



BOARD MEMBERSHIP

Leadership Team

Therese Johnson
Patty Glatfelter
Sally Martens
Amy Wolin

Webmaster

Wayne Johnston

Membership

Rick Wilson

Secretary

Treasurer

Patty Glatfelter

Project Coordinator

John Schwabe

Technology Coordinator

Wendie Warner

Newsletter Editing

Fred Gustafson
Michelle Speck

Gary Censoplano

Linda Laverty

Jerry McLain

Mike Rodriguez

Laine Weber

Member Emeritus

Jean Rodeck



The Florissant Fossil Beds

...both welcomes and encourages you to explore and enjoy the seasonal changes occurring within your local National Monument.

The gradually cooling weather of fall will comfortably accommodate Visitor Center / Museum exploration and outside activities such as hiking and picnicking.

*Autumn replaces summer's warm languor
The early chill in the autumn air invigorates
And readies us for the challenges
of the coming winter
Autumn
Is a gift
From Mother Nature
Wrapped in a seasonal transition
Colorized.*



Table of Contents

Volunteer Mark Harter	Mark Harter	Page 3
Homestead and Night Sky	Mark Harter	Page 4
Volunteer Lainie	Lainie Weber	Page 5
Volunteers Stu and Ellie Ferguson	Stu and Ellie	Page 6
1st Matching Donation	Patty Glatfelter	Page 6
Vim Wright Legacy	Patty Glatfelter	Page 7
National Park Foundation Housing	Patty Glatfelter	Page 8
Friends' Speaker Series - <u>Bud Wobus</u>	Mike Rodriguez	Page 9
Fall Color	Fred Gustafson	Page 10
Friends Annual Meeting	Sally McCracken	Page 11
Annual Meeting Photos	Sally McCracken / Wayne Johnston	Page 12
Visitor Service Award	Sally McCracken	Page 13
Photogrammetry	Brennan Meyerhoff	Page 14
Spring Astronomy	Mark Harter	Page 16
Publications on Florissant Paleontology	Herb Meyer	Page 18
Friends and the Farmer's Market	Gary Censoplano	Page 20
Intern Update	Emma Zuccotti	Page 21
Rocky Mountain Conservancy	Bev Marshall	Page 23
Crossword Puzzle	Fred Gustafson	Page 24
How Big?	Fred Gustafson	Page 25
From the Archives	Mike McClain	Page 26
Before the Eruption	Fred Gustafson / ChatGPT	Page 27
Starry Night	Mark Harter	Page 28
Local Artist Spotlight	Michelle Melville	Page 29
Speaker Series Review	Fred Gustafson	Page 30
Unlocking History	Cody White	Page 31
Reading Room		Page 40
Coda	Fred Gustafson	Page 41



Volunteers



Mark Harter

Clearly a **STAR** volunteer in more ways than one!



Mark is an astronomer, Aerospace Engineer, and retired military officer (U.S. Air Force). He's been an FLFO Volunteer for 15 years and loves every minute of it by leveraging his astronomy and space engineering skills to FLFO activities. He joined the FLFO Volunteers in 2011 working in the Paleontology Lab, conducting fossil shale-splitting demonstrations for the public on Saturdays in the Yurt, and cataloging the backlog of fossils in the FLFO archives. Just prior to the CoVid-19 pandemic, Mark started building the now famous FLFO Night Sky Astronomy program, which achieved International Dark Sky certification in 2021 by the International Dark Sky Association. This is an achievement that only 72 locations in the United States have achieved because of our extremely dark night skies free from urban light pollution. He leads FLFO astronomy events which have reached out to 5,000+ guests since 2021 through partnership with the Colorado Springs Astronomical Society (CSASTRO). Mark has numerous professional-level astrophotography images published in major journals, including Reflector, Astronomy, Sky & Telescope, and numerous college-level astronomy books. As an aerospace engineer for 40+ years, he worked on our nation's most important national security space systems (many highly classified) to protect our country's interests in space. Mark is married (Kimberly), they have 3 grown children, plus grandkids (who are NPS Junior Rangers!). The Harters live in Florissant and are heavily engaged in the Teller County community with public speaking engagements and elected positions.



Photo by Mark Harter
Subject to copyright



Mark Harter



Volunteers

Laine Weber



I began volunteering at Florissant Fossil Beds in 1988. I had moved to the Pikes Peak region from Boulder. I visited the Park and was so intrigued by the fossils and the National Park Service mission that I wanted to be involved. I was eventually hired as a seasonal ranger and spent 26 years as an employee, which dovetailed perfectly with my interests and focus.

I attended Ohio State University. But the mountains called and I left Ohio. I continued my studies and earned a B.A. in Environmental, Population, and Organismic Biology from the University of Colorado Boulder. I also completed the Master of Arts in Teaching Secondary Science from The Colorado College.

After retiring from my additional career as a middle school science teacher I began volunteering at FLFO again. I assisted with school groups and worked at the front desk. As a member of the Board of the Friends of Florissant Fossil Beds I have assisted visitors at the front desk and volunteered for special events and Art in the Park. I truly enjoy giving back to the National Parks. It is a noble concept, and to be able to play a small part in the preservation and protection of these special places is an honor.



Volunteers

Stu and Ellie Ferguson



Stu & Ellie Ferguson, natives of Northeast Iowa, lived in Gunnison on the Western Slope for over 50 years before retiring to Woodland Park about 10 years ago. Stu is a veteran, Army 69-71, and retired from the Gunnison Police Department, finishing his career as chief. Ellie is a retired Master Teacher, having taught elementary grades for over 30 years. A chance encounter with Jeff Wolin got us excited about interpretation. We have enjoyed helping with a variety of programs. A major highlight was helping obtain Dark Sky Park recognition. Look for us setting up the solar scope or leading interpretive hikes.

Honorary Donation

Frani Bickart donated **500 dollars** in honor of *Kim Sikoryak* as our first matching donation to the Vim Wright Legacy Endowment.



Vim Wright Legacy Endowment Fund Has Launched!

Submitted by Patty Glatfelter



Friends of Florissant Fossil Beds, Inc., has officially launched our effort, in conjunction with the Colorado Gives Foundation, to receive targeted matching funds to the Vim Wright Legacy Fund (VWLF). These funds may support housing, travel, conferences, training and professional development, project-related supplies/equipment and other allowable expenses for interns.

This endowment is inspired by John Wright, Vim Wright's son, to honor his mother--an original Defender of Florissant. His generous \$50,000 donation is meant to encourage others who have a special love of the Monument and its mission to provide a match to his donation. The Colorado Gives Day (CGD) end-of-year fundraising campaign begins officially on November 1st. It has supported the efforts of over 4,500 nonprofit or-

ganizations since 2007. Donations can be made via the Friends' website when you tap the [DONATE](#) button. It will take you to our page with the CO Gives Foundation. You may also search for Friends of the Florissant Fossil Beds on the www.coloradogives.org website. Our partnership with the Foundation has been instrumental in establishing the Endowment.

This year ***December 9th is the official Colorado Gives Day.*** On that day there will be special opportunities to participate in enhanced matching fund offerings. Starting November 1st, CO Gives will match recurring monthly donations up to \$100 until their \$250K pool of funds is distributed to all participating nonprofits. Any donations to the Legacy fund prior to December 10th will be applied to other CGD incentive fund opportunities to augment the Vim Wright Endowment. The Friends' relationship with the CO Gives Foundation will now allow us to accept donations of stocks, employer matches or Group Giving campaigns. The "Group" could be family members, co-workers, old college friends--you create the group!

The Friends' Board, the staff of the Monument, present and future interns and environmental leaders at the Florissant Fossil Beds National Monument will be forever grateful for the crucial part you play in sustaining their education and preservation of the Monument's resources.

If you would prefer to donate to the Friends' General Fund, that is also an option on our [Colorado Gives webpage](#). These funds are applied to a myriad of needs that appear throughout any fiscal year.

We thank you in advance for your generosity and heartfelt commitment to the Monument!



National Park Foundation Housing Update

Submitted by Patty Glatfelter

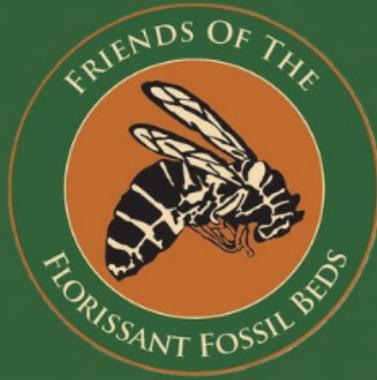
Grant funding options to enhance housing at the Monument continue to unfold. If you read the Summer newsletter article, you are aware that the Friends applied for grant dollars to establish two trailer pads and hookups to serve seasonal or National Park Service (NPS) detail staff as needed. Due to the dire need for housing, we presented the initial grant application, the National Park Foundation (NPF) staff returned via zoom a discussion of how the National Park Foundation could provide additional assistance.

During their discussion with Marin Karraker, Acting Superintendent, Katherine Jervik, Facilities Services Assistant, and Patty Glatfelter, Friends' Treasurer, it was determined that in addition to the trailer pad feature, an expansion of the A-frame remodel might be critical to providing valuable housing opportunities. This would allow for interns as well as NPS staff to have an affordable housing alternative. The NPF representatives determined that a grant providing the needed architectural consultation and housing plan infrastructure development is the first step to making this dream come true.

Discussions are continuing at this time, but the NPF staff determined that a request of approximately \$6,000 to \$10,000 for architectural planning and engineering for phase 1 was a reasonable step to move the project forward. A previously considered additional 600-square-foot expansion of the A-frame remodel project has a current estimate of \$195,000 to \$270,000 cost. This would be determined based on the architectural planning determinations.

The project will require a close partnership between the National Park Service staff, the National Park Foundation and the Friends' board. If future fundraising is required there will be opportunities noted in future newsletters. Stay tuned for updates regarding this remarkable opportunity that has been decades in the making.





Zoom Seminar Series 10/18 at 10am

Please note this seminar will not be presented at the Florissant Fossil Beds, you must register using the link below or by clicking on the flyer.

Join us on 10/18 at 10am for a Zoom seminar with Bud Wobus!

