

Eastern Cougar Foundation
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Eastern Cougar Foundation



Bringing Back a Legend

February 2008

2008: No. 1



“Golden ghosts” in the Black Hills National Forest. An archery hunter found nine caches of an elk kill buried by a cat or cats. He gathered everything into one pile and set up his trail camera. He captured the image above and others this past January 9th. The next day, a coyote was caught in the act of stealing a piece.

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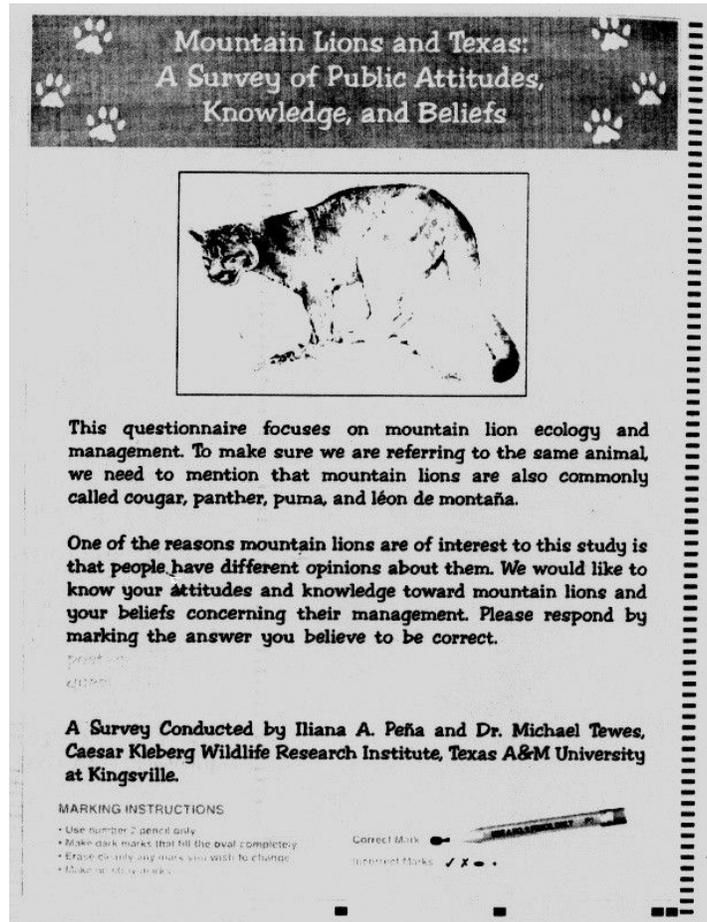
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WHAT DO PEOPLE THINK ABOUT COUGARS OUT WEST AND IN FLORIDA?

By Helen McGinnis

The Eastern Cougar Foundation advocates the restoration of viable cougar populations in suitable regions of central and eastern North America. For this to happen, cougars will need cover for stalking and resting, prey, and a suitable mind-set on the part of the humans with which they must co-exist. We have plenty of cover and abundant prey, but what about the mind-set? What do people who live in the West and in Florida, where cougars undoubtedly occur, think about them? Do they live in continual fear?

Increasingly, wildlife agencies are considering the opinions, beliefs and values of the general public and specific “stakeholder” groups as part of their management planning for wildlife. “Human dimensions” are an essential component of almost any science-based management plan. If people are misinformed or a proposed management action goes against their attitudes or beliefs, strife is predictable. At the worst, the voters or state legislators may bypass the wildlife agency and pass laws that the agency deems unwise.



Cover of 3-page questionnaire used to survey public attitudes about mountain lions in Texas in 2001.

Cougars may not be restored anywhere in the East if the general public is opposed. If they are opposed, will it be because they are misinformed? If so, an education program will help. Or is their opposition deeper, based on deeply held values? Well-designed public attitude surveys can provide answers. Not only are the opinions of the public in a certain state or region important, but also that of the state agency. The state agencies are on the front line of any cougar controversy. If they are opposed to the restoration of cougars, the chances that it will happen are much less.

A well-designed public attitude survey starts with a random sample of the stakeholder group(s) to be sampled so that people all opinions within that group are sampled without bias. This is in contrast to voluntary polls, which attract people with strong, often polarized opinions, while those in the middle don't bother to participate. Most attitude surveys are conducted by mail, using randomly selected mailing addresses. A high percentage of targets do not respond. Non-responders are sampled by telephone to make sure their opinions do not differ on the average from people who do respond.. The Florida survey mentioned below was done entirely by telephone, using randomly selected phone numbers.

