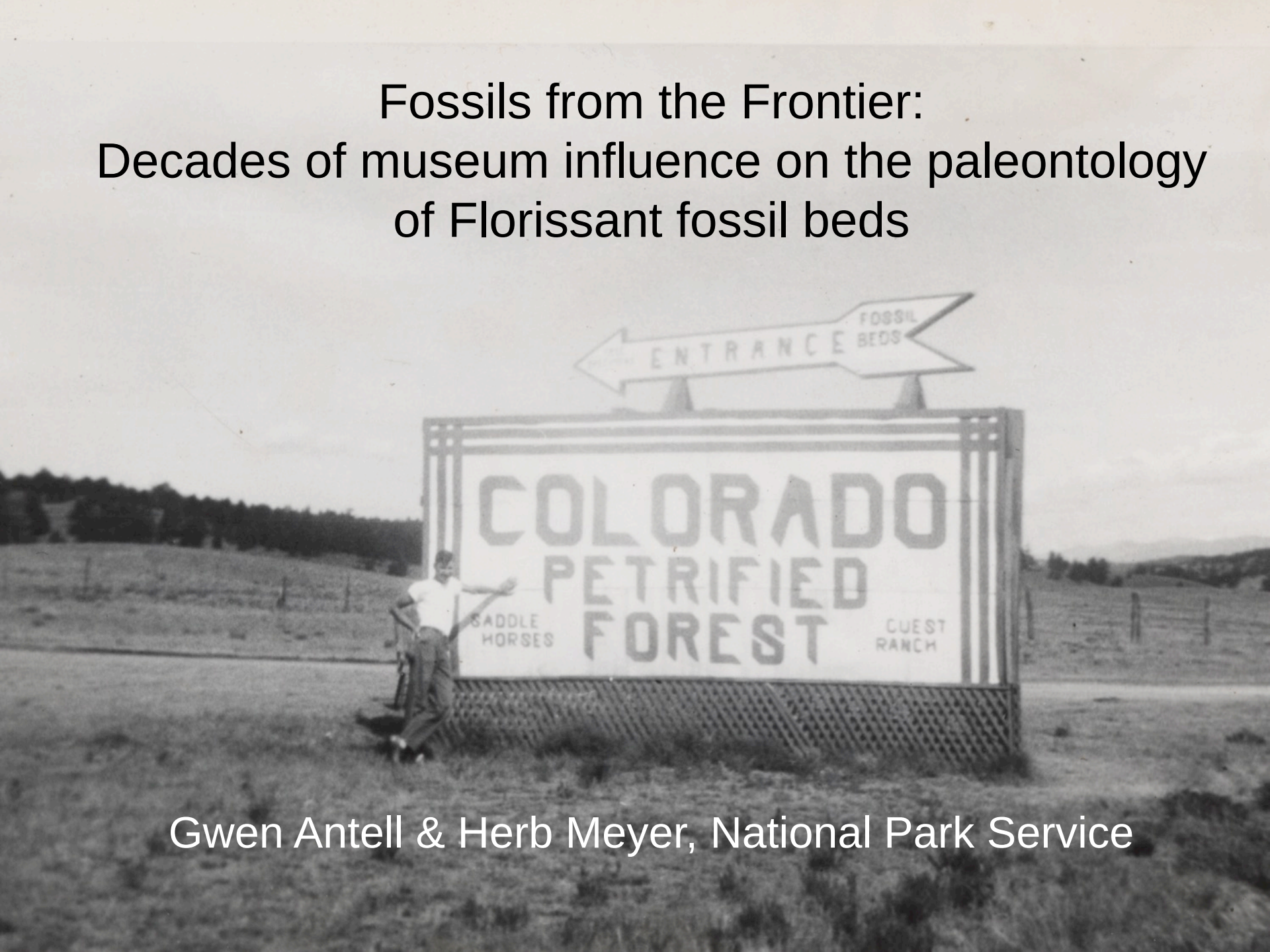
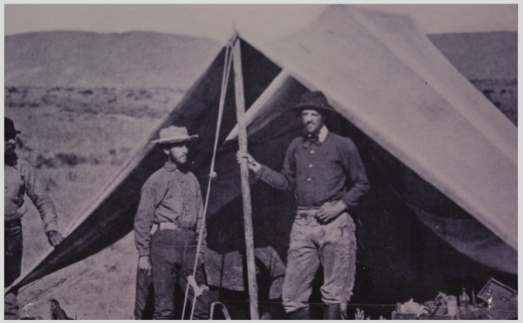
Fossils from the Frontier:
Decades of museum influence on the paleontology of Florissant fossil beds



