FOSSIL COLLECTING REPORT
September 2008
Daniel A. Woehr and Friends and Family

September 1, 2008: Pleistocene – Cretaceous One-Two Punch

"It's the sheriff!" is what I heard when I opened my eyes to blinding lights. It seems that Johnny Law is not used to seeing law abiding grown men sleeping in cars by the roadside. I explained that I was nothing more than a nerdy fossil hunter on a budget and after checking my ID and noting the boat on my roof I suppose he believed me, as did his backup in the second car with headlights in my face.

Dawn found me at my second put-in and soon making my way to a distant gravel bar. I wasn't expecting much but my first find was a worn but very welcome mastodon vertebra. Finds were slow to come but some were rather nice. A good horse tooth, horse tibia, bison astragulus and calcaneum, and a few other things came to hand and put some heft in my catch bag. Still, the ever elusive mammoth tooth evaded me once again.

FIG 1: *Alligator mississippiensis* osteoderm from Site 373

FIGS 2-6: *Bison* sp. calcaneum above and astragulus below (both ankle bones), 2 more views of same followed by worn *Glyptotherium* osteoderm next page (Site 373)

FIG 7: Unidentified distal radius and distal scapula followed by horse lower molar (Site 373)

FIGS 8-9: Worn *Mammut americanum* (mastodon) vertebra (Site 373)

FIGS 10-11: Unidentified proximal rib and vertebrae (Site 373)

Switching gears, I began my drive home, learned that the wife and boy wouldn't be home anytime soon, and opted to drop in once again on some parts of the Corsicana exposure that Weston and I didn't have time to look over on prior trips.

A few *Hemiaster* echinoids here and there along with nice bivalves and gastropods were the order of the day, but then I saw it – a big fat whorl of an ammonite with complex sutures jutting out of the dirt. I photographed an in-situ shot and then was elated to see that the hidden juvenile whorls were indeed intact. This inflated 4 inch *Anapachydiscus* is my biggest of the genus so far and welcome addition to my collection. I didn't take any nice crabs that day, but I did get the inner mold of one that had sat out in the elements too long. I suppose I've been neglecting the site too much!

FIGS 12-13: Ammonite *Anapachydiscus* sp. this and next page (Site 348)

FIGS 14-16: Two more view of *Anapachydiscus* ammonite followed by 6 *Hemiaster bexari* and one *Plesiaster americanus* echinoid (Site 349)

FIGS 17-18: Corsicana fm bivalves *Neithea, Lima, Trigonia,* and *Pycnodonte* above followed by gastropods *Turritella, Cypraea*, and others below (Site 349)

FIGS 19-21: Internal cast of crab *Dakoticancer australis* followed by echinoids *Hemiaster bexari* and bivalves *Trigonia castrovillensis* (Site 248)

September 3, 2008: Oyster Madness

Weston and I once again buzzed over to the Corsicana after being released from the bonds of work and school. It was more to get out of the house than anything, and while we were at it I decided to load up on *Exogyra* and *Pycnodonte* oysters for landscaping purposes. It got dark around the time I dumped the 5th five gallon bucket of them in the bed of my truck. In the process of harvesting oysters we stumbled into a few *Trigonia castrovillensis* bivalves and one *Hemiaster bexari* echinoid.

FIG 22: Corsicana fm oysters *Pycnodonte mutabilis* and *Exogrya cancellata* taken for landscaping purposes (Site 349)

FIGS 23-24: Weston's finds including *T. castrovillensis, H. bexari*, and *Plicatula mullicaensis* above, the author's suite of *T. castrovillensis* bivalves below (Site 349)

Once again I had to yank Weston out of the mud as he was mired up past his knees. I made him wear a big plastic garbage bag over his legs for the ride home then blasted him with a garden hose before letting him in the house. What is this love affair between boys and mud?

September 6, 2008: Disarming One More Native American

I got up early yesterday to drop my kayak in yet another choice stream deposit for hopefully a mix of artifacts and Pleistocene fossils. While neither my best or worst day, a couple finds came to hand which more than justified my effort and expense.

The first half of the day was spent working several miles of gravel bars and banks. Progress was slow in these areas but I did manage to grab some decent horse, bison and turtle material.

