# EasternCougar Foundation

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AUTUMN 2003

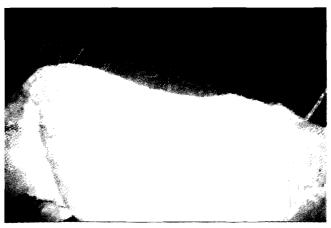
#### RESULTS OF THE FIRST FIELD SEASON

by Todd Lester, ECF President

In April, 2003, Eastern Cougar Foundation began a six month remote camera survey for cougars in the Monongahela National Forest in West Virginia. A total of 20 PhotoScout cameras were purchased for the survey with the help of two grants. The ECF performed this survey under the guidance of a Field Advisory Committee that included several ECF Board members and representatives of the WV DNR, US Forest Service, and US Fish & Wildlife Service.

The study area was broken down into 25-square-mile grids, and the cameras were setup throughout a grid for four weeks. At the end of four weeks, all cameras were collected, film & batteries changed, and moved to another grid for the next month. Cameras were pulled out of the field on the last weekend of September 2003 due to the upcoming hunting season starting in October.

Although no confirmable cougars were photographed this first season (see the photo of the "unknown" animal that could be cougar, coyote, or deer), the survey has been successful from every other perspective. The learning experience was tremendous, and the huge numbers of pictures taken yield much data about forest mammals. Survey information will be shared with the collaborating agencies.



This photograph of an unknown animal could be a White Tailed Deer, Coyote or a Mountain Lion.

#### TOTAL of PHOTOS TAKEN:

639 White-tailed Deer

192 Black Bears

40 Coyotes

20 Bobcats

10 Raccoons

02 Opossums

02 Grouse

02 Wild Turkeys

01 Rabbit

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01 Unknown

Several 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."

## **CHAIN OF CUSTODY**

adapted by Chris Bolgiano from remarks by James Cardoz. MA Division of Fisheries and Wildlife

The proper documentation for finding and handling a piece of evidence, which in our case means an item of field evidence such as scat, pelt or body, photo, video, or hair, is called "chain of custody." Without the documents that track a piece of evidence from the time it is found to the time it reaches an expert for analysis, it is impossible to authenticate that evidence. In court, this can result in evidence being thrown out; for the ECF, it means that the evidence of cougar presence may be subject to allegations of falsification. Combined with the proper techniques to preserve the evidence and prevent contamination (such as freezing scats), chain of custody serves to reduce the chances of losing or invalidating the evidence.

The ECF documents all items received, and tracks all items sent away for analysis. But we depend on the finders of cougar evidence in the field to begin the correct chain of custody procedure. Evidence finders should package the specimen appropriately so that it may not be opened without others knowing it, attach a label with the finder's name, address and phone, date and location found, and include a signed narrative report on the incident. Keep a personal copy of this report, then send the package to the ECF. See the ECF website for more details on how to find evidence www.easterncougar.org.

# PRESERVATION OF SCAT FOR DNA ANALYSIS by Helen McGinnis

ECF has been advising people to photograph possible cougar scat, and then to pick it up with a baggie or disposable glove, put it in a sealed plastic bag with a label, and store it in the freezer until it is sent to a lab. However, this may not be the best way to preserve DNA.Dr. David Paetkau, head of Wildlife Genetics International, a respected commercial DNA laboratory in Nelson, British Columbia, has advised me:

"The objective with any storage method is to get rid of liquid water, which is the environment required by the enzymes that will degrade your DNA. There are three common ways to do this: drying, freezing and storage in an excess volume of ethanol.

"Ethanol is great because you can carry it with you in the field, and stop = degradation as soon as you find the sample. You need an ~10 fold excess of 90% or higher ethanol. I believe that at least one publication that compared storage techniques found ethanol to be superior. I have also had great data from ethanol-stored samples. Having said that, ethanol has some problems. First, it is heavy to carry in the field. Second, it is flammable, and will be difficult to ship with many couriers.

"Freezing if fine, but scats must be frozen very cold (-80) to preserve them properly, and then every time you access or ship the sample you run into problems with freeze-thaw cycles or with having to ship on dry ice.

"Drying is frankly the most practical method for many people. We have seen very high success rates from samples that were just dried on a board in the sun, and once they are dry, you have no more storage or shipping issues.

A scat deposited by a predator will contain DNA from both the predator and the prey that was eaten. Even though the amount of DNA from the prey is much larger, "the presence of prey DNA is not really a problem. When there is other mammalian DNA in the sample in addition to the target species, we can use a felid-specific analysis that won't detect the non-felid species. If a cougar has just eaten a house cat, we could have a mixed result that would be hard to read."

#### PLANNING GROWS for the 2004 EASTERN COUGAR CONFERENCE

Plan now to attend the Eastern Cougar Conference, 2004 next April 28th- May 1st in Morgantown, West Virginia. This special conference, only the second such meeting ever devoted entirely to the fascinating subject of the cougar in eastern and midwestern North America, is being jointly organized by the ECF and the American Ecological Research Institute (AERIE).

The gathering is open to anyone with an interest in wildlife, nature, conservation, feline ecology, cougars, or related topics. Students are encouraged to attend. Registration will cost \$125 for wildlife professionals, \$75 for non-professionals, and \$50 for students.

