

FOSSIL AND ARTIFACT COLLECTING REPORT

May 2013

Daniel A. Woehr and Friends and Family

May 2, 2013: Corsicana Revival

I guess the Corsicana site took offense to my poor mouthing, and just to prove me wrong, she gave up the goods after last week's interlude in the drought brought by 3 inches of precipitation straight from the heavens. I made a little time in my schedule to have a quick look, and almost turned back due to rush hour, road construction and accident induced traffic snarls. I'm glad I proceeded as planned.

My expectations were quite low going in...reclamation by construction...drought...revegetation. But I got there when the ground was still wet so I could use maximum color contrast to my advantage. At many marly exposures, including this one, rain seems to make the surrounding sediments look darker and the fossils brighter than normal, and this knowledge should be an arrow in every fossil collector's quiver.

And quiver I did when I spotted the first *Dakoticancer australis* crab carapace, looking good after 68 million years. In my 90 minute crawl I eventually loaded up on 6 of these coveted finds, with 3 being just about perfect and the other 3 ranging from 50 to 75% complete. No legs or claws this time, but I won't complain, as I was sure I'd never find another one.



FIGS 1-5: Corsicana Formation crabs *Dakoticancer australisthis* and next 4 pages (Site 349)



Barely exposed



Barely exposed







FIG 6: Corsicana Formation echinoids *Hemiaster bexari*(Site 349)



FIG 7: Rough Corsicana Formation echinoids *Proraster dalli* left, *Diplodetus americanus* right (Site 349)



FIG 8: Partial Corsicana Formation ammonite c.f. *Menuites stephensoni*(Site 349)



FIG 9: Corsicana Formation gastropods, bottom to top, *Gyrodes rotundus*, *Lupirasp.*, *Volutomorphasp.*, *Gyrodes petrosus*, *Anchurasp.* (Site 349)



FIG 10: Corsicana Formation gastropods *Gyrodes petrosus* left, , *Bellifusus* sp. right (Site 349)



FIG 11: Corsicana Formation oyster *Exogyra costata* left, bivalves *Pterotrigonia castrovillensis* lower right, *Plicatula mullicaensis* top right (Site 349)



FIG 12: Unidentified coral found in a chert cobble that washed down from the overlying Uvalde Gravel, Pliocene in age. I believe this Pliocene gravel to be redeposited eons ago from the Edwards Formation (104 MYA) to the north (Site 349)

I was also pleased to grab 12-15 *Hemiaster bexaritechinoids*, and one small but flawed *Diplodetus americanus*. A bevy of cool and uncommon gastropods added a little more heft to my catch bag, and sent me home with a good start on a new month of collecting.

May 4, 2013: Scouting Afoot

With boat rental plans dashed by high winds, the Mrs. and I scrambled for a Plan B. I came up with a few sites I wanted to scout that were wife friendly, and away we went. Miles and miles of alluvial gravels provided level but eventually tiring footing, but we enjoyed our 4 mile hike free of trash and people, stopping to enjoy the sunshine and clear pools of water along the way.

We found no fossils, but I did lay hands on 2 pieces of worked flint, nothing too showy, but interesting enough to add to the backyard rock pile.



FIG 13: Rough artifacts or “uglifacts” as I call them (Site 655)

A second scouting stretch required very difficult access, so I ran solo this time. Upon entering the stream bed, I encountered another collector...boy was he surprised to see me come sliding down the bank out of nowhere in a controlled fall, landing firmly on the gravel bar next to him!

My first words...“Dang! I thought I had found a new secret spot!”....His first words...“Too many people come here!”...a man after my own heart. He was a nice older gentleman and also somewhat of a maverick in the field, not unlike myself. I took off downstream and covered a mile or so at a good clip, finding nothing. When I caught up to the other guy, we chatted for a half hour, traded stories and photos, then I spotted some sort of rough lithic artifact, perhaps a chopper, and a couple feet away he found a small, rough blade just seconds later.

Departing for a burger, I stopped on the way home to peruse a shark tooth site that has produced on and off for me in the past. A half hour of scanning Eagle Ford (90 MYA) limestone slabs and splitting a few of them produced a few *Squalicorax falcatus*, *Ptychodus anonymus*, and *Cretoxyrhina mantelli* teeth making the sidetrack worth the time and effort. The biggest tooth I found was another *C. mantelli*, and I should have taken a picture of it in

matrix as found, as my hand sledge blow to reduce the slab sent a crack right through the tooth, and I may not have gotten all the pieces. Stupid mistake. Probably not my last.



FIGS 14-19: Eagle Ford Group ginsu shark teeth *Cretoxyrhina mantelli* this and next 5 pages (Site 36)











Note small crow shark tooth *Squalicorax falcatus* to the right of the *Cretoxyrhina mantelli* tooth



FIGS 20-21: Eagle Ford Group crusher shark teeth *Ptychodus anonymus* this and next page (Site 36)





FIGS 22-23: Eagle Ford Group crow shark teeth *Squalicorax falcatus* this and next page (Site 36)



The weekend was half hit, half miss, and there was good variety in what little I found. No complaints. Plenty of new sites scheduled for scouting over the course of the month.

May 11, 2013: Epic East Coast Eocene Adventure

With my wife wanting to spend Mother's Day weekend with her daughter in Atlanta, I went along, rented a separate car, and headed for South Carolina for a Saturday of collecting with my friend, Adam Osborn. But the adventure began the night before as I went through airport security...apparently my fossil backpack contained a big, stout steak knife which I had been unwittingly carrying around in a side pouch for a while...OOPS! In this case I'm certain that the presence of my wife and son gave me just the shred of credibility needed to make it through security without delay...nobody told me they don't serve steaks on the plane anymore!

Arriving at my wife's other house in Atlanta and getting to sleep around midnight, I woke up 10 minutes before my 2 a.m. alarm. With a GLUG GLUG GLUG of 5 Hour Energy I was on my way, and after 5 ½ hours of interstate and back road driving, I finally got to shake hands with Adam and begin our search at our first site, a quarry that Adam worked hard to secure permission to in the Eocene aged Santee Limestone, Lutetian Age, perhaps 40 MYA.

Waving to quarry workers and hiking around them, we worked our first strip of rock piles, and after expert guidance from Adam in pointing out the more productive types of rock, I found the first echinoid of the day, a rare and perfect *Gitolampasp.* nov. Adam followed suit with several more echinoids. Some we found in slabs, but since they were so fragile, extraction success rate was low when entombed in bryozoan hash. A few small crab carapaces also came to hand between echinoid finds.



FIG 24: The author surveying Eocene aged Santee Limestone (Site 656)



FIGS 25-27: The author's first worthy find in the Santee Limestone, the echinoid *Gitolampas* sp. this and next 2 pages (Site 656)







FIGS 28-29: Santee Limestone echinoid *Gitolampas* sp. with adhered crab carapace *Eriosachila petition* on a bed of unidentified shell and bryozoan hash, this and next page (Site 656)





FIGS 30-34: More Santee Limestone echinoids *Gitolamp* sp. this and next 4 pages (Site 656)











FIG 35: New species of Santee Limestone sand dollar *Protoscutella palmeri*(Site 656)



FIG 36: Santee Limestone partial crab carapace *Acantholambrus baumi*(Site 656)



FIG 37: Santee Limestone unidentified bivalve and partial *Eutrephoceras carolinensis* nautiloid (Site 656)



FIG 38: Santee Limestone unidentified bryozoan and bivalve c.f. *Pecten*(Site 656)



FIGS 39-40: Santee Limestone bryozoans *Lunulites* sp. this and next page (Site 656)





FIG 41: Adam's Santee Limestone mystery find (Site 656)

Several *Lophoranina* crabs were found in limestone slabs as well. These crustaceans reminded me of giant sand fleas. The gray, gritty, sandy slopes in places gave us a few shark teeth, and Adam informed me that these areas were from lag deposits low in the exposure.



FIGS 42-43: Adam's Santee Limestone *Striatolamia macrotashark* tooth this and next page (Site 656)





FIGS 44-45: Unidentified Santee Limestone shark teeth this and next page (Site 656)





FIGS 46-47: Santee Limestone shark teeth left to right: two *Abdouinia* sp. left, *Myliobatis* sp. ray tooth top center, turtle vertebra (?) center, *Striatolamia macrotata* top right, *Isurus* sp. lower right, unidentified shark tooth blades next page (Site 656)





FIGS 48-50: Santee Limestone crabs *Lophoranina rossii* this and next 2 pages (Site 656)





Pressing on to a weathering pile of limestone and overburden a long hike away, we found many more Eocene treasures including 2 species of echinoids (*Eurhodia holmesi* and the larger *Eurhodia rugosa*), one very nice *Lophoranina* crab (thanks Adam!) and quite a few small sand dollars *Protoscutella conradi*. Adam also found a partial regular echinoid *Cidaris pratti*.