Gwen Antell & Herb Meyer, National Park Service

Florissant Fossil Beds, Colorado

- 34 Ma (late Eocene) deposits
- Lacustrine setting with volcanic activity
- ca. 1800 fossil species from shale and petrified wood
- 5800 published specimens, 330 publications
- 2 hours from Denver!



1874
Hayden survey reports Florissant fossils

1877
Princeton and Scudder expeditions

1890
Scudder monograph

1906-08
Cockerell expeditions

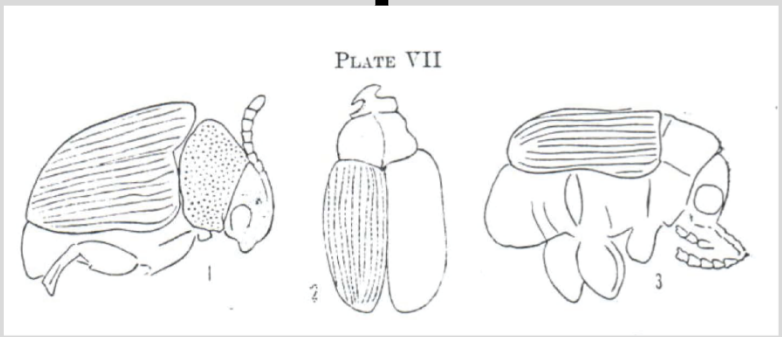
1908-1920
Wickam papers

1953
MacGinitie monograph

1969
National Monument established

2013
Visitor Center & Paleontology Research Lab opened

1874



Nineteenth Century Collectors

- 20-member Princeton Scientific Expedition, July 1877
- Samuel Scudder and Arthur Lakes, August 1877
- Homesteader Charlotte Hill likely the predominant collector
- O.C. Marsh bought fossil plants and insects from Charlotte in 1898

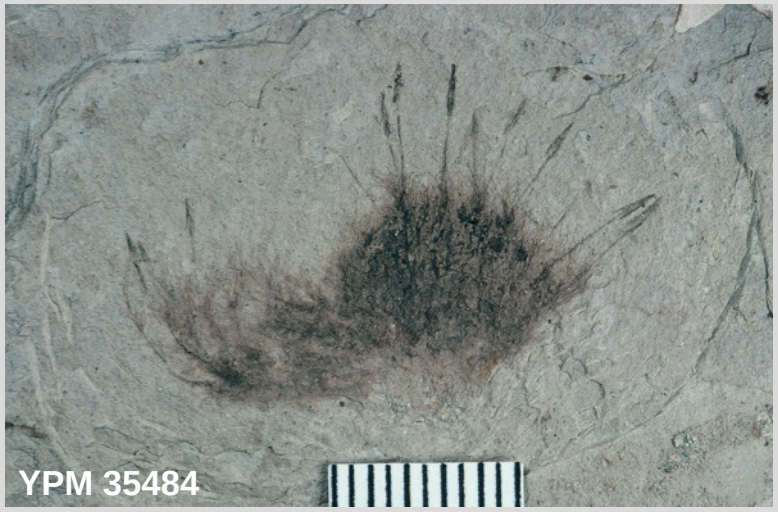
Osborn, Speir & Scott

Charlotte Hill

Samuel H. Scudder

T.D.A. Cockerell

- Professor at UC Boulder; AMNH and Yale affiliations
- Expeditions to Florissant 1906-1908
- Donated Florissant fossils to various museums
- Advocated for science, paleontology, and an integrated network of museums



