

Farley had to get back to work so I dropped him off en route to the next quarry which was in the San Antonio area. This particular pit features an upper Cretaceous marine sequence of Austin Chalk, Dessau formation (80 MYA), the Pecan Gap formation (72 MYA) and a broad expanse of the phosphatic contact zone in between. I remembered an employee from last trip who seemed knowledgeable and interested in the fossils found there and asked for him by name. Lanky and boisterous, long haired and tattooed, a Harley-Davidson bandanna headed Steve Portillo and I became fast friends while perusing the gray contact zone which was peppered with black phosphatic molds of bivalves, gastropods, and *Baculites* (straight ammonites). We found a handful of large shark tooth blades missing roots. I believe they were mainly *Scapanorhynchus texanus*. In an hour or two I must have filled most of a gallon bag with phosphatic material, the most interesting finds being nondescript chunks of bone, a partial ammonite, and several interesting oysters.

Steve and I blabbed the whole time about fossils as we worked higher in the Pecan Gap. I had held back on the technical “geek speak” as I didn’t want to sound like a know-it-all, but he was sincerely eager to learn so our conversation ebbed more scientific toward the end. The upper hard layers of chalk near the rim of the quarry seemed to have the most fossils. Here we saw lots of *Baculites*, *Inoceramus* clams, and one huge gastropod which I inadvertently broke into 4 pieces and took with me. We were out of time as it was approaching “beer thirty” as Steve put it, so I urged him to follow that same layer around the quarry on his own and keep his eyes peeled for ammonites. In my experience when you find the *Baculites* (straight ammonites) in the Pecan Gap, you will also find the more desirable planispiral (tightly coiled) and heteromorphic (more loosely coiled) specimens if you look hard enough.

At the truck I saw Steve’s eyes bug out when I pulled my recently found mammoth vertebra out of the back seat. I happened to have a grab bag of various give away fossils in my truck which he was quite happy to receive. Looks like I made a buddy at that quarry. He was already asking when I was coming back.



**FIG 137:** Various shark tooth blades (Site 81)



**FIGS 138-140:** Phosphatic partial *Baculites* and planispiral ammonites above, various phosphatic gastropods center, 3 ornate oyster inner molds below (Site 81)



**FIGS 141-143:** Pecan Gap phosphatized mystery fossil above, carbonized wood center, unidentified large gastropod below (Site 81)

April 28, 2007: The Corsicana Imperative

Rain fell hard last week in the San Antonio area. In fact 2.5 inches had fallen on much of the Corsicana exposure since last time I had collected there, which wasn't long ago. My 5 year old son Weston, a chip off the old hunk-o-matrix, looked out the window at gloomy skies mid week and said, "Dad, since it rained we have to hurry up and find fossils at the red dirt on Saturday before anybody else goes there." Well twist my arm! I was able to convince my wife that a father/son tag team on the 67 MYA Corsicana formation was indeed imperative and got the nod from the War Department. Weston and I opted to take advantage of comfortable spring conditions by spending the night in his log cabin fort in the back yard. I set my alarm for 6 and the boy needed little coaxing to get up and on the road after we shoveled down some scrambled eggs.

We kicked things off in our usual spot, a curry-orange hillside studded with marl clods replete with marine fossils. I thought ahead and brought Weston's Tonka dump truck which quickly became mired in the biggest mud puddle around, as did his shoes. I had already choreographed all this in my head on the way there. You can't keep this boy away from mud. He spent the next couple hours running around in mud caked socks, occasionally stopping to dig a hole with his rock hammer, toss yet another *Pycnodonte* or *Exogyra* oyster in the bucket, or sling a muddy leg over my back for after screeching, "Horsey Ride!"

I however had a much more systematic approach to the day, and it was very crawling-intensive. Thank God for gel knee pads. While I only picked up a couple decent *Hemiaster bexari* echinoids I did snag lots of crab material. Most of what I found were partial crabs where a nodule had split and revealed legs and/or carapace broken in section. A couple of these *Dakotacancer australis* crabs were worth noting however. One had 3 legs jutting out of the nodule with one chunk of carapace missing from the opposite side but it appeared reasonably complete nevertheless. The other revealed about an inch of carapace jutting out of a nodule implying that the rest of it was still in the nodule protected from the elements. This is my favorite way to find these crabs as they begin to disintegrate if rain falls on them a few times. Like the peaches on the tree in my back yard these things are best when picked ripe. Weston took a couple spills that day, none serious, but I did pick up a nice *Eutrephoceras planoventer* nautiloid at one point when I rushed to scoop him off the ground.