Rivers to Ridges: The Topographic Inversion of Landscape

Bud Wobus is Emeritus Professor of Geology at Williams College, Massachusetts, where he taught for 55 years before retiring in 2021. He will lead a conversation on local geology from Monument into South Park and their reversed topographic expression, as well as the evolution of the Puma Hills.

All views expressed during this presentation are that of the presenter and do not represent those of the National Parks Service, the Florissant Fossil Beds, or the Friends.

Registration link available below or by clicking on this flyer.

[Register Here](#)



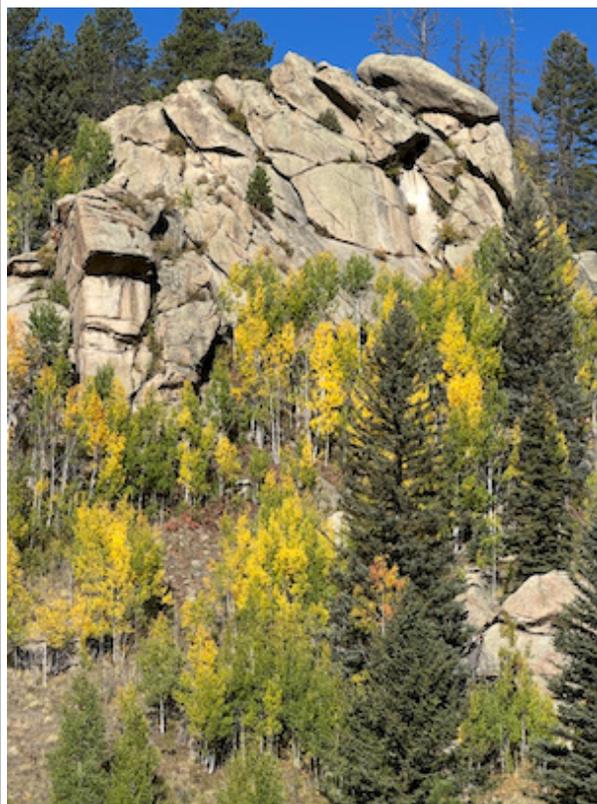


Our lodgepole and ponderosa pine trees do not explode with the some vibrant colors as their cousins in the deciduous world, but that does not mean they are absent of seasonal changes during the Fall season. The pine trees will begin to display yellow or brown needles that are reflective of their respective growth cycles. There is a shedding process that occurs as part of a natural cycle that helps maintain the general health of the pine tree. [CSU](#)

The aspen tree bursts into bright yellows during the early fall season. The brilliance of the colors invites sightseers throughout Colorado to take one, or more, of the scenic routes within our states. The period of brilliant colors is limited and the opportunity to see the aspens in full color should not be ignored.

“The bright reds, oranges and yellow we see in leaves are made mostly in the fall. In some trees glucose is trapped in the leaves after photosynthesis stops. Sunlight and the cool nights of autumn cause the leaves to turn this glucose into a color. The green chlorophyll disappears from the leaves. As the bright green fades away, we begin to see yellow and orange colors. Small amounts of these colors have been in the leaves all along. We just can’t see them in the summer because they are covered up by the green chlorophyll.”

Please read the full article on aspen color change at [Mountain Town Magazine](#)



Places to see the Aspens within the state of Colorado

[Florissant Fossil Beds](#)

[Mueller State Park](#)

[Highway 67](#)

[Maroon Bells](#)

[Kebler Pass](#)



Annual Membership Meeting

- Submitted by Sally McCracken -

On Saturday, August 23rd, the Friends of the Florissant Fossil Beds held its Annual Membership Meeting at the Monument starting at 11 a.m.. Everyone met in front of the Visitor Center and formed carpools for the first part of the event, which was a visit to the private Fossil Quarry in Florissant. Nancy Anderson greeted everyone at the quarry. The membership of the Friends had been invited there to see the “Fossil Mobile” (reused school bus) that Nancy has developed for going to schools and events to teach about the fossil quarry and the fossils found there. Everyone had a chance to see the exhibits inside the bus and learn about how Nancy uses it with school groups and events.

After the quarry visit, everyone went back to the picnic area by the Visitor Center at the Monument for lunch.

After lunch, the Annual Membership Meeting was called to order by our president, Therese Johnson. At the beginning of the meeting, the acting Superintendent, Marin Karkaker, introduced the Monument and Rocky Mountain Conservancy staff. It was so nice to meet everyone who works there.

The Board Member Elections were held and a review of some of the Friends’ current projects was given, including the Vim Wright Legacy Fund, grants we have applied for, and the Junior Ranger albums being made available to everyone.

The Visitor Service Awards were given to Eli Zizka and Robin Martin (see article). This is an award given every year by peer nomination for exemplary visitor service during the year. This year, two people received the award. Congratulations to Eli and Robin for all that you do for our visitors. The Annual Meeting was adjourned around 2 p.m.. We had great weather and a nice turnout.





Friends of
the Fossil
Beds
Annual
Meeting
2025



Photos
by
Wayne Johnston



CONGRATULATIONS TO THE RECIPIENTS OF THE 2025 VISITOR SERVICE AWARD

-Submitted by Sally McCracken -

On Saturday, August 23, 2025, at the Friends' Annual Membership meeting, Robin Martin and Eli Zizka were the recipients of the 2025 Visitor Service award given every year for exemplary visitor service.

Robin Martin is a Recreation Fee Technician in the Visitor Center and has been at the Florissant Fossil Beds NM for 6 years, since 2019. She worked previously on the Pikes Peak Highway and Mueller State Park. She is currently taking classes in hopes to enter a medical program.

Eli Zizka is a seasonal Interpretation Ranger and has been at the Florissant Fossil Beds NM since the beginning of May. They previously spent 11 months at Shenandoah NP and 2 seasons in Yellowstone NP as an Interoperative Ranger and in the Cherokee National Forest as a wildland firefighter. They are looking for a permanent conservation job in the Ft. Collins/ Denver area.

Both employees are to be congratulated for their dedicated and inspiring service to all of the visitors. They both went well beyond their normal work to develop new programs and help other employees and volunteers be the best they could be.

Congratulations Robin and Eli!!!!



Robin



Eli



Photogrammetry

Brennan Meyerhoff / Peyton Smits



My name is Brennan Meyerhoff, and I am a graduate student in Geography at the University of Missouri. Together with Peyton Smith, a senior at the University of Missouri, we work for the University's 3D Digital Heritage Informatics Lab within the Department of Geography.

In the summer of 2025, we spent two weeks at Florissant Fossil Beds National Monument using photogrammetry to document the Park's iconic petrified redwood stumps and fossiliferous outcrops. Photogrammetry is the process of compiling hundreds of overlapping two-dimensional photographs into a detailed three-dimensional model of an object or landscape. By capturing every visible surface from multiple angles, we are able to digitally reconstruct highly accurate 3D replicas of fossils and geologic features. During our fieldwork, we created models of seventeen petrified redwood stumps and one of the fossiliferous outcrops.



These models serve several important purposes for conservation and sharing information with visitors. Fossils are continuously exposed to weather, erosion, and potential disturbance from wildlife or human activity, they are vulnerable to gradual degradation or even theft. Photogrammetry allows Park scientists to monitor both short and long-term changes in these resources, providing critical data to guide

decisions about their protection and long-term preservation. Beyond safeguarding the physical specimens, digital models also expand access. They can be shared online for visitors who are unable to travel to the Park, and they can be 3D-printed to enhance educational and outreach efforts, making the fossil record more tangible and accessible, particularly for individuals with mobility or vision impairments.





1. This is a screenshot of the rough draft of a 3D model of the Big Stump, the top left photo is one of the thousands of photos that makes up the model, which includes all angles of the stumps.

In addition to conservation and accessibility, this work contributes to the scientific mission of Florissant Fossil Beds National Monument, which was established to preserve, study, and interpret its extraordinary paleontological resources. Our work this summer to systematically 3D document these ancient stumps and outcrops through photogrammetry contributed to the Monument's long tradition of scientific research.

Thank you to the Friends of Florissant Fossil Beds for supporting this fieldwork!



Spring Astronomy - Florissant Fossil Beds Night Sky

Mark Harter, FLFO Volunteer, Astronomy Lead

September 2025

Fall -- It's the time of year when the aspens change into their brilliant golden colors, and the summer star constellations are replaced by some of the most spectacular and popular constellations of the night sky! Say goodbye to the Summer Triangle, Cygnus, Lyra, and Aquila. Say hello to the emergence of Orion the mighty hunter, his faithful dog Canis Major (with the brightest star in the night sky, Sirius), the Gemini twins, Cassiopeia (which points to the spectacular Andromeda Galaxy), Pegasus, the flying horse, and the Pleiades (Seven Sisters) just to name a few. Along with all of these are rich stellar nebulas, star clusters, and new looks at numerous planets.

Fire in the sky! There are two major meteor showers this fall, which will hopefully make-up for the disappointing Perseid meteor shower in August (washed out by a nearly full moon). The first is the annual Orionid meteor shower which peaks on Oct. 21-22 between midnight and dawn as earth passes through debris from Halley's Comet. We can expect a clear, dark sky without moonlight interference with rates of about 20-40 meteors an hour (look towards the Orion constellation). To see it, find a dark, open area, lie down, and look up at the sky towards the constellation Orion (the Mighty Hunter), allowing your eyes to adjust to the dark. You can see some meteors within a couple days of the peak night.

Not to be outdone, the annual Geminid meteor shower peaks December 13-14, offering one of the year's most reliable and spectacular displays of bright, fast, and often yellow meteors. Look towards the Gemini twins constellation (close to Orion), which is where the meteors appear to originate from. This year the Geminids will not have moon light interference, so it should be a good show, with meteors starting in mid-November and going through Christmas. Some years the Geminids produce up to 75 meteors an hour. And this year is extra special because the largest planet in our solar system, Jupiter, is very bright, right in the middle of the Gemini constellation.