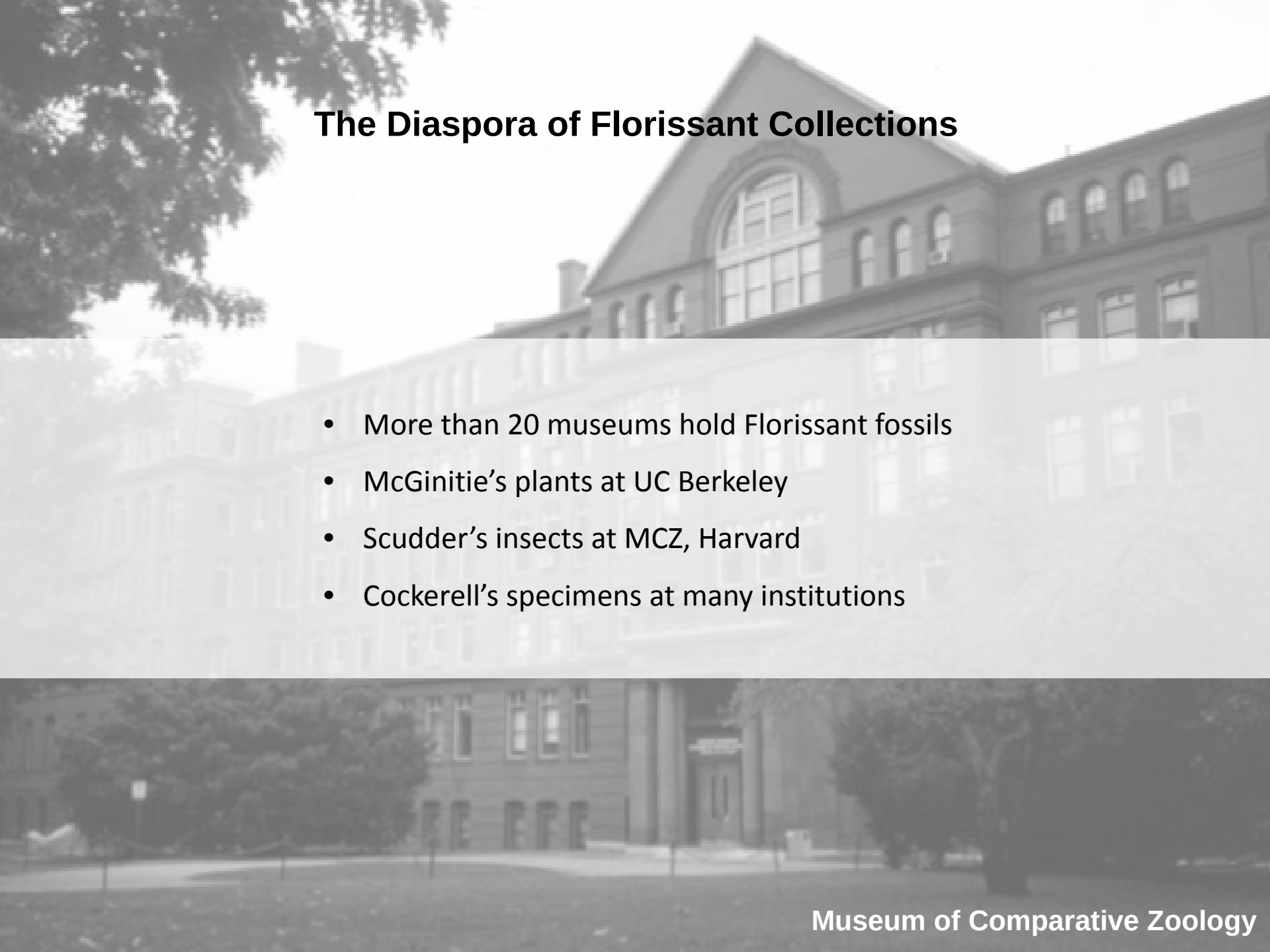
"**One great treasure** was a branch of the narrowleaved cottonwood….We packed it up with the greatest care, and **sent it by express to Yale University Museum**, where it arrived in safety."