FIG 25: Unidentified humerus (Site 157)

FIGS 26-27: Half of a mammoth vertebral epiphysis (detached bone abutting disk in juvenile animal, fuses to vertebra later in life) above, unidentified limb bone below (Site 140)

FIGS 28-29: Unidentified limb bones above, jaw bone fragment, turtle shell fragments, and horse tooth below (Site 132)

FIGS 30-31: Horse phalanx and lower molar (Site 137)

FIGS 32-33: Unidentified vertebrae (Site 137)

FIGS 34-35: Same two vertebrae as previous page followed by proximal rib from Site 179

FIGS 36-37: Various turtle fragments (Site 179)

FIG 38: Unidentified bone and partial armadillo osteoderm (Site 179)

Hoping to pull the proverbial paleo rabbit out of a hat I drove an hour and redeployed the kayak in another area. Things went a little better here as I scanned the submerged head of a gravel bar. My dramatic entrance began with me tripping and somersaulting down the steep river bank followed by the kayak running over my wheeling carcass and ultimately I was back up on my feet, hat never leaving my head. With that out of the way I was ready for more adventure.

First a nice horse molar came to hand, then in the glimmer of flowing water I spotted a perfect Morhiss point, clinching the deal on another trip well spent. I didn't make too many more finds, but the centrum of a mammoth vertebra was acceptable paydirt. A downstream bar produced a very nice camel or llama toe bone, a nice finishing touch on the day.

FIGS 39-40: Possible Morhiss point found underwater this and next page (Site 373)

FIGS 41-43: Worn mammoth vertebra this and next page (Site 373)

FIGS 44-47: Horse teeth and unidentified bone in matrix this and next page (Site 373)

FIGS 48-49: Unidentified bone in conglomerate (Site 373)

FIGS 50-51: Llama toe bone (Site 372)

FIGS 52-54: Probably just a modern hog jaw above, horse tooth and turtle plastron fragment next page (Site 374)

While loading the kayak onto my car I managed to get a big gash in the top of my head, and Weston was quick to put his own home made first aid kit into use later that night. If all I had to do for a spear point and mammoth vert was get run over by a boat and take a gash in the gourd, I'd do it every weekend! That would be much less painful than all the driving I've been doing in the name of fossils.

September 14, 2008: Hurricane Ike Revealed a Few Things that I Like

Well Hurricane Ike came through the day before but did nothing but push a little wind through most of Texas, so a-fossil-hunting-we-went. Actually John Jackson and I opted for a short canoe trip with permission and kept our eyes peeled for whatever relics and reliquiae we could spot. In the first hour of our trip John made the find of the day, a 3 1/4 inch Darl point that he found lying on the submerged gravel. Not a bad start to the day. He also dug a bison vertebra out of a high bank, leaving a shattered pelvis in situ before we tangled with a sounder of wild hogs and one very desperate cow stranded on a nearly vertical bank. Both accounts were entertaining but I'll keep to the matter at hand.

FIG 55: John Jackson's Darl point (near Site 477)

FIGS 56-58: John Jackson's Bison vertebra and partial pelvis this and next 2 pages found eroding out of a high bank near Site 477

Burned rock, clam shells, and flint flakes revealed the presence of an Indian campsite or two eroding out as we went about our business, but for a long time we found nothing of interest. At one point I picked up a 90% complete, unidentified spear point (possibly a Lange?) that John had walked by. He later returned the favor by doing the same thing to me, only producing a higher quality point than mine. His may be a Yarbrough point. I picked up a couple preforms to finish out our take of artifacts.

FIGS 59-63: Possible Lange point and performs found by the author this page, possible resharpened Yarbrough point found by John Jackson next page (Site 477)

Toward the end of our trip we encountered an exposure of light gray Upper Cretaceous chalk, probably Pecan Gap, Marlbrook or Neylandville formation (70-72 MYA). Here we spent an hour or two randomly splitting chalk studded with phosphatized *Baculites* (straight ammonite) fragments. I saw a couple *Trachyscaphites* ammonite fragments as well as a couple damaged *Hemiaster* echinoids as well as occasional jet black regular echinoid spines, and some of the bivalves, gastropods, and *Eutrephoceras* nautiloids were simply spectacular.

FIGS 64-69: A bluff of undetermined Taylor or Navarro group above followed by various *Eutrephoceras* sp. nautiloids, *Hemiaster* sp. echinoid, *Baculites* sp. straight ammonites, bivalves and gastropods collected there, next 2 pages (Site 478)

After throwing down some toothsome chicken enchiladas skillfully prepared by John's loving wife, I ogled over John's recently discovered Tylosaur jaws and snapped a few photos. Considering the shut down that Ike could have caused for more of the state, I'd say that John and I did just fine that day.

FIGS 70-71: 2 views of the Tylosaur (mosasaur) rostrum and dentition found in the Austin Chalk by John Jackson

September 20, 2008: One More Stream Bed Sortee

John Jackson and I again joined forces to canvass yet another entirely different stream exposure than those documented in previous reports. Low water and a rutted stream bottom in the Austin Chalk made for tough navigating part of the time. Clumsy footing almost sent us each face first into the nearly stagnant water, but two of these close up looks at the stream bottom gave up teeth for me, one deer and one horse, although I'm not certain of age.