Now for some space-geek science trivia on meteor showers. This is for extra credit and optional reading. □ Almost all meteor showers originate from the tails of **comets**. However, the Geminids are different, being produced from an **asteroid** known as 3200 Phaethon. What's the difference between a comet and an asteroid? A comet is a dirty snowball, with a solid nucleus covered by a layer of ice which sublimates (turns from a solid to a gas) as the comet nears the sun. Comets are typically lightweight, with a density slightly heavier than water, and they orbit around the sun in elongated orbits, going close to the sun, then going far from the sun to the edge of the solar system. Through a telescope or binoculars, you can clearly see the comet's head and tail (very cool!) Whereas an **asteroid is a rock**. Typically, an asteroid's orbit is more circular than that of a comet, and asteroids normally remain in the asteroid belt between Mars and Jupiter. Through a telescope an asteroid appears



Spring Astronomy - Florissant Fossil Beds Night Sky

Mark Harter, FLFO Volunteer, Astronomy Lead

September 2025

star-like. But occasionally an asteroid deviates, as does 3200 Pantheon, with a highly elliptical orbit that gets very close to the sun, releasing particles that create the Geminids meteor shower. So now you know what makes the Geminids special!

Fall also brings us the last ***Night Sky Astronomy Program*** of the year at the Florissant Fossil Beds National Monument. Weather permitting, it is planned for Saturday October 18 from 7:00-9:00pm. We've had a stellar (pun intended) season of programs this year with over 1,100 guests attending our Night Sky Astronomy events in June and July. Of course, we thank our partners from the Colorado Springs Astronomical Society (CSASTRO), who bring out about a dozen telescopes and astronomers to help us observe planets, nebulae, galaxies, comets, and satellites. Fall night skies are usually some of the clearest of the year, so we hope to see all of you out there on October 18 for a great display of the heavens!



Comet C/2023 A3 Tsuchinshan @ Florissant Fossil Beds, October 2024

(photo credit: Mark Harter)

Mark Harter is a Florissant resident, and is the FLFO Astronomy Lead and point of contact for International Dark Sky. He is a retired military Veteran (Air Force) and aerospace engineer with 40+ years' experience in national security, civil, commercial space operations, and astronomy.



New Theses and Publications on Florissant Paleontology

-- by Herb Meyer --

Two graduate students have recently completed Master's thesis projects dealing with Florissant's paleontology and geology. Both students were supported by stipends provided by The Friends of the Florissant Fossil Beds in 2023 while their fieldwork was underway, and I have been involved as a member of their respective thesis committees. The completion of these projects once again attests to the value of the support the Friends provide for students and interns.

Stephanie Tkacik completed her thesis at University of Colorado Boulder in December, and this work is currently in review for publication, coauthored with her thesis advisor Jaelyn Eberle and myself and titled "Additions to the Mammalian Fauna of the Late Eocene (Chadronian) Florissant Formation, central Colorado." The work involved screenwashing sediments using a very fine mesh size (<0.5 mm) to recover the tiniest fossils of the vertebrates that once lived around ancient Lake Florissant. Stephanie's discovery of seven mammalian taxa new to the Florissant Formation demonstrates that there are still new discoveries to be made here, even after 150 years of collecting.

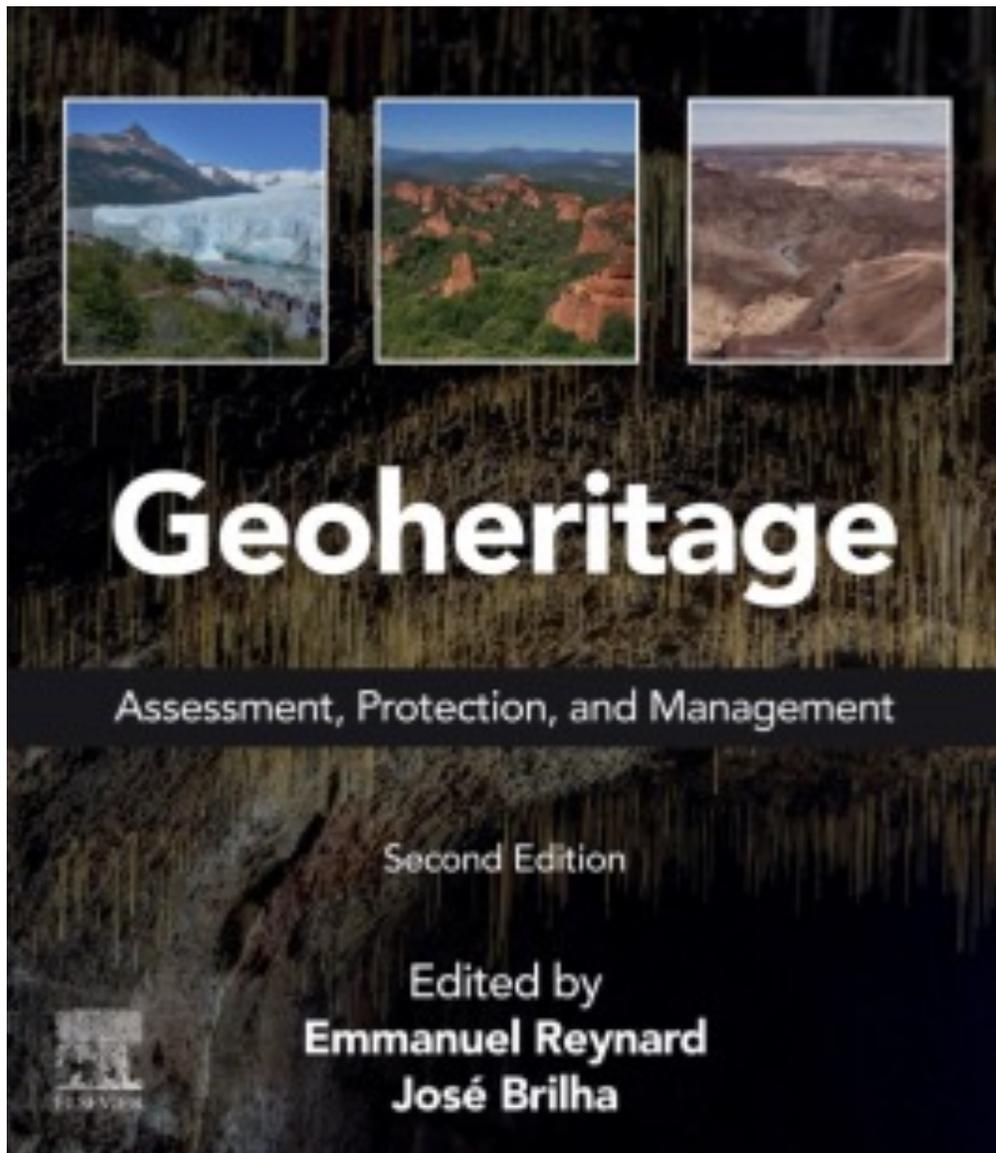
Ariana Miranda completed her thesis for Temple University in August, titled "Underneath the roots of the Sequoias: Paleoenvironmental records within the paleosols of the Florissant Fossil Beds National Monument, central Colorado." Her work involved an analysis of the ancient soils known as paleosols at Florissant, which is an entirely new topic of research for the Monument. Eight paleosols were measured in the field and later examined using geochemical and XRD analyses and petrographic thin sections. Ariana's conclusions provide evidence about the Eocene climate, indicating temperature estimates that corroborate those previously inferred from the fossil plants. The results provide new evidence that the soils may have been poorly drained due to waterlogging during a portion of the year, in contrast to modern redwood forests.

Finally, the second edition of the international textbook on geoheritage is due to be published this month and includes a chapter on Florissant. The book, "Geoheritage: Assessment, Protection, and Management," is described by the publisher Elsevier as "a comprehensive exploration of geoheritage, beginning with an introduction to geodiversity and progressing to the characterization of in situ and ex situ geoheritage, its protection and sustainable use. It also offers advanced concepts and methodologies for site assessment, mapping, conservation, visualization, and management, and features 12 case studies spanning five continents. It is authored by 75 experts from 22 countries." My contribution to this is chapter 31, which is one of the case studies, "Managing Conservation, Research, and Interpretation of Geoheritage Assets at Florissant Fossil Beds National Monument, Colorado, USA." This chapter on Florissant is the book's only case-study example for North America and highlights the Monument's many activities that promote and protect the area's geoheritage.

Thanks to the Friends for the ongoing support of the Monument's projects in paleontology!

(related article images on following page)





CHAPTER

Managing conservation, research,
and interpretation of geoheritage
assets at Florissant Fossil Beds
National Monument, Colorado, USA

31

Herbert W. Meyer





Ranger Peter demonstrates an infectious level of enthusiasm at the Florissant Fossil Bed's informational table at the Woodland Park Farmer's Market.

Rangers Emma and Gabi, relaxed and ready for questions and conversation with table visitors.



Sally, Ranger Eli, and Amy stand at the ready and able to educate Market visitors on the history and offerings of the Florissant Fossil Beds National Monument.

Photographs submitted by Gary Censoplano



Intern Updates

Spotlight on Emma Zuccotti

Submitted by Emma

This summer I spent 9 weeks working as an intern with paleobotanist Dr. Gabi Harris at the Fossil Beds. I got to experience many areas of the park and partake in a variety of projects, getting to know the rangers, volunteers, and even some of the regular visitors at the park. I started out my internship working in the collections room, adding new label cards to the specimens and organizing drawers. Through this time, I was able to familiarize myself with many of the common species seen in the Florissant Formation and I got a lot better at recognizing qualities of the specimens that indicate a certain genus or family.



I created a key for the names of all the objects on the Yurt touch table so that visitors would know what specimens they are looking at. With over 60 objects from inside and outside of the park, the touch table collection displays a variety of both modern and fossilized bones, shells, and wood, as well as different rock types and mammal bone replicas.

I helped with events like Jr. Ranger Day, Night Sky, leading tours with Dr. Gabi, and the Farmer's Market. I also worked with volunteers weekly, helping Dr. Bob at the excavation pit on Wednesday mornings, and the trail crew on Thursdays. I learned about the importance of having good drainage systems in the park along trails and around the stumps to prevent flooding and weathering during the wetter summer months.





On trail crew, we also worked to mitigate hazards along the trails like large rocks, loose limbs, and falling down trees. I really valued the time I spent with the wonderful volunteers at the Fossil Beds; working behind the scenes but doing so much for the park!