"**A tuft of moss**...was appropriately **transmitted for study to Mrs. Gertrude Britton** of the New York Botanical Garden, the best authority on American mosses."

Cockerell's "Pan-American Museum Policy"

i. Local branch museums
ii. Once central institution

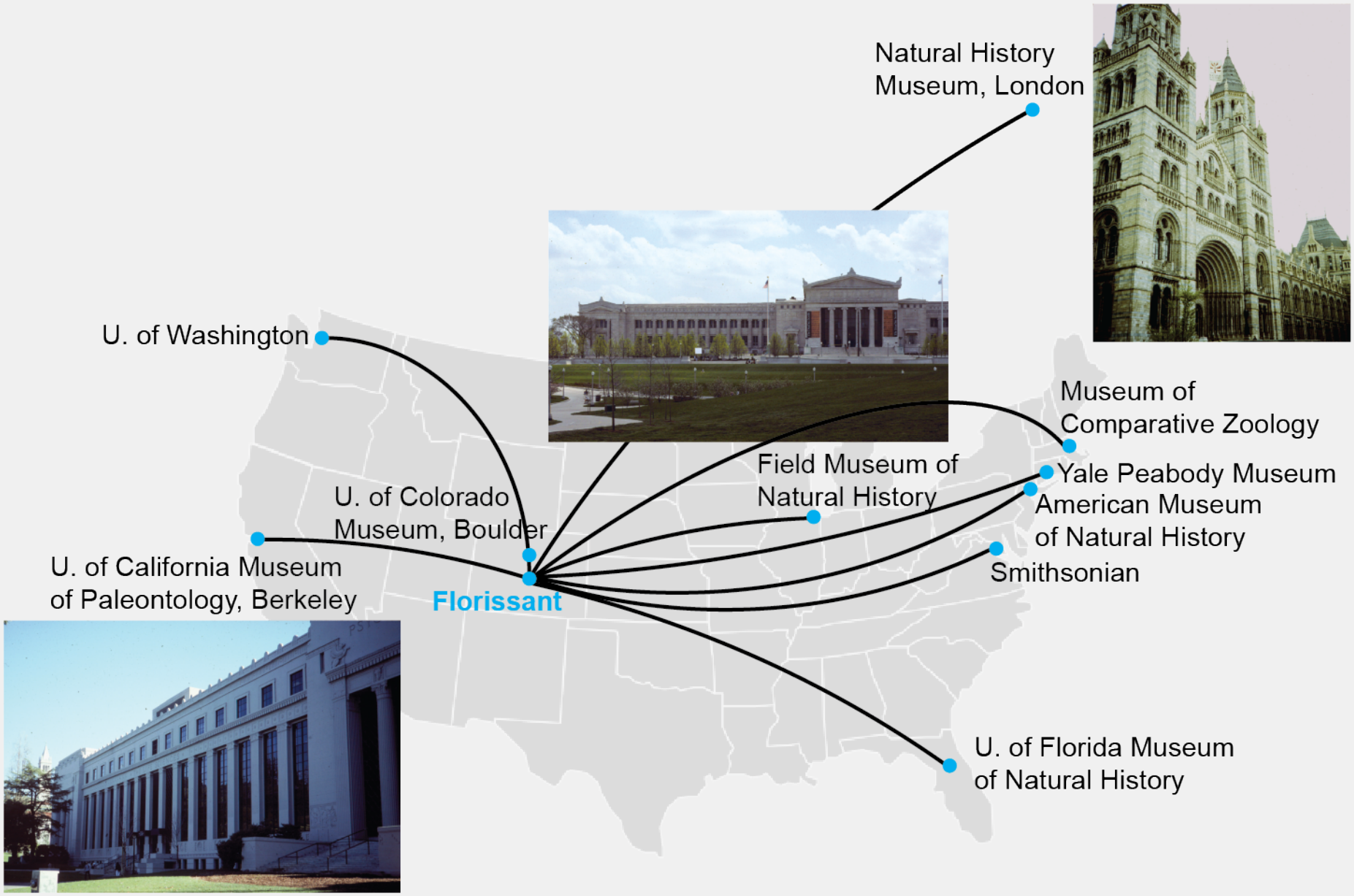
"The National Museum should become national in a larger sense. It seems to me that it should establish branch museums... illustrating the natural history of the regions they represented."
Cockerell, 1920



