Partners

Museum of Western Colorado

Dinosaur Journey Fruita, Colorado

Utah Paleontology

Utah DNR Geological Survey

John Wesley Powell River History Museum

Mid-Mesozoic Logo and website by BJ Nicholls
WELCOME

The Mid-Mesozoic: The Age of Dinosaurs in Transition field conference will involve four day-trips to parts of the Colorado Plateau, and two days of lectures. In the Colorado Plateau region, the Upper Jurassic Morrison Formation and overlying Lower Cretaceous Cedar Mountain Formation contain numerous quarries yielding vertebrate fossils in western Colorado and eastern Utah. Some of the most important include the Fruita Paleontological Area and the Mygatt-Moore Quarry in the Morrison, and the Dalton Wells and Gaston quarries in the Cedar Mountain.

The Morrison Formation is world famous for its Upper Jurassic dinosaur fossils and is one of the most extensively studied dinosaur bearing units in the world. Very significant sites are known in eastern Utah (including the world famous Dinosaur National Monument and Cleveland-Lloyd Quarry) and in western Colorado (the Fruita Paleontological Area and Mygatt-Moore Quarry). Given the extensive research given to these sites over the years this is one of the best understood areas of Upper Jurassic exposures anywhere in the world.

In contrast, the overlying Early/Lower Cretaceous Cedar Mountain Formation spans roughly 35 million years, in comparison to the Morrison Formation’s 7 million years. The Cedar Mountain is approximately half the stratigraphic thickness, but represents about 5 times as much in geologic time. In comparison to essentially two closely related faunas in the Morrison, the Cedar Mountain contains at least 6 different distinct faunas. This means the Cedar Mountain may have more dinosaur species preserved within it than any other formation in the world.

These two formations are separated by an unconformity, which is generally thought to be on the order of 25 million years. However, research on the palynomorphs, ostracods, and charophytes suggests a much shorter time interval between the Cedar Mountain and Morrison Formations.

The Colorado Plateau’s Morrison-Cedar Mountain dinosaurs are contributing critical information about an important period of time in the history of terrestrial life in the Northern Hemisphere. Globally, this was a time of changing climatic conditions and exceptionally high atmospheric carbon dioxide levels causing “supergreenhousing” (a world with no polar ice caps and a sluggish, poorly oxygenated ocean), major restructuring of biogeographic migration corridors, and a complete restructuring of plant communities with the origin and rapid rise to dominance of flowering plants. The Utah Geological Survey, the Museum of Western Colorado, and researchers from a host of different institutions continue to discover and integrate new data from the Morrison and Cedar Mountain Formation into an increasingly robust history of eastern Utah and western Colorado during the Late Jurassic and Early Cretaceous. The density of biostratigraphic, chronostratigraphic, and paleoclimatic data make the Colorado Plateau a standard on which to resolve the geological and paleobiological history of the mid-Mesozoic in the Northern Hemisphere. Continued new discoveries only serve to show that Colorado Plateau has the most complete mid-Mesozoic terrestrial record in the world, and that there is still a great deal to learn.
HOST COMMITTEE

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1765 East Main Street
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Green River, Utah 84525
COLLECTIONS

There will be limited access to collections at the following institution before and after the meeting. Please call in advance to secure an appointment.

Museum of Western Colorado – Dinosaur Journey Museum

Collections are composed of mostly Morrison Formation material, including large amounts of *Apatosaurus* and *Allosaurus*, along with the type material for the dinosaurs *Mymoorapelta maysi* and *Ceratosaurus magnicornis*. In addition, there is a 40% complete *Stegosaurus* specimen and type material of the fish *Morrolepis schaefferi* and “*Hulettia*” *hawesi*, plus several type Late Jurassic plant specimens.

Contact: John Foster
jfoster@westcomuseum.org
phone: 970-858-7282
Abstract Submission Guidelines

Abstracts are now being accepted. The deadline for abstracts is January 12, 2014, 11:59 pm (MST).

To submit an abstract, please email a Word document or .rtf formatted text document to: rhuntfoster@blm.gov.