In addition to the volunteers, I've enjoyed working alongside the rangers here, helping at the front desk when needed and assisting with any other odd jobs around the park. Park staff were able to get ROHVA certified this summer, allowing us to take the UTV out to do trail work, visit different fossil sites, conduct fieldwork, and transport materials around the park.



Dr. Gabi and I spent a week collecting fossils at a new site that was recently discovered in an area of the Monument that has no previously known fossil sites. We found rocks with unique lithology, fossil-bearing shales that showed signs of both soft sediment deformation and silicification. Unlike anything currently in the FLFO collections, these samples offer the chance to learn more about the history of Florissant as we determine how these rocks were formed, deposited, and altered over time.

Though my internship has ended, I will be continuing the research project I started this summer, analyzing $\delta^{13}C$ values in Carbon isotopes sampled from different species of plant fossil from the Florissant formation. This project will hopefully provide insight into the isotopic variations among ancient Florissant plants and how these variations can be attributed to paleo climate.



Happy Fall Y'all!



Bev Marshall

Please allow me to introduce myself. My name is Bev Marshall, and I replaced the irreplaceable Linda Dolven back in April. My background is in engineering, and I worked and retired from IBM a few years ago. Since my retirement I worked for the National Park Service in Glacier National Park in Montana for four seasons. I found out late in life that my true calling is working either in or for our beautiful National Parks. There is also a new addition to the RMC team as well, Paytyn Dalzell. She started a few weeks ago and is from the Florissant area. Paytyn has come up to speed on RMC activities in super-sonic speed, she's great to work with and a great addition to our team.

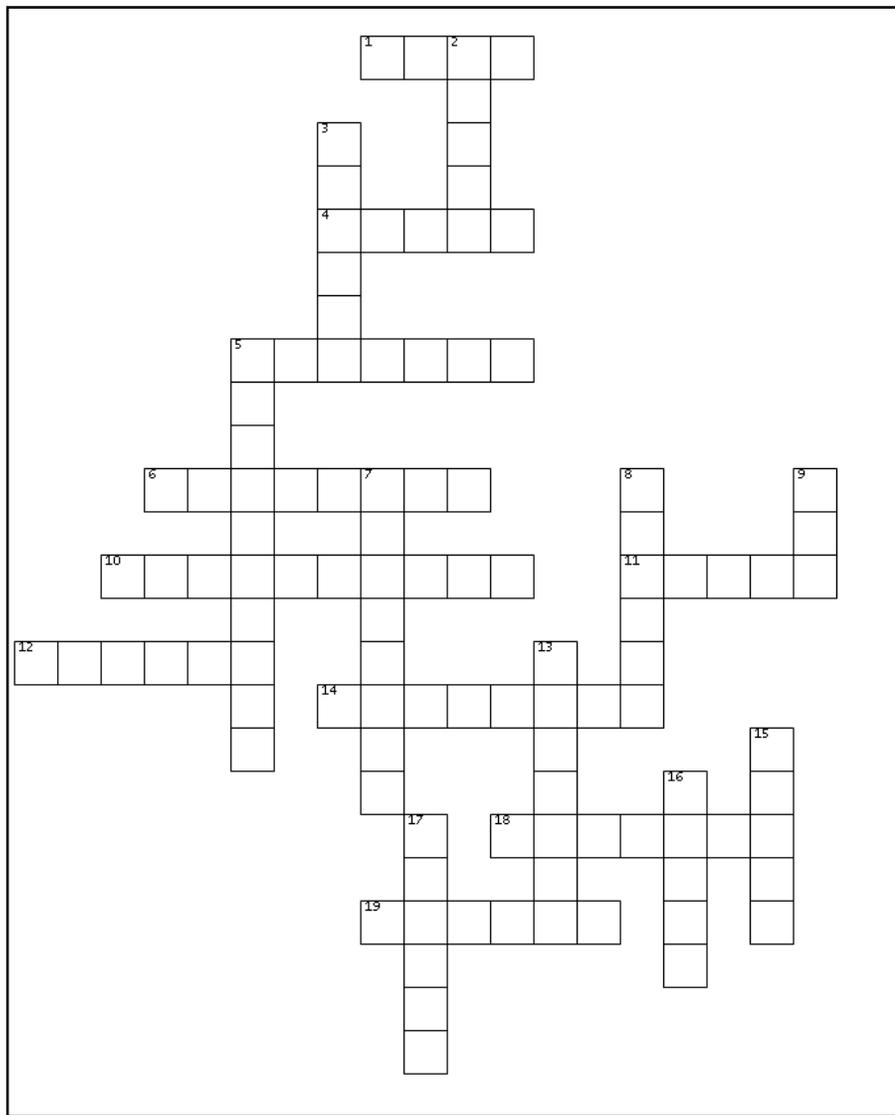
We have stocked up our RMC bookstore with lots of sweatshirts for those cool upcoming fall days. We also have lots of games, books, toys, puzzles, jewelry, night-sky merchandise, wildlife pins, stuffed animals, ornaments, glassware, mugs, and hats. Keep in mind the holiday season will be approaching shortly and why not do your shopping at the RMC shop. The Rocky Mountain Conservancy has a 4-star 100% rating from Charity Navigator, the proceeds from sales go directly back to the Monument! You can feel good about supporting our parks while tackling your gifting list...it's a win-win situation.



Paytyn Dalzell

Thank you for your continued support for our Monument!





Print and Pencil
Required

ACROSS

1. A common type of tree found in the Fossil Beds
4. An animal best left alone and not because it has a white stripe
5. A vent and/or opening in our earth that allows molten lava to flow out
6. Type of lion that frequently visits the Fossil Beds
10. Type of common rabbit found in the Fossil Beds
11. Most common type of bear seen in the Fossil Beds
12. Dog-like animal that can heard howling at night
14. Fossil Beds are not a National Park but rather a National ?
18. Name of homestead found at the Fossil Beds that was established in 1878
19. The first name of a paintbrush flower found in the Fossil Bed

DOWN

2. President that signed the bill establishing the Fossil Beds as a National Monument
3. Prehistoric organism preserved as an impression in rock.
5. Unpaid workers that dedicate their time and effort to keeping the Fossil Beds open, functioning, and welcoming to Monument visitors
7. A small deer-like animal that can run very fast and often found within the Fossil Beds
8. Small wildcat that is common throughout North America
9. Large hooved mammal that often travel in large herds
13. Type of fossilized tree found in the Fossil Beds
15. A person walking the trails of the Fossil Beds
16. Type of an all-black squirrel found in the Fossil Beds
17. Uniformed employees tasked with protection and preservation of National Parks and Monuments

[Answers on the last page](#)



How Big is the Florissant Fossil Beds?

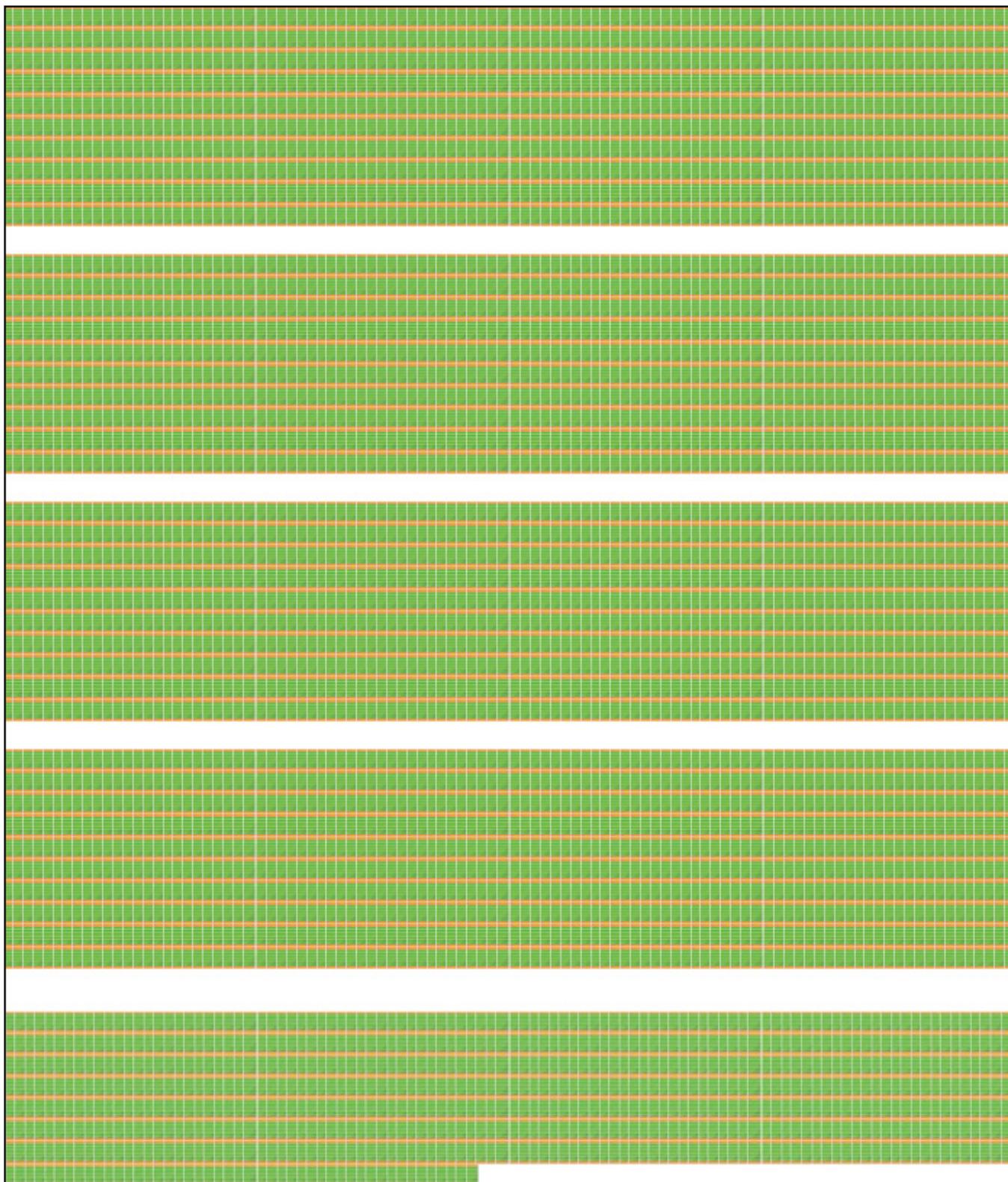
- approximately 6,278 acres - [NPS](#)

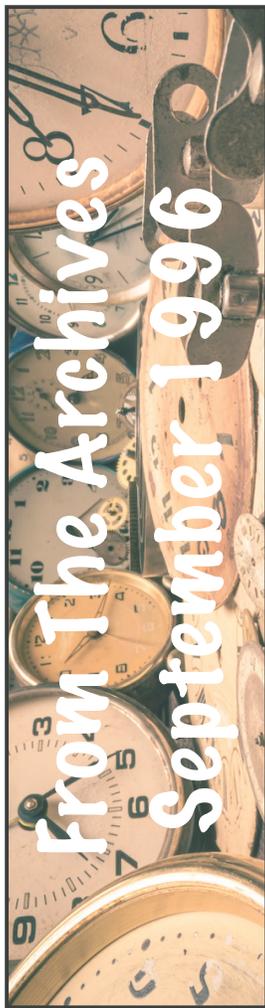
Well, how big is that?