AERIE and the ECF are currently soliciting proposals for papers pertinent to the subject of eastern, midwestern, Great Plains, or other cougars and related topics including population dynamics, feline ecology, habitat assessments, carnivore recovery, the biopolitics of the suburbanwildland interface, genetics, depredation, etc.... If you have questions about the conference, or if you would like to have a paper, poster, or display considered for inclusion in the final program, please e-mail a brief (500 words or less) abstract as soon as possible to Helen McGinnis or Jay Tischendorf DVM at either of the following e-mail addresses:

# helenmcginnis@meer.net

Jay\_Tischendorf@merck.com (Please note the underscore separating the first and last names)

Those without computer access may write to:
Dr. Jay Tischendorf (DVM)
Director
American Ecological Research Institute
(AERIE)
Post Office Box 1826
Great Falls, Montana 59403 USA

#### HOW YOU CAN HELP

Jay Tischendorf is looking for someone who knows how to set up several different email lists that would allow us to send MASS mailings of the conference announcements to a multitude of special groups and categories. We'd also like to hit newspapers, public libraries, sporting goods stores, police departments, nature groups, nature centers, national forests, professional wildlife societies, veterinary associations, zoos, natural history museums, etc. etc. If you know how to set up mass email lists, contact Jay at jay\_tischendorf@merck.com

We'd like to get the word out to stores such as Gander Mountain, Cabella's, Bob Ward, etc., asking that they post information on their web sites and on bulletin boards in their stores. For some major chains, it's possible to get a complete list of the addresses of all their stores from their web site.

If any of you are going to wildlife conferences, the word should be spread there.

For groups, we want to include a special request that conference details be published in their newsletters and web sites, and ask that they forward conference information to other groups.

We are asking ECF members in Morgantown to start asking local businesses such as outdoor stores, sporting goods stores, sportsmen's group, the DNR, Wildlife Society at WVU etc. if they would like to have a display or booth at the conference for an small advertising fee.

ECF volunteers are also needed to run the registration table, etc.

To volunteer, contact Helen McGinnis at 304-227-4166. For more conference info, see the Eastern Cougar Foundation Website www.easterncougar.org

### A CHILD'S ESSAY ON THE EASTERN COUGAR

Mutual of Omaha Insurance Company has a long-standing commitment to conservation that dates back more than 40 years. In 2002, Mutual of Omaha launched a national effort designed to challenge a younger generation to think creatively about the natural world. Mutual of Omaha's Wild Kingdom Kids' Summit encourages kids, aged 9-12, to submit an essay identifying ways they can help an endangered species in their region. One winner from each state was selected to attend the Wild Kingdom Kids' Summit, the first of which was held in Los Angeles in May 2002. Mary Kathryn from North Carolina won with the following essay. You can find her essay and those from other states at: http://www.wildkingdom.com/kids\_summit/index.html (note that the space between kids and summit is underlined).

# The Eastern Cougar by Mary Kathryn in North Carolina

The Eastern Cougar is a large unspotted and brownish yellow cat. Most have been found in the eastern part of North America in wilderness areas. Unfortunately, the clearing of forests has forced them off their natural habitat. Cougars have been trapped and hunted until they are almost extinct.

My idea to save the Eastern Cougar is to create a radio show to make people aware of the condition of the Eastern Cougar. I would ask the station manager for a minute on the radio. Then I would ask Subway to donate food coupons to be used as prizes on the radio show. Next I would contact the Fish and Wildlife Service and ask them to provide booklets on endangered species. I would call the minute I have on the radio "A Minute with Mary Kathryn."

Every week I would talk about a different endangered animal. At the end of the minute I would ask a question about the animal I discussed. The person that answers the questions correctly would win the Subway coupons and the Fish and Wildlife Service booklet. "A Minute with Mary Kathryn" would inform people about the eastern cougar and other endangered species.

# Selected Photos of ECF's First Field Survey

For more photos, and for the monthly log, see the ECF website (www.easterncougar.org) under "News from the Field."



A Total of 192 Black Bears were photographed during this field surveyusing infrared camera traps.



A Total of 40 Coyotes were photographed.



A Total of 639 White Tailed Deer were photographed, not all of them as big as this buck.



A Total of 20 Bobcats were photographed.

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Eastern Cougar Foundation

#### Officers

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Todd Lester
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Vice President Chris Bolgiano email: bolgiace@jmu.edu

Secretary/Treasurer Jaquetta Lester

#### **Newsletter Submissions:**

Deadlines: April 1 and October 1

Send Submissions to: Editor: Traci Hickson email: traci@future.org



# **ECF NEEDS YOU**

Because the ECF has no paid staff, implementation of all programs depends on the actions of dedicated volunteers. Helen McGinnis, for example, is developing a hair snare protocol to expand ECF field survey capabilities as well as helping to organize the 2004 conference. Traci Hickson assembles, edits, and distributes the newsletter. Mark Dowling, Ken Miller, Jim Close and Bob Wilson, who compile cougar confirmations for the Eastern Cougar Network www.easterncougarnet.org, began as ECF volunteers. Without such committed volunteers, activities to advance the recognition and protection of cougars in the East will simply not happen. At this point in time we need help with organizing the 2004 conference. Please contact Helen McGinnis at helenmcginnis@meer.net or 304-227-4166 if you'd like to contribute.

# RENEWAL

ECF membership runs through the calendar year, Jan. – Dec. Therefore, renewals are coming up in a month or two. Because of lack of funds, we may not be able to send you a postcard reminding you to renew, so please use the enclosed envelope. And if you can add a donation to help with the 2004 conference, it will be much appreciated!