

**Fossil Collecting Report**  
April 2009  
Daniel A. Woehr and Friends and Family

April 4, 2009: Escondido Escapades

On this particular day I offered to take my friend John Jackson and his wife Bonnie back to one of my favorite ammonite gathering grounds in the Escondido formation (66 MYA) of South Texas. This was the same area where John, Weston, and I had stayed a month before. We were again bloodthirsty so we all 3 jumped in John's lightweight Kevlar canoe and plied the waters of this particular stream until reaching the Promised Land of *Sphenodiscus* ammonites. Beaching the boat, we hiked with 4 LB hand sledges and chisels in our packs until we reached our destination.

John and I marked a bunch of ammonites we had missed last round while Bonnie systematically searched adjacent gravel bars for artifacts. Meanwhile, John and I pushed farther along the stream until we arrived at yet another exposure of the same ammonite laden strata. "Whoa!", I was first to cry out as a nice 12 inch ammonite came into view. We took turns wearing out that particular expletive as we found ammonite after ammonite. We had to get picky as we could only carry so many. Some were partially weathered open, revealing geode like hollow chambers, others perfect both sides, all very collectible, so our hammers and chisels got a workout.

Walking back John and I both missed a big ammonite I had spotted on the first leg of our stomp. In searching for it John found a killer 10-12 inch ammonite jutting out of the bank that I had missed at head level. This specimen complemented the other monster he had pulled from right in front of me earlier. No matter, I finally found the one I was after, and after tapping it out of the boulder that encased it, it was clear that mine was the biggest of the day at 14 inches diameter!



**FIGS 1-19:** A view of Escondido Fm Site 417 and many of the *Sphenodiscus* ammonites found there by John Jackson and the author, this and next 13 pages





























**FIGS 20-22:** Flint blades found by Bonnie Jackson followed by horse lower molar found by the author next page (Site 417)





**FIGS 23-25:** The author carrying some 100 pounds of ammonites followed by an exposure of Wilcox sandstone (Eocene, 45+/- MYA) and finally the author completely spent (Site 417)



With 18 of these things loading me down it was a long, hard walk back to the canoe which the next day took its toll on my hip joints. Once I heal the pain will be gone but the ammonites will remain. I can live with that! Not to be outdone, Bonnie had a few things to show for her efforts as well. She produced 3 flint blades in her time working the gravel bars. The fossil horse molar that I had found early on thusly rounded out our trifecta of ammonites, artifacts, and Pleistocene material for this leg of the trip.

Next stop: the shark tooth pit, also in the Escondido formation. Bonnie had never found fossil shark teeth before and we were about to remedy that situation. We had had one decent rain since John, Weston, and I had last visited this site and I was curious to see how fast the site would regenerate. In the end it wasn't quite as productive as a month before, but we still took 200-300 teeth between us including *Serratolamna serrata*, *Squalicorax pristodontus*, *Ginglymostoma lehneri*, *Rhombodus binkhorsti*, *Enchodus*, and a few others I can't yet ID such as pycnodont crusher teeth, bladed fish teeth, etc. We also took a few small shark vertebrae.

From there I took John and Bonnie to a delightful little Texas small town hole in the wall saloon/eatery with great food, live music, and a rustic Texas atmosphere. I plan to return to this spot at every opportunity. My money was still good there despite my grizzled appearance.



**FIGS 26-28:** Nurse shark tooth *Ginglymostoma lehneri* above, mackerel shark tooth *Serratolamna serrata* lower left, unidentified shark vertebra lower right (Site 86)



**FIGS 29-30:** Various ray teeth *Rhombodus binkhorsti*, fish teeth *Enchodus* sp. and unidentified pycnodont, nurse shark teeth *G. lehneri*, mackerel shark teeth *S. serrata*, crow shark teeth *Squalicorax prisotontus*, shark vertebrae and shark coprolite (excrement) (Site 417)

With an hour of light remaining I coaxed John into one more stream stomp with me exploring a stretch of gravel bars along a certain stream. It didn't take much to get him out there. And the expanses of gravel were huge.

Leave it to John though to reduce endless gravel to something very finite – a nice flint blade, possibly a reworked paleoindian blade found right at dusk, a fitting end to our ludicrously productive and enjoyable day....