To submit an abstract to the conference, please follow these guidelines:

1. Determine whether it best fits into the Jurassic or Cretaceous discipline category and clearly state this in the first line of the document.

2. Compose your abstract in Microsoft Word format or as an .rtf format text document.

   Each abstract must contain the following in order:
   - Title – the title should be all capital letters in bold Times New Roman 12 pt font
   - The names and contact information for all of the authors – email addresses must be included. All text in this portion must be in Times New Roman 12 pt font. No more than 10 authors may be listed on a paper. Group names will not be accepted as an author.
   - The body of your abstract – the body must be in Times New Roman 12 pt font. The abstract body has a strict 3500 characters limit, not counting spaces. (Your abstract will be sent back for editing if it exceeds 3500 characters.).
   - Keywords – select up to five keywords for index searches

3. Select your preferred mode of presentation: Oral, Poster, or Either (no preference) and indicate your choice at the end of your abstract document. (Please Note: The program organizers will do their best to fit you into your preferred mode. They will override your original mode selection if they feel your paper would fit well in a particular session with other compatible abstracts. The decision of the program organizers is final.)

4. Before sending your abstract, please do the following:

   Check the spelling of the abstract’s body and title using your own word processor. Read it again and make sure that it is something the whole world should see. (We will not rewrite these for you.)
5. You are ready to submit when you have available all of the information listed above. Please attach the Word or .rtf document to an email and address it to:

rhuntfoster@blm.gov before January 12, 2014, 11:59 pm (MST).

SESSION INFORMATION

Abstracts are accepted for oral and poster presentations in the following categories:

Jurassic Topics

J/K: the Transition

Cretaceous Topics
FIELD TRIPS

Four field trip days are scheduled, with an optional fifth pre-meeting trip to Dinosaur National Monument. Onsite registration for field trips will not be accepted. We reserve the right to alter or cancel a field trip due to unforeseen circumstances, such as weather or limited/closed access to the public. In the event of a full cancellation, refunds will be given. All field trips include transportation (no private vehicles please), snacks, lunch, water and field guide. Please dress appropriately for moderate hiking over uneven terrain, and bring a hat, sunblock and a raincoat. Temperatures and weather conditions can vary considerably at this time of year. Due to limited space in vehicles, participants are asked to not bring more than one bag or piece of luggage to Green River.

Field Trips:

Optional: Dinosaur National Monument

Regular: Late Jurassic of the Grand Valley Area
          Early Cretaceous of the Moab Area
          Late Jurassic-Early Cretaceous of the Green River-Hanksville Area
          Late Jurassic-Early Cretaceous of the San Rafael Swell Area

Optional Trip on April 29th: DINOSAUR NATIONAL MONUMENT

The upturned Upper Jurassic Morrison Formation at Dinosaur National Monument is world famous for the wall of bones left in relief in the Carnegie Quarry. This braided river system was responsible for the burial of some of our most famous Jurassic fossils such as the baby Stegosaurus and juvenile Camarasaurus (one of the most complete sauropods in the world) and the skull of Apatosaurus. This Morrison Formation quarry has produced the remains of at least 120 individual dinosaurs, and 1500 bones of these animals are still exposed at this spectacular locality. Preserved in this deposit still on site or in museums are dinosaurs such as Camptosaurus, Barosaurus, Diplodocus, Allosaurus, and Dryosaurus, along with non-dinosaurian vertebrates like turtles, crocodylomorphs, and a sphenodontid. In addition, the Lower Cretaceous Cedar Mountain Formation has yielded the first complete skulls of North American Cretaceous sauropods, Abydosaurus, a partial skeleton of Deinonychus, and a possible partial specimen of Tenontosaurus. This region provides a critical bridge between the mid-Cretaceous rocks of the central Colorado Plateau and those of Wyoming and Montana. For this optional pre-meeting field trip, the price includes transportation, lunch and admission to the park. We will meet at Dinosaur Journey Museum in Fruita - 550 Jurassic Court.
LATE JURASSIC OF THE GRAND VALLEY AREA

