March 19, 2011: Filthy with Ammonites

Thursday night’s Bon Jovi concert coupled with a 3 a.m. start on Saturday morning left my girlfriend Brett and me in dire need of coffee and energy drinks. However, anticipation of good fossil finds in North Texas kept me from drifting onto the rumble strip on the right shoulder of I-35 north. Brett had never before experienced a lower Cretaceous ammonite and echinoid run, so the time had come for her to feel the tug of a heavy backpack. Lack of rain in recent months plus ongoing collecting pressure had left me with few viable collecting options, but we managed to scratch together a little something at each site to make it worth our while overall.

After wolfing down a few kolaches from Czech Stop in West, we eventually deployed the canoe in the filthiest of creeks in the industrialized world incising the Weno Formation (100 MYA). Sometimes a counterintuitive approach to choice of sites works in my favor, and in this case I figured the skanky environs would have allowed this particular site to evade scrutiny for long periods. The canoe approach was employed as much to keep us from immersing our bodies in consummate filth as much as it was to haul in our tools and haul out our prized finds with minimal effort.
These silly Texans don’t know their west from their left....

And so our paddling excursion soon brought us to the first small limestone bench, and I was able to give Brett an onsite tutorial in the mechanics of pounding ammonites out of the limestone and hoisting them intact. Tapping the top of the surrounding rock reveals natural fissures with a telltale hollow sound, and this helps choose the best angle for the chisel. She was ready to make her own finds.
FIGS 2-6: The author and Ms. Brett trekking into the Weno Formation and beating a few finds into submission this and next 3 pages—this bedrock was hard! (Site 201)
The next bench was quite large and consumed us for an hour or two, as did the slabs that had fallen from the bluff above. Once Brett seemed comfortable spotting and tapping out *Mortoniceras* ammonites I walked to the far end of the bench to afford her the satisfaction of self-made finds. I tapped out a couple Morts, marked a couple others, and soon heard her happy chiseling from farther upstream.

One of Brett’s first Morts was quite a prize for any collector of any experience level as it preserved the rostrum at the aperture of the shell, meaning the entire specimen was preserved in one piece. We proceeded to take 12 or 15 nice ammonites between us from 1 to 5 inches diameter, along with a few gastropods plus Brett’s *Heteraster* echinoid and my *Trigonia clavigera* bivalve in hard matrix.
FIGS 7-12: Ms. Brett and her wonderful Mortoniceras ammonites, including the best specimen of the site with rostrum intact, see this and next 5 pages (Site 201)
FIGS 13-22: More Mortoniceras ammonites this and next 7 pages (Site 201)
FIGS 23-24: Weno Formation bivalve *Trigonia clavigera* (Site 201)
FIGS 25-26: Weno Formation gastropods above, burrows next page (Site 201)
Luckily I was walking behind Brett as her camera slipped out of her pocket and into the water, but only for a half second as I snatched it from the drink….fortunately it still worked. With the canoe now scraping bottom in the low spots we decided to double back and proceed to the next site.

And so we pressed on to Lake Texoma, this time surveying the Fort Worth Formation (101 MYA). Winds were about 15 knots but we ran a protected shoreline where waves were minimal, except from the wakes of passing boats, which sent showers of icy spray into Brett in the front of the boat as my little outboard hummed across the lake.