April 5, 2005: Ambulating through the Anacacho

After a night of sleep in the back of my truck interrupted by a curious sheriff checking to see precisely why I was sleeping next to a bridge, I was up in the morning wolfing down breakfast tacos en route to my next site. And what a wonderful experience it was. While stomping along a stream bed exposing expanses of Anacacho limestone (78 MYA), I noticed a big ammonite impression on top of a boulder then another large ammonite keel jutting out of the block of limestone. More on this later. I continued my march and ultimately encountered a couple marly yellow bluffs that caught my eye... they looked "echinoidy".

Closer scrutiny revealed the treasures contained in those bluffs. I must have pocketed a couple hundred *Mecaster (Hemiaster) texanus* specimens, filling a 2 gallon Ziploc bag. I was very picky this time, just picking up the well preserved specimens along the talus of the exposure, then banged a few more out of the face of the bluff. No regular echinoids came into view, but I did lay hands on a couple *Menabites* ammonites. Life was good.

Pressing on I then worked my way up to a large bluff noted by George Phillips at the Mississippi Museum of Natural Science. It was some 60 feet tall, gray on the bottom, yellow on top. The gray unleached layers contained wonderful fossils in impeccable condition, most notably echinoids. I pocketed several more *M. texanus* and some sort of *Hemiaster* that was smaller and more round in form. I found half a *Salenia* echinoid followed by the most pristine example of the regular echinoid *Rachiosoma hondoensis* that I've ever seen! A large *Squalicorax kaupi* shark tooth blade also made it into my bag. Then while I was banging away at the base of the bluff something caught my eye...looking up I locked eyes with an Aoudad sheep staring right back at me from atop the cliff! Thinking fast I grabbed my camera and got 2 good pictures before it made off.



**FIGS 31-32:** Two bluffs in the Anacacho Fm this and next page (Site 496)





**FIGS 33-35:** Two ammonites *Menabites* sp. this and next page followed by *Baculites* sp. (Site 496)





**FIGS 36-39:** Anacacho fm shark tooth blade *Squalicorax kaupi* followed by rare echinoid *Rachiosoma hondoensis* next 3 pages (Site 496)









**FIGS 40-49:** 7 pages of echinoids *Mecaster texanus* – take special note of specimens still covered in hair like spines as well as clusters of specimens in matrix (Site 496)















**FIGS 50-54:** A curious Aoudad sheep followed by an ammonite that didn't quite make it home (Site 496)











**FIGS 55-58:** Three views of regular echinoid *Salenia pseudowhitneyi* this page, more *M. texanus* next page (Site 495)



The hike back to the truck was a grueling one with shoulder straps pulling me into the ground. Once again I felt as if I were carrying a dead man over my shoulder. I stopped for a rest at the boulder with the big ammonite. I reduced the boulder to rubble in 20 minutes, but unfortunately the 12-14 inch ammonite was very thin and fragile in the center and came out in 5 pieces with no center – and there it still lies. I then stopped for a crawl at “Woehr’s Waller”, the echinoid laden ditch I had found a few weeks earlier. It had seen a rain since our last foray, so I was able to pick up a few nice *M. texanus* and one *Salenia pseudowhitneyi* with a damaged apical system, such is life.

Soon I had my feet up, throwing back some beef brisket, and recounting the bumper crop of great finds from the weekend....

#### April 11, 2009: Wrong Turn, Thumbs Up!

Weston and I got up at 4 a.m. to embark on a long distance river adventure, a few breakfast tacos keeping us company until we arrived at our destination hours later. Driving up and down various county roads I was unable to find my desired put-in. A local steered us to another county road that dead ended at the river, but this was not the right spot....oh well, time to fish or cut bait so I slid the yak into the water, mounted the outboard onto the transom, strapped all manner of gear to the hull, plopped the boy in the front seat clutching his beloved Red Ryder BB gun, and shoved off...

We grounded out on the bottom and jumped off to look at a small gravel island....a hunk of mammoth bone came to hand....this was a good sign!