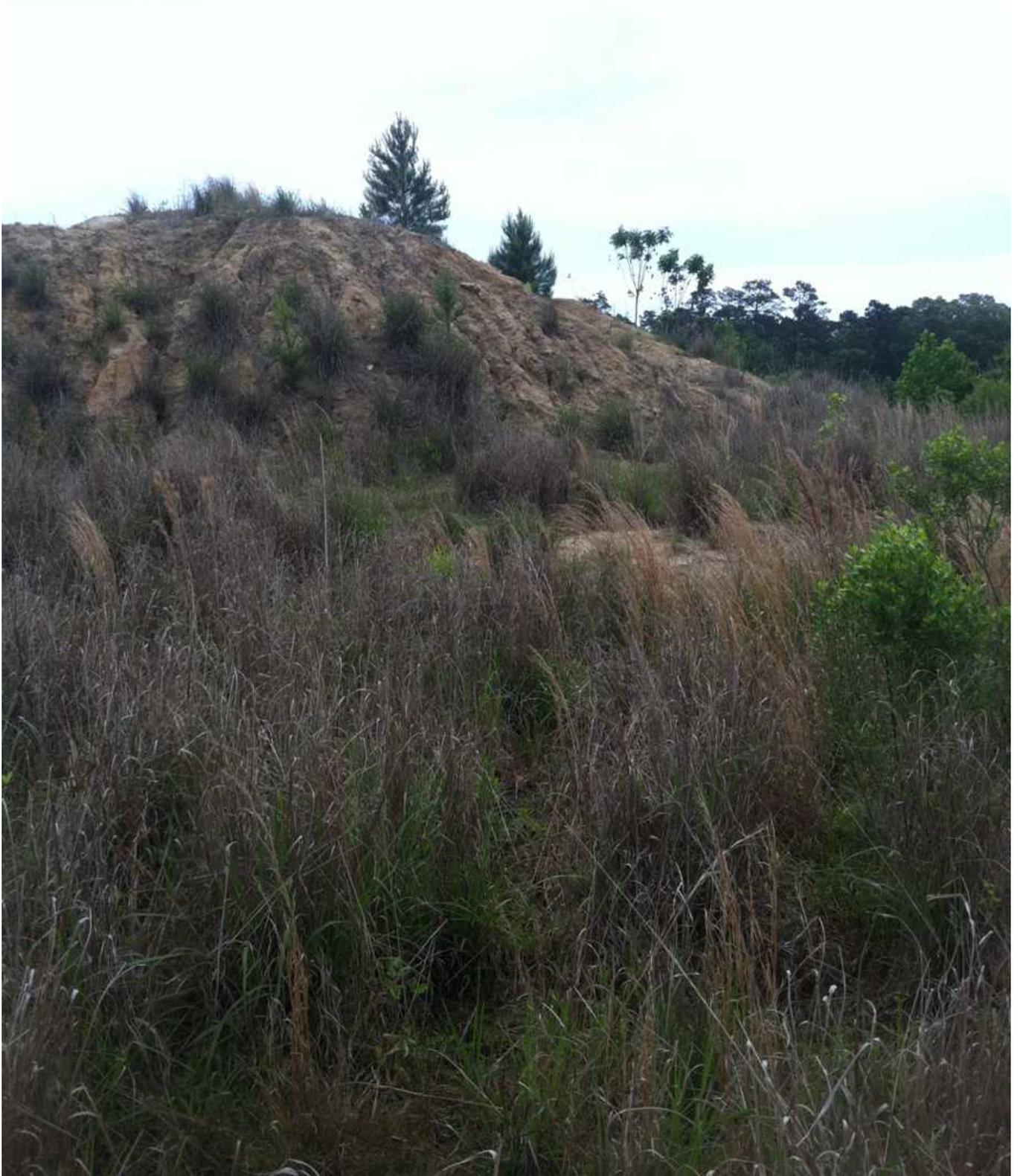


FIG 51: Another section of Santee Limestone Site 656



FIGS 52-55: Spectacular Santee Limestone crab *Lophoranina ross* found by Adam Osborn this and next 3 pages (Site 656)









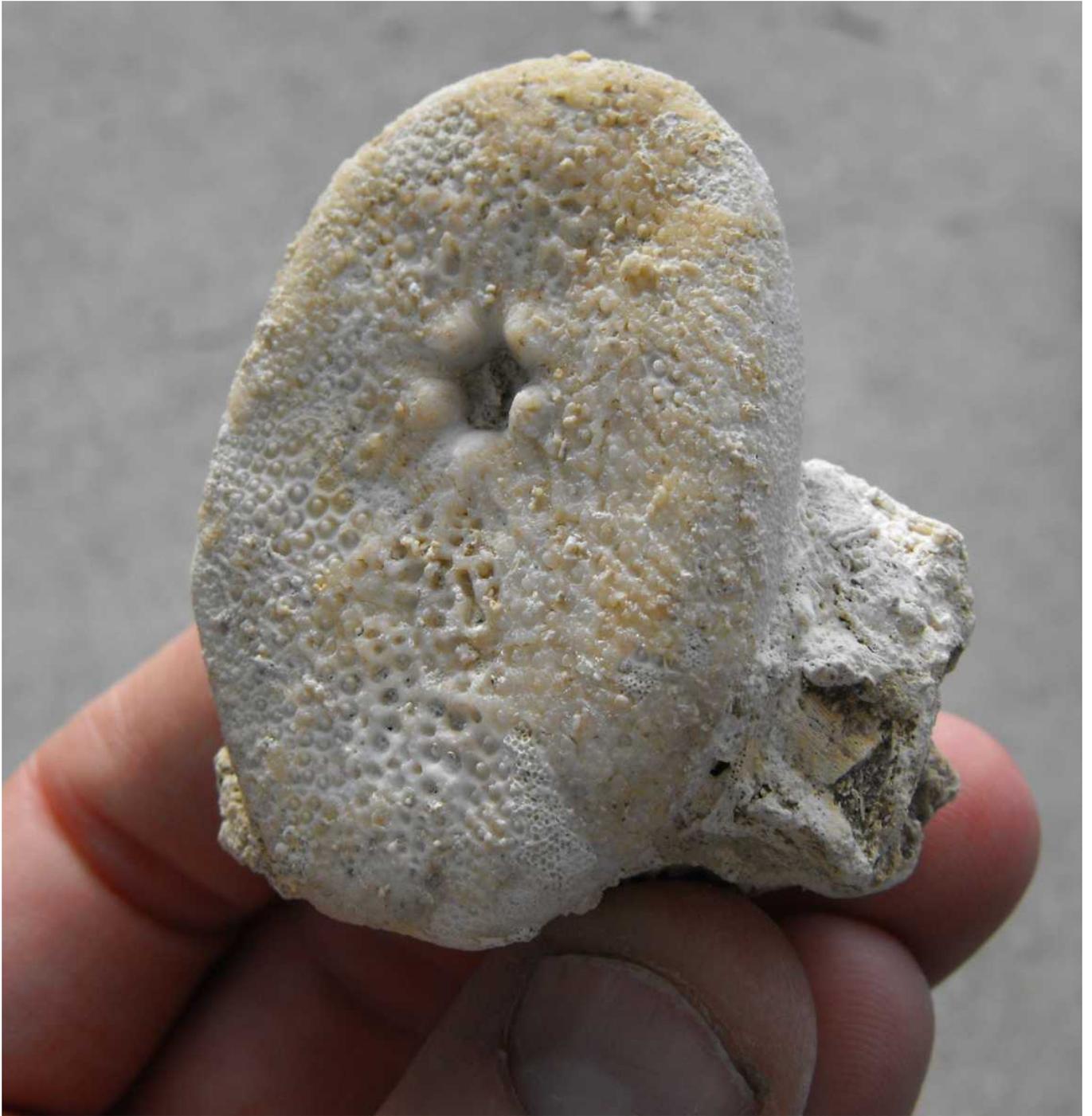
FIG 56: Santee Limestone regular echinoid *Cidaris pratti* found by Adam Osborn (Site 656)



FIGS 57-61: Santee Limestone irregular echinoids *Eurhodia rugosathis* and next 4 pages (Site 656)











FIGS 62-64: Santee Limestone irregular echinoids *Eurhodia holmesi* this and next 2 pages (Site 656)







FIGS 65-66: Santee Limestone sand dollars *Protoscutella conrad*/this and next page (Site 656)





FIGS 67-68: Unidentified Santee Limestone turtle shell fragment this and next page (Site 656)



On our way out of the site, we noticed that the steady pounding of a certain jack hammer had ceased, opening one more string of rock piles up for us to search. This was quite a fortuitous stop – the next 45 minutes produced several crabs and echinoids for us both.