We were greeted by a shoreline exposure of limestone and marl and were on the lookout for its denizens, namely ammonites and echinoids. I soon spotted a Holaster simplex echinoid near the waterline, perfect in appearance, but weathering had taken its course, with calcite shedding from the surface as I picked it up – bummer! Brett soon followed suit by producing a small Macraster echinoid, and that set the pace for the next hour. We methodically worked the exposure and landed a few very nice Holasters and a few Mortoniceras ammonites as well. On the shoreline I spotted a large but thin slab of Rastellum carinatum oysters that would look good in my rock garden, so into the boat it went.
FIGS 27-28: The author canvassing the Fort Worth Formation (Site 185)
FIGS 29-34: Ms. Brett showing off a cute little *Macraster* echinoid above, same echinoid with two *Holaster simplex* echinoids she found below, more *Holasters* next 3 pages (Site 185)
FIG 35: Worm tube covered *Macraster* echinoid right, weathered and exfoliated *Pedinopsis (?)* left (Site 185)
FIGS 36-43: A procession of *Mortoniceras* ammonites this and next 5 pages (Site 185)
FIGS 44-47: The author and his slab of *Rastellum carinatum* shells this and next 3 pages (Site 185)
Once again Brett’s camera slipped out of her pocket, and our fossil hunt transformed to a camera hunt. 10 minutes later I spied it nestled between some rocks and she was back in business. Our return trip across the lake was a bit wetter than before, spelling the end of our collecting for the day, but I think Brett and I agreed it was all worth it. Back in Lewisville we hooked up with my friend Frank Holterhoff for dinner and a stay at his house, and met with our other fossil buddies Ron Hunter and Brent Dunn for dinner. Then we exhausted ourselves admiring Frank’s extensive cosmopolitan echinoid collection before calling it a night.

March 20, 2011: More Macs and Morts with a Side of Hols

With a satisfying visit to Einstein’s Bagels we began our meandering trek home, but not before including one more waterborne assault on Washita strata of North (for us) Texas. This time we focused on the Duck Creek Formation (102 MYA), and I lucked into a honkin’ big Macraster echinoid where we slid the boat into the water. Our timing was good as...
some other boat- equipped fossil collectors showed up just as we jumped in our canoe and fired up the engine...the early bird catches the proverbial worm in this pursuit and we saw no more of our colleagues.

Pressing on, we ultimately encountered an intermittent exposure of Duck Creek limestone and marl, and went about exploring it with high hopes but no guarantees...had it been sufficiently washed by recent rains? Had it been worked by other collectors? Our questions were soon answered – no worries – *Holaster* and *Macraster* echinoids were popping up like Easter eggs. Many were cracking and falling apart from weathering, telling us that the area hadn't been systematically collected recently. Many echinoids were distorted at some point relative to fossilization, but there were a few good ones thrown in to make it all worth it, both in the marl wall as well as in the scree collected at the bottom of the exposure near water’s edge.

**FIGS 50-59:** *Macraster* echinoids from the Duck Creek Formation this and next 8 pages, the latter specimen exhibiting hairlike spines preserved as detailed in photos (Site 95)
FIGS 60-62: Brett's *Macraster* echinoid right and *Holaster simplex* left followed by more *Holasters* next 2 pages (Site 95)
And then the ammonites showed up. I had found a nice Mortoniceras weathered out near the water’s edge, so when I spotted a honkin’ big Mort stuck in the bluff, I threw a few hints until Ms. Brett wandered over, found it, and chopped it out of the wall – a splendid find. She followed up by finding another nice 8 inch Mort free of matrix just after I laid hands on a big Macraster with articulated, hair like spines followed by a hand sized, flattened specimen just peeking out of the exposure.
FIGS 63-64: Unidentified ammonite from the Duck Creek or Fort Worth Formation (Site 95)
FIGS 65-73: Ms. Brett discovering her best ever Mortoniceras ammonite, a splendid double, followed by the prepped result, this and next 6 pages (Site 95)
FIGS 74-75: Ms. Brett once again hitting Mortoniceras paydirt this and next page, her eyes now trained (Site 95)
FIGS 76-78: The author’s Mortoniceras ammonite, this and next 2 pages (Site 95)
FIG 79: Our joint take of ammonites and echinoids in the raw (Site 95)

We eventually realized that we had plenty of paleo goodies to justify our efforts and agreed to pull the plug and grab a steak to celebrate a good weekend of adventure. Low on sleep, I was glad to put forth maximum effort this weekend not only to help Brett find success afield, but also since I knew this would be my only devoted collecting weekend of the month.