The first bank exposure we encountered was Eocene Cook Mountain formation (45 MYA) overlain with Pleistocene terrace deposits (gravel). Weston had fun flinging BBs at the various feathered critters near the water, connecting with none of them but still living out a water borne big game safari in the boy’s eyes. "Whoa!" was the most articulate utterance I could muster upon spotting a huge gastropod *Clavilithes* jutting out of the exposure. After

extricating this fragile treasure we continued our search, all the while talking to a friendly fisherman anchored to the bank. I was also able to land 3 *Belosepia veatchi* rostra, a rostrum being the only hard part of the skeleton preserved in squid. Very cool! Several nice but smaller gastropods came to hand, as did a chunk of heavily mineralized bone on the surface of the exposure....hmmmmmmmm...Pleistocene mammoth rib fragment or Eocene *Zeuglodon* (whale) bone frag? The jury is still out on that one.



**FIGS 59-61:** From the Cook Mountain Fm a whopper gastropod *Clavilithes* sp. this and next page followed by shark tooth, fish otoliths (earbones) and squid rostra *Belosaepia* sp. (Site 497)





**FIGS 62-63:** Bivalves *Venericardia* sp. above along with gastropods *Athleta petrosus*, *Conus sauridens*, *Cornulina armigera*, *Pseudoliva* sp. above, *Venericardia* in ironstone concretions below (Site 497)



**FIGS 64-67:** Rib section either Pleistocene mammoth or Cook Mountain *Zeuglodon* (whale) followed by worm tube cluster (?) and petrified wood found by Weston Woehr (Site 497)



In the meantime calamity struck on the river. While easing along dragging the boat behind me while inspecting the

bank I heard a "plop" behind me. Weston asked "What was THAT?" The sad truth was that I had bumped his beloved Red Ryder overboard and into its watery grave, the currents carrying it away despite my valiant attempts at "raccoonin" it back into possession. I owe the boy a new projectile dispenser so it seems.

Pressing on a few miles we encountered another bank exposure of Cook Mountain formation, its gray shell marl giving up many nice gastropods. This bank was low and flat and devoid of gravel. So when I looked up and spotted some lines in the mud at the contact with the Cook Mountain, I had to do a double take...it struck me as strangely "mammoth-esque" in a toothy sense....and upon closer inspection I could see that I had a big portion of mammoth jaw buried in the mud! With a couple fishermen within earshot I kept everything on the "down low" and called Weston over....I told him what was hiding and sent him off to find it himself. I'm teaching him to see how nature presents these fossils so this was just one more installment in his "field schooling". The half mandible unfortunately lacks the tooth, but exposes very well one side of the tooth socket which once held a very large tooth. The symphysis (point of the jaw) is intact, as is the base of the ramus (part that curves up to the jaw hinge). Covered in cemented sandstone, it is a splendid find.



**FIGS 68-74:** Section of juvenile Mammoth mandible this and next 5 pages (Site 498)











Running low on fuel I doubled back and extricated the yak from the turbid water. Weston was dead tired and cranky, but with one last attempt I was able to find my original put in point. I coaxed him into trading out his wet clothes for my rain suit with sleeves and cuffs turned up to better fit him. After devouring a chocolate Easter bunny he suddenly had the reserves for one last hoo-rah on the water. And a worthwhile stop it was! Amidst all the nice little gastropods such as *Athleta petrosus*, *Architectonica* sp. and *Conus* and *Distorsio* that I was mining from the softer layers I found a crab carapace *Harpactocarcinus americana* worn and mostly exfoliated of shell nestled down in the gravel. This was a great find. Then I found not one but two more squid rostra and a bunch of cool branching coral *Archohelia singleyi* and *Madracis johnsoni* as well as tabulate corals *Discotrochus orbignianus* and rugose (horn) corals *Endopachys maclurii* and *Flabellum cuneiforme*.



