



Friends of the Florissant Fossil Beds Newsletter

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Populus crassa — A Large Poplar Leaf Fossil

Steven Wade Veatch

Western Interior Paleontological Society

"When the mountains are overthrown and the seas uplifted, the universe at Florissant flings itself against a gnat and preserves it."

— Dr. Arthur C. Peale, Hayden Expedition Geologist, 1873.

West of Pikes Peak—near the small community of Florissant—there is a beautiful mountain valley where the rocks reveal a prehistoric Colorado. About 34 million years ago, raging mudflows from volcanic eruptions poured into this valley. The silica-rich mud buried the base of redwood trees that grew in the Florissant valley. The lower trunks of these trees were ultimately petrified.

The mudflows also dammed a river that was flowing in the valley, forming a long and narrow lake. Over time the fine-

grained sediments at the bottom of the lake became the burial site for countless insects and plants. These sediments compacted into layers of shale, preserving plant and animal remains as fossils.

The Colorado Springs Mineralogical Society hosted a field trip to the Florissant Fossil Beds National Monument that followed the 2005 Pikes Peak Gem and Mineral Show. After a tour of the monument, the group went to the Florissant Fossil Quarry, a commercial collecting site.

Everyone in the field party found a number of plant and insect fossils. During the last five minutes of the field trip an 11th grade student announced that he had found a large leaf fossil. The clatter of shale fragments being split in search of fossils and the lively discussion among the fossil hunters quickly ended at this

declaration. Everyone rapidly gathered around the student to see the prized leaf fossil. Excitement filled the mountain valley as the specimen was being exposed for the first time. Using standard paleontological techniques, the young man slowly and carefully extracted this remarkable specimen. The fossil was removed in fine condition and a celebration followed.

The high school student uncovered a remarkable Eocene-age poplar leaf, *Populus crassa*. The fossil leaf impression, on a slab of lake shale, was formed in ancient lake sediments and volcanic ash. The lanceolate (shaped like a spear) leaf has an overall length of 18.5 cm; the leaf length is 15.3 cm; the stem is 3.2 cm; the width at the widest point of the leaf is 4.5 cm. The base of the leaf is rounded.

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Lake Florissant's Big Neighbor and the South Platte River

By Donald P. McGookey

Lake Florissant was formed when east flowing mudflows from the Guffey volcano plugged the south-flowing valley of an ancestral creek. Guffey volcano was an explosive, fairly large, volcano. The base of the volcano exceeded 20 miles in diameter. This type of volcano violently ejects large quantities of ash,

bombs and tefra (small sharp pieces of ejected lava) that build a cone around a central vent. There were very few lava flows. The cone may have attained 6000 to 8000 feet in elevation above the surrounding area (McGookey, 2001). The climate of Oligocene time (34 to 32 million years ago) in this area was wetter than the present climate. The combination of

abundant rainfall and the loose ejecta high on the cone resulted in continuous mudflows (lahars) that traveled as much as thirty miles away from the cone.

Prior to the building of the Guffey volcanic cone all the streams of South Park, and extensive areas to the west of South Park,

(Continued on Page 9)

Notorious Outlaws Caught Near Florissant

Cops and robbers in the Florissant Valley – Wednesday, Feb. 20, 1878

Submitted by Beth Simmons

Original article in Denver Daily Tribune Feb. 24, 1878, p. 4, sent from Colorado Springs on Feb. 21, 1878

Accessible on line at

[http://gunnison.aclin.org/Archive/skins/CHNC/navigator.asp?](http://gunnison.aclin.org/Archive/skins/CHNC/navigator.asp?skin=CHNC&BP=OK&AW=1099196851984)

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“A Good Job-Capture and Punishment of Two Notorious Outlaws”

“COLORADO SPRINGS, Feb. 21, 1878”

“Quite a ripple of excitement spread through this community this morning, caused by the arrival of a squad of armed and mounted men from the mountains, having in charge the noted outlaws Miller and Klowan, who it will be remembered evaded a hot pursuit of the officers of this county at the time McCarthy, the leader of the gang, was captured last winter. The squad that captured Miller and Klowan, consisted of Hon. W.W. Webster, President pro tem, of the State Senate, Walter Bird, Avery Tubbs, John Cabler, Jewett Palmer, A.D. Starkes, Wm. Wright, F.R. Smith and his son, Louis Smith. The capture was made about four miles from Judge Castello’s, at Florissant, at about four o’clock yesterday afternoon. Miller and Klowan were surprised and ordered to surrender, notwithstanding which they

sprang for their arms, when a volley was poured into them and Klowan was wounded, but not fatally, the ball striking him on the left eyebrow and glancing off. This resolute action on the part of the pursuers caused an immediate surrender, and this morning, after being brought into town, they were taken before Judge Henry, who is holding district court here, and pleaded guilty to the indictments which the grand jury had brought against them. These men, with McCarthy, who has been convicted on three indictments, were the scourge and terror of the South Park cattlemen and ranchmen, and the news of their capture was hailed with great satisfaction. Certainly great praise is due to the men who spent so much time and trouble and ran such risks to effect their capture. Both the outlaws are desperate men and good shots, and had the plans for their capture failed in any respect, the loss of lives, valuable to this community, might have been the result.”