I have collected reports on 7 formal attitude surveys from 6 different states inhabited by breeding populations of cougars, done between 1995 and 2006--southern California (CA), Texas (TX) , South Dakota (SD), Florida (FL), Arizona (AZ), Colorado (CO) and Montana (MT). Here are some of the conclusions:

Most people want to have mountain lions in their state:

In CO and FL, an overwhelming majority (more than 90%) of people who were asked some form of the question “It is important to me to know that mountain lions exist, even if I never see one,” or “It is important to me that future generations have mountain lions,” agreed overwhelmingly. In southern CA in the vicinity of San Diego, a majority of urban and rural residents, including owners of pets and livestock, supported the continued presence of mountain lions.

In TX, 81% of urban residents but only 71% of rural residents agreed with, “Efforts should be made to ensure the survival of mountain lions in Texas. “ Most urban (68%) and rural (71%) of rural residents agreed with “I enjoy knowing mountain lions live in Texas.”

In AZ in the vicinity of Tucson/Saguaro National Park, 78% said that cougars should be protected on private and public land, but 69% said they should be shot or trapped if they have caused problems that affect humans. 83% of these people supported efforts to maintain mountain lion populations in the national park and 86% in surrounding mountain ranges.

Almost half (47%) of South Dakotans agreed that “Having a healthy, viable population of mountain lions in South Dakota is important to me.” 28% were neutral and 25% disagreed.

Most people agree that the presence of mountain lions is a sign of a healthy environment.

In AZ, 85% agreed that pumas play an important role in the ecological balance of wildlands. When asked to explain the role, the most common responses were that they control populations of other species (37%), play a part in the balance of nature (22%), play the role of a predator (13%) and prey on the sick and weak of other species (12%).

A majority in TX (78%) agree that mountain lions are an essential part of nature. 72% agreed in South Dakota.

A majority of people connect habitat protection with the continued existence of cougars.

In Florida, 46% of respondents identified habitat loss, development, construction, or too many people as the principal cause of panther decline.

In AZ, 79% agreed that urban expansion is detrimental to mountain lions in the Tucson area because it reduces lion habitat (52%); reduces habitat for prey species; and increases human-lion interactions, which could lead to control efforts (18%). Most residents stated that the following actions would be beneficial to lions: zoning restrictions: 71%; acquisition of land for habitat and movement corridors: 63%; and ban on lion hunting: 59%.

Texans were asked to agree or disagree with this statement: “Making a living from the land is more important than conserving habitat for mountain lions.” Urban respondents (39%) disagreed more than rural respondents (32%). Rural residents (52%) tended to disagree with a statement that new housing and urban developments are more important than conserving habitat for lions, but not as strongly as urban residents (60%).

Most people are not particularly worried about being attacked by a cougar.

In SD, 61% did not agree with the statement, “Having mountain lions in South Dakota is too dangerous a risk to people.” 81% agree that “By following some simple precautions, people can live safely in areas occupied by mountain lions.”

A majority of respondents in AZ were not concerned about being attacked. Fewer than 7% indicated being somewhat to very worried about being attacked in their neighborhoods, and approximately 16% indicated fear of attacks while recreating in natural areas.

Mountain lions are not high on the list of potential concerns in the Denver area and adjacent foothills of the Rockies. However, 79% of respondents believed that the likelihood of being attacked is greatest when recreating in or near lion habitats, with 79% believing there is a high, moderate or slight risk of being attacked. 88% believed that they were likely to encounter a lion (whether or not it resulted in an attack) while recreating in or near their habitat.

Southern Californians perceived the risk of attack as low. Likewise, a majority of Texans did not fear being attacked by mountain lions. To the contrary, they believed that seeing the track of a lion would heighten their outdoor experience.

A study in Montana focused on the perception of risk of attack. People surveyed were asked to assess the risk of being attacked by a cougar. They were presented with a ladder of increasing risk—the highest being climbing Mt. Everest. The most common response was the correct one—the lowest level of risk above no risk (22%). Only 6% thought cougars posed no risk at all to humans. However, 55% believed the risk was greater than flying on a commercial airline, and 27% thought risks great than those associated with operation of farm tractors. Almost 20% believed risks greater than those incurred riding in an automobile. Actual risk in Montana (only one human fatality in the last 100 years) is close to zero.