On Wednesday, April 30, 2014, we will meet at Dinosaur Journey Museum, in Fruita, Colorado. This one-day field trip will visit various sites located in the BLM McInnis Canyons National Conservation Area. Focusing on the Late Jurassic-age Morrison Formation, trip leaders John Foster and Jim Kirkland will tour you to both historic and current fossil quarries and outcrops. We will visit the site of Elmer Riggs’s famous 1901 *Apatosaurus* Quarry at Dinosaur Hill, which is still on display at the Field Museum in Chicago. We will then tour the Fruita Paleontological Research Natural Area, which is well-known for its abundance and diversity of terrestrial fossils and examine the taphonomic biases inherent in different micro-environments preserved on the Morrison floodplain. In the afternoon, we will travel to the Rabbit Valley area, where we will tour various sites known in the Brushy Basin Member of the Morrison Formation, including the Mygatt-Moore Quarry. Worked consistently since 1985, this quarry is well known for its abundance of common Jurassic dinosaurs like *Allosaurus, Apatosaurus, Camarasaurus*, and *Diplodocus* as well as the rare *Ceratosaurus*, but it is also the type locality for the ankylosaur *Mymoorapelta*. We will return to Fruita at the conclusion of the day.

EARLY CRETACEOUS OF THE MOAB AREA

Friday, May 2, 2014, we will depart Dinosaur Journey Museum, in Fruita, Colorado and travel into the Yellow Cat Member of the early Cretaceous Cedar Mountain Formation in eastern Utah. We will visit quarries located on BLM land off the Yellow Cat Road, including Doelling’s Bowl. Jim Kirkland will talk about the Utah Geological Survey’s extensive work on several new animals, including a sauropod, ankylosaur, dromeosaur and iguanodonts. We will also visit the historic BYU Dalton Wells Quarry. This State of Utah site includes a variety of taxa, including *Venenosaurus, Gastonia, Utahraptor, Nedcolbertia*, iguanodontids, a basal macronarian and a camarasaursur. We will then visit the newly discovered BLM Mill Canyon Dinosaur Tracksite, which preserves tracks of more than six different taxa in ancient lake bed sediments. This world class site is the only tracksite in the Early Cretaceous of North America to exhibit a spectacular variety of species, including some not yet documented from body fossil remains in the Cedar Mountain Formation. We will spend the evening in Green River, Utah.
LATE JURASSIC—EARLY CRETACEOUS OF THE GREEN RIVER-HANKSVILLE AREA

On Sunday, May 4, 2014, we will depart from John Wesley Powell River History Museum and travel to the rich badlands on BLM lands southeast of Green River to the bonebeds of the basal therizinosaur *Falcarius* at the base of the Yellow Cat Member of the Cedar Mountain Formation. These bonebeds yielded the remains of hundreds of *Falcarius*, along with a huge polacanthine ankylosaur, theropods, sauropods, and crocodilians. We will hike up Don’s Ridge, which preserves a dozen bone-bearing sites at several different stratigraphic levels within a paleo valley at the base of the Yellow Cat Member, including those of the newly named *Iguanacolossus*, sauropods, and ankylosaurs. After lunch, we will visit the Hanksville-Burpee Quarry, located in the Brushy Basin Member of the Morrison Formation. This river-channel deposit has produced the remains of *Allosaurus, Camarasaurus, and Stegosaurus*, to name just a few, along with freshwater clams and an abundance of petrified wood. We will the continue east to view the Cedar Mountain section on the south end of the San Rafael Swell east of Capital Reef National Monument, where the Yellow Cat Member can be seen interfingering with the Buckhorn Conglomerate. We will spend the evening in Green River, Utah.