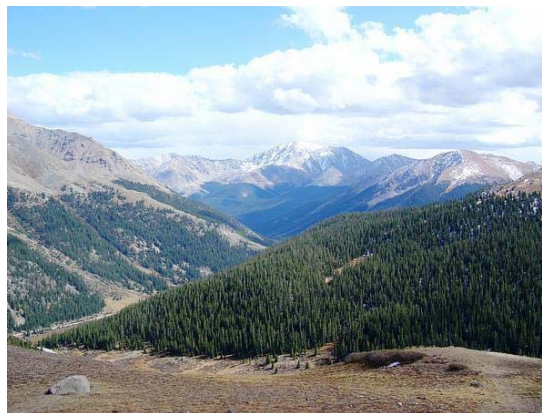
Note: Spellings were not changed to protect the guilty, innocent, or Judge Castello’s town. Ranchmen, including Adeline Hornbek and Judge Castello in the valley and all of the cattlemen of South Park could now rest easy, knowing their herds were safe.

The Alpine Tundra

By J.J. Huie

The high point of my summer (quite literally) is hiking in the alpine tundra of Colorado. No other outdoor experience is as exhilarating as spending time above timberline. If you do, you will witness scenes of complete peace and stillness, and later on during the same hike you may experience the most violent weather Colorado has to offer. My hike up Mt. Elbert (which at 14,433 ft. is the highest point in Colorado) last summer reminded me not only of the grandeur of the alpine world but also its potential dangers.

On a day in late June, I started hiking at 5:45 am toward the South Mt. Elbert Trailhead from a parking lot near the Lakeview Campground, which is off of Lake County 24 (paved up to the campground) near the town of Twin Lakes. I hiked for approximately two miles on a four-wheel-drive road to the official trailhead, using my headlamp to light the way during the first few minutes. The early morning start had been cool, but now I had the chance to put my fleece jacket in my pack. Right before reaching timberline, the intense solar radiation from being at over 11,000 ft. reminded me to rub sunscreen onto my face and neck. As I passed through the krummholtz (a German word meaning “crooked wood”), which consists of stands of wind-deformed trees in the transition area between the subalpine forest and alpine tundra, I became giddy with the thought of reaching the world above trees for my first time that summer.



Mt. Elbert

Shortly after moving into the alpine tundra, I spotted both pikas (*Ochotona princeps*) and yellow-bellied marmots (*Marmota flaviventris*). Pikas, part of the hare and rabbit family, have brownish-gray fur and a round body with short legs. A pika is about the size of a juvenile cottontail rabbit. Unlike marmots, pikas do not hibernate. They make hay piles during the summer for use in the winter months. I have yet to take a trip into the alpine tundra without seeing a pika standing on top of a rock or darting in and out of rocky piles near meadows. The yellow-bellied marmot is much larger, being the largest of the ground-dwelling squirrels. Their bodies are yellow-brown to rusty-

(Continued on Page 6)

General Tommy Franks Visits the Florissant Fossil Beds National Monument

By **Montgomery Connors**

General Tommy Ray Franks visited the Florissant Fossil Beds National Monument on August 20, 2005. General Franks met with Superintendent Reggie Tiller, park staff, and members of the Friends of the Florissant Fossil Beds. General Franks, a board member of the National Park Foundation, visited the Fossil Beds to learn more about this unit of the National Park Service.

Franks is a retired General in the United States Army, previously serving as the Commander-in-Chief of United States Central Command, overseeing United States Armed Forces operations in a 25-country region, including the Middle East. General Franks succeeded General Anthony Zinni to this position on July 6, 2000 and served until his retirement on July 7, 2003. He was succeeded by General John Abizaid. Franks was the U.S. general leading the attack on the Taliban in Afghanistan in response to the terrorist attack on the World Trade Center and The Pentagon. Franks also led the 2003 invasion of Iraq and the overthrow of Saddam Hussein and was commander-in-chief of the American occupation forces.



Superintendent Reggie Tiller welcomes General Franks to Florissant Fossil Beds National Monument

New Topaz Discovery

By **Steven Veatch**, Geologist and **Rich Fetterd**, Prospector

Topaz, an aluminum fluorosilicate with the formula $Al_2SiO_4(F,OH)_2$, is found in a number of Colorado localities. The Tarryall area in Park County is known for the striking topaz specimens discovered there. Topaz, with a hardness of 8 on Mohs scale, is a gem mineral harder than quartz. Topaz in the Tarryall Mountains forms in miarolitic cavities in pegmatites (coarse-grained granite). The China Wall, a granitic cupola in the Tarryall area, also yields topaz.

East of the China Wall, the Mutakat Road (Forest Road 211) winds its way near an area where a number of claims have been producing gem topaz for several years. The Hayman Fire of 2002, the largest fire in Colorado's history, has been a major factor in the discovery of new topaz in the area. Frequent rain storms form newly eroded gullies that uncover topaz-bearing pegmatites. Mountain rains have also revealed numerous topaz and quartz crystals on the surface. Rich Fetterd, a member of the Lake George Gem and Mineral Club, staked the Petra Placer in April, 2004 after he discovered a number of fine topaz specimens at this locality. The name of the claim comes from the Latin *petra*, meaning rock or stone. The Petra Placer is south-east of Pilot Peak (SW1/4 Ne1/4 Sec. 12 T. 11S, R72W).