**FIGS 75-78:** Cook Mountain Fm exposure this and next page followed by squid rostra *Belosaepia* sp. (Site 419)







**FIGS 79-82:** Cook Mountain Fm crab carapace *Harpactocarcinus americana* this and next page (Site 419)





**FIG 83:** Cook Mountain Fm branching corals *Archohelia singleyi* and *Madracis johnsoni* (Site 419)



**FIGS 84-86:** Cook Mountain Fm bivalves *Plicatula* sp. and corals *Discotrochus orbignianus*, *Endopachys maclurii* *Balanophyllia desmophyllum* and *Flabellum cuneiforme* (Site 419)



**FIGS 87-88:** Cook Mountain Fm gastropods *Athleta petrosus*, *Conus sauridens*, *Architectonica* sp., *Distorsia septemdentata*, *Eosurcula moorei*, *Mesalia* sp., and *Turritella* sp. this page followed by young Weston Woehr tending to a field problem next page (Site 419)



) Weston's little hunger bell went off and the squawking began, so I pulled the plug on our Tom Sawyer adventure. My back hurt anyway so I didn't mind leaving. Weston was amused that I ran out of gas 1/4 mile from our take out and I had to paddle the rest of the way. It was a big day for both of us; 10 hours in the car and 10 hours on the river made for two whipped pups, the smaller of the two snoozing most of the way home.....

#### April 18, 2009: Deep in the Devonian

When the Dallas Paleo Society announced a trip to Black Cat Mountain near Clarita, OK to hunt Devonian trilobites from the Haragan formation (395 MYA), Farley Katz and I jumped at the opportunity. Although it is a 400 mile run each way from San Antonio, we've both wanted to do this trip for quite some time. Farley picked me up at 3 at work on Friday and we were soon snagged in Austin rush hour traffic, but we eventually made it up to his brother-in-law's house by 9 or 10 where we spent the night. The 4 hour leg of our drive turned into 6. Up again by 6 a.m., we made it to Clarita in another 2 1/2 hours and met our fellow fossil zealots roadside in the middle of town while the Aamish rode by in their buggies.

We met quarry operator Bob Carroll in his workshop where we each paid \$20 for a day's admission to the quarry including a newly published book on trilobites to which he had contributed. 1/4 inch of rain the day before had turned the dirt road leading to the quarry into a long trail of pig slop. Vehicles were getting rutted in the road, sliding

sideways, and getting stuck. We ended up hiking the last half mile to the quarry, not really a pit but more the side of a hill systematically excavated by Mr. Carroll as his livelihood comes from digging up and expertly preparing the more rare trilobites hidden in these rocks. He uses a back hoe to expose productive layers which he then pulls up in chunks and breaks into fist sized pieces using a hammer to reveal trilobites. Often the specimen is not exposed well along the splitting planes of the rock and is instead broken in section. One can then glue the rock back together, remove matrix with an air scribe, then microblast away the remaining veneer of matrix to reveal the specimen.



**FIG 89:** Dallas Paleontological Society member digging for Devonian (395 MYA) trilobites of the Haragan and Bois d'Arc Formations at the Black Cat Mountain quarry in Clarita, OK (Site 499)



FIGS 90-91: *Kettnerapsis* trilobites above, *Huntoniatonia* pygidia or tails below (Site 499)



**FIGS 92-109:** *Paciphacops*, *Reedops*, and possibly *Kainops* trilobites this and next 10 pages followed by 3 pages of orthocone cephalopods, a gastropod (snail) and various unidentified brachiopods (Site 499)