...since it's Football season once again...

- approximately 4,747 Standard American Football Fields -

Give or take





The Florissant Story with Apologies to Dr. Suess

The story of the fossils is easy to tell,
and when we are done you will know it quite well.
So let us get started, let's start right away,
I'm ready to talk I've been waiting all day.

Our fossils were formed a long time ago,
It was 34 million years just so you will know.
Our weather was warm our weather was wet.
50 inches of rain is what we would get.

The forest was full of big trees called Sequoias,
and lots of bugs and insects around to annoy us.
Way in the distance was a big volcano cone,
at 20,000 feet it dominated this zone.

The volcano began to roar and rumble,
and lots of mud began to tumble,
down the volcano to the forest floor,
the trees were buried and soon were no more.

Next the volcano put out ash and smoke,
the insects and bugs began to croak,
because they were trapped under lots of ash
their little skeletons got mashed.

The volcano continued. It spit up rock!
All of which landed on top.
Way underneath, down in the dark,
Were all of the makings of this fossil park.

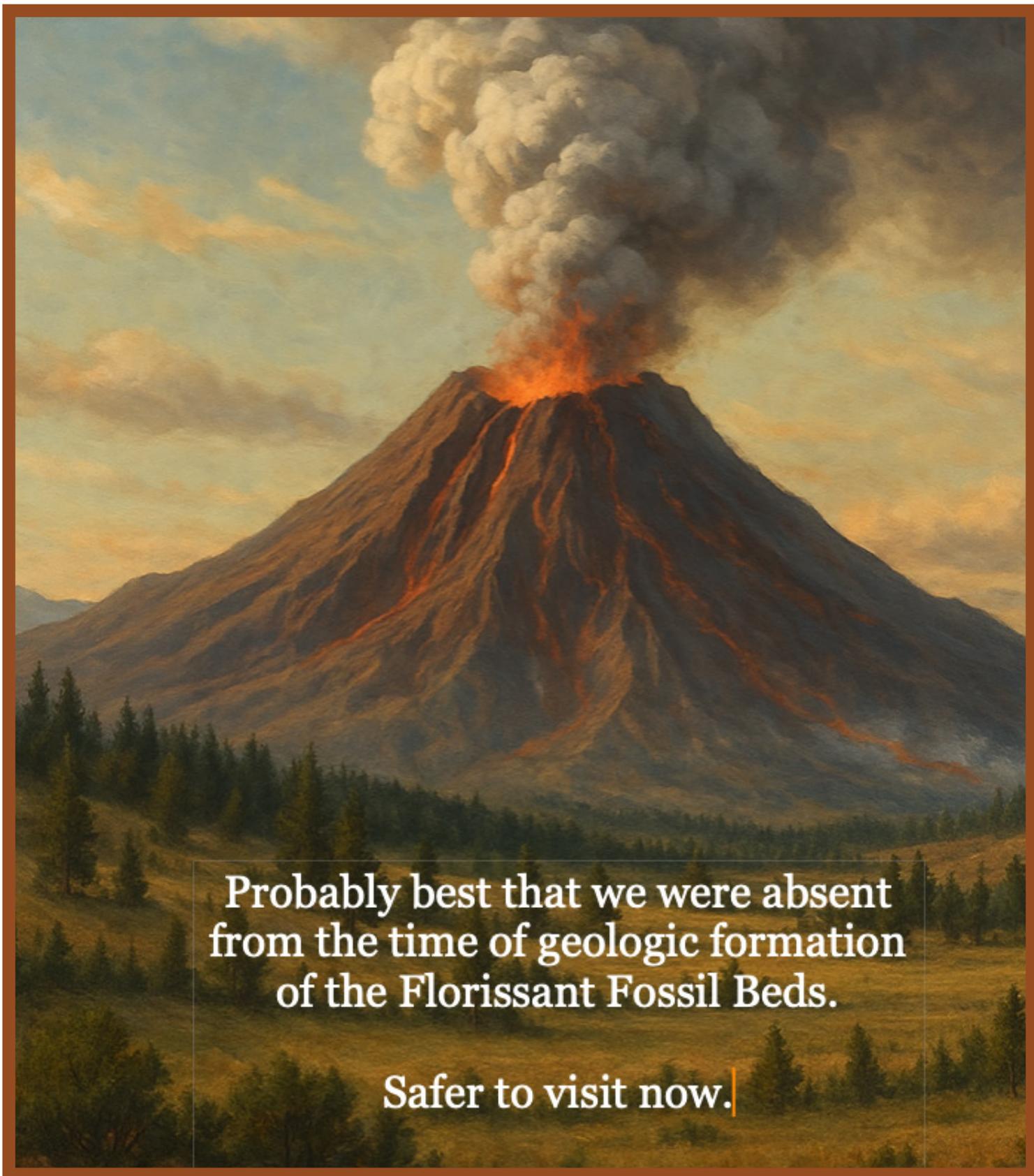
One other thing I think I should say,
is that the weather changed in a dramatic way.
What was wet and warm, became cool and dry,
and I think I know exactly why.

Way out West there were no mountains on the coast,
like we have today that prevent most,
of the rain and snow from coming to the Fossil Beds,
in this park that is now owned by the feds.

And now you have all of my wisdom,
about this part of the National Parks System.
So welcome to the fossil beds park,
the trees are now stone but once they were bark.

Mike McClain
Florissant Fossil Beds
National Monument September 1996





Probably best that we were absent
from the time of geologic formation
of the Florissant Fossil Beds.

Safer to visit now. |



Photograph by Mark Harter
Another wonderful example of the beauty to be found in our
night sky if we just take the time to look up.
Image subject to copyright



Local Artist Spotlight



This is a painting of the view opposite the Visitor's Center at the Fossil Beds.

It is entitled "Crystal Peak" and is painted in oil by Michelle Melville.

We welcome submissions of local artists.



Speaker Series Review

July 21, 2025

- Submitted by Fred Gustafson -

Things Left Behind: An intimate time with Spencer and Julie Penrose



Steven Veatch presented an informative presentation on the life and legacy of Spencer and Julie Penrose that referenced their enormous influence on the development and growth of the Broadmoor Hotel and the surrounding area. The overview was graced with a very personal perspective in that Steve's grandfather was Spencer Penrose's personal / business secretary, and Steve's mother was a close friend and confidant to Julie Penrose. This family relationship allowed Steve to have access to, and ownership of, artifacts that heretofore were not freely accessible to the general public.

As Steve's preview text proclaimed, *"This isn't just a history lesson; it's an immersive experience, rich with personal connection and untold stories that will bring the Penrose legacy vibrantly to life."*

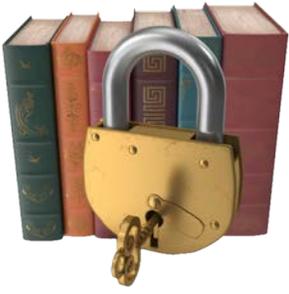
Don't miss this chance to uncover the grit, glamour, and profound impact of a true American dynasty!"

Attendees were privileged to be exposed to pictures, videos, documents, artifacts, and stories, all colored with Steve's unique, personal familiarity with the Penrose history that combined to elevate the presentation to a 'you are there' experience.

Spencer Penrose was a colorful character who was not a fan of the status quo, and not afraid to confront and overcome obstacles that initially would seem to be insurmountable. Spensor amassed a fortune in gold and copper mining and used this money to realize his vision for the Broadmoor area and beyond. Penrose was responsible for the Broadmoor Hotel, the Cheyenne Mountain Zoo, Manitou Incline, the Cog Railway, among others. His influence, and that of his wife, Julie, remain as significant catalysts for the growth of the Colorado Springs area.

Everyone in attendance enjoyed the presentation and, at the conclusion, left with an enhanced understanding of, not only the history of our area, but an insight into the individuals that shaped it.





Unlocking History

Permission to publish in our Newsletter was authorized by Cody White.