Fetterd is presently working on topaz-bearing pegmatites that are part of the Redskin Granite, a zoned oval-shaped intrusion

covering approximately 49 square kilometers. The Redskin Granite, a late stage variant of the Pikes Peak Granite, intrudes the western part of the Pikes Peak Batholith. Pikes Peak Granite weathers

pink whereas the Redskin Granite weathers red due to the oxidation of iron-rich micas. The Redskin Granite is also known for its topaz-bearing pegmatites concentrated within and near the contact with Pikes Peak Granite.

The specimens from the Petra Placer are remarkable for their



(Continued on Page 13)

Culturally Modified Trees

By **Harv Burman**, Park Ranger

I began work (it's hard for me to call my job "work") at Florissant Fossil Beds N.M. in 1994. When the Chief Ranger handed out assignments for that season, she was reluctant to give me extra jobs since I was a first-year ranger. She asked another ranger if he were interested in scarred trees, but he was less than thrilled. I said, "I'll help!" I had no idea what a "scarred tree" was! I began to read what little I could find on the subject. Native peoples, in this area probably Utes and Apache, cut the tree bark and peeled a portion of it in order to scrape the inner layers of cambium for food, medicines, or for use in spiritual activities. A permanent scar was left on the tree but generally they were otherwise unharmed by the peeling.

I followed the directions in our "Culturally Scarred Tree Report" to find the seven trees recorded at that time. In the process, I discovered other trees that seemed scarred, or peeled, in a very similar way. I was hooked! Then I began wandering areas of the Monument on my days off looking for more "scarred" trees. After three or four years the number was up to 30 or so. Then Celinda Kaelin introduced me to trees whose shape had been modified from being bent parallel to the ground when young. The trees then grow vertically again resulting in an "L" shape. Most of these trees are bent toward Pikes Peak and were possibly used in spiritual activities. I found that type of tree as well, so the designation of "scarred" or "peeled" tree no longer fit. We now refer to them as "Culturally Modified Trees." The trees had sometimes been referred to as "Ute Trees." However, other native peoples such as the Jicarilla Apache also frequented this area and modified trees.

Over the last few years I have continued to find additional trees that were bent or peeled and have been working to GPS each tree to record its exact location. Some of the trees are so obvious to me that I have no doubt of their authenticity. Some have modifications that could possibly be explained by non-human occurrences, but I recorded them all for professional archaeologists to judge at a later time. With the GPS coordinates, they have been entered into the Monument's map database and will be easy to relocate in the future. The number of documented trees is now up to over 90 and I continue to find new ones. I have also found Culturally Modified Trees outside of the Monument, from Guffey to Vedauvo Park near Laramie Wyoming. Over 100 have been found in Great Sand Dunes National Park.



Adjacent to Florissant, the Sanborn Western Camps have over 100 and nearby Mueller State Park is currently surveying for these trees.

Locating and documenting these trees as archaeological sites are important for many reasons, but perhaps most important is that they are a perishable resource. These trees were peeled or bent over a century ago, and many are reaching the end of their lifespan. At least one tree died since I documented it, so it important to locate and document them before more are lost. The Friends of Florissant Fossil Beds are working closely with the Monument to obtain a grant to further survey, record, and study these vanishing resources.

The next time you are out in the forest, take a closer look at the trees around you. You too may discover trees peeled or bent by native peoples over a century ago. And you too may be hooked by the bug to seek out more of these

living archaeological gems.



Dear Friends of the Florissant Fossil Beds

I am extremely grateful to the Friends of the Florissant Fossil Beds for making my summer here possible. There is no other internship I would have preferred, and the chance to work at Florissant Fossil Beds National Monument, in such a beautiful and scientifically significant setting, is priceless.

During the course of the summer, I assisted visiting researchers with fieldwork, designed a new site monitoring database, re-recorded photo sites in GPS coordinates, and scanned several hundred monitoring photographs. In addition to these tasks, I have collected samples for my undergraduate thesis on Rocky Mountain elevation in the Eocene, which I will be writing this coming year.

Thanks to this internship, I am now sure that I would like to enter the field of museum collections and curation. I believe museums, National Parks, and similar organizations fulfill an invaluable service to the public and to science, and it is my goal to contribute to that service. The experiences I have had and the

people I have met here will doubtless influence my future career path. It was a particular honor to work for Dr. Herb Meyer, whose work I greatly respect and admire.

I have worked with an excellent group of people – interns, volunteers, staff, and visiting researchers – and I would like to again thank the Friends for making this possible. I will look back on this internship with many happy memories, and I hope to remain involved with Florissant Fossil Beds National Monument for many years to come.

I hope that the Friends will continue to fund this internship in the future, as it provides a service to the Monument and a wonderful educational opportunity for the fortunate interns.

Sincerely,
Melissa Barton
2005 Paleontology Intern

Colorado School of Mines—Teacher Enhancement Classes

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CT-05123-05F

0.5 semester credit hour

Date: October 15

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Instructors: Steven Veatch, Don Miranda

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The Alpine Tundra (Continued)



Pika

brown, and they have whitish fur about the mouth and chin. While they share the same habitat with pikas, they

hibernate during the winter.

