ANSON PANTHER RE-DISCOVERED
Donated to State Museum of Pennsylvania in Harrisburg
By Helen McGinnis

On October 4th, representatives of the State Museum of Pennsylvania picked up the Anson Panther at Gerald “Jack” Fultz’s home near York and brought it to the museum. Jack’s twin brother Bob had earlier signed forms donating the old stuffed panther to the museum. Three members of the Eastern Cougar Foundation were involved in the discovery and donation of the last fully documented wild cougar in the state.

Here is what Henry Shoemaker, chronicler of extinct and extirpated animals of the state, said about the panther in the May 1948 issue of Pennsylvania Game News:

WITH the hand of all raised against them it is small wonder that by 1860 the panther had become a rarity in the Pennsylvania wilds. Three or four were the most killed in any one year from that date on until the final extermination. After 1860 they bred in three localities in the Commonwealth—in the Divide Region of Clearfield County, in Mifflin County, and at the headwaters of the Lehigh River. In Clearfield County they had the widest range, and increased most satisfactorily. There was an almost impenetrable evergreen forest at the head of Medix Run, which did not first feel the woodman's axe until 1904, and which was a panther's paradise. A few panthers bred there until about 1892. The cries of panthers and the howling of wolves could be heard there for some years after that.

Sam Odin of Clifford, Susquehanna County, killed the last panther in the northern section in February, 1874. It is described as having been a superb male, red colored and weighing 153 pounds. Its measurements are not given. A female, which was with it escaped, and is probably the same one which was killed by Thomas Anson, a coal-burner on the slope of the Pinnacle [Hawk Mountain], in northern Berks county, in August of that year. "Forest and Stream" gives the weight of this animal as 146 pounds, length 6 feet 5 ½ inches. Measured in the study of the writer of this article, where it now reposes, it is exactly six feet six inches. The old hunters were not all "gross exaggerators" as some would have us think.

After Shoemaker died, his estate was put up for auction in 1959. Bob, then a student at Penn State who went on to work as a naturalist for the National Park Service, attended the auction and bought the stuffed cougar for $5.00. The measurements etc. indicate that it is almost certainly the panther that Anson killed. At the same auction Bob purchased other rare and extinct animals and birds, including passenger pigeons in a glass case. These irreplaceable specimens may have been lost forever to science.

Skip forward 45 years. Tom Baddick, source of many of the news items posted on the Eastern Cougar Foundation’s easterncougar listserv, came upon a December 24, 2004 message in the HuntingPA forum from Bob's nephew Joe Fultz. Joe said, “My father has the last known Pennsylvania panther mounted. It was killed by a lumberman in Berks County in 1874 (near Panther Springs). My Dad acquired this mount from the estate sale of Colonel Henry Shoemaker (historian for the Pa. Game Commission in the 30’s and 40’s).”
Tom forwards many messages from hunters' forums to me. When the writer claims to have a photograph, video, or track casts, I follow them up. I call it "electronic cougar hunting." So far, everything but the Anson Panther has turned out to be something else, or the evidence can't be located.

I immediately emailed Joe. Arrangements were made, and on a stormy winter day in January, Joe Lankalis drove to York. The panther had been stored for many years in Jack’s basement. Joe took many excellent photos, two of which are reproduced here.

On the advice of Suzanne McLaren, manager of the mammal collection at Carnegie Museum of Natural History in Pittsburgh, I contacted Walter Meshaka, Senior Curator of the Section of Zoology and Botany of the State. Sue had assured me that this museum has the modern facilities needed to preserve this priceless old specimen. Meshaka was very interested. Now that his museum has the panther, he will keep us updated on the plans for the cougar. Most likely it will be exhibited.

The Eastern Cougar Foundation plans to combine the announcement of the donation of this historic specimen with promotion of Chris Bolgiano's new book The Eastern Cougar (reviewed in this newsletter). We hope it will be an opportunity to educate Pennsylvanians about cougars in the state--past, present and future.