Sport hunting of cougars is a fractious issue.

It is not an issue in Florida, where cougars (Florida panthers) are protected as federal endangered species, or in California, where sport hunting of mountain lions is not allowed. Interestingly, the state with one of the most contentious cougar hunting seasons, South Dakota, has not asked people for their opinion of sport hunting. In other states, opinions are polarized, with a majority approving. Men tend to approve of sport hunting of cougars, and women tend to be opposed. It will not be an issue in the East until we have cougar populations to hunt.

References: Available upon request.

PRESIDENT’S MESSAGE—Puma Pollination and the Golden Ghost

It often is said that the squeaky wheel gets the grease. In the case of the cougar, lately that “squeaking wheel” has taken ECF all the way to the Dakotas. It is here, in the famed Black Hills and Badlands, that a population of cougars, or mountain lions, as they are known in the Rocky Mountains, has re-emerged over the past 10-15 years. The seed for this population likely originated with young, wandering cats drifting in from Montana and Wyoming. In any case, today--outside of Florida and southern Texas--South and North Dakota’s mountain lions represent the nation’s easternmost cougar populations.

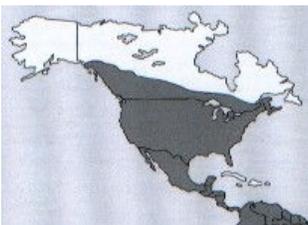
As did Montana and Wyoming for the Dakotas, dispersing cats from this population are almost certainly providing seed stock for emerging populations in places like Nebraska and Missouri. Given time and more dispersers, states like Missouri and Arkansas, where occasional cougars have also been confirmed (including already at least one breeding female), might also benefit from this natural recolonization, or “puma pollination”.

Unfortunately, while a recent South Dakota public attitude survey demonstrated strong support for *Puma concolor*, these cats currently face challenges wrought by an overzealous hunting season established to aggressively reduce their numbers and ostensibly protect the public from danger.

In the opinion of ECF, this harvest program is based neither on good nor publicly shared and peer-reviewed science, and it may in fact increase the likelihood of adverse encounters between man and cat. It also is reducing the possibility of dispersal and recolonization, thereby impacting the natural reinvigoration of landscapes and habitats crying out for the return of the native feline predator—*Puma concolor*, the Golden Ghost.

As always, your support for ECF’s conservation and recovery efforts on behalf of the cougar are critical. In many ways Nature is like dominoes—what happens in the Black Hills can impact events in Bruce Crossing, Binghamton, or Bangor. We will certainly keep you posted as this story in the Great Plains continues to unfold. Thank you for your support!

---Jay Tischendorf



Historic range of the cougar.

NEWS FROM THE BLANK SPACE



Range of the cougar ca. 1990

Maps of the cougar’s range produced in the 1990s show a vast blank space in eastern and central North America—habitat that the big cat used to occupy before it was eliminated by persecution and near-elimination of its natural prey—the white-tailed deer. Above are maps from Kevin Hansen’s 1992 book Cougar: The American Lion. The Eastern Cougar Foundation is dedicated to the restoration of cougar populations in suitable areas of the eastern portion of that blank space and advocates responsible management when cougars recolonize former habitat.

SOUTH DAKOTA: 2007 Hunting Season Ends in Controversy: The state's third mountain lion season opened on November 1st, only five years after the species was delisted as a state endangered species. The quota was a total of 35 cougars or 15 females, whatever came first. The quota has steadily increased from 25-5 in 2005 to 25-8 in 2006. Hound hunting is not permitted. Instead, hunting licenses were issued to South Dakota residents for only \$15.00 for the 2007 season.

Cougars are difficult to manage as game animals. Their populations are always small, and because they are so elusive, their numbers are extremely difficult to determine. Females are the key to sustainable sport hunting of cougars. They spend almost all their adult lives either pregnant or rearing kittens. In contrast to all other game animals except bobcats, cougars can give birth at any time of the year, although in northern latitudes there is probably a birth pulse in the spring. Kittens do not leave their mothers until they are at least 1½ years old. The only other game animals with such a long period of dependency on the mother are bears. Bears hibernate in northern latitudes. Females that are pregnant or have dependent cubs go into hibernation earlier than males. This fact enables wildlife managers to set late bear hunting seasons to minimize the take of females. There is no way to set a cougar hunting season that avoids subjecting females with kittens to hunting. However, hound hunters can be more selective than hunters without dogs.

