

Join the H.M.S. Beagle Team for a Paleo Adventure

The 1st Annual TrilobiteJam Delta, Utah July 22 – 25, 2010

As a part of the H.M.S. Beagle Team for the 1st Annual TrilobiteJam outside of Delta, Utah, you will experience four full days of uninhibited fossil collecting on over 300 acres of trilobite and fossil-bearing rocks in the Wheeler Shale and Marjum Formation. Come and try your luck at some of the incredible sites, such as, Hemirhodon Hill, Modocia Madness, Marjuria Mound, and Olenoides Meadows!

In addition to the fossils you will discover, this is a great opportunity to discover the West Desert of Utah. You will be “hunting” some of the world’s finest fossils while enjoying the incredible views of Marjum Pass, Wheeler Amphitheater and Swasey Peak.

At least 20 species of trilobites can be discovered on the 320 acres (owned by American Trilobite Suppliers) of largely unexplored property full of Marjum and Wheeler Shale. Workshops on digging techniques and field curation of specimens will be offered.

As part of the 1st Annual Trilobite Jam, you collect on 320 acres of State leased lands that are controlled by the American Trilobite Suppliers for four full days, Thursday July 22 – Sunday July 25.

AND you will be able to keep **EVERYTHING** you find. Even if you find a rare *Olenoides superbus*, you will get to **KEEP** it!



Registration and Fees

Advanced Registration is due by May 1, 2010. A non-refundable deposit of \$100 is due with your registration. Full payment is due June 30, 2010. You can pay by cash, check or credit card or by PayPal on our website. Space is limited. Please make your reservations as soon as possible to guarantee a spot.

- **Delta Package: \$850 per person**

This package includes participation in all four days of the TrilobiteJam, motel accommodations for five nights in Delta, seminars, nightly campfire, breakfast and box lunches for all four collecting days, drinks and snacks on site, and a commemorative t-shirt.

- **Camping Package: \$500 person**

This package includes participation in all four days of the TrilobiteJam, seminars, nightly campfires, box lunches for all four collecting days, drinks and snacks on site, and a commemorative t-shirt. (Bring your camping gear for free camping on site).

Beagle Society members receive a \$50 per person discount on either package.



Accommodations

The Beagle is reserving a block of rooms at a modest (suitable for paleontologists!) motel in Delta, Utah. However, you are also welcome to camp on the State leased land of American Trilobite Suppliers, who will have a large Camping area set up. Your registration fee is less if you camp.

Your registration fee will also include breakfast (if you stay in Delta) and a box lunch for everyone in our group. Evening dinners will be on your own, except for Saturday, when the TrilobiteJam organizers will provide a buffalo dinner on site.

Location and Transportation

You will be responsible for your own transportation to Delta, Utah. If you plan to drive from Kansas City, there will be opportunities to carpool with other participants. The nearest airport to the TrilobiteJam is Salt Lake International Airport (SLC). It is about a three hour drive to the site. McCarran International airport (LAS) in Las Vegas is a five hour drive.

TrilobiteJam Schedule

Thursday, July 22:	
9:00 AM	Meet in Delta, Utah.
9:00 AM – 9:30 AM	Quick introduction and desert safety seminar.
9:30 Am – 10:30 AM	Caravan to the TrilobiteJam site.
10:30 AM– 12:00 PM	Introduction of the TrilobiteJam landmarks and stations.
12:00 PM – 6:00 PM	Collecting hours with optional seminars.
6:00 PM – 9:00 PM	Optional collecting hours.
9:00 PM	Campfire.
Friday, July 23:	
9:00 AM	Meet in Delta (for those who are staying Hotels and would like to caravan to the TrilobiteJam site).
9:00 AM – 6:00 PM	Collecting hours with optional seminars.
6:00 PM – 9:00 PM	Optional collecting hours.
9:00 PM	Campfire.
Saturday, July 24:	
9:00 AM	Meet in Delta (for those who are staying Hotels and would like to caravan to the TrilobiteJam site).
9:00 AM – 12:00 PM	Collecting hours.
12:00 PM – 1:00 PM	Lunch.
1:00 PM – 5:00 PM	The Dig Off: Contests and Challneges
6:00 PM – 8:00 PM	Awards Ceremony and Buffalo dinner provided by the American Trilobite Suppliers.
9:00 PM	Campfire.
Sunday, July 25: (optional collecting day)	
9:00 AM	Meet in Delta (for those who are staying Hotels and would like to caravan to the TrilobiteJam site).
9:00 AM – 9:00 PM	Collecting hours.



Seminars

- **Basic Digging Techniques**

Thursday 1:00 PM at Typicalis Trench

This seminar will be aimed at teaching how to dig a systematic and geometric hole following a few simple criteria. Key points will be stressed in guiding the collector in time management, talus allocation, site assessment, and maximization of surface area.

- **Tools Seminar**

Friday 1:00 PM at Modocia Madness

This seminar will be aimed at teaching the collector what tools are best for digging certain types of rock. Emphasis will be placed on the five tools that should be in every collector's quiver.

- **Advanced Digging Techniques**

Friday 2:00 PM at Modocia Madness

Techniques will be taught that insure the collector will be able open up a large and productive trilobite quarry. Sledge hammer-swinging techniques as well multiple bar techniques will be taught.

The TrilobiteJam Awards Ceremony will be 6 pm on Saturday at the JAMstage.

Awards will be given for the most outstanding specimens, those that have traveled the furthest to attend, winners of the various categories of the DIG-OFF and more! Prizes will include tools, trilobite specimens, and other awesome TrilobiteJam memorabilia!