FIG 69: The author canvassing another section of the Santee Limestone (Site 656)



FIGS 70-72: Santee Limestone crabs *Eocarpilius carolinensis* this and next 2 pages (Site 656)







FIG 73: Santee Limestone crab *Eocarpilius carolinensis* and echinoid *Gitolampas* sp. This association was inadvertently destroyed during prep when the echinoid disintegrated. They are hollow and fragile as a light bulb. (Site 656)



FIGS 74-75: Santee Limestone crabs *Eriosachila petitthis* and next page (Site 656)





FIGS 76-78: Santee Limestone crabs *Lophoranina ross*/this and next 2 pages (Site 656)







FIG 79: Santee Limestone scallop c.f. *Pecten* sp. (Site 656)



FIGS 80-81: Santee Limestone sand dollars *Protoscutella conrad*/this and next page (Site 656)



Pulling out around 2 p.m., we headed to another Santee Limestone dominated quarry to which Adam has permission. Our first stop was a small sandy gray pile on the quarry floor which Adam called Warley Hill Formation, which outcrops just below the Santee Limestone. Here we found 4 rare echinoids *Santeelampas oviformis*; the 3 best of which were found by Adam.



FIGS 82-83: Santee Limestone above and Warley Hill Formation below, this and next page (Site 657)





FIGS 84-86: Warley Hill Formation echinoids *Santeelampas oviformis* this and next 2 pages (Site 657)







FIG 87: Santee Limestone sand dollars *Protoscutella plana* left, *Protoscutella conradi* right. Note difference in periproct shape and position (Site 657)

Another zone gave up *Terebratulina* brachiopods and a single *Protoscutella plana* sand dollar, the latter distinguished from the more common *Protoscutella conradi* by the periproct shape and position.

Pressing on, Adam hiked me over to an area he called "crab ridge", and for good reason. We spent close to an hour in an area of cream colored gritty limestone where the quarry operator had ripped up the quarry floor and made a few low piles. This area was littered with crabs large and small, and of probably 3 or 4 genera. Many carapaces were found by each of us along with a few claws. Then Adam found a worn tip of a shark tooth jutting out of a rock, and when I whacked the rock with my chisel pointed at the proper angle, a big flake of limestone broke away, revealing the rest of a large shark tooth *Carcharocles auriculatus*, a rare and good find for this area. We supplemented our crab and shark tooth take in this little area with frequently encountered *Protoscutella conradi* sand dollars.



FIGS 88-90: Various unidentified Santee Limestone crab claws and cheliped elements this and next 2 pages

(Site 657)







FIG 91: Santee Limestone crab carapaces *Eocarpilius carolinensis* left and *Eriosachila petit* center, crab claw *Paguristes wheeleri* right, scallop c.f. *Pecten* above (Site 657)



FIG 92: Santee Limestone crab carapaces *Eocarpilus carolinensis* (Site 657)



FIGS 93-95: Santee Limestone crab carapace *Dromidia bedettae* and next 2 pages (Site 657)







FIG 96: Santee Limestone crab carapace *Eriosachila petiti*(Site 657)



FIG 97: Santee Limestone echinoids *Eurhodia rugosa* (Site 657)



FIGS 98-99: Santee Limestone sand dollars *Protoscutella conrad*/this and next page (Site 657)





FIG 100: Rare for this site, a Santee Limestone giant white shark tooth *Carcharocles auriculatus* (Site 657)

We had enough steam left for one more hard push, and Adam directed us to a string of freshly quarried gray limestone that has never been searched for fossils. A white, nearly baseball sized form quickly caught my eye 40 feet away, and it turned out to be a large crab carapace *Eocarpilius carolinensis*. Many more smaller examples came to hand as well. Echinoids made a light showing here, but I found one nice *Eurhodia* and Adam found a beautiful example of the coveted regular echinoid, *Coelopleurus infulatus* (thanks again, Adam!)



FIG 101: Adam leading me to another fresh rock pile rich in Santee Limestone crabs (Site 657)



FIGS 102-104: Adam's best echinoid find of the day, a Santee Limestone *Coelopleurus infulatus*(Site 657)







FIGS 105-109: The author's biggest Santee Limestone crab carapace *Eocarpilius carolinensis* shown in situ through prepped, this and next 4 pages (Site 657)











FIGS 110-114: More Santee Limestone crab carapaces *Eocarpilius carolinensis* this and next 4 pages (Site 657)











FIGS 115-116: Santee Limestone crab carapace *Eocapillus carolinensis* in association with sand dollar *Protoscutella conrad* this and next page (Site 657)



We spotted a few more crabs and sand dollars *Protoscutella conradii* in boulders along the quarry road on the way out, making for a super productive, one day surgical strike on the middle Eocene exposures of South Carolina. I gave Adam some nice Texas echinoids and with a handshake, I bade goodbye, slammed back one more 5 Hour Energy, and made my way back to Atlanta the same day, 85-90 MPH where possible, making for a 24 hour day by the time I got to bed. Mother's Day went well after I had a good round of ZZZZZZZ's.

Airport security once again questioned me about my backpack, this time not for sharp implements, but for the myriad rocks within. I slipped into geek mode and began spewing newly learned taxonomy, and probably doing a bad job of it, but the desired effect was achieved...the TSA lady got that "get this nerd out of here" look on her face, a look I'm getting quite familiar with...

May 17, 2013: Escondido Escape

After squaring away some obligations at work, proper timing and a cool boss resulted in a last minute vacation day taken on Friday. I had high aspirations of multiple site visits on this day, but in the end, the first 100F collecting day of the year made me lazy, so I worked just one site.

I enjoy spending time in the Escondido Formation (66 MYA) whenever I can, more so with sites a little off the grid. So with a good deal of effort, I was able to place myself in a stream exposing the uppermost Cretaceous Escondido Formation.

I hadn't been to the site in a while, and didn't know what to expect, but an hour or so of leisurely looking around the stream bed produced 5 compliant *Sphenodiscus* ammonites, with 3-4 being keepers. I saw many more, but just took the easy ones, preferring to haul in a couple uninitiated friends to enjoy the bounty on a future visit.



FIGS 117-130: Escondido Formation ammonites *Sphenodiscus* s.f. *pleurisepta* this and next 13 pages (Site 417)











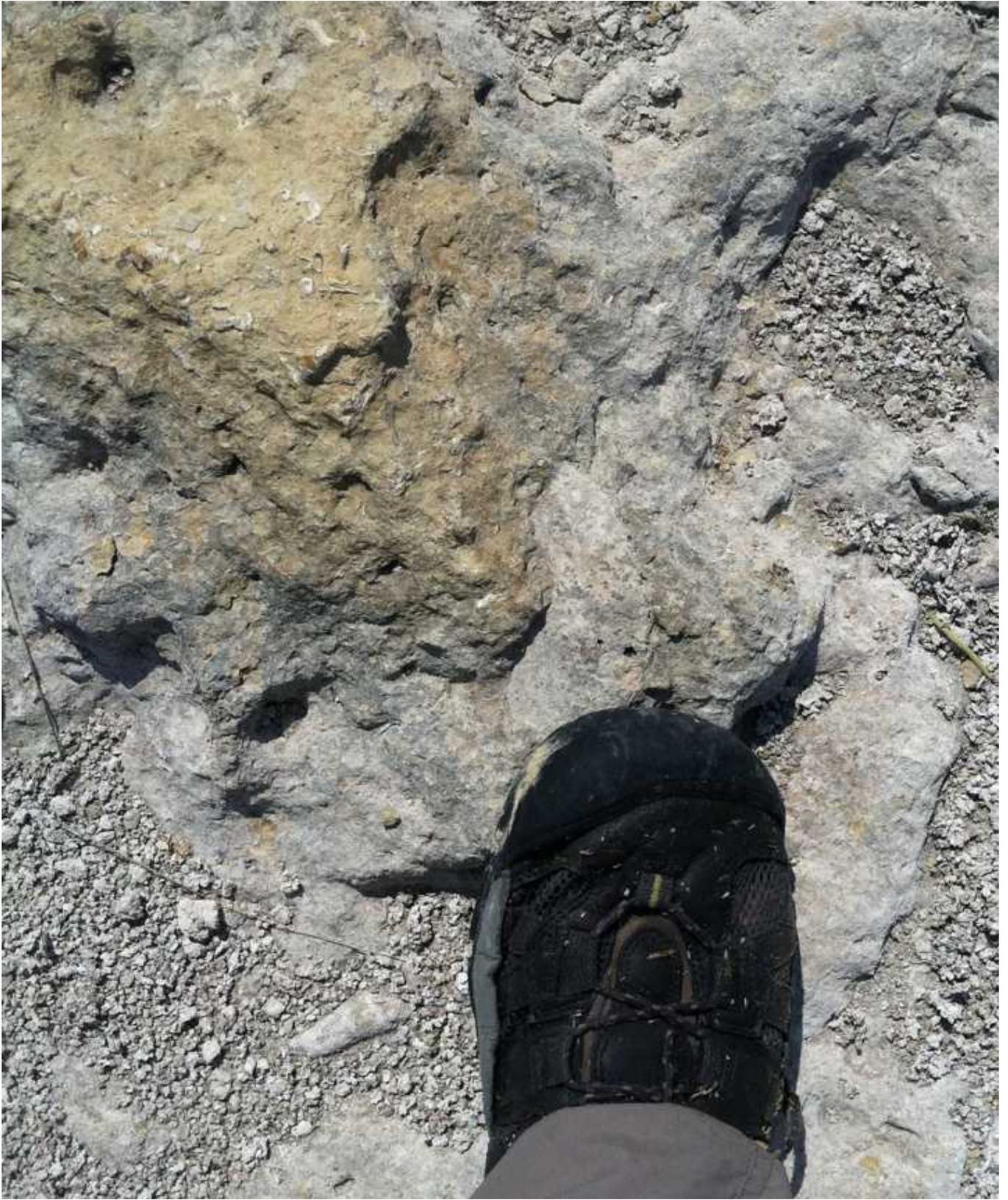


















FIG 131: Escondido Formation gastropod *Turritellac.f. trillira*(Site 417)