Even before 8 am, clouds started filling the sky. As I neared the summit (about four to five miles from the official trailhead), two hikers emerged from a different route up the peak and passed me to join some friends. When I reached the summit, at least a

half-dozen people were already there. I might have been disappointed at having my solitude disturbed were it not for one of the best views I've ever experienced. A fellow hiker pointed out a dozen other 14ers (14,000 ft. peaks) to me, one of which was Snowmass Mountain, which not surprisingly was still mostly covered with snow above timberline. During the five minutes I spent on the summit, the temperature seemed to have dropped 20°, and clouds obscured the views in all directions. I even felt some snowflakes.

The sun came out again during my descent, but my experience at the summit (which occurred before 9 am) reminded me of the importance of starting early during any trip into the alpine tundra. Perhaps even more dangerous than the cold temperatures and winds one can face at high elevations is the lightning that accompanies afternoon thunderstorms. While you can usually depend on the mornings to be calm and clear in the Colorado Rockies, you can also depend on the afternoon thunderstorms. I've read that a good guideline to follow is to be descending by noon to avoid lightning, but my experience has been that descending by 11 am feels much safer when dark clouds are sailing through the sky. And while preventing sunburn, pacing oneself, and staying hydrated are key to keeping the trip enjoyable, it's more important from a safety standpoint to be hiking with a group or to be on a mountain with other people.

Another important consideration is minimizing one's impact on the alpine tundra. The harsh conditions above timberline result in slow growth rates for alpine plants, so hiking on these plants causes long-term damage. A 14er may have hundreds of people hiking on it on a weekend, so preserving the fragile ecosystem above timberline means sticking to the trail (or non-vegetated surfaces if no trail exists) and not cutting switchbacks.

Presentation: China and India's Appetite for Natural Resources

The Friends of the Florissant Fossil Beds will host a community seminar presented by Vince Matthews, the Colorado State Geologist. Dr. Matthews will present:

China and India's ravenous appetite for Natural Resources: Their potential impact on Colorado

Colorado's history is steeped in a rich horde of natural resources. Today the state is still a major provider of mineral and mineral fuels. However, worldwide shortages of many resources caused by the explosive and unprecedented economic growth of the two most populous nations on earth, China and India, will put increasing strains and pressures on Colorado's rapidly expanding and rapidly urbanizing population. An already strong demand for Colorado's rich reserves of oil, natural gas, coal, uranium and metals will only increase as unparalleled competition for Earth's limited resources grows.

The hour-long seminar will be presented at Colorado College's Tutt Science Center at 7 p.m., December 14, 2005. To get there, take the Uintah Street exit on I25 and head east, just past Cascade turn right onto a parking lot. The parking lot is east of the Tutt Science Center. For more details call Steven Veatch at 719-748-5010. There is no cost for the seminar.

Populus crassa (Continued)



Eocene-age plant and insect fossils can be collected by paying a modest hourly rate at the Florissant Fossil Quarry. This commercial quarry is just south of Florissant. Photo by S. Veatch, © 2005.

Poplar is one of the largest fossil leaves found in the Florissant Formation. The tree, needing more moisture than some of the other trees, grew around the edge of ancient Lake Florissant—improving the chance of the leaves becoming fossilized.

This ancient poplar leaf from the Eocene will be studied by paleobotanists and become part of the paleontological record of the Florissant Fossil Beds. Although fossils at the Florissant Fossil Beds National Monument are protected, fossils can be collected at the Florissant Fossil Quarry, a commercial collecting site. Both locations provide an extraordinary window to the prehistoric world of the Eocene.

Taxonomy	
Class	Magnoliopsida
Order	Salicales
Family	Salicaceae
Genus	<i>Populus</i>
Species	<i>crassa</i>

Acknowledgments:

Brandon Mimiaga, a member of the CSMS field trip, discovered the fossil poplar leaf. Stan Balducci, of the Western Interior Paleontological Society, contributed to this paper. Joe Hall, who was a summer intern at the Florissant Fossil Beds National Monument, provided the stratigraphic column. Joe Bowman, from Tucson, Arizona, was a member of the field trip and provided several of the photographs for this paper. Shelly Veatch provided critical review.