LATE JURASSIC—EARLY CRETACEOUS OF THE SAN RAFAEL SWELL AREA

Monday, May 5, 2014, we will visit the San Rafael Swell Area, and will depart from John Wesley Powell River History Museum. We will first visit the Utah State University – Eastern Prehistoric Museum, located in Price. This museum exhibits a wealth of Morrison fossils including *Allosaurus, Stegosaurus, Camptosaurus, Camarasaurus*, and parts of a *Torvosaurus*. Many type specimens from the Cedar Mountain Formation, including *Utahraptor, Gastonia, Animantarx, Peloroplites, Cedarpelta, Eolambia, Nedcolbertia, Geminiraptor* and several sauropods awaiting formal description are also displayed. Afterwards we will visit the world-famous *Allosaurus* mass-mortality site at the BLM Cleveland-Lloyd Quarry and its new interpretive facility. We will then drive through the entire section of Jurassic and Lower Cretaceous in the type area for the Cedar Mountain Formation and the Buckhorn Conglomerate Member. We will then continue on to the Moore Road where once again we will traverse the entire Mid-Mesozoic section examining the area where the Short Canyon Conglomerate was recently described separating the Albian Ruby Ranch Member from the overlying basal Cenomanian Mussentuchit Member, which over the past two decades has yielded more than 80 vertebrate taxa, largely from microvertebrate sites. From here we will continue across the spec-
PRELIMINARY SCHEDULE

As of June 2013 (Jurassic Only Meeting in Red; Cretaceous Only Meeting in Blue)

*Tuesday, April 29, 2014 – Depart from Dinosaur Journey Museum
7:30am – 4:30pm   Dinosaur National Monument Field Trip (*optional additional cost - $50)
5:00pm            Return to Fruita, Colorado

Wednesday, April 30, 2014 – Depart from Dinosaur Journey Museum
7:30am – 4:30pm   Morrison Field Trip to Grand Valley Area
5:00pm            Return to Fruita, Colorado
7:00pm – 10:00pm  Welcome Reception at Dinosaur Journey Museum

Thursday, May 1, 2014 – Dinosaur Journey Museum
7:30am – 9:30am   Poster Setup
9:30am – 6:00pm   Posters Open
8:30am – 12:00pm  Jurassic Sessions
12:00pm – 1:30pm  Lunch on own
1:45pm – 4:30pm   Jurassic Sessions

Friday, May 2, 2014 – Depart from Dinosaur Journey Museum
7:30am – 4:30pm   Moab Area Field Trip
5:00pm            Stay in Green River, Utah overnight

Saturday, May 3, 2014 – Depart from John Wesley Powell River History Museum
7:30am – 4:30pm   Green River-Hanksville Area Field Trip
6:00pm            Stay in Green River, Utah overnight
Sunday, May 4, 2014 – John Wesley Powell River History Museum
7:30am – 9:30am  Poster Setup
9:30am – 6:00pm  Posters Open
8:30am – 12:00pm  Cretaceous Sessions
12:00pm – 1:30pm  Lunch on own
1:45pm – 4:30pm  Cretaceous Sessions
7:00pm  Burgers and Beer Banquet at Ray’s Tavern

Monday, May 5, 2014 – Depart from John Wesley Powell River History Museum
7:30am – 4:30pm  San Rafael Swell Area Field Trip
7:30pm  Return to Fruita, Colorado

Schedule subject to change. Please continue to check the meeting website at http://www.utahpaleo.org/mid-mesozoic-conference.html for updates.

SPECIAL EVENTS

A Welcome Reception will be held at the Museum of Western Colorado’s Dinosaur Journey Museum from 7pm to 10pm on Wednesday, April 30, 2014. This museum displays a wide variety of western Colorado fossil material, from dinosaur tracks from the Late Cretaceous coal mines of the area and from the Late Triassic Chinle Formation of the region, to fish, plants, and insects from the Eocene Green River Formation. Also featured are Late Jurassic dinosaurs from the Mygatt-Moore Quarry and other local sites in the Morrison Formation, as well as Late Cretaceous dinosaurs and a robotic *Utahraptor* ripping the head off a saurpod.

A ‘burgers and beer’ banquet will be held at Ray’s Tavern in Green River at 7pm on Saturday, May 3, 2014.
Registration for the Mid-Mesozoic: The Age of Dinosaurs in Transition is now open. Registration will be online only:

Online Registration: https://www.museumofwesternco.com/visit/dinosaur-journey/mid-mesozoic-conference/ or http://www.ittybittyurl.com/U4t

If you cannot register online, please contact:
ReBecca Hunt-Foster
435-259-2179 or at rhuntfoster@blm.gov

Note: all times are Mountain Standard Time (MST). Early registration will run until March 3, 2014 5:00 pm. Late Registration will start 8:00 am, March 4. On-site meeting-day registration will be available. All field trips must be scheduled ahead of time—no on-site registration will be available.