Today's post was written by Cody White,

Archivist at the National Archives at Denver

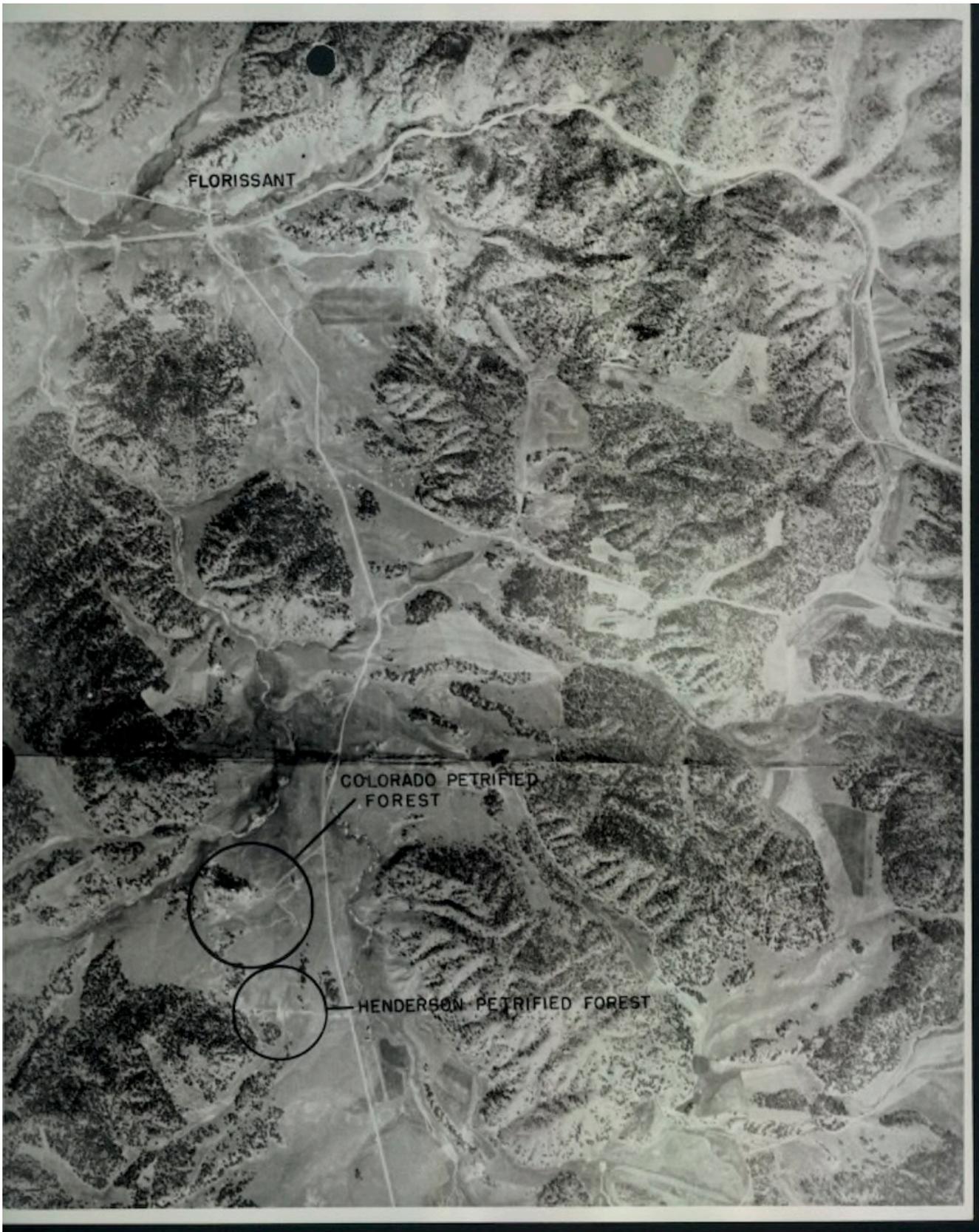
November 17, 2015 by NationalArchivesBlog

“We can’t get too much science so am for the park.” And so opened a 1962 letter to the National Park Service from Orson Rice, an Ohio resident who owned a parcel of land near the proposed Florissant Fossil Beds National Monument in central Colorado. Finally established in 1969, the fossil beds that make up the monument were created roughly 34 million years ago when nearby volcanoes erupted and the ensuing ash fall worked to preserve an enormous variety of insects, arachnids, algae, leaves, and even whole trees in what was then a large fresh water lake. Our story starts much later however, in roughly 1952 as documented in the National Park Service (NPS) records held at the National Archives at Denver.

Throughout the history of the NPS there have been many proposals for protected sites and despite the time and money invested in the creation of reports, correspondence, and attempted legislation many of these proposed parks never make it to creation. In the case of the Florissant Fossil Beds National Monument it took nearly 50 years and while the NPS still retains the bulk of the historical records relating to the monument, we do have five folders of correspondence, reports, newspaper articles, maps, and photographs that detail the work leading up to the monument’s establishment.

The story begins in the 19th century when survey expeditions discovered and first chronicled the fossil deposits. By 1920 the area was thought of as a possibility for a park but further research was deemed necessary. Twelve years later the Superintendent of Yellowstone National Park, Roger Toll, submitted an “adverse report” concerning the fossil beds park proposal to the NPS director and the idea was shelved until 1952 when Secretary of Interior Oscar Chapman asked for yet another report. In December of that year Edmund Rogers, Yellowstone National Park Superintendent, and Edwin Alberts, Rocky Mountain National Park Naturalist, set out to visit the Florissant area in order to talk to area landowners and visit the two private parks already there; the New/Henderson/Pike Petrified Forest and the Colorado Petrified Forest.





Aerial photograph of the proposed park area with both petrified forest attractions marked.



Generally speaking, records concerning private tourist attractions are rarely found in the National Archives but much like the insects trapped in the lake so many millennia ago, records of the two privately operated petrified forests are now saved in perpetuity by token of their association with the monument. The Colorado Petrified Forest first opened in 1890 as the Copeland Petrified Forest and in 1926 P.J. Singer purchased the property. Renaming it the Colorado Petrified Forest in 1932, Singer also moved the Midland Railway station from the town of Florissant to his park for use as a museum and office. A half mile away in 1920 the New Petrified Forest, later called the Henderson Petrified Forest, opened. By 1950 the park went through yet another name change to Pike Petrified Forest as it was purchased by T. Dale Miller for around \$40,000 (USD).



Front cover of Colorado Petrified Forest brochure





The section of Rogers and Alberts' report on the two parks reads in part like a soap opera. Soon after his purchase of Henderson Petrified Forest Miller handed off the operations to John Baird, at which point the feuding between the two parks seems to have escalated with local residents telling the NPS officials it was thought Baird was "trying to develop a nuisance value so that someone will buy him out at an exorbitant price." The feuding between the similar attractions was noted to include trick signs luring away potential visitors from the other park, high pressure solicitations along area roads, and even lawsuits flying back and forth much to the chagrin of local residents. While gathering these accounts, the NPS officials also duly paid the \$0.50 admission at each and documented their visit within their report.





Blatant advertising signs for Pike Petrified Forest. Note the "fine-print" technique of the lower sign -- it is evidently a successful one, capitalizing on the traditional advertising for the Colorado Petrified Forest. December 12, 1952.

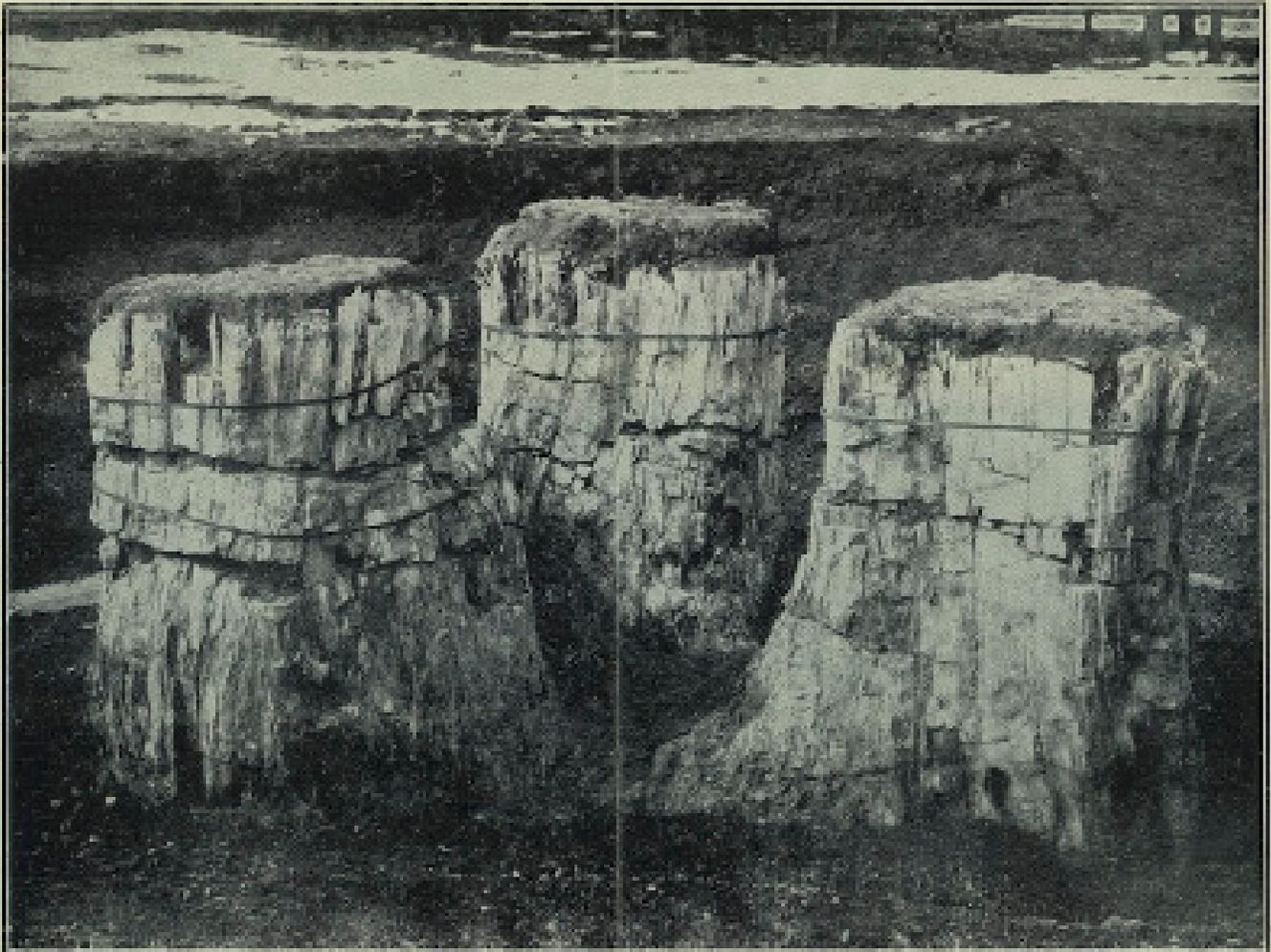
NPS Park officials took note of the Pike Petrified Forest's advertising tactics.