The Diaspora of Florissant Collections

- More than 20 museums hold Florissant fossils
- McGinitie's plants at UC Berkeley
- Scudder's insects at MCZ, Harvard
- Cockerell's specimens at many institutions

Museum of Comparative Zoology


Natural History
Museum, London
U. of Washington
Museum of
Comparative Zoology
Field Museum of
Natural History
Yale Peabody Museum
American Museum
of Natural History
U. of Colorado
Museum, Boulder
U. of California Museum
of Paleontology, Berkeley
Florissant
Smithsonian
U. of Florida Museum
of Natural History

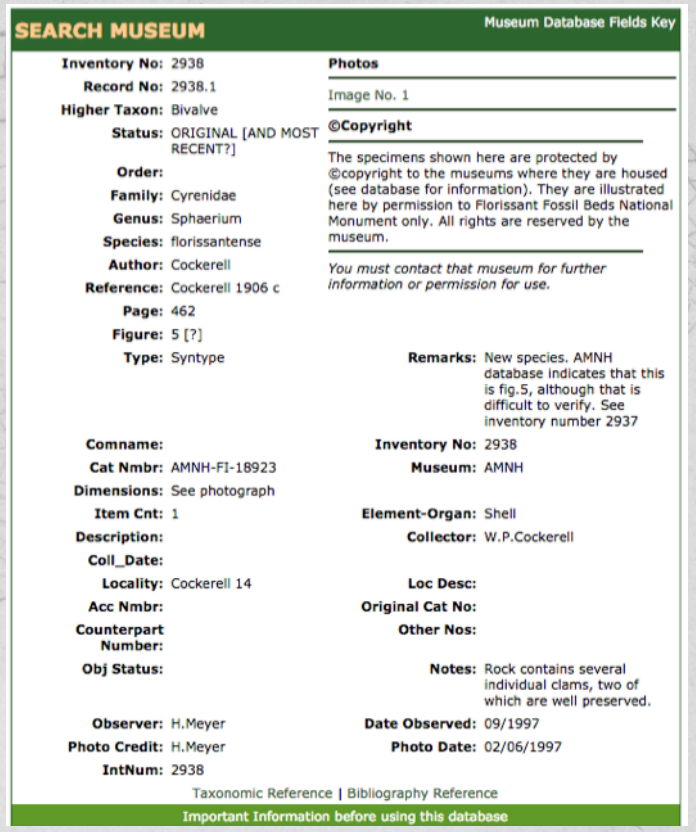
Establishment of the National Monument

- On-site museum holds ca. 10,000 objects
- Interpretive center hosts educational activities
- Archives document Florissant fossil beds history
- Long-term site monitoring

A Central Database

- All Florissant type specimens imaged and databased
- Built with cooperation of 17 museums
- Searchable and publicly accessible

planning.nps.gov/flfo/

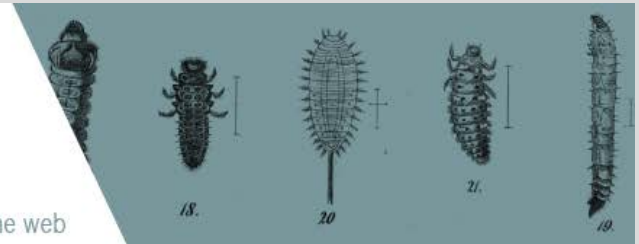


Digitization Collaborations

- Fossil Insect Collaborative, 10 museums involved
- Specimen images and museum records uploaded to digital databases
- Data feed into national, NSF-funded database (iDigBio.org/portal)