I am certain that other wild native cougars were killed in Pennsylvania after 1874, but there is no link between stories of their demise and an actual specimen. One that may have been killed as late as 1900 is on display in the Lycoming County Historical Museum in Williamsport. ECF member Bev Fronk believes this animal may have been killed near the Loyalsock River just north of Williamsport, but she hasn’t been able to locate documents verifying this. The only post-1900 cougar killed in the state, in Crawford County in 1967, was almost certainly a captive of Central American origin.

Jack Fultz (left) and his twin brother Bob and the Anson Panther in York. Photograph by Joseph A. Lankalis, January 2005.
Introducing the Members of Our Board of Directors: Don Linzey

As the second oldest Director, I get to write the second Director’s Column. I am a native of Maryland and attended Western Maryland College (now McDaniel College) for my AB degree. I did my graduate work in Vertebrate Biology at Cornell University (PhD, 1966) under Bill Hamilton, Bob Eadie, and Ollie Hewitt. I did my doctorate research in the Great Smoky Mountains National Park while working as a Park Ranger-Naturalist and have been documenting cougar reports in the Park since 1964. I taught at Cornell for one year, at the University of South Alabama in Mobile for 10 years, at Virginia Tech for 8 years, and I am now in my 17th year as Professor of Biology at Wytheville Community College in Wytheville, Virginia.

In 1978, I organized Virginia’s first Endangered and Threatened Plants and Animals Symposium and served as the Editor of the 664-page Proceedings (Linzey, 1979). Bob Downing was one of the attendees. In 1979, I began the Virginia Cougar Investigation, in which I have distributed posters statewide on two occasions, worked with Bob in the Dismal Swamp and elsewhere, worked with National Park Service personnel along the Blue Ridge Parkway, etc. I maintain a large map of Virginia in which I place colored pins coded by decade for the most reliable reports. Approximately 43% of the reports that I receive are deemed reliable after on-site investigation, speaking with the observer, etc. Of those, 44% had two or more observers. I maintain a similar map for the Park.

Several years ago I began using hair snares (rubbing pads), primarily in the Park. The purpose of hair snares is to secure hair samples whose DNA can be identified by a reputable laboratory. We made and erected about 75 pads and monitored them for a year and a half. This technique was developed by a wildlife biologist in Idaho for use for cougars, bobcats, and lynx. He prepares and sells his own unique cougar lure, which we placed in the center of each pad. The lure was surrounded by 10 roofing nails. The pads proved effective for coyote, bobcat, bear, boar, red fox, gray fox, and deer; however, no cougar hair was found. I have also been using 3 remote cameras and have gotten good photos of bear, boar, squirrels, coyote, raccoon, etc., but no cougar.

I have written 9 books including Snakes of Alabama, Snakes of Virginia, Mammals of Great Smoky Mountains National Park, The Mammals of Virginia, and a textbook entitled Vertebrate Biology (McGraw-Hill, 2001) that is being used worldwide. I give a number of illustrated programs on my cougar research each year in Virginia (Wintergreen, Abingdon, etc.), Tennessee (Pigeon Forge, Gatlinburg, Tremont), North Carolina (Bryson City), and Kentucky (Middleboro).

Join our listserv/cougar news service! During the first ten days of November, 102 items were posted. Thirty-nine of these were news items and information copied from websites, hunters’ forums, and releases from other cougar organizations; 55 were discussion items. Join by going to our website, www.easterncougar.org and clicking on “About ECF.”
Prior to the use of DNA, skull morphology was the best way to determine geographical races of cougars. Pelage is too ambiguous. DNA is not perfect because Culver (2000) indicated that no subspecies can be distinguished in North America. However, South American races manifest more DNA diversity.

The definitive work done on cougar skull morphology was written by Edward A. Goldman (Young and Goldman 1946). His ideas are still used by cougarologists today. He listed thirty geographical races that are so overlapping in characters that he himself was never able to conjure up a taxonomic key to differentiate them. He more or less compared each race only with its neighbors. Adjacent races are confusing, but the contrasts become more defined as latitude differences are increased. This article will describe major skull differences between North American and South American cougars.

Goldman found three characters to be significant between the two continents: the frontal nasal pit, the posterior jugal process, and the rostral notch.

The frontal nasal pit occurs at the posterior end of the nasal bones where they appear to plunge into the frontal bones creating a depression or pit. This depression is most pronounced in the races from the Pacific Northwest, and barely perceptible in the subspecies *Puma concolor pearsoni* in southern South America. See Figure 1.