**FIG 144:** An enthusiastic Weston Woehr early in the day (Site 248)



**FIGS 145-149:** *D. australis* crab specimen #1 as found and as prepped above (note claw in front of face), *Eutrephoceras planoventer* nautiloid center left, remaining frames *D. australis* #2 as found barely exposed and as prepped (Site 248)



**FIGS 150-151:** More views of *D. australis* #2 (Site 248)

Crab anatomy primer: Chela=claw, cheliped=leg terminating in a claw, pereopod=walking leg, maxilliped=leg-like feeding apparatus. The crab shown above exhibits all of these structures.



**FIG 152:** One last view of *D. australis* #2 – love those big chelae (Site 248)

The main event was supposed to be an adjacent exposure, but the groan of heavy equipment caught me by surprise and threatened that leg of the trip. We headed over nonetheless and soon one of the earth mover operators drove up to us to see what we were doing. A little name dropping kept us in good shape as I had run into the construction foreman on a previous trip, thrown my pitch, and secured permission. The operator gave us the nod and ambled off into the distance. Good thing too since right around then I picked up a large and perfect specimen of the rare echinoid *Proraster dalli*. Soon afterward Weston witnessed a sight that was quite captivating for a 5 year old. One of the huge earth movers had buried its front end in a big mud hole right in front of us and dug itself so deep in the operator's efforts to get it out that the back end was up in the air. It took 2 identical machines, a couple belly scrapers, and the supervisor to chain up and pull this thing out.



**FIG 153:** Throw him a rope! (Site 348)

In the meantime Weston dug holes, threw rocks in puddles, and messed around with his Tonka truck while I commenced to speed bagging echinoids. I must have looked like a praying mantis lashing out at its prey while I snagged scores of *H. bexari* echinoids that littered the ground. I grabbed one perfect *Linthia variabilis* echinoid along the way. My knees were pretty roughed up from 2 days of this but I didn't care since it was so insanely productive. At one point Weston begged me to climb a hill I would have otherwise ignored. I appeased the boy and in the process located another pocket of abundant echinoids. It was here that I glanced down and locked eyes on the Holy Grail of the Corsicana, a perfect *Codiopsis stephensoni* echinoid. This was my second from the site but I had to go through 600-800 more common echinoids over the last 18 months to get them. Nearing the end of

our quest I stumbled upon yet another rarity for these parts, namely an excellent example of the echinoid *Cardiaster leonensis*.

While this part of the exposure was dominated by echinoid finds, it was not without crabs. In fact I took two nearly complete carapaces plus several halves. We pulled the plug around 12:30 but our bags bid sagging testament to the day's gain. I later tallied the body count at over 130 echinoids, 5 crabs, many partial crabs, and a host of cool bivalves and gastropods. Fortunately the 5 rare echinoids were all in perfect shape.

Once rehydrated and strapped into his booster seat the boy was fast asleep, the hum of steel belts on asphalt singing him a mid day lullaby. This is my favorite site to take Weston as it has everything he needs to stay interested for the 6-8 hours I like to spend each visit. It offers lots of fossils, mud puddles, no cliffs, no snakes, and soft landings for his inevitable falls and face plants. He wore home a few scrapes including a minor one on his face but didn't complain. Like his old man he readily accepts a little discomfort in exchange for huge adventure.



**FIGS 154-155:** 3 more *D. australis* crabs, one being little more than a cluster of legs and a claw – pass the drawn butter! (Site 348)



**FIGS 156-160:** Echinoids *Codiposis stephensoni* and *H. bexari* in situ above, remaining frames from left to right, *Proraster dalli*, *Plesiaster americanus*, *Cardiaster leonensis*, *C. stephensoni*, and *Linthia variabilis* (Site 348)



**FIGS 161-163:** More views of same rare echinoids shown in preceding frames above, author's favorite *H. bexari* specimens below (Site 348)



**FIGS 164-166:** Rear view of same *H. bexari* group above, *H. bexari* in matrix lower left, close up of *C. leonensis* lower right (Site 348)



FIGS 167-168: Remaining *H. bexari* echinoids above, nautiloids *E. planoventer* below (Site 348)



**FIGS 169-172:** Nautiloid *E. planoventer* above, bivalves including *Neithea bexarensis* and others second row, remaining frames various gastropods (Site 348)



**FIGS 173-174:** Author's favorite gastropods above including *Cypraea* sp. left and *Striatocostatum bexarense* second from left, other 2 unidentified, bottom frame *T. vertebroides* (Site 348)



**FIGS 175-176:** Wiped out from all the fun (Site 348)