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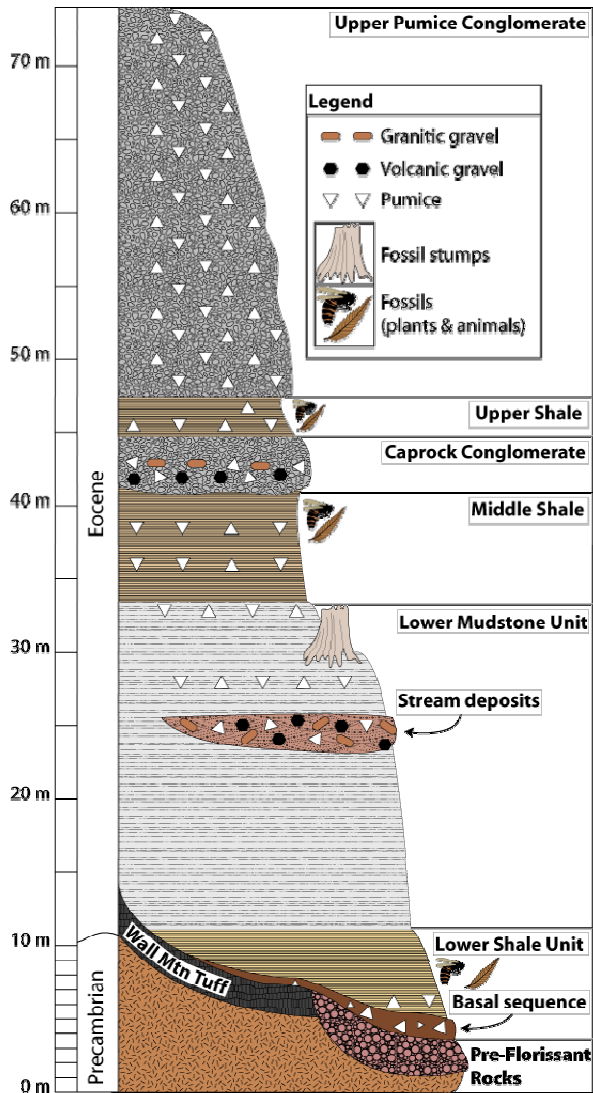
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Populus crassa is one of the more common Eocene leaves in the fossil record at Florissant. This specimen is important due to the detail seen in the fossil leaf and that the fossil is largely intact. Photo by J. Bowman, © 2005.

Populus crassa (Continued)



Stratigraphic column of the Florissant Formation and its underlying rocks (modified from Evanoff et al., 2001)

Note: the specimens from the commercial Florissant Fossil Quarry, including the *Populus crassa* specimen, are from the lower shale unit in the Florissant Formation.



A number of remarkable fossils have come from this exposure of the Florissant Formation at the commercial quarry north of the national monument on Teller County Road 1. Photo by J. Bowman, © 2005.

Lake Florissant's Big Neighbor (Continued)

drained to the south into the Canyon City embayment (Figure 1). Mudflows from the Guffey Volcano pored into all of the old valleys and the resulting dams created a large lake called "Ancestral Lake Antero" that drowned much of the South Park intermountain basin (Figure 2).

Over 2000 feet of water-laid andesite ash that is interlayered with air-fall volcanic ash and lahar breccias are preserved in the Antero Syncline (Scarborough, 2001). This syncline is a north-south geologic structure to the east and south, but not under, present day Lake Antero (Figure 2). Paper-thin shales like those deposited in Lake Florissant are common in Ancestral Lake Antero sediments. Locally these deposits contain insects, twigs and leaves, mollusks and fish (Epis and others, 1979). Around the edge of the lake beach sands are present in some areas and algal reefs are common.

The sediments of Ancestral Lake Antero are preserved at elevations that average 1500 feet higher than the sediments of Lake Florissant. It is probable that at the time of lake formation ash from the Guffey Volcano and other volcanic sources in the Thirty-Nine Mile Volcanic Field covered and buried the entire Front Range. Ancestral Lake Antero eventually found an outlet from South Park to the plains east of the Front Range on top of this cover.

The South Platte River drainage is from South Park to Denver is a superimposed drainage. The river cut downward from the Mid-Tertiary sediment cover to incise a canyon through the Puma Hills from South Park to the northwest part of Lake Florissant. In the same manner the river incised a canyon into the Front Range from Lake Florissant to the eastern foothills (Figure 3). The Mid-Tertiary blanket of sediment has long since been removed by erosion.

Thus developed the weird canyon path of the South Platte River through the mountains that we see today. Study of many of the river systems of the Rocky Mountains will reveal similar occurrences of superposition. Collectively these superimposed river systems are evidence that most of the mountain region was buried by Mid-Tertiary time by thick blankets of sediment (much of which came from volcanoes) that has since been removed by erosion. That erosion continues today.