iDigPaleo

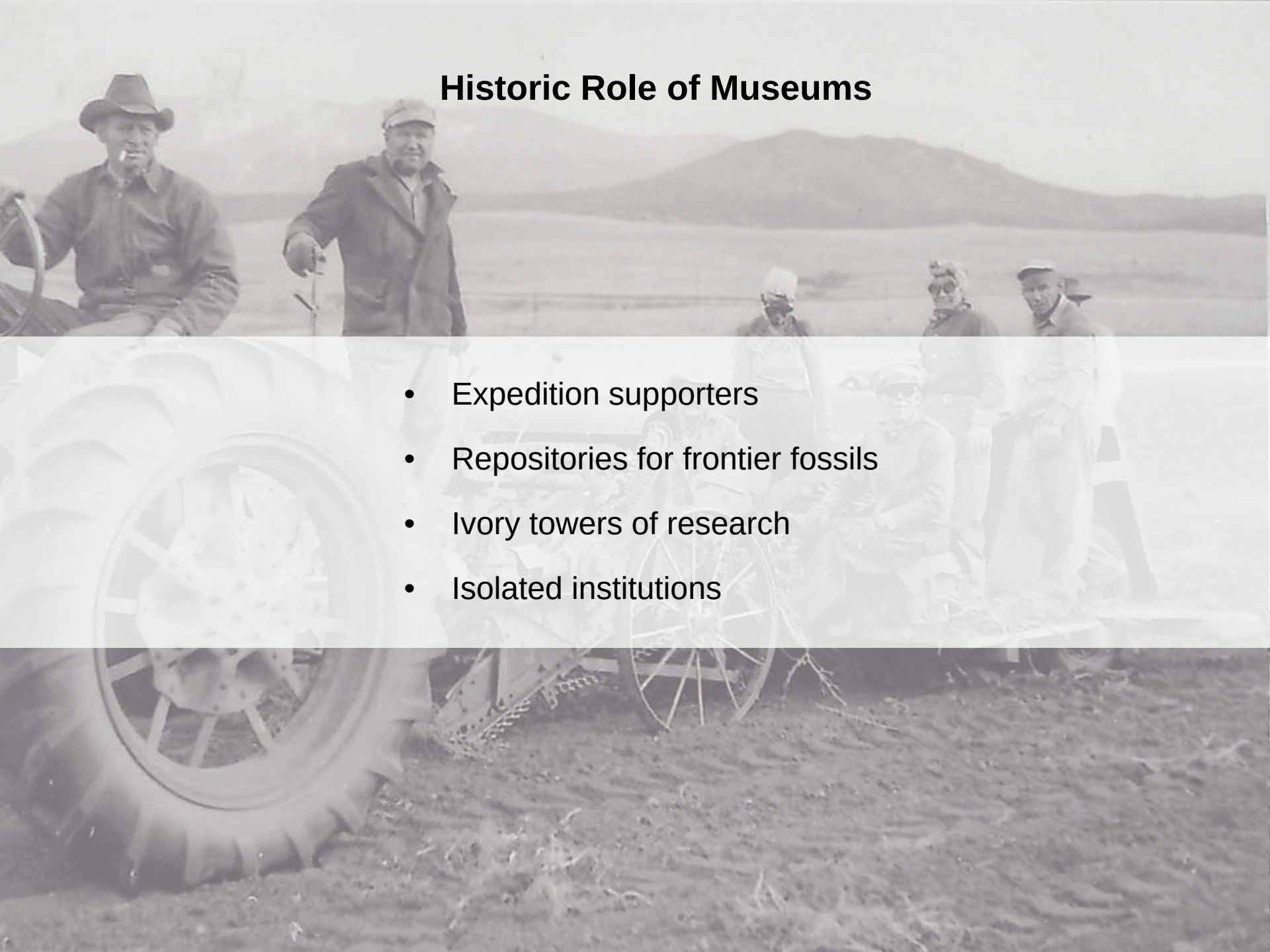
Making data and images of millions of insect specimens available on the web