HENDERSON PETRIFIED FOREST

FLORISSANT
COLORADO

(Formerly the NEW Petrified Forest)



This Trio Stands 13½ Feet High. Each Sprout Is 6 Feet in Diameter.
Diameter of Trio at Base, 27 Feet. Only Petrified Trio in the U. S.

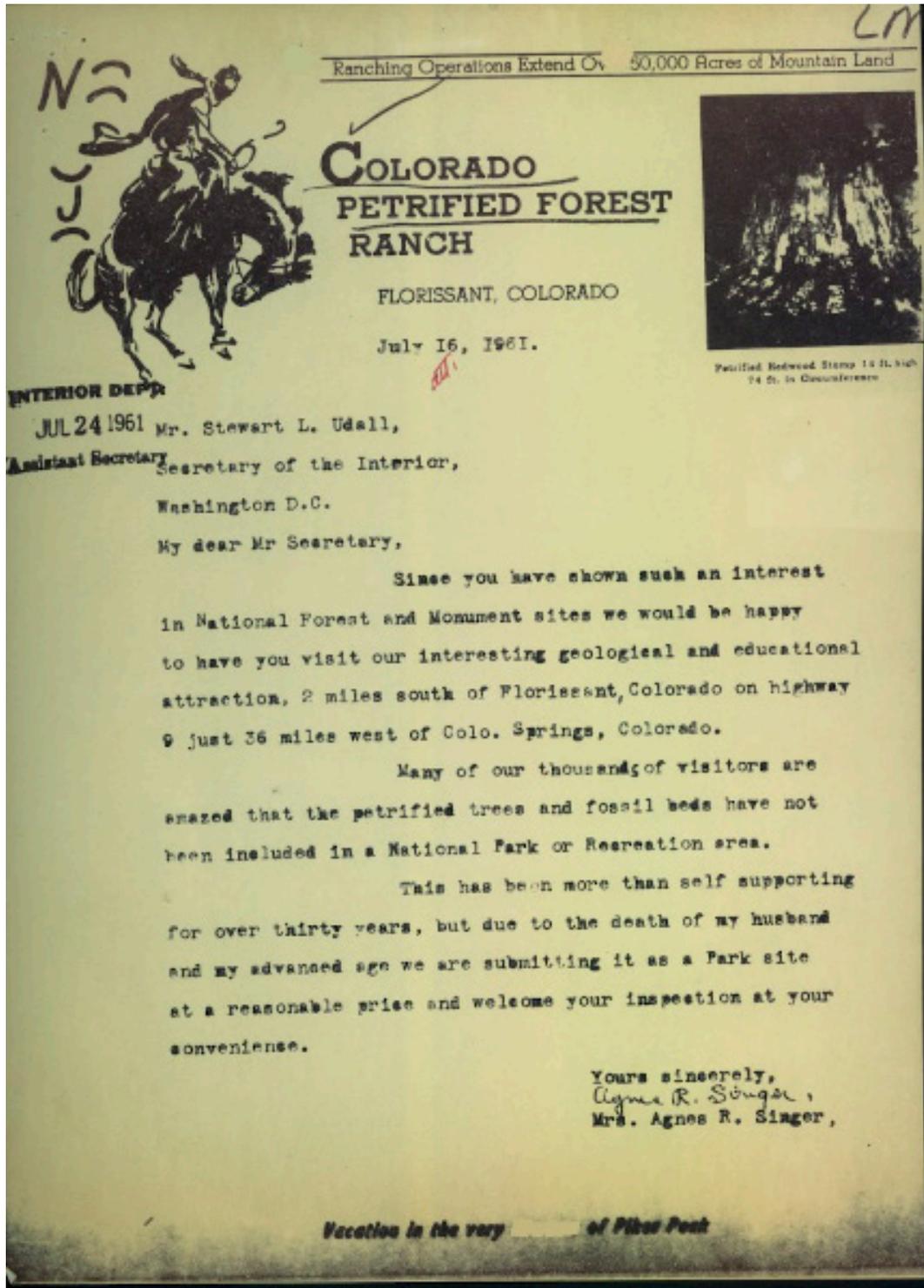
You Have Heard of It, Seen It in the Movies; Now Come and See the Real Thing

NPS Park Officials also seemingly felt the Trio,
seen here in the brochure mentioned above, was overhyped.

Rogers and Alberts submitted their findings in January 1953 and once again the fossil beds park idea was dead. The duo recommended no action as they felt there was little active danger to the fossils, the difficulties of park creation with all of the land held in private hands, and that with fossils all over the world this site was about “average interest” and not worth purchase. Singer, owner of the Colorado Petrified Forest, followed up with a letter once again signaling his offer to sell but was rebuffed for the time being.



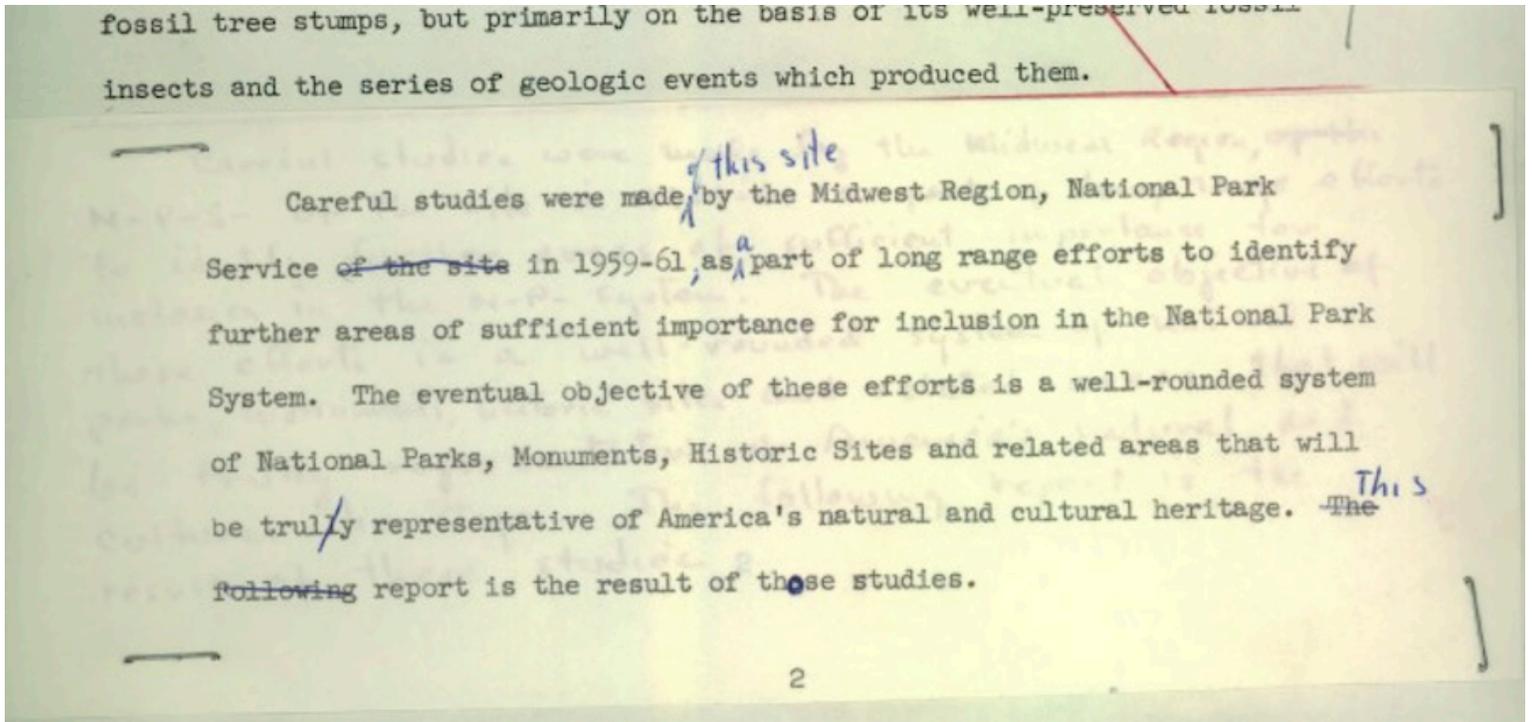
In the late 1950s interest began once again in the area with more officials and groups changing their perception on preserving the area and so yet another NPS report was ordered. P.J. Singer passed away in 1958 but in 1961, no doubt hearing the rumblings that park creation was back on the table, his widow Agnes began correspondence with the NPS reiterating her willingness to sell.



Facsimile of letter sent to Secretary of Interior Stewart Udall from Agnes Singer reiterating her late husband's offer to sell the Colorado Petrified Forest



In April 1962 the newly filed NPS report came to a different conclusion than those compiled within the previous 30 years -the area should be established as a national monument.



Section of 1962 NPS report on the proposed monument, showing edits

Requests for copies of the report came in from across the country and spawned letters from a variety of universities and museums agreeing with the conclusion. George Emrick, originally from the area and who had worked as a tour guide at Pike Petrified Forest while a teenager, had since earned a MA in art and even wrote the NPS to offer his design skills for the entrance and markers for the assumed soon to be monument. As a November 1962 editorial headline from the Denver Post stated, the Florissant fossil beds were a “Geological ‘Museum’ Worth Saving” and with housing subdivision soon sprouting up nearby time was of the essence to get the project in gear.

Still bubbling under the surface was the issue that the entire park would need to be acquired from private landowners, a concern seen in a November 1962 letter from Senator Gordon Allot inquiring as to what their reactions were so far. That winter the Regional Chief of Proposed Park Studies and the Rocky Mountain National Park Superintendent travelled back to the Florissant area to meet with all of the landowners and submitted a detailed letter on the meetings. While most of them signaled approval and even enthusiasm for the plan, including Agnes Singer and her son, the one exception was John Baker who along with his parents owned the by then closed Pike Petrified Forest. Described as “somewhat belligerent,” Baker harangued the NPS officials in the four hour meeting over such trivial matters as how he felt the pictures of his attraction in the report were inferior to those of Colorado Petrified Forest. While open to selling, the officials worried



the family had an overinflated estimate of the property value and noted that the sale to Walt Disney of a petrified tree stump to be installed in Disneyland several years earlier had given the family a “vision of a goldmine.” In closing they felt “the Bakers will be very hard to do business with” but by March of 1963 the NPS reported that all 13 landowners had signaled “general approval” of the project. There was no mention on how tenuous that approval was.