FIGS 132-134: Unidentified partial blade this and next 2 pages (Site 417)





On my way out I saw many tantalizingly suggestive pieces of flint, then finally a blade with the tip and base knocked off. Lately I've earned the trophy for finding the ugliest, most undesirable artifacts ever cast aside by ancient man!

May 18, 2013: Fossils and Matrimony

On Saturday, the wifey and I decided to rent a pontoon boat on Lake Texoma and take a spin around its expansive shorelines, enjoying the simple pleasures of a couple in the outdoors. An increasing wind forecast threatened to thwart our trip for the second time in 2 weeks, but in the end the small white caps did little to cramp our style.

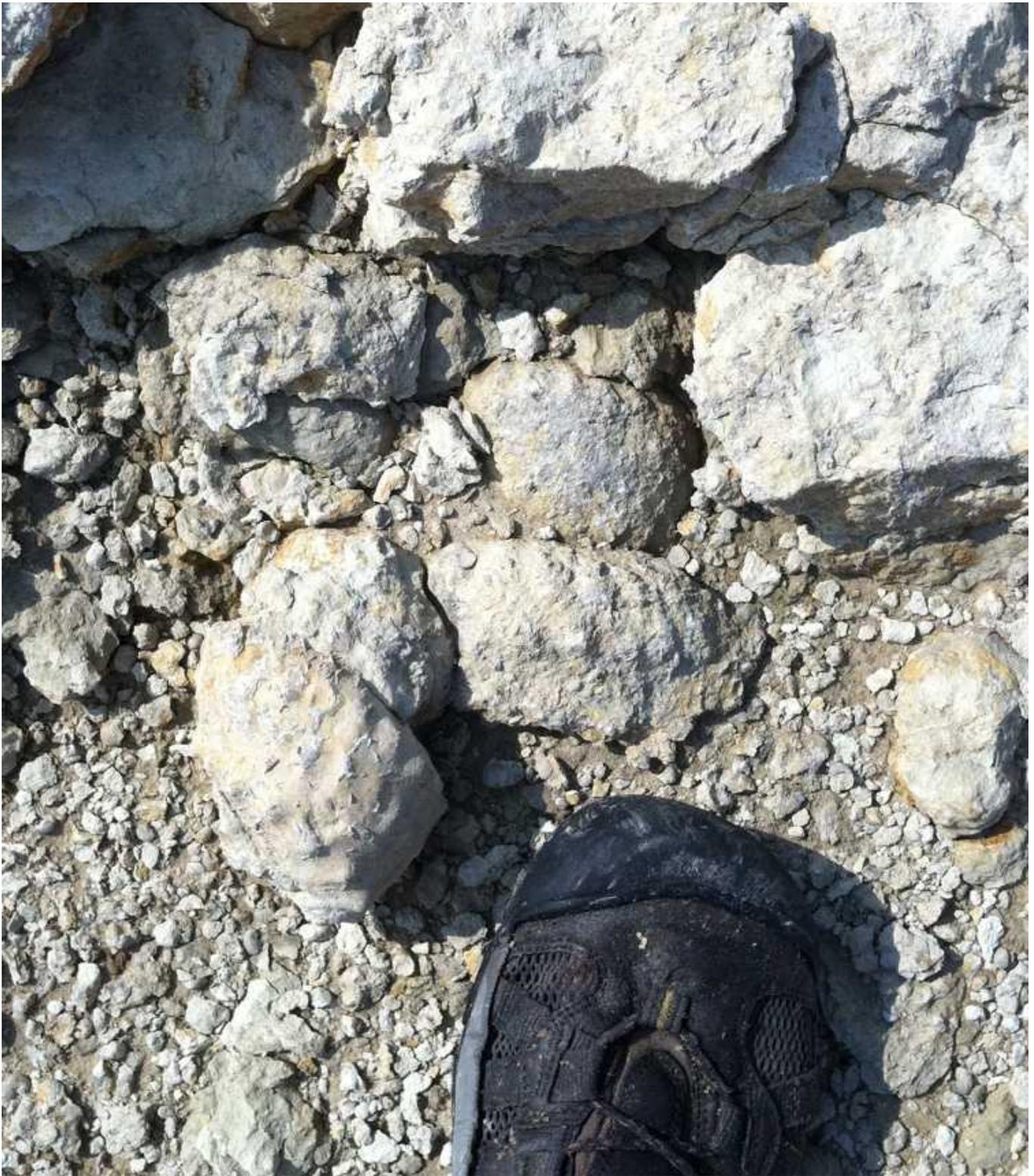
First we focused on the Grayson Formation, and although we didn't find as many echinoids as we had hoped for, we still got a few *Washitaster* sp. and nice *Hemiaster calvini* specimens. The echinoids were overshadowed in

abundance by heteromorphic *Mariella brazoensis* ammonites and *Cymatoceras hilli* nautiloids – and we got some pretty nice examples of both.

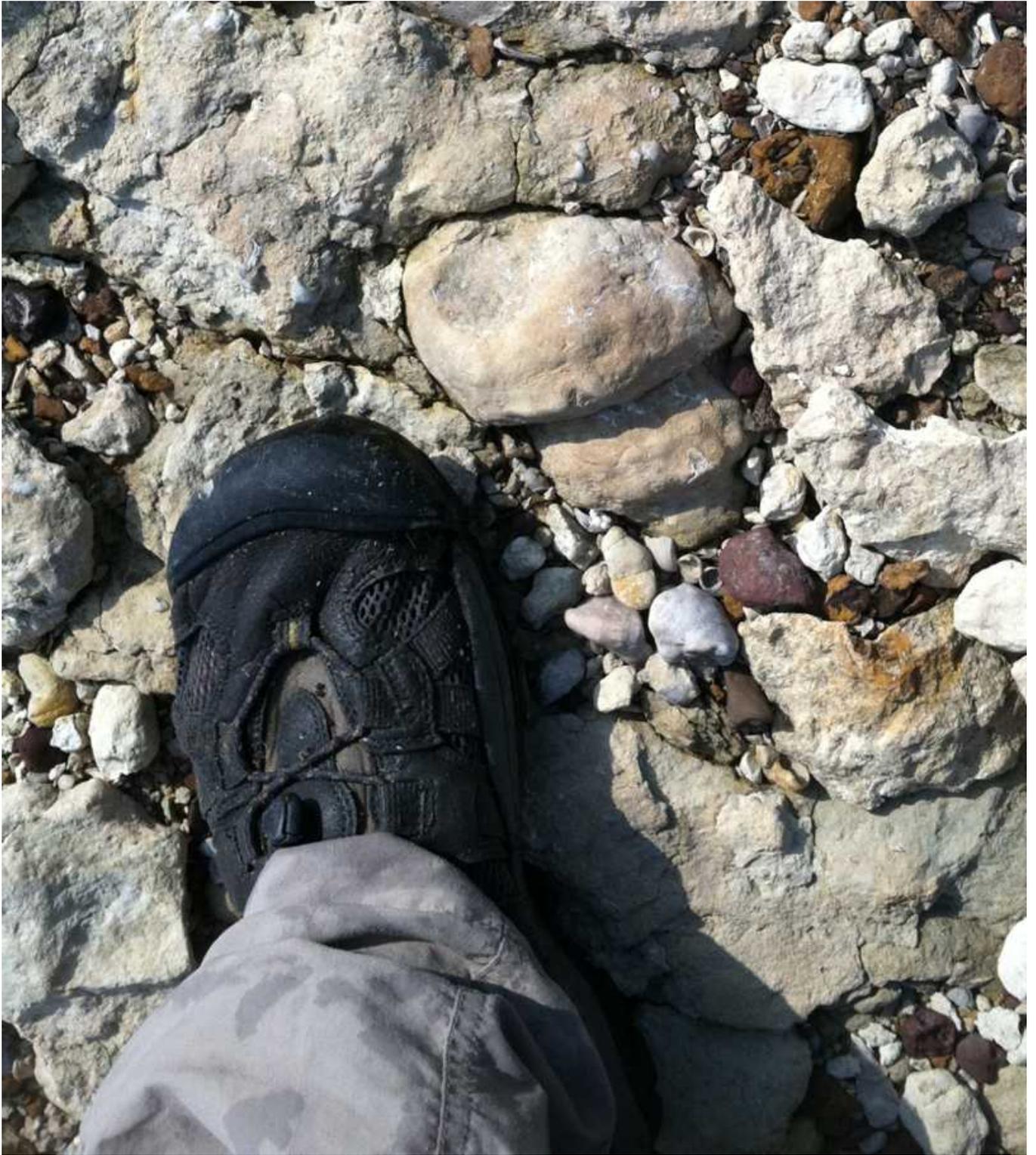


FIGS 135-136: Grayson Formation echinoids *Washitaster* sp. left and center, *Hemiaster calvini* right and next page (Site 294)





