

FOSSIL COLLECTING REPORT

July, 2007

Daniel A. Woehr and Friends

July 4, 2007

I had to take my neighbors to the airport at 5:30 a.m. on the 4th of July and since I was already up early and we'd had big rains lately I opted to drop in on the Corsicana site once again and focus on another underutilized section of real estate. I began my crawl in dim light around 6:15 and spent the next 2 hours on hands and knees, at times stopping to dig my fingers into thick mats of mud that had formed on my knee pads and fling them off into the distance. It was a well spent 2 hours. A few *Hemiaster bexari* echinoids and a *Dakoticancer australis* crab carapace were in hand before 6:30 and the festivities didn't stop there. In all I took 76 echinoids dominated by *H. bexari* with several *Plesiaster americanus*, *Proraster dalli*, and *Linthia variabilis* adding to the total. 13 crab carapaces from 60-100% complete were eagerly annexed into the Woehr Collection as well. I took a few notable gastropods and bivalves, but my favorite find came near the end of my crawl...the 2 inch perfect *Pachydiscus* sp. ammonite was a welcome find, its complex suture pattern unmistakable from the surrounding tan and orange clods of marl. With that I packed it up for the day, hit the gym, and got home to the family before giving cabin fever a chance to damp their holiday morning.



FIGS 1-2: A dozen Corsicana fm crab carapaces *Dakoticancer australis* (Site 349)



FIGS 3-5: Crabs *D. australis* ventral view above, nautiloids *Eutrephoceras planoventer* below (Site 349)





FIGS 6-8: Two views of ammonite *Pachydiscus* sp., echinoids *Plesiaster americanus*, *Proraster dalli*, and *Linthia variabilis* (Site 349)



FIGS 9-10: Echinoids *Hemiaster bexari*, bivalves *Lima acutilineata* and *L. guadalupensis* and others below (Site 349)



FIG 11: Various gastropods (Site 349)

July 7, 2007: Aftermath of the Flood

With all the torrential flooding that had inundated Central TX for a couple weeks I decided to descend on Williamson and Bell Counties when the first bit of weekend sunshine fell on the saturated ground. At 7:30 I dropped down into a creek exposing the Georgetown formation, a condensed section representing the 100 MYA Washita group of marine strata. I was prepared to bust through a maze of poison ivy and sticker bushes to get to my preferred sites but was pleasantly surprised to see that the creek had overflowed its banks with such ferocity that a 50-75 yard swath of understory was knocked flat, making my approach a breeze. The gray, soft, nodular marl and limestone once again laid out its riches before me. The first exposure gave up a nice low form *Holaster simplex* echinoid in matrix, some big, rough *Macraster* echinoids, and a few nice *Mortonicer* ammonites including one about 10 inches in diameter.







FIGS 12-14: 3 *Mortonicer* sp. ammonites from the Georgetown fm. Note pyrite on one specimen (Site 173)





FIGS 15-16: Echinoid *Holaster simplex* from Georgetown fm Site 173

Buoyed by this success I pressed farther along the creek bed to arrive at a larger, generally more productive bluff at a gentle bend in the creek's course. Here I took 3 or 4 more nice *Mortoniceras* ammonites but the main draw was echinoids. I must have taken another dozen palm sized *Macraster* echinoids of which I kept the 5 best once I cleaned them all up and scrutinized them. I made it back to my truck by 9 a.m. with 75 pounds of material, about half of which has since been donated to a school.





FIGS 17-18: Another pyrite dusted *Mortoniceras* sp. ammonite and some of the better echinoids *Macraster* sp. found at Georgetown fm Site 218

I spent the rest of the day in the 105 MYA Walnut fm. of Bell Co., beginning with a creek shown to me by Marc de Vries exposing soft gray and tan marls chock full o' wonderfully preserved marine fossils. In 30 minutes I picked up 5 nice *Phymosoma texanum*, 2 nice *Hemiaster* sp., and a handful of *Heteraster* sp. echinoids in addition to two sterling quality *Engonoceras* sp. ammonites.







FIGS 19-21: A few shots of Walnut fm Site 123



FIGS 22-23: Walnut ammonites *Engonoceras* sp. above, echinoid *Phymosoma texanum* in site below (Site 123)



FIGS 24-25: More echinoids *P. texanum* in situ (Site 123)



FIGS 26-27: Echinoids *P. texanum* (Site 123)



FIG 28: Echinoids *Hemiaster* sp. left and *Heteraster* sp. right (Site 123)

From there I proceeded to a construction site shown to me by Robert Bowen where we found a handful of *Phymosoma* several months ago. The site was largely overgrown, but recent rains did their duty as hoped. In a couple hours I picked up 34 *Phymosoma* of varying condition, some with big cubic pyrite crystals attached. I plan to keep the better half of these.