Figure 1. DORSAL VIEWS OF ZYGOMATA. (A) North American. (B) South American. 
aof = antorbital foramen; fnp = frontal nasal pit.
The zygomatic arch is the cheekbone. It is composed of two bones: the projection of the squamosal or temporal bone which extends anteriad [forward?] overlapping the posterior projection of the jugal or malar bone. The width across the cheekbones is called the zygomatic breadth. The posterior jugal process projects underneath the anterior process of the squamosal forming the zygomatic arch. In the skulls of the northern races, the posterior jugal process is shorter than in the southern races. The tip of the posterior jugal process fails to reach the mandibular fossa where the condyle of the mandible articulates. In southern races, it does reach. See Figure 2.

Figure 2. ZYGOMATA OF COUGARS. (A) North America. (B) South America. In North America, the posterior jugal process does not reach the mandibular or glenoid fossa, whereas in (B), it does. $j =$ jugal; $s =$ squamosal; $mf =$ mandibular fossa.

The anterior portion of the zygomatic arch seems to plunge abruptly into the rostrum or muzzle producing a rostral notch in the northern races. In southern skulls, the zygomatic arch meets the rostrum with a gradual slope. In living cougars, this should induce a discernible facial difference between these races. The southern races should have faces similar to those of leopards, whereas, the northern races should have faces more like those of housecats.

This rostral notch is caused by the morphology of the lip of the infraorbital foramen (an opening located in the jugal bone below the eye socket). In the northern races, the lateral edge of the foramen is raised and appears to project forward. This will make the lower eyelid appear to be swollen. In the southern races, the lateral portion of the foramenal lip is not raised. This same contrast can be seen between bobcat and lynx skulls with the bobcats mimicking the northern cougar races.

Thus are described the extreme latitudinal variations of the geographical races of cougars. The longitudinal variations are more complex and harder to comprehend.

BIBLIOGRAPHY


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First Cougar Hunting Season in South Dakota Black Hills Closes

By Helen McGinnis

On October 24th, the South Dakota Department of Game, Fish and Parks (DGFP) closed its first cougar-hunting season in the Black Hills in southwestern South Dakota after only 24 days. The controversial season was to continue until December 15th or until a total of 25 cougars or five breeding-age females—whatever came first—were taken by hunters. The Mountain Lion Foundation, based in California but now concerned with cougar issues nationwide, brought an unsuccessful lawsuit to stop the hunt.

The Black Hills are a long way from the East, but the recovery of that cougar population and its subsequent management are significant to cougar advocates who are monitoring cougar recovery in the Midwest and “Far East.” The Black Hills population is the first extirpated population to fully recover. Cougars historically occurred throughout South Dakota. A bounty was imposed to eradicate them in 1899. This goal was apparently attained by 1906. Four cougars were killed in the early 1930s, and then no more were recorded until 1958, after which the bounty was ended. In the 1960s, a few sightings and tracks were confirmed. Mountain lions were legally protected in 1978 as a state threatened species.

As anyone who has driven across the northern Great Plains can attest, the Black Hills are isolated from the Rocky Mountains. It is not clear if the cougars seen in the 1960s were survivors of the original native population or if they dispersed from the Rockies. The nearest viable population is 100 miles to the southwest in the Laramie Mountains.

The Black Hills National Forest, which encompasses most of the Hills in SD and Wyoming, is said to have more roads per square mile than any other national forest in the country. Some biologists have speculated that the entire East outside of southern Florida has too many roads for viable cougar populations to recover. The cougars in the Black Hills have shown that this is not the case.

It’s difficult to accurately estimate the number of cougars in any region, but there may have been 150 in the Black Hills at the start of the hunting season. The population may have been close to its carrying capacity.

The Hills are an important source of dispersers. Two radio-collared young males have demonstrated that the Hills are a source of at least some of the cougars that are turning up in the Midwest. One was killed by a train near Red Rock in northern Oklahoma on May 27, 2004. It had last been located by radio-telemetry on September 3, 2003 in the northwestern part of the Black Hills of Wyoming. In a straight line, this 2 ½ year-old male had traveled a minimum of 667 miles.