FIGS 137-143: Grayson Formation heteromorphic ammonites *Mariella brazoensis* this and next 6 pages (Site 294)















FIGS 144-146: Grayson Formation nautiloids *Cymatoceras hilli* this and next 2 pages (Site 294)







FIG 147: Grayson Formation with Mrs. Woehr in the lead (Site 658)



FIGS 148-149: Grayson Formation echinoids *Hemister calvin* this and next page (Site 658)





FIGS 150-152: Grayson Formation heteromorphous ammonites *Mariella brazoensis* this and next 2 pages (Site 658)

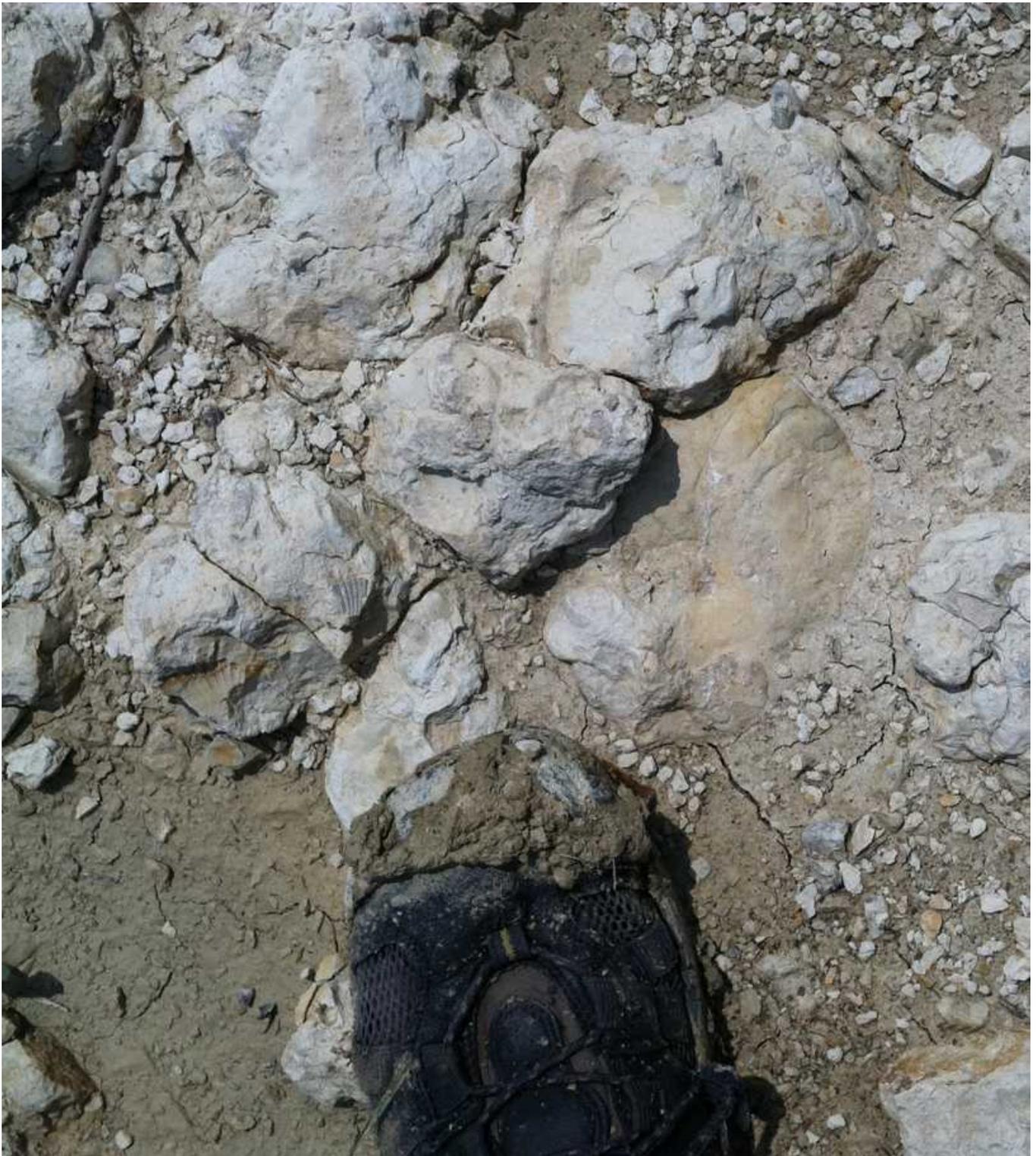




Ammonite on left, gastropod on right



FIG 153: Grayson Formation planispiral ammonite *Stoliczkaia crotaboides*(Site 658)



FIGS 154-157: Grayson Formation nautiloids *Cymatoceras hill* (this and next 3 pages) (Site 658)









FIG 158: An unfortunate gar (Site 658)

The Fort Worth Formation was our next target, and we found a very remote site to be picked over – unexpected bad news. But things took a positive turn when Mrs. Woehr began smashing open limestone slabs where she saw ammonite impressions. As it turned out, the fossil density was pretty high at this exposure, and we scored a few decent *Mortonicer* ammonites by blind mining, with the biggest and best going to Brett...she loves when that happens!



FIGS 159-162: Brett and her best Fort Worth Formation *Mortonicer* ammonite of the day, this and next 3 pages (Site 659)









FIGS 163-165: Fort Worth Formation *Mortoniceras ammonites* this and next 2 pages (Site 659)







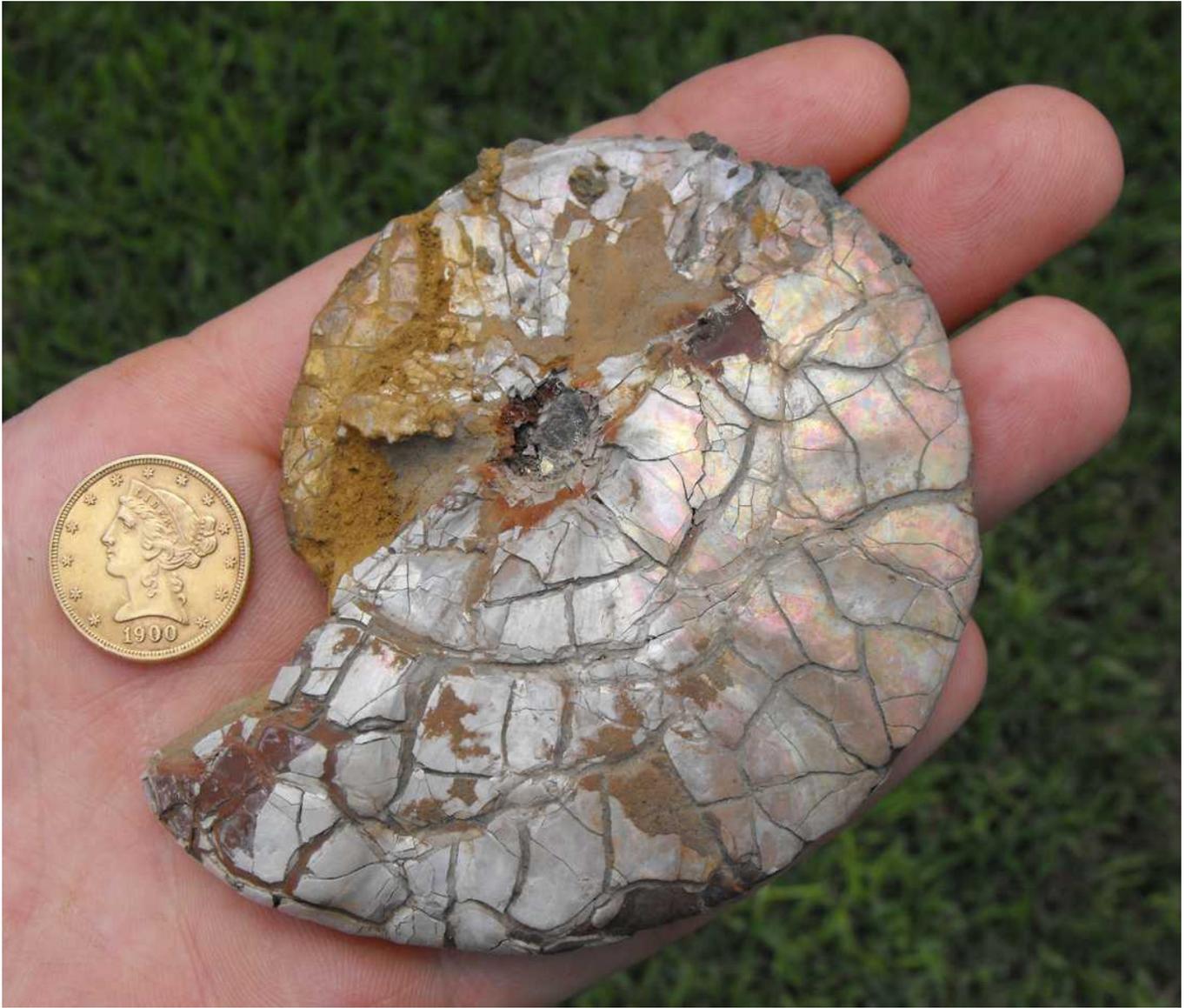
FIGS 166-167: Fort Worth Formation *Washitasterechinoid* this page, *Trigonia* bivalve next page (Site 659)