On the Congressional front things were hitting a snag with Representative Chenoweth asking for yet another study in order to look at shrinking the size of the park. According to correspondence he felt it held little public appeal potential and was too large – but his argument was for naught as he was unseated in the election of 1964 by Frank Evans. Correspondence indicates that NPS officials quickly moved to acquaint Evans with the proposal even before he arrived in Washington, DC in January 1965. By 1966, the monument appears to be nearly a done deal with Representative Evans backing the project enthusiastically and the NPS working on park boundaries and analyzing area visitors, population statistics, hotels, highway plants, and even climate data.

The records in our holdings stop at this point but three years later in 1969 the Florissant Fossil Beds National Monument was established. If you too agree with Mr. Rice in that “we can’t get too much science,” [visit their webpage](#) for more information, or visit the monument itself here in Colorful Colorado.

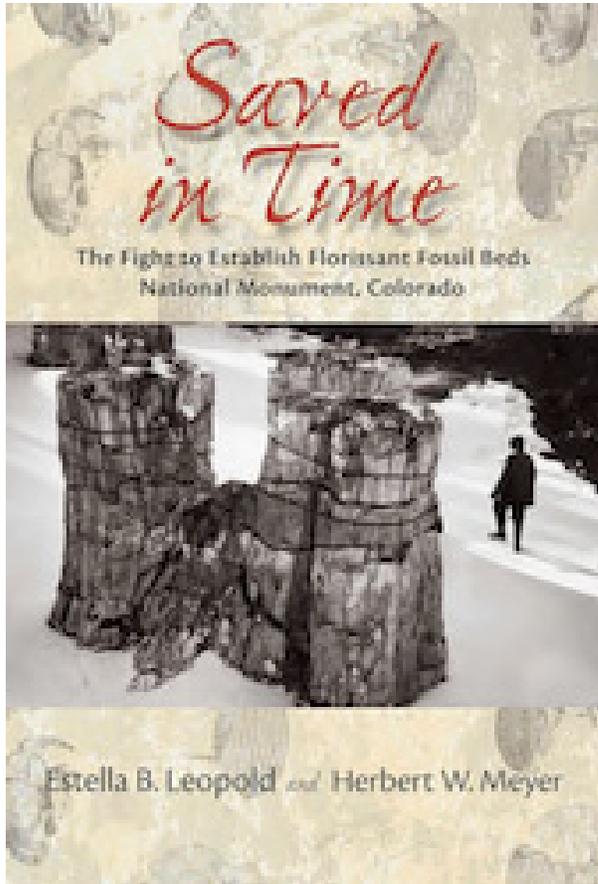
Article printed with permission of Cody White from the National Archive Office in Denver, Colorado.

Link to Original Article

<https://text-message.blogs.archives.gov/2015/11/17/a-tale-of-two-tourist-traps/>



The Reading Room

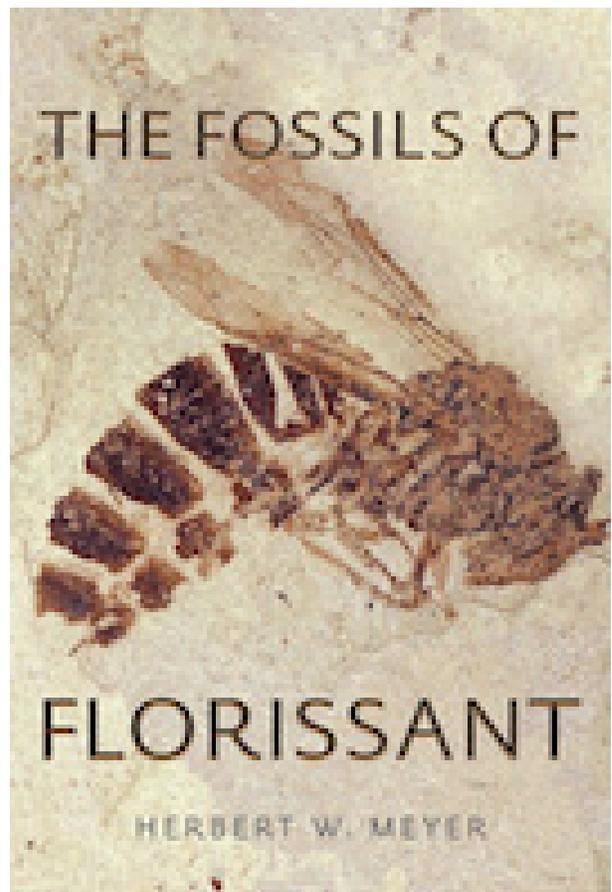


“In the summer of 1969, a federal district court in Denver, Colorado, heard arguments in one of the nation’s first explicitly environmental cases, in which the Defenders of Florissant, Inc., opposed real estate interests intent on developing lands containing an extraordinary set of ancient fossils. This book, the first account of the fight to preserve the Florissant Fossil Beds, tells a story of environmental activism that remains little known more than forty years after the coalition’s victory. The principal author, Estella Leopold, was a major participant in the process.”

- [Amazon](#) -

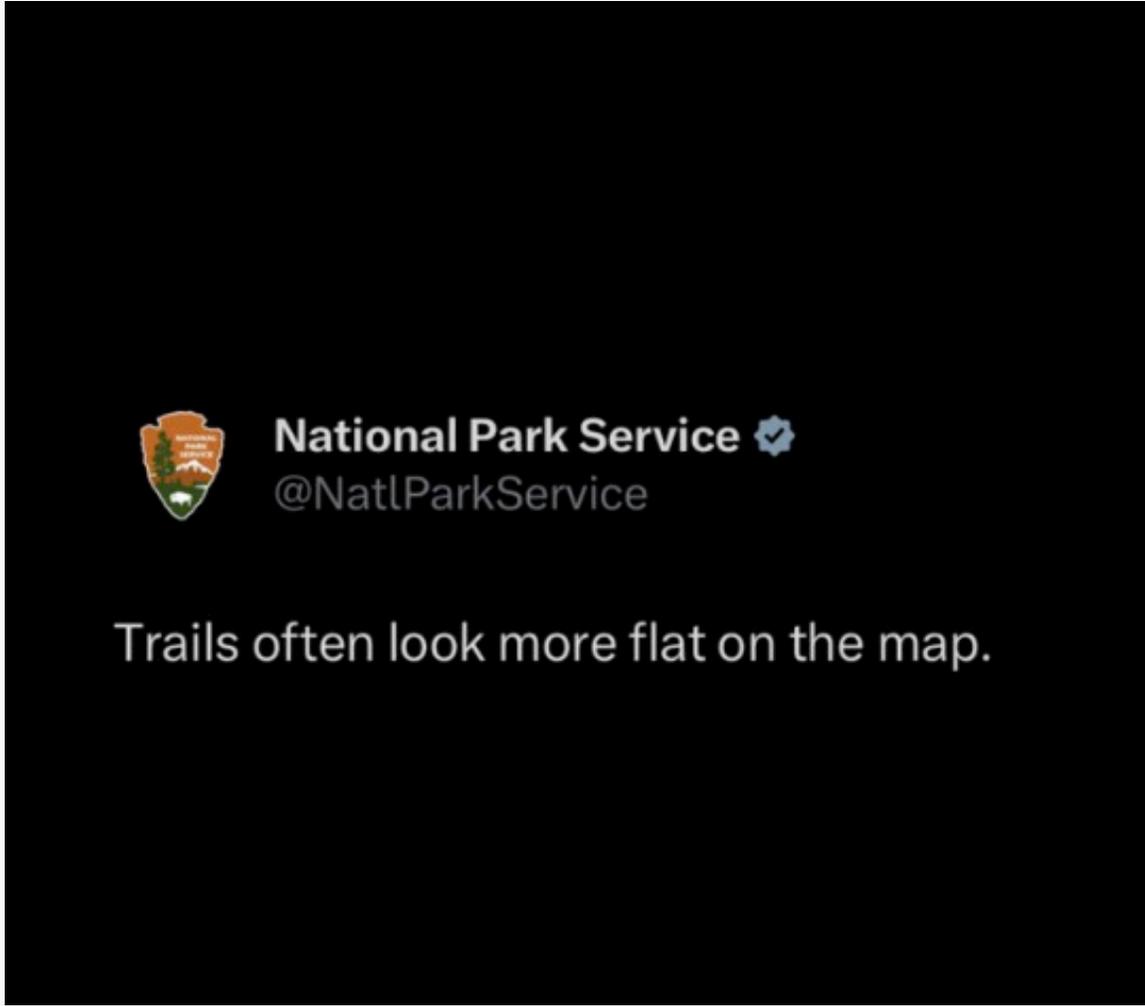
“The most diverse fossil bed in the United States provides a unique picture of what life was like 34 million years ago. In the rocks of Florissant, Colorado, lying in the shadow of Pike’s Peak, is the evidence of a long-lost world. Encased by the ash of volcanoes that erupted tens of millions of years ago, animals such as insects, fish, and mammals were fossilized in the same deposits as flowers, trees, and the delicate leaves of plants. This amazing collection of animals and plants from the same place at the same time provides a rare, uniquely comprehensive glimpse of life in the past.”

- [Amazon](#) -



CODA

Trail elevations consume energies.
Many energies both up and down.
Really.



Don't be Fooled.
Learn to read topographic maps

Crossword Answers

Across

- 1 Pine
- 4 Skunk
- 5 Volcano
- 6 Mountain
- 10 CottonTail
- 11 Black
- 12 Coyote
- 14 Monument
- 18 Hornbek
- 19 Indian

Down

- 2 Nixon
- 3 Fossil
- 5 Volunteer
- 7 Antelope
- 8 Bobcat
- 9 Elk
- 13 Sequoia
- 15 Hiker
- 16 Abert
- 17 Ranger