iDigBio

Integrated Digitized Biocollections

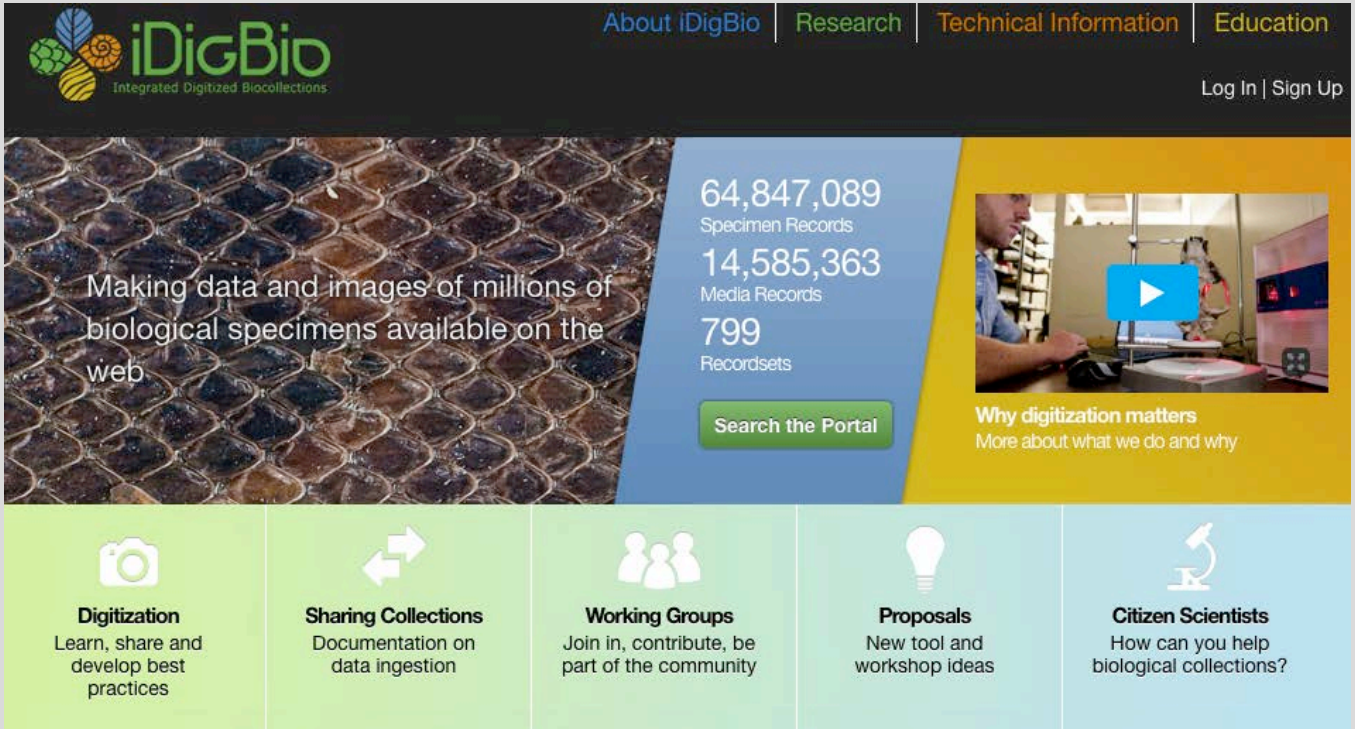
Historic Role of Museums

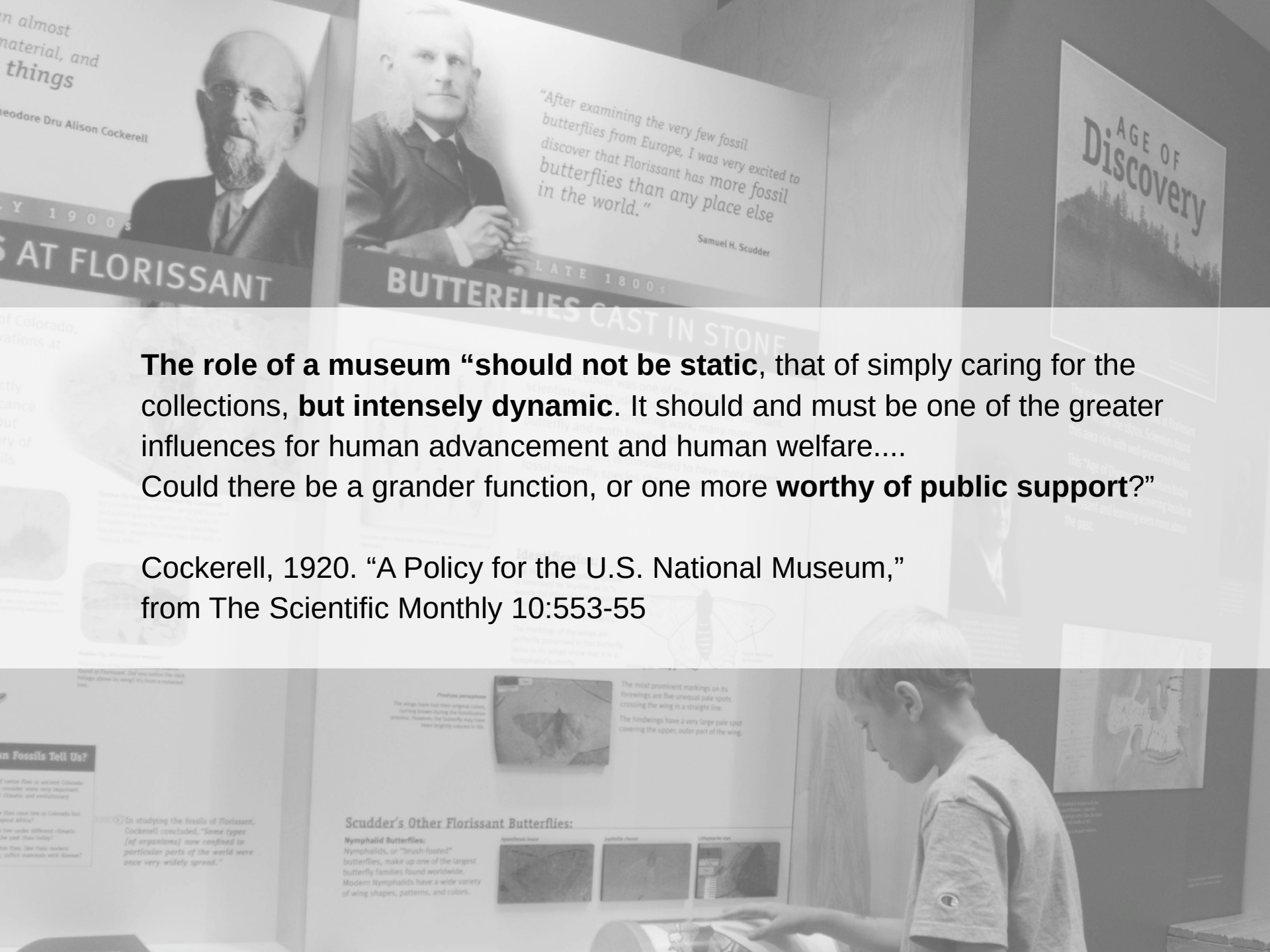


- Expedition supporters
- Repositories for frontier fossils
- Ivory towers of research
- Isolated institutions

Emerging Role of Museums

- Small museums with local material
- Interpretation and education for general public
- Data distributors, through integrated digitized collections
- In 2016: federally mandated protectors for park fossils





The role of a museum "should not be static, that of simply caring for the collections, **but intensely dynamic**. It should and must be one of the greater influences for human advancement and human welfare....
Could there be a grander function, or one more **worthy of public support**?"

Cockerell, 1920. "A Policy for the U.S. National Museum,"
from The Scientific Monthly 10:553-55

With thanks

Rocky Mountain Conservancy

fossil insect COLLABORATIVE

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ENVIRONMENTAL STEWARDS

FRIENDS OF THE FLORISSANT FOSSIL BEDS

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