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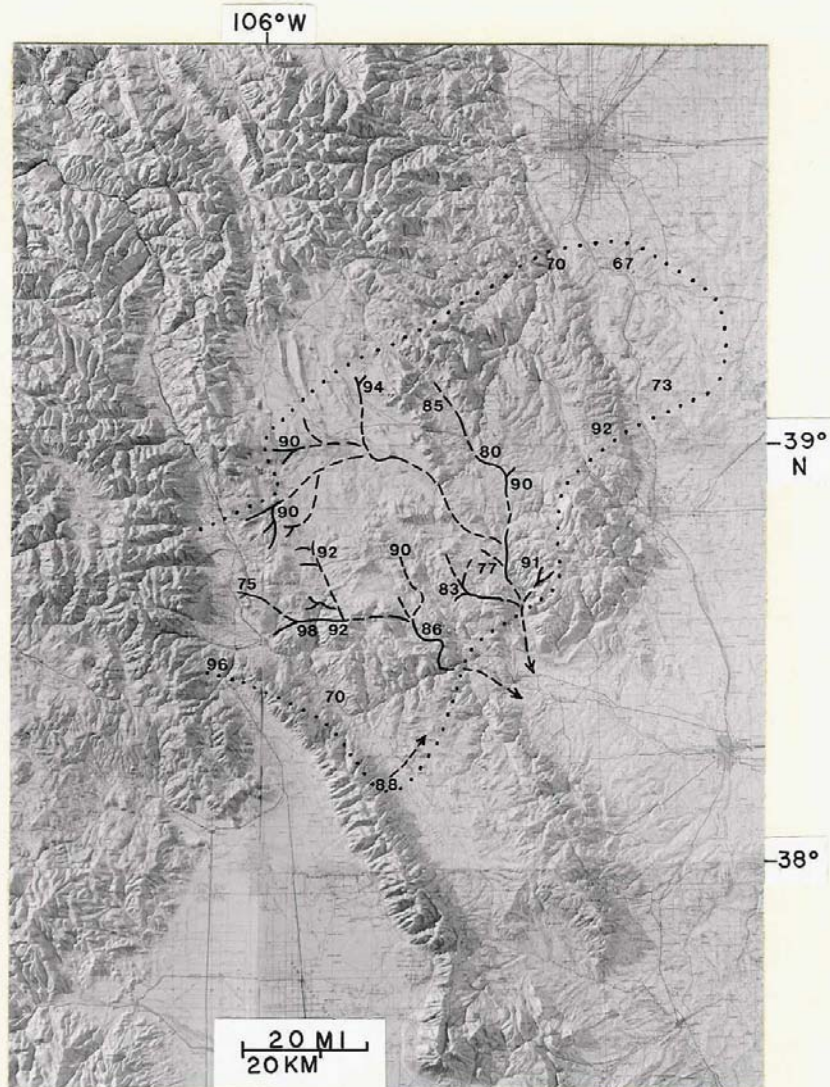


Figure 1. Physiographic map of central Colorado. The extent of Wall Mountain Tuff and the pre-Guffey Volcano drainage from South Park are posted. Contributed by C.E. Chapin (personal communication, 2000).

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Lake Florissant's Big Neighbor (Continued)

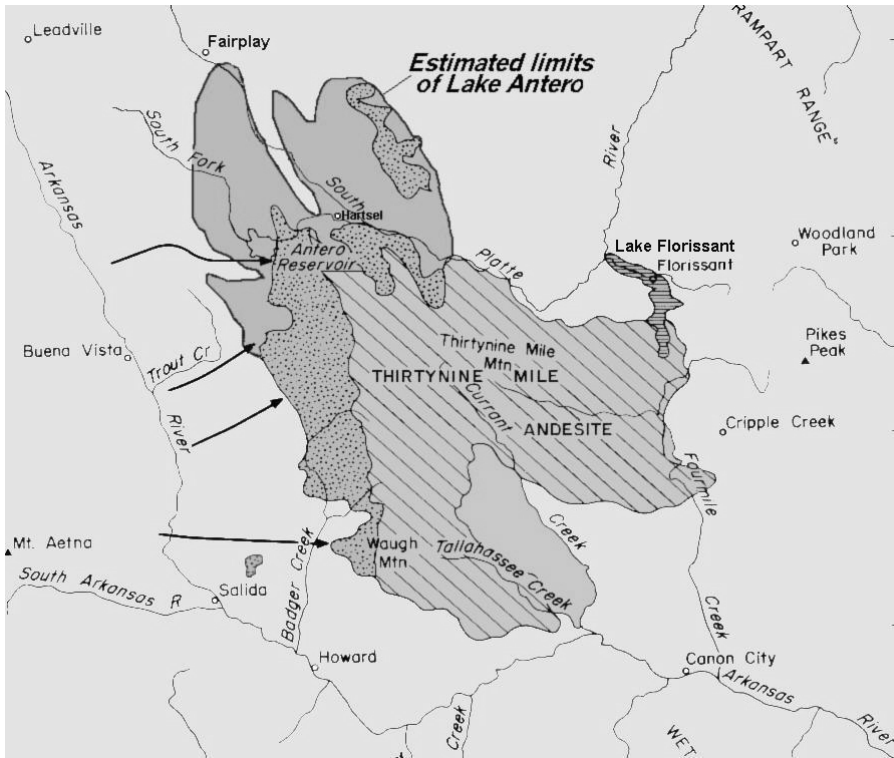
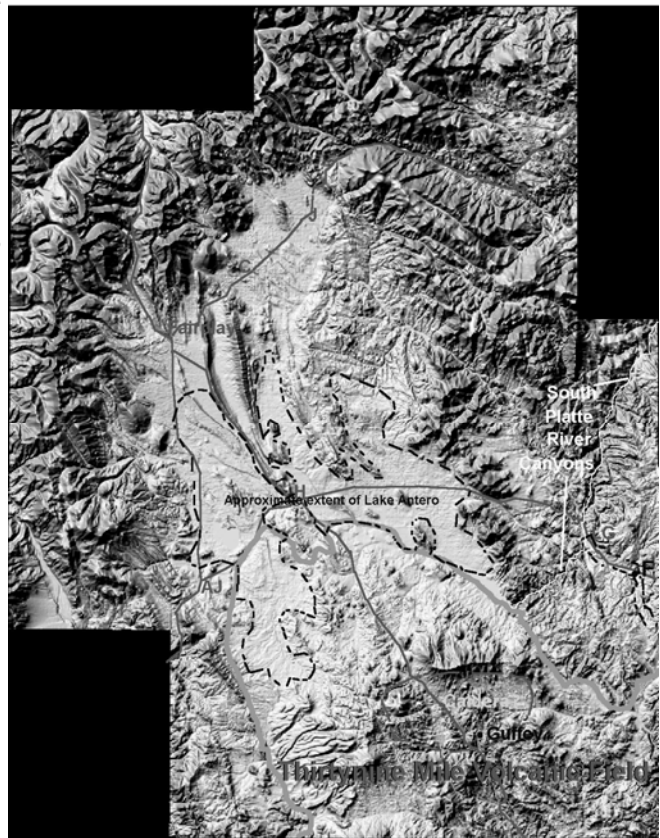