In a debate between Sharon Seneczko, President of the Black Hills Mountain Lion Foundation, and John Kanta, a wildlife biologist with the SD Dept of Wildlife, Fisheries and Parks (DWFP), aired on SD Public Radio on Nov. 28, 2007, Kanta said that the estimated *biological carrying capacity* for the Black Hills was 165. (Unfortunately, the DWFP has not allowed people outside the agency to review their data and calculations.) Kanta stated that the *social carrying capacity* is also important. The social carrying capacity is the number of cougars that people will tolerate. If people are fearful and ignorant, the social carrying capacity could be zero. It can be increased by education, not by killing more cougars. There is growing evidence that significantly reducing a cougar population without totally eliminating it increases the number of human-cougar conflicts because a high proportion cougars in heavily exploited populations will be subadults. Subadults, just like human teenagers, are more likely to get into trouble.

Out of 19 cougars killed by hunters in South Dakota in 2007, 16 were females. No scientific explanation has been offered to explain such a skew toward females. At least 6 (more likely 7) of these females had dependent kittens. In the radio discussion, Kanta said that the DWFP had pushed back 2007 hunting season three week to reduce the possibility that hunters would stumble upon females with very young kittens. However, in the 2007 season, at least 12 (perhaps more than 15) dependent kittens were orphaned, more than in the previous seasons. Seven of these were taken into captivity. As far as the wild population is concerned, they are dead. The survival of the others is dubious.

HR 1171—Mountain Lion as Varmint Bill: Representative Betty Olson, who lives in the northwestern part of the state, and 13 other legislators introduced a bill that would have classified cougars encountered in South Dakota anywhere outside the Black Hills as varmints that could be taken at any time for any reason. The bill was reported out of House Agriculture and Natural Resources Committee and put to a vote on February 11th. It was defeated 26 to 42. (The interesting debate preceding the vote was recorded and is available over the Internet.) It is clear that fear is what drove Olson to introduce the bill because there has never been an incident of livestock depredation on her ranch. HR 1171 was the subject of ECF's first Action Alert.

Female Killed in Southeastern South Dakota: A young female judged to be less than 2 years old was shot during a confrontation with farm dogs near Howard in Minot County on December 3, 2007.

It presumably originated in the Black Hills. Females usually do not disperse as far as males. The fact that this one apparently did is encouraging. Cougars cannot recolonize new areas without females.

WISCONSIN—First Confirmation in Modern Times. On January 18th, Kevin Edwardson started a cougar in the haymow of Randy Hookstead's barn near Milton in the southern part of the state. It had been tracked through the snow into the barn, leaving characteristic cougar tracks. The cat made its escape through a missing slat in the barn. A number of credible sightings in the Rock and Jefferson counties preceded the incident.

Dr. Eric Anderson and colleagues at the University of Wisconsin-Stevens Point have been collecting alleged sightings for several years. Credible reports are concentrated the northern part of the state, so it was a surprise that the January 18th incident was in a rather heavily developed area near Madison. Deer are abundant there, however.

The cougar had cut its foot and left blood spots in the departing tracks. Doug Fendry from the WI Department of Natural Resources collected the blood samples and sent them to USDA Forest Service's Rocky Mountain Research Station laboratory in Missoula for DNA analysis. The initial determination has been announced: the animal was indeed a cougar. Further analysis is continuing to determine if the cougar was of North or South American origin. If it has South American ancestors, the DNR may decide to remove it, but no decision has been made.

The Eastern Cougar Foundation advocates removing cougars living successfully in the wild only if they are in inappropriate places or if they are misbehaving—habitually preying on livestock or threatening people—not on the basis of their ancestors.

MICHIGAN—Review Casts Doubt on Swanson-Rusz Scat Study. The results of a DNA study of 297 possible cougar scats (feces) collected by Patrick Rusz of the Michigan Wildlife Conservancy and cooperators from 12 sites on both the Upper and Lower Peninsulas were published in 2006¹. Swanson, who is at Central Michigan University, was able to identify only 12 of the scats. Ten of these, from 8 different localities on both peninsulas, were identified as cougar; one as bobcat; and one as coyote. Based on the distances between the 8 localities, the authors concluded that there were at least 8 cougars in Michigan between 2001 and 2003, when the scats were collected. The geographic origin—North American—could be determined for only one of the scats.