There are three different categories of registration:

**Full meeting** (All non-student presenters/authors)
- Early Registration: $230.00*
- Late Registration: $250.00*

**Jurassic Only Meeting**
- Early Registration: $140.00*
- Late Registration: $160.00*

**Cretaceous Only Meeting**
- Early Registration: $205.00*
- Late Registration: $225.00*

*Prices in USD
**Student Full Meeting Only** (students enrolled in an accredited college or university undergraduate or graduate program)
Early Registration: $170.00*
Late Registration: $190.00*

**Dinosaur National Monument Optional Field Trip—April 29th**
Early Registration: $50
Late Registration: $60

**One day Talks-Only Pass**
Walk-up Registration: $30.00/day

**Media Pass** (For all media personnel covering the conference, including television, radio, printed, and web-based)
There is no charge for this type of pass, but all media staff must register to obtain a badge or they will not be admitted.

*One commemorative T-shirt is included for each full meeting professional and student registration. Shirt size availability will be limited for late registrants. Registration for full meeting includes admission to the opening social the evening of April 30th and the banquet on May 3rd. Jurassic Only Meeting includes admission to the opening social on April 30th. Cretaceous Only Meeting includes the banquet on May 3rd.

*Individual Banquet tickets (Saturday evening, May 3, 2014): $25

**Other Conference merchandise:**
Additional T-shirts: $10.00 each (don’t forget to include size preference: S, M, L, XL, XXL)

*Please Note Refund Schedule:*
Before March 3, 2014, 5:00 pm MST: 100% refund minus $5 processing fee.
March 3, 2104, 5:00 pm through April 3, 2014, 5:00 pm MST: 70% refund
After April 3, 2014, 5:00 pm: NO refunds will be given.
VENUES, LODGING AND TRAVEL

The first portion of the meeting will take place at the Museum of Western Colorado’s Dinosaur Journey Museum, located at 550 Jurassic Court, Fruita, Colorado 81521, with additional trips based out of the Wesley Powell River History Museum in Green River, Utah. Grand Junction Regional Airport (GJT) is located only twenty minutes away from Fruita, Colorado. Taxis are readily available and pre-scheduled shuttle rides will be provided.

LODGING

The meeting will be split between the towns of Fruita, Colorado (April 30 – May 1, & May 5) and Green River, Utah (May 2-4). Lodging is available at the following hotels:

Fruita, Colorado Lodging Options:

Comfort Inn
970-858-1333
400 Jurassic Avenue, Fruita, CO, 81521-9535 (0.1 miles from Dinosaur Journey Museum)
http://www.comfortinn.com/hotel-fruta-colorado-CO156

Super 8
970-858-0808
399 Jurassic Avenue, Fruita, CO 81521 (0.1 miles from Dinosaur Journey Museum)
http://www.super8.com/hotels/colorado/fruta/super-8-fruta/hotel-overview

La Quinta
970-858-8850
570 Raptor Road, Fruita, CO 81521 (0.1 miles from Dinosaur Journey Museum)
http://www.lq.com/

Balanced Rock Motel
970-858-7333 ext. 4
126 S Coulson Street, Fruita, CO 81521 (0.8 miles from Dinosaur Journey Museum)
www.balancedrockmotel.com/
Fruita, Colorado Camping Options:
James M. Robb-Colorado River State Park – Fruita Section (0.2 miles from Dinosaur Journey Museum)
970-858-9188
http://www.parks.state.co.us/Parks/JamesMRobbColoradoRiver/Camping/FruitaSection/Pages/CampingFruitaSection.aspx

Monument RV Resort
970-858-4405
607 Highway 340, Fruita, CO 81521 (0.2 miles from Dinosaur Journey Museum)
http://www.monumentrvresort.com/