Figure 2. Estimated extent of Ancestral Lake Antero. Stippled area indicates where the lake sediments crop out today.

Figure 3. Physiographic map of Park County. South Platte River is superimposed into crystalline rocks in the canyons.



(Continued on Page 11)

Lake Florissant's Big Neighbor (Continued)



Figure 4. Outcrop of lake beds along Park County Road 53 in Antero Syncline.

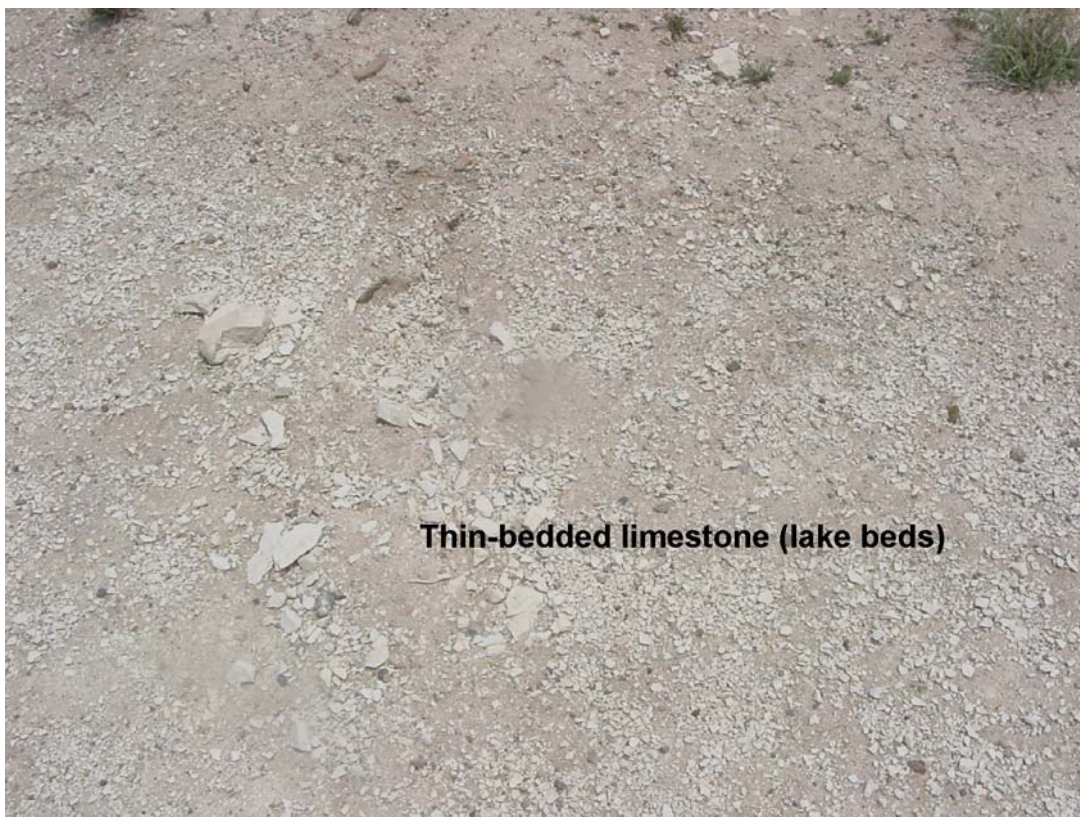


Figure 5. Close-up of thin-bedded limestones in Figure 4.

(Continued on Page 12)

Lake Florissant's Big Neighbor (Continued)



Figure 6. Algal limestones that were deposited along northeast edge of Ancestral Lake Antero. Outcrop is along Elkhorn Road (Park CR 12) northeast of Hartsel.



Figure 7. Paper-thin shales (water-laid volcanic ash) along Elkhorn Road.

Topaz (Continued)

size and clarity. Many specimens have a bluish-tinge.

The specimen shown in figure 1 was found loose, just below the surface in an alluvial/colluvial deposit. The slightly abraded specimen had been transported a short distance from the crystal-bearing pegmatite. This topaz specimen has a blocky, prismatic crystal habit with some of the prism faces slightly etched. The pale-blue crystal has a transparent interior and is terminated at one end—the other end is the cleavage plane. The specimen in figure 2 was found shortly after a rain shower in a ravine on Fretterd’s claim.

New specimens continue to be found. Anhedral specimens are faceted into gems, while euhedral specimens make their way into museums or the mineral cabinets of rock hounds. The Petra Placer is now a significant Colorado topaz locality.