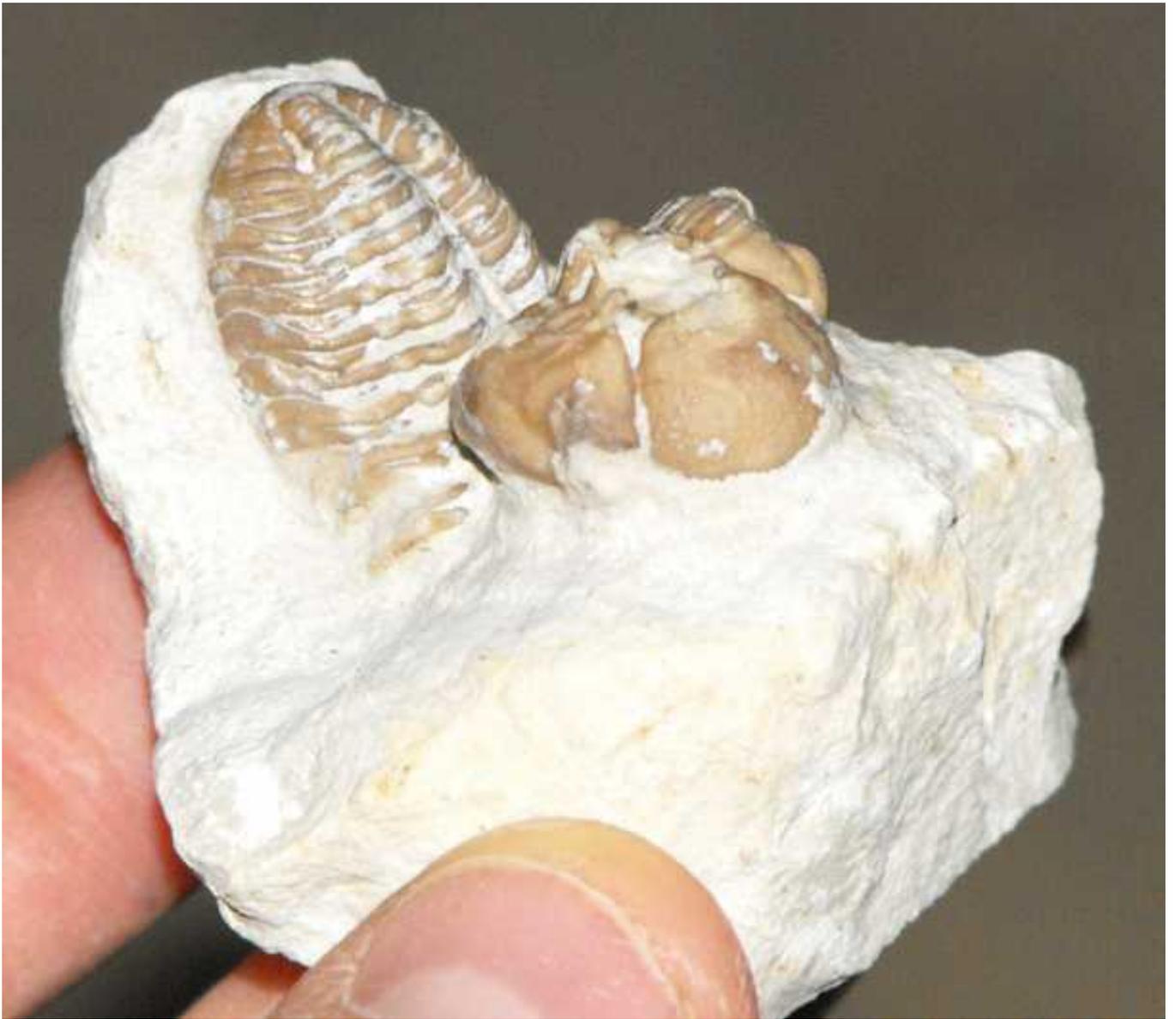


























Since Mr. Carroll does not pursue the more common trilobites such as *Paciphacops* and *Reedops*, these can be found in his spoil piles in the quarry. After splitting a little rock I could see that the easiset pickings would come from these piles, so I opted to surface collect them before the other 15 club members in attendance had covered the entire area. This technique was very effect and I think most everyone found trilobites this way. In addition to trilobites I picked up a few orthocone cephalopods as well as gastropods and brachiopods. Trip leader and friend Adam Armstrong suggested that high quality specimens could be found by lifting and splitting slabs of yellow to light gray limestone, so he and I did exactly that with limited success. I got 2 to justify my effort, but soon our thoughts wandered back toward the much less tedious surface collecting.

It seemed that for each spoil pile I found 1 or 2 more nice trilobites. As it seemed we were running out of fresh piles to examine, I had an epiphany....when collecting in groups I often find it worthwhile to work counterintuitively, to do what nobody else is doing. I looked over the top of a long line of spoil piles to see a the whole back side exposed and realize that nobody had been working that area. It was hidden from view and steep with loose footing so most had overlooked it. Not me! I kept sliding down the hill but proceeded to clobber the trilobites, sometimes two in the same rock. Perfect *Paciphacops* and *Reedops* specimes came to hand easily, some rather large, including a large, enrolled *Reedops* that is clearly the biggest trilobite I've ever found. During prep work I was pleasantly surprised to see 3 ornately spiny *Kettnerapsis* trilobites materialize from the limestone.