What You Will Find

The Wheeler Shale

In 1908, Charles Doolittle Walcott named the Wheeler Shale in honor of George Wheeler, one of the great surveyors of the West. Of the many fossiliferous trilobite-bearing units in Utah, the Wheeler Shale surpasses all in popularity. Beautifully preserved trilobites have been commercially mined out of the Wheeler for over 40 years.

The Wheeler Shale is found in only three mountain ranges, The House Range, Drum Mountains, and Canyon Range. Its maximum thickness is in the Drums Mountains where it attains a thickness of just over 900 feet. The sections that occur in the House Range are

considerably thinner, with the thickest section occurring at Marjum Pass where it attains a thickness of nearly 400 feet.

The structure and geology on our Wheeler property is fascinating, The Wheeler Shale is sandwiched in between two large tear faults. Because of this faulting the Wheeler in the central House Range was subject to a combination of heat and pressure that caused a localized change in the color of the stone. On our Wheeler property the Wheeler Shale has beautiful reddish and pinkish hues.

Because of the rich colors, trilobites from the red Wheeler are very aesthetically pleasing. It is our hope that those who attend the TrilobiteJam will enjoy digging trilobites in the red Wheeler.

Altiocculus harrisi – One of the rarer trilobites that comes from the Wheeler Formation, *Altiocculus harrisi* is named after Robert Harris. Robert was the first to commercially dig fossils in the House range.

Altiocculus sp. – Similar to *Altiocculus harrisi*, this trilobite has fewer segments.

Elrathia kingii – The most recognizable trilobite in the world, *Elrathia kingii* is quarried in staggering numbers in the Wheeler Amphitheater. The great thing about *Elrathia* that come from our property is that they red!

Asaphiscus wheeleri – Another common trilobite on Wheeler property. The *Asaphiscus* from the red layers get very large – the challenge is to find the four-incher!

Olenoides nevadensis – The rarest trilobite that is known from the Wheeler property, *Olenoides nevadensis* from the red Wheeler layers are gorgeous!

Perenopsis interstricta – A common agnostid from the Wheeler, *Perenopsis interstricta* can be found in large multiples.

Bolaspidella housensis – A common trilobite in the Wheeler. *Bolaspidella housensis* can also be found in large multiples.

Bolaspidella sp. – The most stunning of all of the *Bolaspidella* species, this trilobite has incredible axial spines!

Gogia spiralis – Beautiful echinoderm that is found in the upper layers on the Wheeler property. Large multiples of this animal can be discovered.

Many Soft-bodied taxa – Many nonbiomineralized animals can also be found on the Wheeler property – keep your eyes peeled!

The Marjum Formation

Charles Doolittle Walcott described the Marjum Formation in 1908. The Marjum Formation as a unit is relegated to the House Range. The Marjum Formation overlies the Wheeler Shale and underlies the Weeks Formation. The Marjum has a rich and varied fauna.

The type locality of the Marjum Formation is at Marjum Pass, where it attains a thickness of over 1,300 feet! The Marjum is comprised of a suite of lithologies from beautiful thin-bedded shales, to massive limestones. The Marjum changes considerably from the type locality at Marjum Pass to the Wheeler Amphitheater.

The beds at Marjum Pass are famous for the abundance of *Hemirhodon* trilobites that occur in the interbedded shales and limestones. The Wheeler Amphitheater is equally famous for its abundance of *Olenoides* trilobites. Being situated roughly half way in between these two classic locations, the Marjum on our properties contain both faunas!

Modocia typicalis – Found on the northern most portion of the Marjum property. This species is found in red and pink shales that are indicative of the lower and middle Marjum Formation in the deeper portions of the House Range Embayment.

Utaspis marjumensis – One of the more uncommon trilobites on the property. This trilobite got large, the largest being nearly 10cm long! Molted specimens can be found at Utaspis flats.

Modocia laevenucha – This species is the most common species that is found on the Marjum property. This trilobite can be found in the upper portion of the Marjum formation at Hemi Hill and Bathyriscus Bonanza. However, this trilobite can be found in staggering numbers at Modocia Madness.

Marjuria callas – The only place in the House Range this neat trilobite is found is Marjuria Mound. These trilobites are fairly common in a narrow zone.

Bathyriscus fimbriatus – This beautiful trilobite can be found at Bathyriscus Bonanza. Molted carapi of this trilobite are fairly common, while complete specimens with the free cheeks attached are a little more difficult to come by.

Bolaspidella wellsvillensis – This elongate species of *Bolaspidella* can be found at Bathyriscus Bonanza. This species of *Bolaspidella* has more segments than any other *Bolaspidella* species.

Bolaspidella sp. – This trilobite is fairly common in the lower layers of the Marjum Formation in the red and pink shale's. This trilobite can be found associated with *Modocia typicalis*.

Hemirhodon amplipyge – One of the largest trilobites that is found on the Marjum property, *Hemirhodon* grew to lengths of 12cm! This trilobite can be found at Hemi Hill.

Olenoides superbus – *Olenoides* are probably the rarest trilobites that can be discovered in the Marjum Formation. Isolated pieces of this trilobite indicate that it may have grown to lengths of 15cm!

Olenoides inflatus – A close relative of *Olenoides superbus*, *Olenoides inflatus* can also be found on the Marjum property. The distinctive characteristic of *Olenoides inflatus* is the eight pairs of spines on the pygidium. This is the rarest of the trilobites that come from the Marjum property.

Marjuria typa - This trilobite can be found in the hard black limestones of Marjuria Mountain. They are fairly rare however.

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