FIGS 72-76: Austin Chalk Site 478 followed by John Jackson's unidentified ammonite and the author's huge clam found there

John got a head start on me with a weathering yet still spectacular and rare *Submortoniceras* (?) ammonite followed by another weathered ammonite taken from the stream float. I on the other hand laid hands on a large clam eroding out of a block of Austin Chalk. This thing was huge and came out nearly intact, with detail preserved on both sides.

Several miles away we encountered a high bank of gray marl and chalk, possibly something in the Pecan Gap to Marlbrook Marl spectrum. At any rate, John and I accumulated 3 nautiloids plus some cool pyrite/marcasite nodules from this site before moving on.

FIGS 77-81: Another bluff of an undetermined Upper Cretaceous formation featuring unidentified nautiloids this and next page (Site 480)

At one point John pointed out a particular bank where he had found artifacts many years prior. He showed me an accumulation of burned rock and while scratching around with his rock hammer produced two perfect 3 inch spear points, a Pedernales and a Morhiss. I on the other hand picked up half of a large needle tip knife of some sort plus a couple preforms. Once again John smoked me, but I'm used to it at this point and look forward to picking up more of his scraps.

FIGS 82-85: John Jackson strikes again with some exquisite Pedernales and Morhiss points followed by the author's partial Archaic knife, preorms, and a lone horse tooth this and next 2 pages (Site 481)

September 21, 2008: Coastal Bend Cornucopia

With the wife and son recovering from their own Saturday adventure, I got up at 3 a.m. Sunday in order to put the sneak on some fish at the coast. I deployed my kayak at the JFK Causeway near Corpus Christi around 7 a.m. with 60 live shrimp in the bait bucket. The NE wind was much stiffer than forecast, so by hiding behind bridge pilings I was able to get a little shelter. Waves continued to splash into the yak however.

The food chain was undaunted by the conditions. My first cast produced an undersized trout which was released as were 2-3 other dinks that followed. A feisty 18 inch red was also released unharmed, but the little mangrove snapper at the end of my line found his way onto my stringer.

Another 15 yard cast onto the sand flat was met by a mighty tug and spirited fight. 10 LB line peeled off my Shimano Curado reel and bent the rod into a pronounced arc. The boat pivoted around its anchor during the fracas, and the fish made multiple runs under the boat, which I countered by jabbing half of the rod down into the water and letting the rod bend against the hull so as not to let the line rub and break. These tactics worked and soon I had an 18-19 inch black drum in the net.

I repeated this sequence with a nice 20 inch redfish, although the drum fought noticeably harder. After releasing a couple skipjacks I had one last tug that was worthy of note. As I winched my assailant to the surface I got a good look at a nice 16-18 inch flounder right next to the boat. When it saw me it let go of the shrimp as I went for the net, then the tan polka dotted blanket of brown settle back into the deep…I REALLY wished I had landed that flounder!

FIGS 86-87: The author's redfish, black drum, mangrove snapper, and coastal fishing setup

With half of my shrimp remaining I switched gears and locations for a coastal fossil hunt. 7 miles into my kayak trip I reached my intended spot – "Glyptodont Gulch" I call it – which has produced glyptodont osteoderms (giant armadillo body armor) 3 out of 4 trips in the past. The site is quite small, and that combined with the cloud of pesky

mosquitoes kept my visit down to about 15 minutes. I did however manage to land enough goodies to justify the effort – 2 glyptodont osteoderms and a few pieces of turtle shell.

FIGS 88-89: *Glyptotherium* sp. and turtle shell fragments from coastal Pleistocene Site 350

The weekend brought quite a mixed bag of outdoor experiences and I look forward to sharing more with friends and family in the near future.

<u>September 28, 2008: Impromptu Aside in the Glen Rose Formation</u>

This was a big weekend for Weston and me. Friday night after work I took him on his first ever deer hunt as an observer and we managed to knock down and take home an axis doe. Saturday night we camped out at a state park, swam in the river, ate axis tenderloins over the campfire, burned marshmallows, listened to the coyotes howl as we dozed off, then cooked bacon and eggs over the revived fire in the brisk morning air.

On the way home Weston got out to climb around a road cut in the Upper Glen Rose formation with me where we took echinoids *Loriolia rosana* and *Heteraster obliquatus* in addition to an assortment of better bivalves and

gastropods. The temperature rose, the boy began to wilt, and soon we were on our way home with heavy doses of adventure under our belts. I look forward to our next outing.

FIG 90: Glen Rose echinoids *Heteraster obliquatus* left and *Loriolia rosana* right (Site 27)