

Developing and Delivering Digital Content Through Multiple Media Avenues and Exhibits at Florissant Fossil Beds National Monument, CO

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Quick Intro

- Florissant Fossil Beds
 - Late Eocene (~34 Ma)
 - Lahar and lacustrine deposits
 - Giant redwood stumps and very delicate plants and insects
- National Monument since 1969
 - Established many precedents of modern environmental law
 - But known as a fossil hotspot since the 1860s



Why does this matter?

- For all the new media buzzwords, it's actually about connecting with PEOPLE
- Visitors have seen museum exhibits before, but we want to provide more
- People are becoming more accustomed to digital content
- We need to engage visitors with modern media



What are our goals?

- Innovate
 - No other park, especially a park with paleo resources, is attempting this level of technology innovation
- Show visitors a paleo experience unlike any they've likely seen before
 - Small, fragile fossils; not giant dinosaurs
 - Need a new kind of park experience to still blow people's minds
- GOAL: Engage our visitors with interactive digital content to get them excited about our park and its unique paleo resources



(Not to scale)

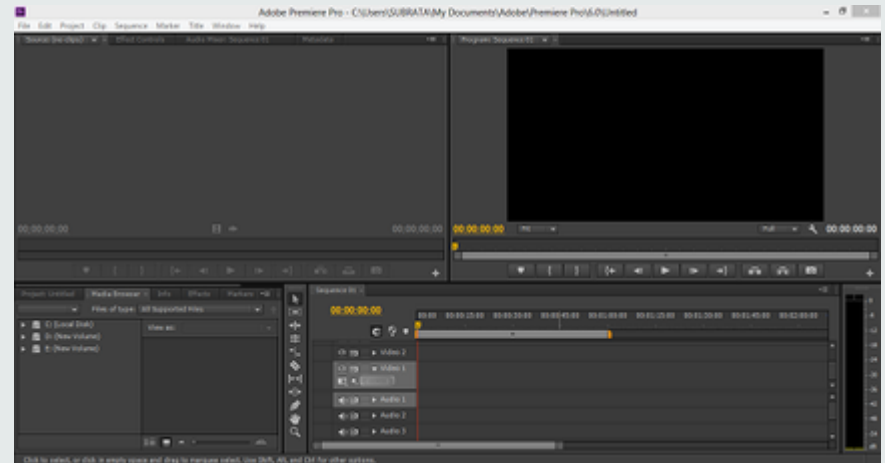
What different media avenues are we using?

- Touchscreen Kiosk
- Livestream paleo lab tour
- Augmented Reality App



The Tech

- Cameras and microphones
 - Lots of details to sort through
- Paralinx Triton System
- Software:
 - Audio/video editing
 - Augmented Reality Software
- Somebody who know how to use it



Content: Touchscreen Kiosk

- INTERACTIVITY – Key to visitor engagement
- Content can be updated with new discoveries or fresh content



Content: Digital Paleo Lab Tour

- Our lab purposefully lacks a lab “viewing window”
 - In general, we have smaller more delicate fossils
 - And a smaller lab/prep space
- We thought, our concept is to walk visitors through the collections area digitally



Content: Augmented Reality App

Florissant Fossil Beds National Monument

National Park Service
U.S. Department of the Interior



Charlotte Hill *Homesteader turned naturalist*

Women played an important role in the early days of Florissant. Charlotte Hill was a pioneer and homesteader here in the late 1800s. This remarkable woman raised seven children, ranched with her husband, and pursued her avocation of collecting fossils. Her collection efforts helped unveil Florissant's reputation as a world-class fossil site. She is credited by paleontologists for finding many of Florissant's first known fossil species.



Charlotte and Adam Hill.

According to the 1880 census, Adam changed his occupation from carpenter to specimen collector.

Touch the *Podryas* to see a slide-show of other fossils found by Charlotte and her family

Charlotte Hill's finds included the famous *Podryas neophane*, which was the first ever found at Florissant.



Prof. Scudder went over to Hill's ranch to see about some fossil insects Mrs. H. had been collecting for him...[she] had boxes upon boxes of... most perfect insects of various descriptions.

From the field journals of Arthur Lakes, teacher and fieldworker-for-hire, 1877

Only two miles from the Florissant post office are the quite famous petrified stumps. They are situated on a ranch owned by Adam Hill, and are the pride of his wife, Mrs. Charlotte Hill, who has turned naturalist, and has displayed at her home an elegant array of geologic specimens... This place furnishes a most interesting study for the naturalist and is visited every year by large delegations from the colleges and scientific schools of the east.

The Fairplay Flume newspaper
June 17, 1880

Click here to learn to listen to our paleontologist talk about Charlotte's continued contribution to Florissant

Challenges

- Tech requires some level of familiarity and expertise
- Subject to unexpected failures
- Filming isn't easy, and conditions don't always cooperate
- Have to balance science content with attention span and being entertaining



FINALLY: the product



Broader Applications

- Other parks can try this too!
 - We can all learn from each other
- Don't be intimidated by the technology
- No longer need to rely on outside help to create the content, can all be done in-house



Petrified Forest National Monument

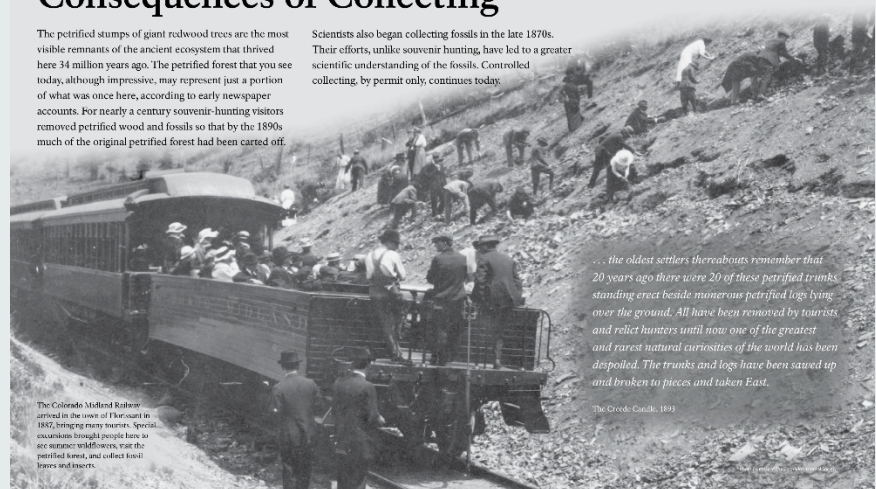
National Park Service
U.S. Department of the Interior



Consequences of Collecting

The petrified stumps of giant redwood trees are the most visible remnants of the ancient ecosystem that thrived here 34 million years ago. The petrified forest that you see today, although impressive, may represent just a portion of what was once here, according to early newspaper accounts. For nearly a century souvenir-hunting visitors removed petrified wood and fossils so that by the 1890s much of the original petrified forest had been carted off.

Scientists also began collecting fossils in the late 1870s. Their efforts, unlike souvenir hunting, have led to a greater scientific understanding of the fossils. Controlled collecting, by permit only, continues today.



... the oldest settlers thereabouts remember that 20 years ago there were 20 of these petrified trunks standing erect beside numerous petrified logs lying over the ground. All have been removed by tourists and relic hunters until now one of the greatest and rarest natural curiosities of the world has been despoiled. The trunks and logs have been sawed up and broken to pieces and taken East.

The Crooks Cattle, 1911

The Colorado Midland Railway arrived in the town of Petrified Forest in 1882, bringing many tourists. Special excursion brought people here to see summer wildflowers, view the petrified forest, and collect local birds and insects.

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