FIGS 29-32: A shot of Site 354 and some of the echinoids *P. texanum* found there. Dark spots on specimens are pyrite





FIGS 33-34: Cool Walnut fm bivalve and gastropod with traces of fingers along fringe of aperture of shell (Site 354)

Soon after, I noticed a big hillside torn open by recent construction. I concentrated on the deep blue/gray layers as they tend to present the better preserved material. Here I found several *Heteraster* sp. echinoids in situ and in the tan marl I found several more of the same plus a couple *Phymosoma*. With time and rain this could evolve into a good site, but it is way too fresh at the moment.







FIGS 35-39: A view of Site 404 and the nice echinoids *Heteraster* sp. and one average quality *P. texanum*

From there I pressed on to an area creek where Robert and I had once found a few *Phymosoma* and once again I found a couple more plus an *Engonoceras* ammonite in the ground in pieces. But a cool wind made me shift my attention from the ground to the sky as black clouds loomed close by. I made it to my truck just as the sky opened up and dumped a deluge of rain over the entire area. The ground was so saturated that flash floods consumed the landscape. As I went under the overpass en route to my next site cars were nearly stalling in deep water collecting in a low area. Luckily my next site was close by and on a hilltop, another Robert Bowen signature site.







FIGS 40-43: Walnut fm Site 355 and the echinoids *Heteraster* sp. and *P. texanum* found there

I sat in my truck for another half hour as the area was thoroughly washed. Freshly washed with fossils in sharp contrast to the wet ground, this small and unassuming field of gray gravel and grass presented the best of echinoid collecting conditions possible. An hour of crawling produced 24 *Salenia mexicana*, one more perfect *Phymosoma*, 3 *Loriolia*, several *Heterasters*, and my first perfect micro *Coenholectypus* from the Walnut fm. I got one pycnodont tooth (crusher tooth from the roof of a fishes mouth) as well.



FIGS 44-45: Walnut Site 352 in pouring rain followed by a freshly washed *P. texanum* in situ



FIGS 46-47: Pycnodont tooth left of *Coenholectypus* sp. echinoid directly above two echinoids *Loriolia* sp. on left in both images, *P. texanum* and *Heteraster* sp. on right (Site 352)



FIGS 48-49: Echinoids *Salenia* sp. above, *S. mexicana* and possibly *S. leanderensis* below (Site 352)

This had been a banner day. With 10 ammonites and 100 echinoids spilling over the rim of my 5 gallon bucket I decided to quit early and head home. Big rains and being first on site were the ticket to maximum collecting productivity in the areas I visited. I must have doubled my Walnut fm collection while adding some truly museum grade specimens suitable for prominent display at the house.

July 15, 2007: Feast and Famine

I loaded up the boat and made a run for the coast this weekend and strangely caught no keeper fish. With 30 live shrimp I only managed one small ladyfish, 3 perch, a croaker, and a small red. It was fun to be out there, but I'm not used to striking out. Nobody else seemed to be catching either so I didn't feel bad. Strike one. I stopped to help an old man push his boat off a sandbar he didn't see so at least I saw some value in my time on the water.

From there I dropped by the Corpus Christi Museum to peruse their paleo exhibit only to find out that the place wasn't going to open for another couple hours. Strike two.

No problem, or so I thought. I had been working a Pleistocene exposure in an area creek and after running the boat several miles found the site to be completely overwashed by inches of sand. I only managed a few bone and tooth scraps plus a cool deer skull. Strike 3.







FIGS 50-52: Nice flood killed whitetail rack, Pleistocene tooth enamel fragment and turtle shell fragment (Site 350)

This day's outcome was turning out to be in sharp contrast to the previous weekend's. I had an ace in the hole however. I pointed the truck to the north and floored it for the Corsicana formation. With about 3 hours of good light I was able perform cursory searches of 3 sites concentrating on the faster eroding areas. While I didn't leave with 5 gallon buckets of material, I did end up with 4 *Dakoticancer* crabs, maybe 40 echinoids including *Hemiaster*, *Plesiaster*, *Proraster*, and *Linthia*, and some interesting gastropods.

My weak performance this weekend is not entirely bad however. At least this lull will give me a better chance of getting caught up on my growing pile of prep work out in the garage this week.



FIGS 53-55: Crab carapace *D. australis*, nautiloids *E. planoventer*, echinoids *H. bexari* and *P. americanus* left of bivalve *Trigonia castrovillensis* (Site 248)







FIGS 56-60: Corsicana crab *D. australis*, echinoids *P. americanus*, *L. variabilis* and *H. bexari* followed by a bivalve and a gastropod from Site 348







FIGS 61-64: Corsicana crabs *D. australis*, echinoids *P. americanus*, *P. dalli*, *L. variabilis* and *H. bexari* followed by gastropods from Site 349