In late 2004 and early 2005 another radio-collared young male dispersed from the Black Hills into North Dakota, entered the northwest corner of Minnesota, and seemed to be headed for Manitoba when contact was lost. It traveled at least 500 miles since it left the Black Hills.

The reactions of the state wildlife agency and the public in South Dakota may foretell what happens when viable cougar populations reoccupy the middle and eastern portion of North America. In early 2003 the DGFP supported a bill to remove cougars from the state threatened species list. At hearings before the state legislature, DGFP officials said that cougars were a growing threat to humans. Taking them off the threatened list would allow them to establish a hunting season for the cats. (But Cougar Management Guidelines, released this summer, states that sport hunting has not been demonstrated to reduce the likelihood of attacks on humans.) DGFP told representatives of non-governmental cougar organizations that there were no plans to institute a hunting season. The bill passed the legislature unanimously.
Plans for a hunting season were announced in late 2004. In June 2005, ECF President Todd Lester sent a letter to the DGFP pointing out the importance of the Black Hills as a source of dispersing cougars that ultimately could re-colonize the East. Public hearings were held last summer. According to the agency, most participants favored a hunting season, which was announced in August. Outside the Black Hills, any landowner possessing a $10.00 mountain lion hunting license would be permitted to kill one cougar during the October 1st-December 15th season.

Two non-governmental organizations formally opposed the hunt. The Mountain Lion Foundation (of California) joined the Black Hills Mountain Lion Foundation and two private individuals in bringing a lawsuit to stop the hunt. The plaintiffs were concerned that the population size had been overestimated and that the removal of five breeding females was excessive. The day before the hunt was to begin, the suit was rejected.

Although the DGFP doubted that the quota would be met, the season was closed 24 days later when the fifth breeding age female was killed. Altogether 13 cougars were taken, including 7 females. Three of the breeding-age females had dependent kittens. Although it isn’t usual policy to look for young game animals orphaned by hunters, the DGFP yielded to public pressure and captured two of the litters. These six kittens will live their lives out in captivity.

The wisdom of the Black Hills cougar hunt and whether it will be repeated next year undoubtedly will be hotly debated in the coming months.

(Map showing the known range and confirmations of cougar populations in North America, with highlights on the isolated Black Hills population.)
THREE NEW COUGAR BOOKS RELEASED THIS YEAR


The book is divided into four main parts. The first, Identity: What is an Eastern Cougar? traces the changing European perception of Puma concolor from 1497, when Amerigo Vespucci first reported seeing one, to the present. During the 16th and 17th centuries, naturalists back in Europe believed that cougars were Old World lions. By the time that Audubon and Bachman were able to write a reasonably accurate account of cougars in 1845, they were becoming very rare in the East. By the early 1900s, they were presumably gone, but reports of sightings refused to disappear. Wildlife officials routinely dismissed these accounts in the later 1900s, so several grass roots organizations formed to carry on investigations. The question as to the identity of an eastern cougar isn’t addressed until later in the book.

Part 2—Reappearance: Where’s the Evidence? Here is a collection of journal articles, newspaper articles and correspondence on evidence of cougars in the East and Midwest and the response of wildlife officials. The lead article was presented by Bolgiano at the 6th Mountain Lion Workshop in 2000. She and her authors described 12 confirmed incidents involving cougars from Ontario to North Carolina and west to Missouri and Illinois—carcasses or live animals, scats, tracks, and videos. Ten of these incidents occurred east of Illinois and the Mississippi River, nine of them after 1990.

This overview is following by accounts of confirmations from many states: Arkansas (several confirmations), Missouri (ditto), Illinois, Iowa, Ontario, Quebec, New Brunswick, Massachusetts, Maine, West Virginia, Kentucky and Delaware. The controversy between the Michigan Wildlife Conservancy, which maintains that cougars are present on both the Upper and Lower Peninsulas, and the state Department of Natural Resources, which insists no breeding populations exist, is touched only lightly here.