The comfortable overcast skies gave way to showers and lightning bolts, so Adam, Mark McKinzie and I decided to head back to the main part of the quarry for a ride back to the vehicles...only to find that the rest of the group had bailed on us! I sat down and reduced my rocks in size, preparing for a long, hard walk, and then finally a truck came up the hill to rescue us. Despite the weather it was a great time with good people and plenty of fossils to go around - I alone picked up 50 trilobites, a quarter of them being perfect.

Farley and I ultimately made it back to his brother-in-law's house for a dinner party of goulash, risotto, squash, and spiced cole slaw - good times, good food, good night - I was tired!

April 19, 2009: Return to the Lower Cretaceous

Farley and I kicked off our collecting day with a creek site exposing the Duck Creek formation (103 MYA). Farley was content to work the exposures near the car, but I had a bit of a hike in mind. In the end I discovered that I had bitten off a bit more than I could chew! Briars and poison ivy made my hike a slow one, but eventually I reached my target exposure where 45 minutes of searching turned up a few nice ammonites including a whopper 12 inch *Mortoniceras drakei*. I also landed several nice echinoids including *Holaster simplex*, one decent *Macraster elegans*, and my best find from the site, a *Tetragramma steeruwitzi*. As much as I enjoyed my finds, the big ammonite in my pack proved to be a killer! My hike back to the car was even slower, and the jungle of briars took its toll in blood. When I got to the car my arms and legs were slashed, my pants in tatters....I had earned my take.

I had been gone for so long that Farley had rested, gotten a pizza, and read part of a book. The half of a cold pizza he saved for me hit the spot! And the box made a great carrying case for my big ammonite for the ride home.



**FIG 110:** *Mortoniceras* ammonites from the Duck Creek Formation (Site 95)



**FIGS 111-112:** *Tetragramma steeruwitzi* echinoid from the Duck Creek Formation (Site 95)



**FIGS 113-115:** *Holaster simplex* echinoids above, *Macraster elegans* echinoid covered with worm tubes, all from the Duck Creek Formation (Site 95)



**FIGS 116-117:** The author tattered from a push into the Duck Creek Formation (Site 95)



Pressing on, we stopped at an old, crusty, worn out site in the Pawpaw formation (101 MYA), this too a marine exposure. The Pawpaw is known for its diminutive pyritized fauna, so we broke out our gloves, knee pads, and pill bottles and gave chase. We very quickly began finding tiny pyritized ammonites - *Engonoceras*, *Plesioturrites*, and others. I lucked into finding 2 tiny crabs, and Farley got a nice *Cretolamna appendiculata* shark tooth before we bailed out and headed south for our final site of the day.



**FIGS 118-119:** From the Pawpaw Formation various ammonites *Engonoceras*, *Mortonicerias*, *Scaphites*, and *Plesioturrillites* above, *Xanthosia* and possibly *Cretacorantina* crabs below (Site 176)

A couple hours later we connected with my good friend John Jackson at a "joint custody" site of ours in the Georgetown formation (102 MYA). This was the same site with the cool pyritized ammonites, echinoids, and bivalves that we had investigated a few weeks prior. John had made some spectacular finds there recently which will be shown in this report - an extremely rare *Tylocidaris* echinoid, a cool *Mortonicerias* ammonite with a perfect,

pyritized *Holaster simplex* echinoid tucked into the aperture among other things.

So all 3 of us converged on the same small rock pile and began banging away. I landed two nice *Globator whitneyae* echinoids and then Farley came over and found a nice one....on the rock I had been sitting on! John jumped into the act by finding a nice *Salenia* echinoid. Our take had been good so we decided to pull the plug on this site early. In the end leaving early was an exercise in futility as another Austin traffic jam detained us for an additional hour and a half. Oh well, with a little KFC in my belly I began my slumber right there in the passenger seat....It was a wonderful weekend full of numerous and spectacular finds that we'll not soon forget.