Weekend of March 26, 2011: Tradin’ in Rock Pickin’ Irons for Shootin’ Irons

My friends Ron Hunter and Barry Wood came to Texas from D.C. and New York respectively for a couple weeks to hunt fossils and wild hogs, and this particular weekend we were able to enjoy both with my 9 year old son Weston in tow. The wild hogs on this ranch near Moore, Texas about 45 miles south of San Antonio were hunted regularly and somewhat wary so we opted to hunt them at night.

I showed up with a tactical flashlight electrical taped under the tubular magazine of my beloved lever action Marlin 1895G Guide Gun chambered in .45-70. Weston and I sat together in one blind Friday night and I missed a fleeting shot at a pig walking fast at about 75 yards around 9:30 P.M. Weston had spotted the animal first and therefore carried his weight as my trusty accomplice, despite my failure to put the pig on the ground.

Minutes later I heard Ron’s .300 Winchester Magnum ring out, and with one shot to the rear of the jaw he felled a respectable 225 pound boar. Since I’m most experienced in butchering hogs in our group, I gladly took the knife and went to work until nearly 3 a.m. then later on in my leisure time processed and bleached the trophy skull for Ron.
FIG 80: Ron Hunter with his 225 pound feral boar (Site 546)
We slept in and then Ron, Weston and I took the ranch buggy to some gravelly pastures where we picked up several pieces of petrified wood and one crude Indian artifact. I cooked us steaks on the grill then we napped before getting serious about the pigs again Saturday night.

FIGS 81-83: Father and son take of Eocene petrified wood above followed by crude Indian artifact, possibly a preform, core or scraper, next 2 pages (Site 546)
We teamed up same as the night before and returned to the same blinds again. Weston and I were determined to wait out the pigs or spend the night out there trying, so we took pillows to the blind. I slept on and off then sat silently in the chair of the box blind with my forehead leaning against the blind window, my eyes strained from gazing through binoculars in low light, just listening.....

....Then I heard it at 11:30 P.M. as Weston stirred in his slumber on the blind floor... hurried footfalls in the distance....something snorting like an ailing vacuum cleaner....HOGS! It was too dark to pick them up in the binoculars or scope but I knew there were several. I lined up my crosshairs in their approximate direction, then flipped on the flashlight only to see one hog run across the pasture in short order.

I shifted my focus a bit to the right and picked up the eyes and silhouettes of 3 pigs greedily snarfing up corn, facing me 100 yards away, their youth and competitive nature causing them to ignore the bright white light. I singled one out quickly
and pulled the trigger... BOOM! A 300 grain hollow point closed the gap at over 2100 feet per second, then there was some commotion, followed by silence and no pigs in sight.

I awoke Weston (no he didn’t get up after the gunshot) then we went to investigate. A small black motionless form came into view... followed by a smaller brown one....the first was a 35 pound piglet with a 25 pounder directly behind it, both stone dead and shot cleanly through the brain! Weston was then allowed to make noise, quite a release for any kid who had been asked to maintain silence for hours on end. He did his job well – keep the Old Man company and KEEP QUIET so as not to derail potential encounters with our quarry, as we had paid money for this hunt.

FIGS 84-85: Father and son take wild piggies this and next page – no ammunition wasted this night! (Site 546)
We returned to camp around midnight and I stayed up until 2 a.m. butchering tender pork. In the meantime the Ranch Boss Jay had gone out to investigate the scene of the shot and 100 yards away from the point of impact along a fence row found a third hog, a 120 pound sow, also expired from one single bark of the formidable .45-70.

Fresh pork…petrified wood….Indian artifact…I really felt like I experienced the best of what this ranch had to offer in one short weekend  And I promise you this….based on what Weston observed in terms of terminal ballistics, he’s the LAST kid I would expect to play with guns….