Valuable new information on a controversial scat collected near Craftsbury, Vermont in the winter of 1994 is presented. From a source other than this book, I know that there were convincing sightings of a three cougars in the vicinity. The cats were tracked in the snow, and a scat was collected. It was submitted to the National Fish and Wildlife Forensics Laboratory for identification. Bonnie Yates microscopically identified hair of cougars and other mammal species in the scat. In 1997, with the science of DNA analysis rapidly advancing, the scat was submitted to Holly Ernest in California. She determined that the animal that deposited the scat was a canine. But was the scat that Ernest analyzed the same one that Yates studied? Vermont District Wildlife Biologist Cedric Wright, who had initially submitted the scat, said that the one that was forwarded to Ernest was smaller than the one collected on the snow. Bolgiano investigated this problem. Yates
told her that the scat contained a mixture of mammal hairs and that she never intended to imply that a
cougar deposited the scat. “What I found were signs of a scavenger. The cougar hairs I found
probably indicate a cougar carcass scavenged by another animal.”

Additional new information on the two cougars taken in Pocahontas County, West Virginia in 1976 is
also presented. WV Department of Natural Resources employees have frequently stated that parasites
in the cougars could only have come from south of Athens, Georgia, and that the cats were thus
former captives. Bolgiano learned that the lab that supposedly did the parasite analyses “did not do a
clinical case” on this incident.

The next section is entitled *Outlook: Can They Come Back?* Here we have the 1982 Eastern Cougar
Recovery Plan, which was never implemented, and a journal article by two wildlife biologists with
the Massachusetts Division of Fisheries and Wildlife published 20 years later. Both these documents
call for a systematic search for evidence by professionals and/or trained volunteers. This hasn’t been
done. The searching is still conducted mainly by non-professional volunteers.

The 8-page essay by DNA specialist Melanie Culver is alone worth the price of the book. Here, for
the first time in print, in plain English, Culver discusses her DNA study of cougars from throughout
their range and its implications, updated with follow-up work by other researchers at the population
level in several areas of the West. We now learn what an eastern cougar is—it is a cougar of the North
American genotype that happens to live in the East. There may have originally been several
genetically distinct populations in the East. It is unlikely that we will ever be able to document them
because fewer than a dozen historic specimens have yielded DNA suitable for analysis.

This section also includes ECF’s request in 2000 that all cougars living as wild animals in the East be
protected because former captives cannot be distinguished from wild presumed eastern cougars in the
field. The US Fish and Wildlife Service turned down this request.

Finally, David Maehr contributes an essay on the possibility and problems with re-introducing
cougars in the East. Todd Lester, ECF founder and president, describes his life-changing encounter
with a wild cougar in southern West Virginia in 1983 and sets forth the ECF’s goals.

The final part of the book is a 55-page bibliography of published and unpublished writings even
remotely related to eastern cougars. Unfortunately, this is arranged by categories such as “Books,”
“Periodicals [articles],” etc. If you are interested in a specific topic—let’s say, cougars
in Massachusetts—you’d have to read through the entire 55 pages, and even then you would have
difficulty determining whether or not some titles contain any relevant information. Perhaps sometime
this section will be converted to a pdf document with key words added, making such a search quick
and easy.

If you are even casually interested in eastern cougars, this book belongs on your shelf.
--Reviewed by Helen McGinnis
Beast of Never, Cat of God: The Search for the Eastern Puma by Bob Butz (Lyons Press, 243 pp., Hardbound $22.95, ISBN 1-59228-446-9). This is an excellent book that will entertain people from all walks of life. Butz does an excellent job of playing the role of "true reporter", and definitely doesn't play favorites in this book. He tells the saga of cougars in Michigan as he sees it. The truth can be painful, and Butz's pen dishes it out to all of the major players involved. The MWC, DNR, and CN all take their fair share of lashings. On the other side he gives them credit where credit is due.

Butz draws you in as only a real life detective can, and holds your full attention to the very end of the book. Those that are new to the controversy of mountain lions living in Michigan will have the entire saga laid out before them. Seasoned veterans who have been following the battle for years will learn many new facts about the evidence of growing puma populations that exist in Michigan and other places in the east.