**FIGS 120-123:** Georgetown Formation echinoids *Globator whitneyae* this and next page (Site 190)





**FIGS 124-127:** Some of John Jackson's recent finds in the Georgetown Formation including a new species of *Tylocidaris* above followed by *Goniopygus будаensis* below, next page depicting a spectacular presentation of a *Holaster simplex* echinoid perched on the aperture of a *Mortonicerus* ammonite, both pyritized (Site 190)



April 24, 2009: Father/Soon Fossil Hookie

Actually it wasn't hookie, but a city wide holiday celebrating Fiesta Week. Instead of watching a parade downtown I decided to take young Weston out collecting fossils with me once again. First stop after wolfing down a few breakfast tacos: The Corsicana formation, a site exposing 68 million year old marine sediments choked with fossils. The Old Man donned knee pads and gloves with the boy ran around, threw rocks, and occasionally collected some fossils of his own.

I was sad to see about 25% of the exposure freshly graded, as this means either a long wait for subsequent rains to refresh the area, or perhaps the onset of an aggressive construction schedule which would prevent further collecting. The beginning of the end of this site? Perhaps...but for the time being we crawled until our knees were sore, raw stumps, and took some fine specimens including two rare *Cardiaster leonensis* echinoids, a handful of more common *Hemiaster bexari* echinoids, and 6-8 nice crab carapaces *Dakoticancer australis*. Throw in a few nice gastropods and bivalves and by noon we had had our fill.



**FIGS 128-131:** A spectacular crab *Dakoticancer australis* from the Corsicana Formation (Site 348)



**FIGS 124-127:** Some of John Jackson's recent finds in the Georgetown Formation including a new species of *Tylocidaris* above followed by *Goniopygus budaensis* below, next page depicting a spectacular presentation of a *Holaster simplex* echinoid perched on the aperture of a *Mortonicerias* ammonite, both pyritized (Site 190)



**FIGS 132-134:** Legless crab carapaces *D. australis* followed by echinoids (L-R) *Plesiaster americanus*, *Linthia variabilis*, *Cardiaster leonensis* (Site 349)



**FIGS 135-136:** Echinoids *Hemiaster bexari* followed by various gastropods (Site 349)

Weston had requested a trip to one of the San Antonio Missions, so we diverted to Mission Espada so he could climb around on the ruins of the old Spanish fort. Sometimes a kid should occasionally get to call a few shots, so I indulged him, and got some pics along the way.



**FIG 137:** Young Weston Woehr playing at the ruins of Mission Espada in San Antonio

Speeding into the Glen Rose formation we targeted the soft, echinoid bearing 108 MYA marls found north of town. With 1.5 inches of rain the previous week I seized the opportunity to take Weston to a site teeming with regular echinoids *Salenia texana*. And find them we did, perhaps a dozen in total, at least 3 falling to young eyes. He enjoyed grabbing the various gastropods and bivalves as well, and our short visit resulted in one distorted but complete echinoid *Coenholectypus planatus* as well.



**FIG 138:** Echinoids *Salenia texana*, *Coenholectypus planatus*, *Heteraster obliquatus*, and *Palhemiaster comanchei* (Site 445)

A move of less than a mile put us on a road cut higher in the Glen Rose formation. Here a slightly different echinoid fauna was present, our target being well preserved *Coenholectypus planatus* echinoids. I grabbed one that was slightly compressed, and a beaming Weston loved finding a perfect nickel sized specimen, then telling his Old Man how much better he was at seeing fossils....I didn't take away a thing from his glory.



**FIG 139:** One for the Old Man, one for the kid: echinoids *Coenholectypus planatus* (Site 491)

Finally, still higher in the formation, we hit another road cut bearing a soft gray marl seam studded with regular echinoids *Loriolia rosana*. Again this was a quick hit, but we managed perhaps 10 specimens before we made the dash back south to the house. Why all the rushing around? Because I had two days of river collecting in store for the lad, and I hadn't packed a thing or bought food yet.....



**FIG 140:** Upper Glen Rose echinoids *Loriolia rosana* (Site 249)

April 25, 2009: Weston's Pleistocene Pilgrimage

At 2:30 a.m. I slapped the alarm clock on 2 hours sleep, swung my legs over the side of the bed, and stirred young Weston...I had to dress him in his sleep and load his limp frame into the truck so he could continue his slumber, but soon we were on our way, choking down pastries, and ultimately launching the jon boat by daylight. I came prepared with a 4 pronged approach to keeping a kid interested in our outing for 12 hours straight: food, drinks, and umbrella to keep him out of the sun, and a BB gun to make this a water safari (yes I broke down and got him a new one after I dumped the other one in another stream weeks back).