Figure 1. Topaz specimen from the Petra Placer. This prismatic crystal specimen terminates with a frosted pyramid on top. Rich Fretterd specimen, Steve Veatch photograph.



Steven Veatch lives in Florissant and conducts earth science research projects in the Pikes Peak area.

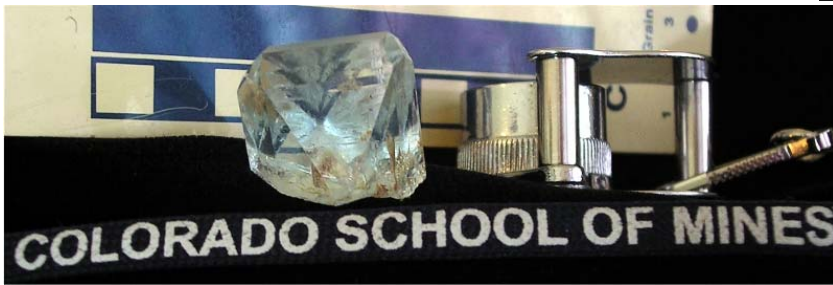


Figure 2. Topaz from the Petra Placer. Rich Fretterd specimen, Steve Veatch photograph.



Rich Fretterd prospects throughout Teller, Fremont, and Park counties, Colorado.

Cripple Creek School of Paleontology

October 22, 2005



This entertaining and educational class is for anyone interested in an introduction to the fascinating world of fossils. This adventure class:

- highlights astonishing new dinosaur discoveries
- features the mammoth found at Florissant and other Pikes Peak area fossils
- presents how to find and prepare fossil specimens
- is perfect for teachers K through 12

includes a field trip and hike at the Florissant Fossil Beds National Monument and a guided tour of the Rocky Mountain Dinosaur Research Center

Itinerary

8:30 am	Presentations and discussions at the Park and Recreation Center
11:30 am	Board bus for the Florissant Fossil Beds National Monument
12:00 pm	Lunch at the Florissant Fossil Beds National Monument (bring sack lunch)
1:00 pm	Presentation by a Park Ranger about the fossil beds
1:25 pm	Explore the fossil beds (guided hike)
2:25 pm	Leave for Rocky Mountain Dinosaur Research Center (Woodland Park)
3:00 pm	Arrive Rocky Mountain Dinosaur Research Center
4:45 pm	Leave for Cripple Creek
5:30 pm	Arrive downtown Cripple Creek

Part of this class is conducted in the field and requires participants to be in good general health and able to do an easy hike about one mile long. Come prepared with clothing appropriate for mountain weather in the late fall. Cripple Creek offers many interesting diversions after class.

Date:	October 22, 2005
Time:	8:30 am to 5:30 pm
Place:	June Hack Community Center in Cripple Creek
Fee:	\$35.00 includes materials, transportation, completion certificate, and admissions
Register:	Call Cripple Creek Park and Recreation at 719-689-3514 today

Advertising Rates

Business Card Size:	\$6.00
¼ Page	\$12.00
½ Page	\$24.00
Full Page	\$48.00

You may submit advertisements to: Steven Veatch, P.O. Box 5938, Woodland Park, CO 80866 or via email: sgeoveatch@att.net

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Friends of the Florissant Fossil Beds

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We're on the Web!
See us at:

www.fossilbeds.org

Email Addresses Wanted

Please send your current email address to fossilbeds@yahoo.com. This will allow us to send you reminders or events and important news items as they occur.

Please provide us with feedback on the newsletter or any topic you are interested in. We would also like to know who is interested in serving on various committees or on the Board. You can reach us at the address to the left or by email at fossilbeds@yahoo.com.

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The Friends of the Florissant Fossil Beds newsletter is published quarterly by the Friends of the Florissant Fossil Beds and is governed by the by-laws of the Friends. Articles appearing in the newsletter do not necessarily reflect the views of the National Monument, officers, members, or sponsors of the Friends.

About Our Organization...

In 1987, the Friends of the Florissant Fossil Beds, Inc. was organized by a group of dedicated individuals interested in assisting the National Park Service in its mission to preserve and protect our national treasures. As a non-profit organization, the Friend's mission is to secure resources to help preserve the fossils and promote programs activities that enhance the Monument's educational, research, and scientific objectives.

Friends' groups help many of the National Park service areas in a variety of ways. Membership fees and donations to the Friends of Florissant Fossil Beds are used for:

- Environmental education programs
- Field seminars
- Year-round interpretive programs
- Jr. Ranger programs
- Paleontological and geological resources
- Natural history resources
- Publications

Past accomplishments and ongoing support by the Friends of Florissant Fossil Beds includes:

- Major funding of the yurt shelters
- Travel and research funding for the Monument's paleontologist
- Assistance in the purchase of an all-terrain wheelchair for handicapped visitors
- Financial support for the University of Denver's (fossil data) Digitization Project
- Purchase of furniture for the seasonal rangers and intern housing
- Funding for other special Monument related celebrations and special events (such as the dedication of the new stump exhibit area May 11, 2002)
- Planning, funding, and coordinating the Monument's 30th Anniversary Celebration (1999) and 35th Anniversary Celebration (2004)
- Funding for the Monument's newspapers each spring

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