Next we visited the Weno Formation, and at a picked over site, Brett found a beautiful nacreous *Engonoceras serpentinum* ammonite despite obvious collecting pressure. She loves it and equates it on some level with the ammolite ammonites she'd love to find in Alberta, Canada someday. We found a lot of nice gastropods entombed in red Weno ironstone with replaced shell material intact, and in the end, even I found a few *Engonoceras*



FIGS 168-174: Brett's prized Weno Formation *Engonoceras serpentinum* ammonite as found this page, after attempted repairs next 6 pages (Site 660)















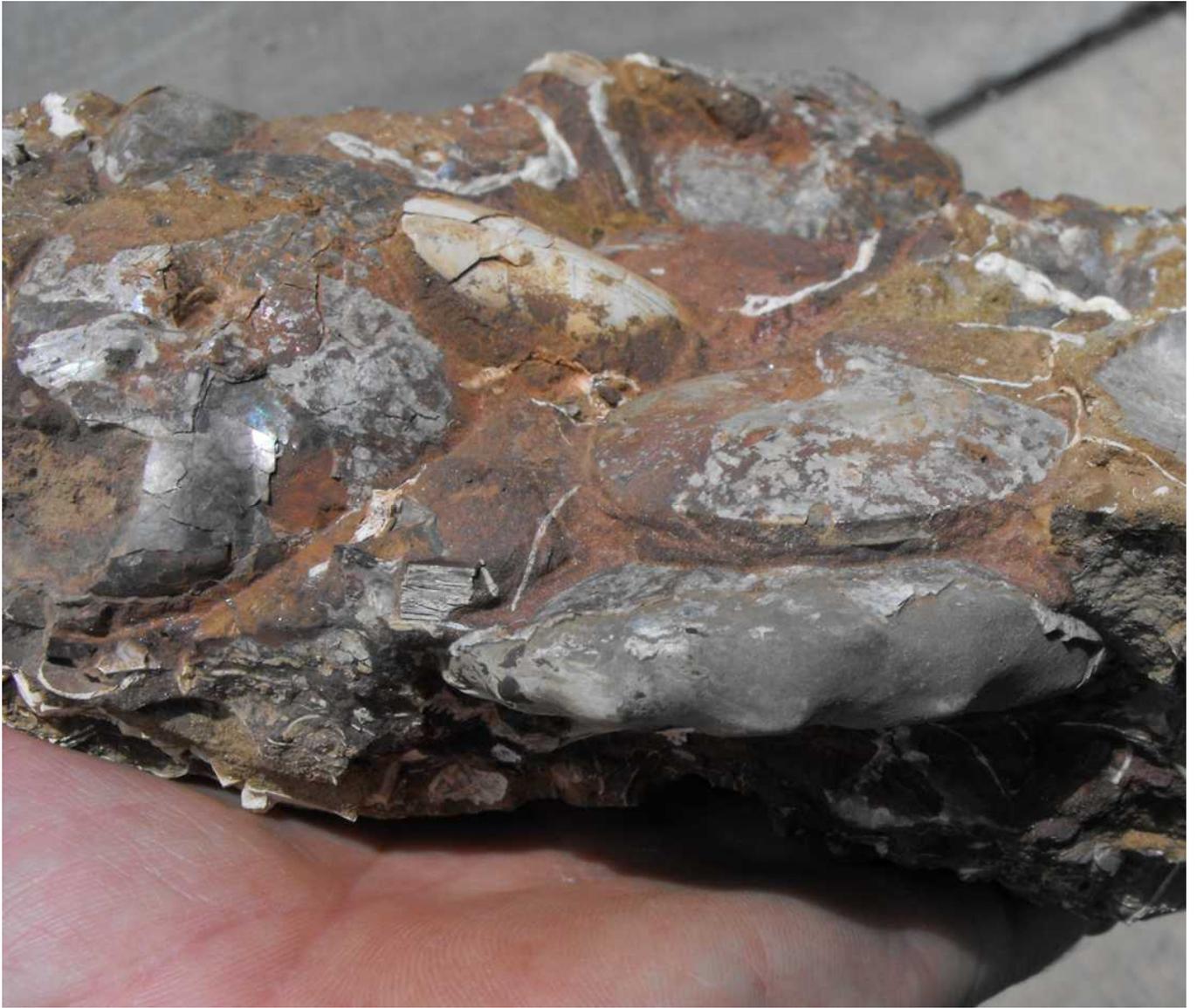
FIGS 175-184: The author's colorful Weno Formation *Engonoceras serpentinum* ammonites this and next 9 pages

(Site 660)















Anchura mudgeana gastropods in ammonite block above







FIGS 185-189: Wenon Formation gastropods *Anchura mudgeana* this and next 4 pages (Site 660)











FIGS 190-193: Weno Formation gastropods *Turritella* sp. this and next 3 pages (Site 660)









FIGS 194-195: Weno Formation bivalve *Trigonia clavigera* this page, another unfortunate gar next page (Site 660)