Our first gravel bar produced some interesting things, nothing major, but a horse tooth, turtle fragments, and miscellaneous bone chunks. At least he was finding bone and having fun. Our second bar was a letdown - completely covered in sand and no rock or gravel exposed! The third bar had me scratching my head....no footprints, so where were the fossils? Subsequent bars gave up 4 nice vertebrae, a couple more horse teeth, a couple bison teeth, a cool gallon stoneware jug, and a few things here and there but no major slam dunk finds. Still it was a good time together with Weston, no injuries, no loss or damage to equipment, and more bones than he's ever seen.



**FIGS 141-156:** Take aim: Weston and the Old Man enjoying the river and taking various deer, horse, bison, mammoth and turtle remains, even a 100+ year old ceramic jug (Sites 305, 306, 308, 379-383)



















A second put-in at another site put us on another exposure or two that too resulted in lackluster finds. Hmmmmmm. Not sure why this round of flooding failed to dredge up the goods. No matter. It was dinner time so we found a little seafood dive with really good food and chowed down while I convinced Weston to do all 4 pages of his homework at the table, and we recounted seeing a 4 foot gator and some eagles sharing the river valley with us

that day.

We retired for the evening in my truck under a bridge awaiting the first streaks of dawn to guide us along another stream...

April 26, 2009: Pleistocene Round Two

Surprisingly Weston wasn't terribly difficult to roust for another round of bucking the river in our little boat. Shooting bottles and harassing birds with his BB gun captivated his attention during the slow times. But our runs would be shorter this day and soon I had him climbing a gravel bank with me. No sooner had I warned him to stay close due to snakes, one slithered out toward us... Weston threw me his walking stick and enjoyed watching the Old Man make quick work of the serpent. Pressing on, I landed a deer sized distal femur encased in clay and sandstone. This was a good find. Not to be out done, Weston lay hands on a big yellow, sandy Bison vertebra which he was quite proud of. Soon after, he picked up about 2/3 of a VERY NICE spear point. Again his smugness prevailed and I let him enjoy the limelight of smoking his Old Man.



**FIGS 157-163:** Weston Woehr surveying Site 157 and flaunting his finds including a bison cervical vertebra and a partial spear point, possibly a Covington, Refugio, Abasolo, or Lerma (this and next 3 pages)









**FIGS 164-166:** Possible deer distal femur found by the author (Site 157)



One high percentage gravel bar was still covered with water, but another good bar gave up very little other than a glyptodont osteoderm. The next bar was a dud as well. Making a long run to another gravel bank we finally got back into some fossils. However they were small, so the boy wasn't quite as interested, but I was happy to pick up osteoderms of 9 banded armadillo, turtle shell frags, even small mammal jaws with teeth intact. Winds were whipping up whitecaps on the river so we aborted the final leg of our trip and headed back to the house. Our combined take was not heavy, but quite satisfying as we took everything as a team.



**FIGS 167-168:** Glyptodont osteoderm, a piece of bony armor from a giant armadillo-like creature (Site 132)



**FIGS 169-171:** Various bones including rodent jaws, turtle and armadillo osteoderms, and a deer antler (Site 179)



April 29, 2009: Wanton Slaughter in the Walnut Formation

With my car packed with gear I left work at 5 p.m. and headed a little west of San Antonio to capitalize on recent rains that had fallen on a certain echinoid bearing exposure of the Walnut formation (105 MYA) which had given up good specimens recently. The gray, receding marl layer weathers quickly when doused by rain, and is most easily collected when still wet as the white echinoids stand out in stark contrast to the wet gray surrounding marl.

In short I spent 2 hours or so at the exposure and found the site to once again be quite generous. The "Coenholectypus slot machine" went off to the tune of 24 *C. planatus* specimens plus 9 "bonus" *Loriolia* sp. echinoids. Tired and sweating on a hot evening in the Texas Hill Country, I headed home around dusk quite satisfied with not just the day's haul, but the entire month's.



**FIGS 172-177:** Walnut Formation echinoids *Coenholectypus planatus* this and next page followed by echinoids *Loriolia rosana* (Site 455)



