length that is less than 36 inches. The apparent length not only diminishes with increasing distance, but also with orientation.

The three dimensions are Height (up & down), Width (right & left), and Depth (forward & backward). In analytical geometry, these are respectively the X, Y, & Z axes. Both the cat and the scale indicators must be in the same plane. That is accomplished when they are the same distance (Depth) away, which puts them in the same plane as the XY axes. They, therefore, have the same perspective. And, their apparent lengths should be in accord with each other. Trick photography occurs when deviations of perspective cause objects to appear either larger or smaller than they should be. This should be avoided in film evidence.

How does orientation of the subjects affect the perception of apparent length? Here is an example. Cast the shadow of the yard stick on a wall so that its length axis is parallel to the plane of the wall and the light source is perpendicular to them both. The shadow of the yard stick is the apparent length. As the right end moves toward the wall and the left end moves away from the wall, the yard stick shadow length diminishes. It will reach a minimum when the yard stick is perpendicular to the wall, and the apparent length (the shadow) will appear to be almost nothing. This is what happens in photographs when the Depth Axis is altered and produces illusions.

To summarize the preparation of film evidence, a reference to size must be established. If a primary indicator is used, choose one that does not have its axis of measurement extending in and out of the depth axis. That is, it should not be slanted toward or away from the viewer. It may slant to the right or left as long as it remains in the XY plane. The indicator's length should be easily expressed on the film so that it can designate the cat's size.

Oklahoma Confirmation

by Helen McGinnis

On May 27th, a dead male cougar was found on railroad tracks in Oklahoma, not far from the Kansas state line. It was wearing a radio collar.

Amazingly, this 2 ½ year-old animal had been outfitted with a collar in February 2003 in the Black Hills of South Dakota. Researchers at SD State University were last in contact with it in Wyoming last September, a minimum of 667 miles from where it was killed by a train. This is a record for dispersal for a radio-collared cougar.

Why did this young male travel so far? The Black Hills are the furthest east region with a well-established cougar population; in fact, it's near carrying capacity. Young males must leave their mothers' home ranges and look for territories of their own. If they don't, they are likely to be killed by resident adult males. A suitable territory must have prey, cover AND potential mates.

Kansas has an exceedingly sparse cougar population; the first individual was confirmed at Lawrence only last year. The young male from the Black Hills surely found habitat in Kansas with food and cover, but probably no females. So he kept going.

I have often wondered if cougars in the Far East wander widely and are seen by many people for the same reason. They are looking for mates.



ECF Board member and conference organizer Dr. Jay Tischendorf introduces keynote speaker, author, and ECF vice president Chris Bolgiano. Her PowerPoint presentation assembled rare historical and contemporary images of cougars in the East.



Dr. Judy Chupasko of the Harvard Museum of Comparative Zoology presents a poster session on a cougar skull reportedly found in Massachusetts recently.



David Baron, author of *The Beast in the Garden*, gave a talk about cougar attacks and signed his new book. Books by Chris Bolgiano, Gerry Parker, and several others were also available and most sold out quickly.



Mark Jenkins, director of Coopers Rock Mountain Lion Sanctuary for abused and abandoned cougar pets, hosted a tour that demonstrated how devastating the pet trade is for cougars. At the Cougar Sanctuary, the promise of guaranteed cougar sightings at the conference was fulfilled!





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Foundation

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Conference volunteer Kate Gill models the popular ECF T shirt, which sold out

 **New ECF Brochure Available**

ECF distributed a brand new, hot off the press brochure at the conference, entitled "Living with Cougars in Eastern North America." It updates the earlier handout by addressing the concerns of farmers and hunters. It is copyright free. To obtain one, send a business-sized, self-addressed and stamped envelope to Chris Bolgiano, 10375 Genoa Rd., Fulks Run, VA 22830. The brochure will also be available on the ECF website by the end of the summer.

 **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.