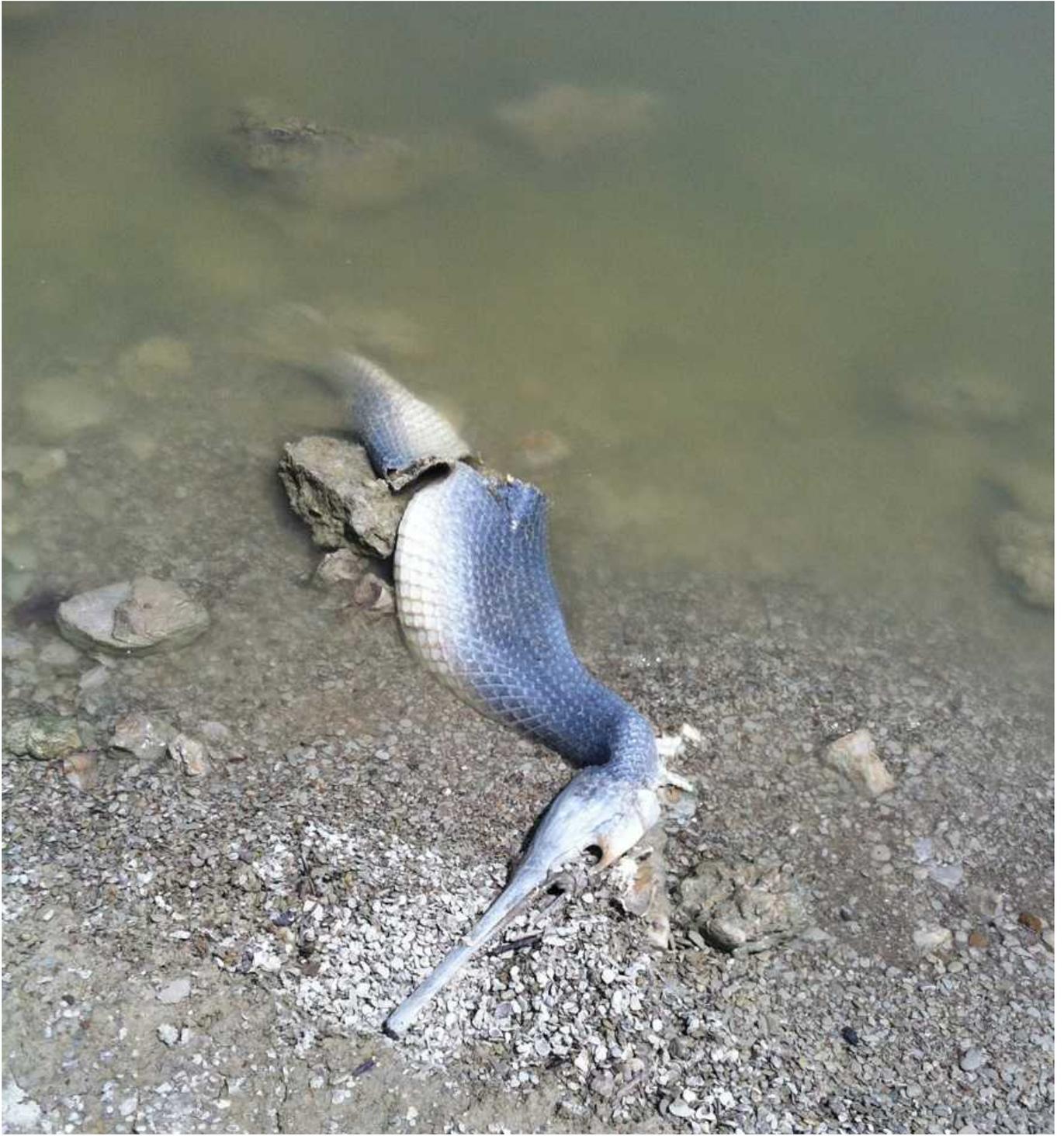




FIG 196: Weno Formation ripple marks (Site 194)



FIGS 197-198: Weno Formation ammonite *Engonoceras serpentinum* this and next page (Site 194)



Our boat rental return time came too soon, and with our new found sunburn and a load of Lower Cretaceous fossils we returned to the dock, one more good Team Woehr adventure behind us.

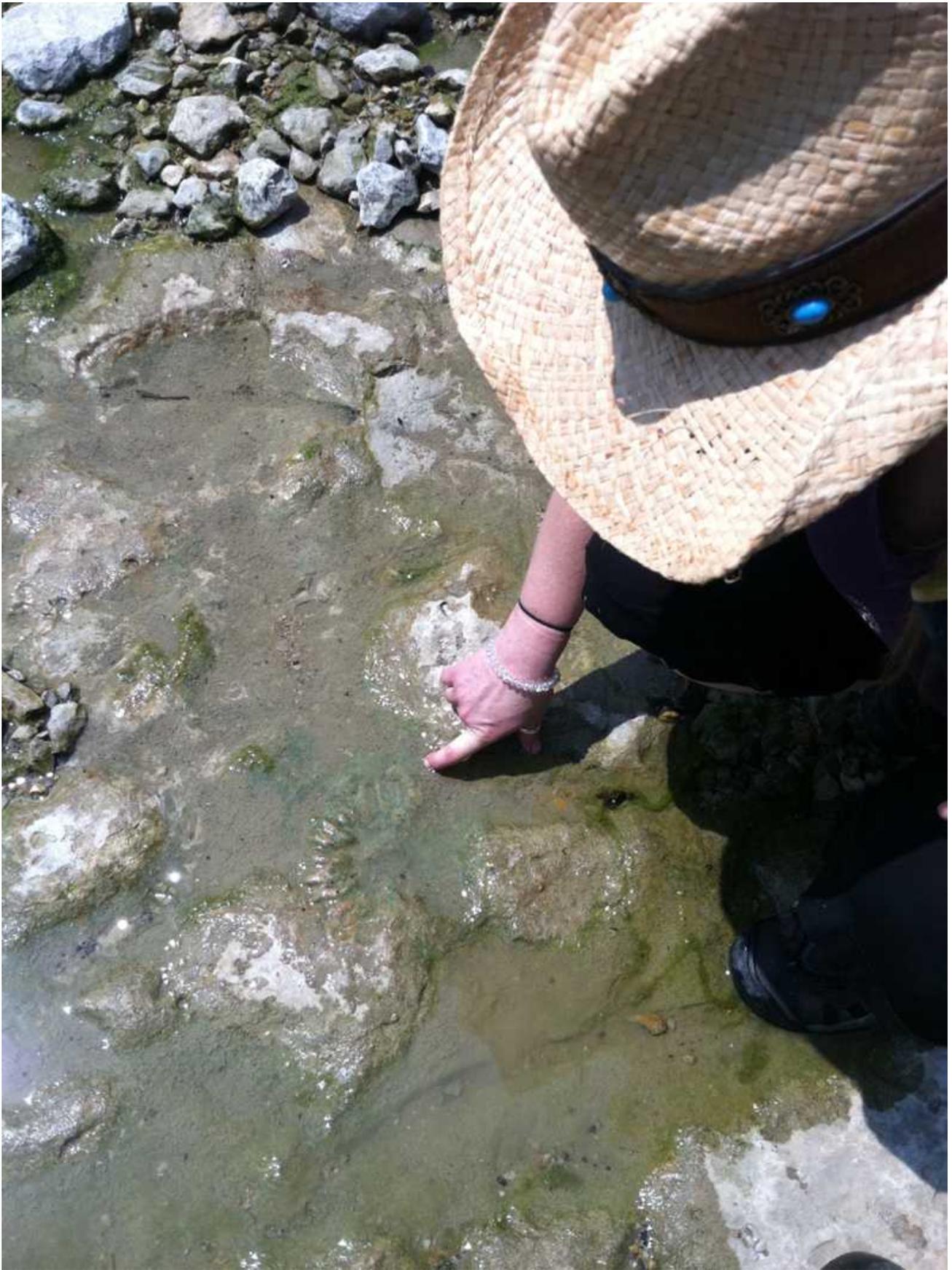


FIG 199: The author high tailing it back to port

May 19, 2013: Cretaceous Scouting Mission

We did more scouting than collecting as we headed south, the day marked by noting a few new potential sites for future trips, and several dud sites I can now cross off the list. Toward the end of our collecting as we stomped a Weno Formation stream exposure, we located a few *Angolaites* ammonites.

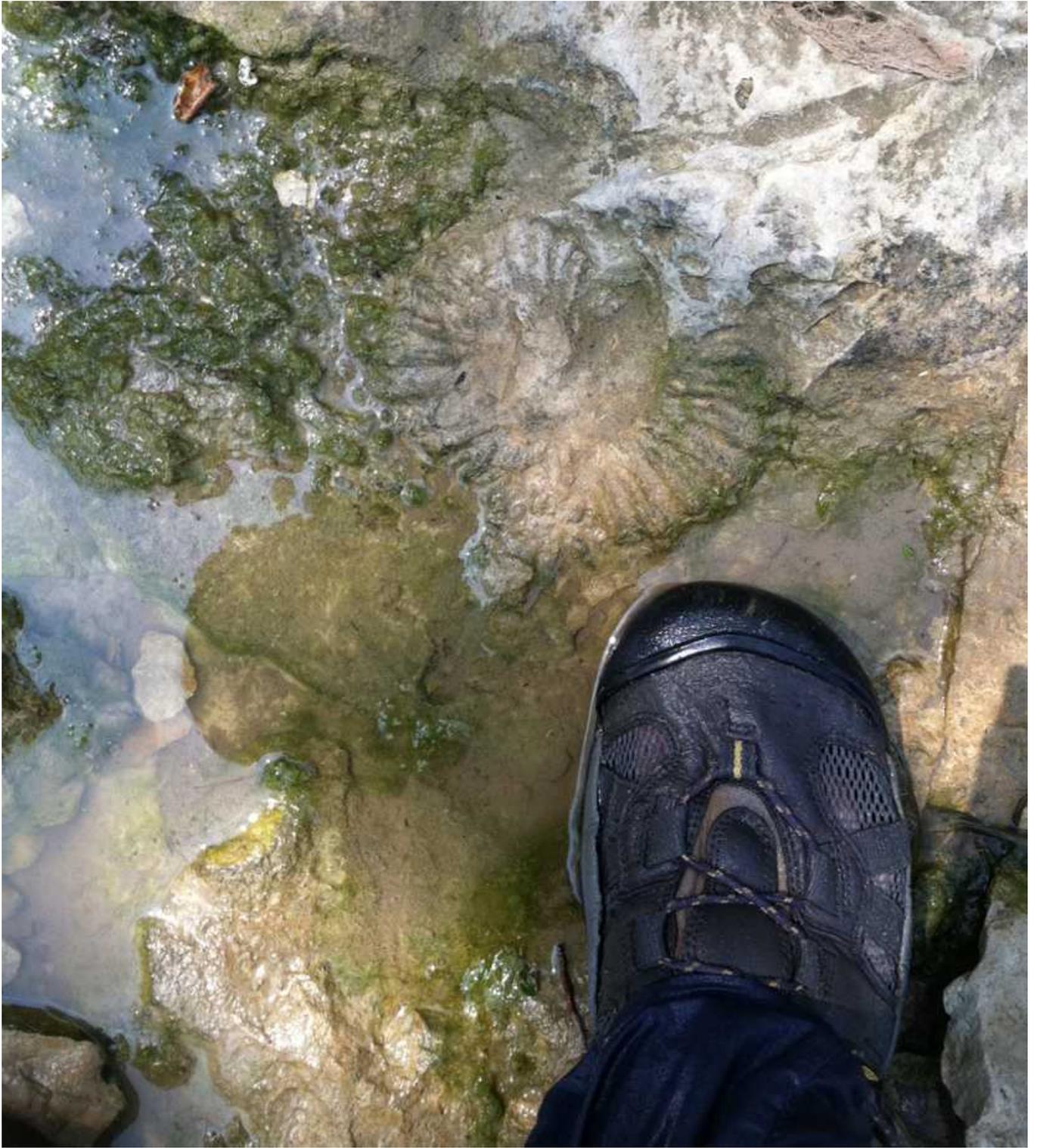
Out of 3 we were only willing to bang out the easiest one, leaving the others, both perfect, for more motivated collectors who perhaps don't have many of these things yet.