Many readers, that are looking for "the answer", may come away from the book as frustrated as they were before they read it. This frustration seems to stem from the fact that the fuel feeding the controversy is pure political fodder, and has little to do with the simple question of whether or not pumas exist in Michigan and the rest of the eastern states. There are still many questions left unanswered, but the book clears up the major points. The reader is left to form their own opinion about the status of cougars in Michigan which is still definitely up in the air. If you are interested in cougars in the eastern USA this is an absolute must read!

--Reviewed by Kevin Heyde. Originally posted on amazon.com


CHRISTMAS IDEAS: ECF offers two books by Chris Bolgiano, the award-winning LIVING IN THE APPALACHIAN FOREST: TRUE TALES OF SUSTAINABLE FORESTRY (Paperback $23.00 including shipping) and MOUNTAIN LION: AN UNNATURAL HISTORY OF PUMAS AND PEOPLE (Paperback, $19.00 including shipping). Send your check to ECF Books, 10375 Genoa Road, Fulks Run, VA 22830. Include instructions if you like Chris to inscribe the book.

ECF’s cougar T shirts are on sale for $8.00 each including shipping. Supplies of S, M and L are limited. Send checks to Helen McGinnis, PO Box 300, Harman, WV 26270.

More information on these items is available online at ECF’s website, www.easterncougar.org.
BECOME AN ACTIVE MEMBER OF ECF

The Eastern Cougar Foundation seeks to document the existence of cougars in areas from which they may have been extirpated. We are science-based and welcome the active participation of anyone willing to acquaint him/herself with the basics of cougar biology. No advanced degree or employment as a professional in a wildlife agency, college or university is required. We are an educational organization that advocates the recovery of the East’s top native predator. We seek protection for all wild cougars east of the Mississippi River. We seek to build tolerance for cougars in this broad region.

All of us are volunteers. Whatever ECF accomplishes is up to us. Here are some things that need to be done:

**Webmaster:** Chris Bolgiano, who designed our beautiful website, can no longer continue as webmaster. We need someone to keep it up to date and to make additions. Bev Fronk, a long-time eastern cougar activist in Montoursville, PA, has designed an attachment on cougars for young children. We need to get this on our website. Bruce Wright’s classic, long out-of-print THE GHOST OF NORTH AMERICA (1959) is being converted to a pdf document; we expect his daughter will give us permission to make it available to everyone as an attachment.

**Searching for Evidence and Evaluating It:** Some of the searching is done in the field, some on the phone and some on the Internet. Needed skills are the ability to distinguish cougar sign from that of other animals, which you can learn, and tact.

Hair snares “baited” with the urine of estrous female cougars are a promising new technique for documenting cougars that is proving successful in Quebec, New Brunswick and possibly Ontario. Hair snares are time-consuming to maintain, so you probably would only want to set up a few in an area near you. You would need to work with a wildlife professional to ensure credibility.

**Grant Writing:** ECF received grants from two foundations in 2002 that were used to purchase 20 remote cameras that have been set out in the southern part of the Monongahela National Forest in West Virginia. We need to be thinking of writing other proposals. Two ideas are funding for a public attitude survey, and funding for hair snare supplies. You may have ideas for cougar-related projects you’d like to do.

**Speakers Bureau—Slide and PowerPoint presentations:** Help locate visual materials so that ECF members can speak to classrooms and groups. There’s lots of interest in cougars in the East and also lots of misinformation. Volunteer to speak in your local area.

**Newsletter Contributions:** Articles, photographs, drawings and letters to the editor are welcome. Ask the editor before embarking on an ambitious project to make sure it’s suitable.

If you’d like to become active in ECF, get in touch with Todd. Contact information is on the back of this newsletter.

*If you can’t remember paying your $10.00 ECF dues, they are due now. In January 2006, dues will be raised to $15.00 per year. They will be payable every January thereafter regardless of when you join. People who join only a few months before the end of the year will be mailed back issues for that year. Please provide your email address if you have one. We hope to issue the next newsletter in February or March 2006. To save printing and postage costs, we will send as many newsletters as possible electronically.*
This remote camera photograph first started showing up on the Internet in September 2004. It has been passed off as evidence of cougars in various parts of the East, but deer is a mule deer. It was probably taken somewhere in the Great Basin, perhaps in NW