Skeptics pointed out that despite dozens or even hundreds of alleged sightings on both peninsulas, there are no confirmations except those scats, with exception for two controversial incidents in Menominee County on the Upper Peninsula. One of these is now discounted—in 2005, Swanson identified a fragment of a leg bone from an animal wounded by an Indian in 1988 in Menominee County as bobcat.

Allen Kutra (Eastern Michigan University), Michael Schwartz (USDA Forest Service, Rocky Mountain Research Station), and Charles Anderson (Colorado Division of Wildlife) reviewed the conclusions and found them dubious². The extremely low success rate in identifying the scats was ascribed to improper methodology. Also, the method that Swanson used could not eliminate the possibility that the scats were deposited by domestic cats or lynx. They did agree that the single scat identified as being from a North American cougar, from Delta County in the Lower Peninsula, was cougar but concluded, "Whether that sample represents a released pet, a dispersing individual or a planted sample is not something that we can assess."

¹Swanson, B.J., and Rusz, P.J. 2006. Detection and classification of cougars using low copy DNA sources. *American Midland Naturalist* 155:363-372.

²Kurta, A., M.K. Schwartz and C.R. Anderson, Jr. 2007. Does a population of cougars exist in Michigan? *American Midland Naturalist* 158:467-471.



Go East, young cougar! Three documented long distance dispersals from the Black Hills by young males and one by a female, presumably also from the Black Hills.

NEBRASKA: Analysis of claw documents another long-distance eastward disperser. A 115-lb male found dead near the Gretna-Louisville interchange in southeastern Nebraska on November 6, 2005, originated in the Black Hills of South Dakota. Biologists had suspected it had been living in the West because porcupine quills were embedded in the skin. Porcupines do inhabit the Black Hills but not the prairies.

“Tissues in the claw of the dead cougar have established that it had indeed traveled hundreds of miles from the Black Hills, according Larkin Powell and another wildlife ecologist at the University of Nebraska-Lincoln. As it made its way across northeast Nebraska, it drank water and ate prey such as deer, which became part of the growing tissue of its claw.

“Earlier research at UNL's School of Natural Resources found that the state's water has a distinctive chemical signature in different places.

“Powell and his colleague built on that research, analyzing samples of the claw to see where the animal was when it ate and drank. They found that the chemical signature varied from the claw's tip, the oldest part, to its root, the newest part, and by

comparing it to the chemical patterns found in water and deer across the state, they inferred its origin and migration route.”

Anonymous. “Research documents mountain lion movement.” *North Platte Bulletin*, February 11, 2008.

ECF UPDATE

Land Between the Lakes Remote Camera Project: Judy Tipton and friends set up ECF’s 15 PhotoScout cameras over the Christmas holidays. She also set up three hair poles designed by Marc Gauthier. Gauthier had donated one hair pole to ECF with a month’s supply of attractant and pheromone lure. Judy made two more poles so that she could have three hair poles out for a month. Gauthier’s pheromone lure has resulted in five confirmations of cougars in Quebec and New Brunswick since 2002.

Judy reports finding more evidence of feral hogs in LBL—of great interest to the US Forest Service, which manages area.



Remote camera and Gauthier hair pole set up at LBL. The pheromone lure is hung inside the PVC pipe.

She says, “I also found a road-killed deer that I set the first day with a remote camera. I checked the day I left and it had been fed on and was removed from the location. I did tie it down well, too. Well, one could tell it that a cat had fed on it, because the hair was removed at the camera site. Then the deer was dragged off about 60 feet from the tied location. The deer was covered and scratch marks where it had done this. Once I uncovered the deer, it was even more clear that it was a cat because of how it was fed upon. Classic cat. I removed the film, and yes, it was a bobcat. But I videoed the before and after effects.”

Adirondack Explorer article. Chris Spatz and Jay Tischendorf have submitted an article to this non-profit bimonthly magazine devoted to the East’s great park. They suggest that cougars will be coming to the Dacks, most likely from eastern Canada, and advise the New York Department of Environmental Conservation to get ready by educating people.