Colorado National Monument – Saddlehorn Campground (6.8 miles from Dinosaur Journey Museum)
970-858-3617
1750 Rimrock Drive, Fruita, CO 81521
http://www.nps.gov/colm/planyourvisit/saddlehorn-campground.htm

Green River, Utah Lodging Options
River Terrace (0.1 miles from John Wesley Powell River Museum)
435-564-3401
877-564-3401 (toll free)
riverterrace@etv.net
1740 East Main, Green River UT 84525
www.river-terrace.com/

Holiday Inn Express (0.1 miles from John Wesley Powell River Museum)
435-564-4439
1845 E Main St, Green River, UT 84525

Motel 6 Green River (0.2 miles from John Wesley Powell River Museum)
435-564-3436
1860 E Main St, Green River, UT 84525
Green River, Utah Lodging Options (continued):

Comfort Inn (0.3 miles from John Wesley Powell River Museum)
435-564-3300
1975 East Main Street, Green River, UT 84525

Knights Inn (0.7 miles from John Wesley Powell River Museum)
435-564-3421
1015 E Main St, Green River, UT 84525

Green River, Utah Camping Options:

Green River State Park (1.3 miles from John Wesley Powell River Museum)
800-322-3770/435-564-3633
PO Box 637, Green River, UT 84525
http://www.utah.com/stateparks/green_river.htm

Shady Acres RV Park (0.6 miles from John Wesley Powell River Museum)
800-537-8674/435-564-8290
350 East Main, Green River, UT 84525
http://www.shadyacresrv.com/

Green River KOA (187 feet from John Wesley Powell River Museum)
800-562-5734/435-564-8195
235 South 1780 East, Green River, UT 84525
http://koa.com/campgrounds/green-river/
TRAVEL

The Grand Junction Regional Airport (GJT) is located an easy 20 minutes from the town of Fruita, along Interstate 70. Grand Junction Regional Airport current air carriers include Allegiant Air, American Airlines, U.S. Airways, Skywest/DeltaConnection and United Express, with nonstop flights to Denver, Houston, Las Vegas, Los Angeles, Phoenix, Dallas/Ft. Worth and Salt Lake City.

The Denver International Airport (DIA) is located 4 hours and 50 minutes away to the east, and the Salt Lake International Airport (SLC) is also located 4 hours and 50 minutes to the west.

AMTRAK provides daily service to the east and west coasts through Grand Junction and Green River. 800-872-7245; 970-241-2733

Greyhound Bus Service is provided into Grand Junction and Green River from Denver and Durango, Colorado; Los Angeles; Las Vegas and Salt Lake City. 800-231-2222

Travel Visas and Letters of Invitation

Please visit the International Visitors Office website at Http://www.nationalacademies.org/visas for information. Travelers are advised to apply for a visa as early as possible. Please check with your local U.S. consulate or embassy to find out the earliest that you may apply for a visa www.usembassy.gov

For security purposes, letters of invitation can only be sent to individuals registered for the meeting. To request a letter of invitation please contact rhuntfoster@blm.gov.
GENERAL INFORMATION

Climate

The average high and low temperatures in western Colorado and eastern Utah during late April, early May are a high of 70°F (21°C) and a low of 40°F (4°C).

Car Rentals

Around ten rental car companies operate out of Grand Junction, with many of them providing phone links inside or near the baggage claim areas. To learn more about pick-up and drop-off options available to customers of rental car companies, please visit the Grand Junction Visitor & Convention Bureau website (http://tinyurl.com/l84fm4m)

About Fruita, Colorado

Located in western Colorado along the Colorado River, Fruita is well known for its outdoor sports such as mountain biking, hiking, and rafting, its downtown life, proximity to Colorado National Monument, and its great paleontological resources.

Visitor Information

To learn more about Fruita please visit the Fruita Tourism Boards website (http://www.gofruita.org) or to learn more about Grand Junction, please visit the Grand Junction Visitor & Convention Bureau website (http://www.visitgrandjunction.com).

About Green River, Utah

Located in eastern Utah along the Green River, this town is famous for its melons and river history. Green River is also a popular freeride mountain biking spot.

Visitor Information

To learn more about Green River please visit the Destination Green River website: http://destinationgreenriver.com/