South Dakota HR 1171 Alert: In its new activist, advocacy role, ECF issued its first alert on this bill, which would have classified cougars outside of the Black Hills as varmints that could be shot any time, shortly after learning about it on January 17th. We emailed ECF members for whom we have email addresses, put a special alert with supplementary information

on our home page, and notified members of the easterncougar listserv. As noted elsewhere, the bill was defeated on February 11th. Thanks to Tom Huhnerkoch of Lead, SD for keeping us informed, to Jim Solley who designed our new alert logo and put the alert on our website, and to all of you who wrote to the governor and legislators.



Kerry Gyekis Schedules More Talks: So far, Kerry has four presentations scheduled in Pennsylvania.

April 11th—Union County Conservation District near Lewisburg. Ask the UCC District for details.

April 12th—at PPL Wallenpaupeck (Poconos)

April 25th—at Potter County Historical Society

May 10th—at Montour Preserve near Williamsport

For details, contact Kerry at gyekis@easterncougar.org or 570-353-6682. Kerry could use help from other ECF members at these presentations. You would talk with attendees and sell books and ECF T-shirts.

Reorganization: Over the winter, Jay Tischendorf presided over a reorganization of ECF. A revision of the By Laws prepared earlier by Kerry Gyekis was adopted. It recognizes that most of the work in ECF is done by volunteers rather than by Board members, who are mainly scientists busy with teaching and their own research. Most of the former Board members are now Advisors: Dr. Marcella Kelly of Virginia Tech, Sue Morse of Keeping Track, and Mark Jenkins of the Coopers Rock Mountain Lion Sanctuary. One former Board member, Dr. David Maehr of the University of Kentucky, and four of ECF’s most capable volunteers—Chris Bolgiano, Dr. Jay Tischendorf, Judy Tipton, and Chris Spatz, are now members of the Board of Directors. The officers remain the same.

Ben Shrader will be manning a booth for ECF at the Bedford Armory outdoor show in Bedford, Virginia, on Saturday, March 8th. He will also be recruiting volunteers for the Appalachian Trail remote camera project, which will begin April 1st and go through October. ECF is not directly involved in this project. The Smithsonian Institution is managing it, and Appalachian Trail Conservancy is coordinating volunteers. If you would like to help, contact Jack Noll of the Appalachian Trail Conservancy at jnoll@appalachiantrail.org or 540-953-3571 in Blacksburg, VA. Volunteers will be required to attend a training secession to be held at various locations TBA in March. Volunteers will need access to a GPS for finding the assigned camera point and to specifically identify where the camera is set. Camera points will be occupied for a month. In addition to setting and retrieving the camera it will need to be checked during the month.

The easterncougar listserv now has more than 350 members, thanks to Kerry Gyekis' moderating skills. This Yahoo! group is mainly a news service, with up to 200 posts a month. It's an excellent way to keep up to date on cougar news from central and eastern North America. News pieces on other topics of interest to cougar advocates are also included, including news of jaguars along the border and wolves in New England. You can join from ECF's Home on the Internet – www.easterncougar.org If you don't need a lot more email, you can select the Daily Digest option when you join. That way you'll get no more than one email per day.



DONATIONS NEEDED FOR EVENTS: We need items for outdoor shows, such as the Wilderness Wildlife Week held every January in Pigeon Forge, Tennessee near the Great Smokey Mountains National Park, and numerous others that occur in every state, as well as for talks and temporary exhibits in nature centers--folding exhibit panels, professionally designed and printed brochures, a sturdy cougar skull replica, and a cougar skin, among other things. Help ECF volunteers educate the public and recruit new members. Your earmarked donation would be most welcome

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Join the Eastern Cougar Foundation!

Membership Categories		
	<u>Individual</u>	<u>Family</u>
Student	\$5	--
Regular	\$15	\$25
Igmutaka*	\$25	\$35
Klandagi**	\$50	\$75
Catamount	\$100	\$150

*Lakota word for cougar
 **Cherokee for cougar (Lord of the Forest)

address and email address. If you prefer, you can join online from our website. *Become a Virtual Member!* Let us send your newsletters to you via the Internet. You will get your copies earlier and they will be superior, with color photos *AND* you will be saving us postage and printing costs. Newsletters typically occupy 500-950 MB of computer space. Even if you want a paper copy, send us your email address anyway so we can send you alerts on issues affecting the recovery of cougars in central and eastern North America.

Send your check to the Eastern Cougar Foundation (address above). Don't forget to include your