FIGS 200-203: Weno Formation *Angolaites* ammonites this and next 3 pages (Site 650)









FIGS 204-205: Brett's calcite infilled Weno Formation *Cymatoceras hilli* nautiloid this and next page (Site 650)



Brett then found a *Cymatoceras* nautiloid jutting out of the limestone, and as I banged away at it to free it, it broke in half, exposing some interesting calcite crystals inside.

Content with our outdoor weekend, we made our way home a little early to wind down before the start of another work week, but not before outlining the next couple weekends of excursions...

May 25, 2013: Fishing in the Fort Worth Formation

Dodging the heavy rains forecast for San Antonio on this particular Saturday (over 8 inches fell as I later found out), I decided to run to North Texas to explore a new-to-me waterway incising the Fort Worth Formation (101 MYA). The only problem was that rain, albeit lighter than what was falling at home, extended all the way up

through North Texas, and raised stream level along my targeted paddling course. While higher water means less dragging of the boat over low spots, it also means less exposure of gravel bars.

At long last I reached the first exposure, and my heart sunk as I saw the telltale signs of another collector after my long and expensive drive. However once I reached the low bluff and downstream gravel bar, the *Mortonicerias* ammonites found in matrix and scattered around the bar suggested that perhaps the last visitor was there some time ago.



FIG 206: Stream tumbled *Mortoniceras* ammonites serve as a harbinger of things to come around the next bend (Site 661)



FIGS 207-209: A few views of the Fort Worth Formation this and next 2 pages (Site 661)



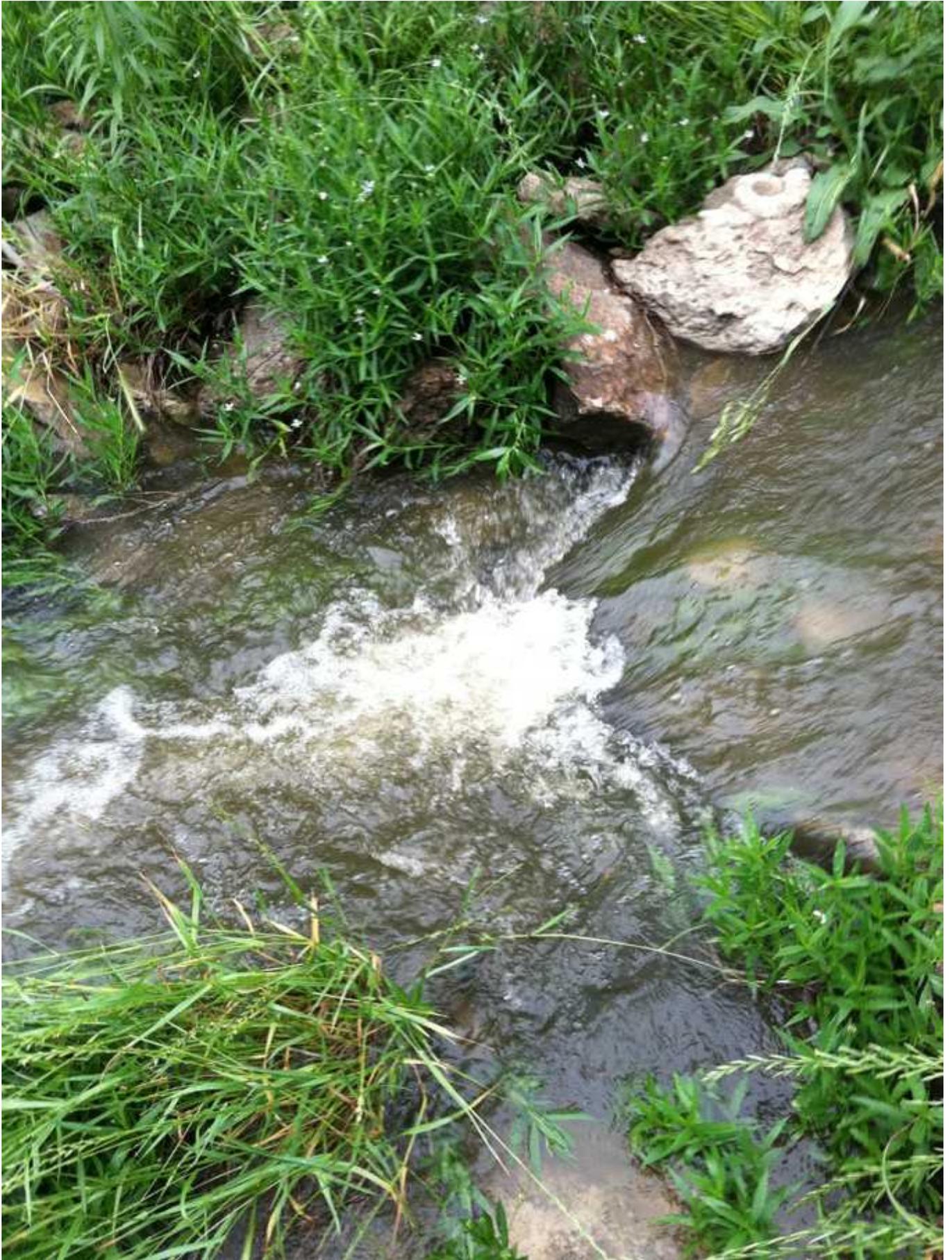




FIG 210: Fort Worth Formation *Mortoniceras* ammonite (Site 661)



FIGS 211-227: Fort Worth Formation *Mortoniceras equidistans* ammonites (Site 661)



































FIGS 228-229: Fort Worth Formation *Mortoniceras* sp. ammonite (Site 661)





FIGS 230-232: Another Fort Worth Formation *Mortoniceras equidistans* ammonite this and next 2 pages

(Site 661)







FIG 233: Unidentified pyritized Fort Worth Formation ammonite (Site 661)

I was really hopeful of encountering lots of nice echinoids and perhaps scattered marine vertebrate material as this age of rock is known for, but the echies never made a strong showing. Half heartedly I began collecting ammonites as they were the only apparent paydirt within sight. I began telling myself that I was wasting my time and effort on ammonites, even these nice ones, as I already have so many at home.

I dug a small 4 inch *Mortonicer* out of the bank, then whacked the surrounding limestone nodule with my hammer to lighten my carry. A strange brown pattern was revealed along the last break, a pattern that I instantaneously recognized as a fish broken in cross section, the lens shaped sectional profile revealing a vertebra in the center and scales on the sides. I retrieved the chunk that had flown on the last hammer blow, and thankfully it was a clean break. With careful airscribe work, I hope to reveal one side of this partial fish, envisioning chocolate brown scales lying neatly in the gray limestone. This find made my long distance solo exploratory trip in the rain worth all the effort.



FIGS 234-245: Composite block from the Fort Worth Formation including *Mortoniceras* ammonites and partial fish, possibly *Osmeroides* sp. or similar, this and next 11 pages (Site 661)





















Fish or starfish material?



A small ammonite hiding under the fish block

Farther upstream I reached another long, low exposure of Fort Worth Formation, and I was presented with a couple small spatangoid echinoids which I believe to be *Washitaster*. Farther along I beat out a few more high grade *Mortonicer* ammonites as they presented themselves, taking the easy ones and leaving the more difficult extraction jobs for perhaps a younger, more motivated collector. I don't feel the need to take them all as I used to...but great ones are hard to leave behind.



FIG 246: A view of the Fort Worth Formation (Site 662)



FIG 247: Fort Worth Formation echinoids *Washitaster* sp. (Site 662)



FIGS 248-257: More Fort Worth Formation ammonites *Mortoniceras equidistansthis* and next 9 pages

(Site 662)









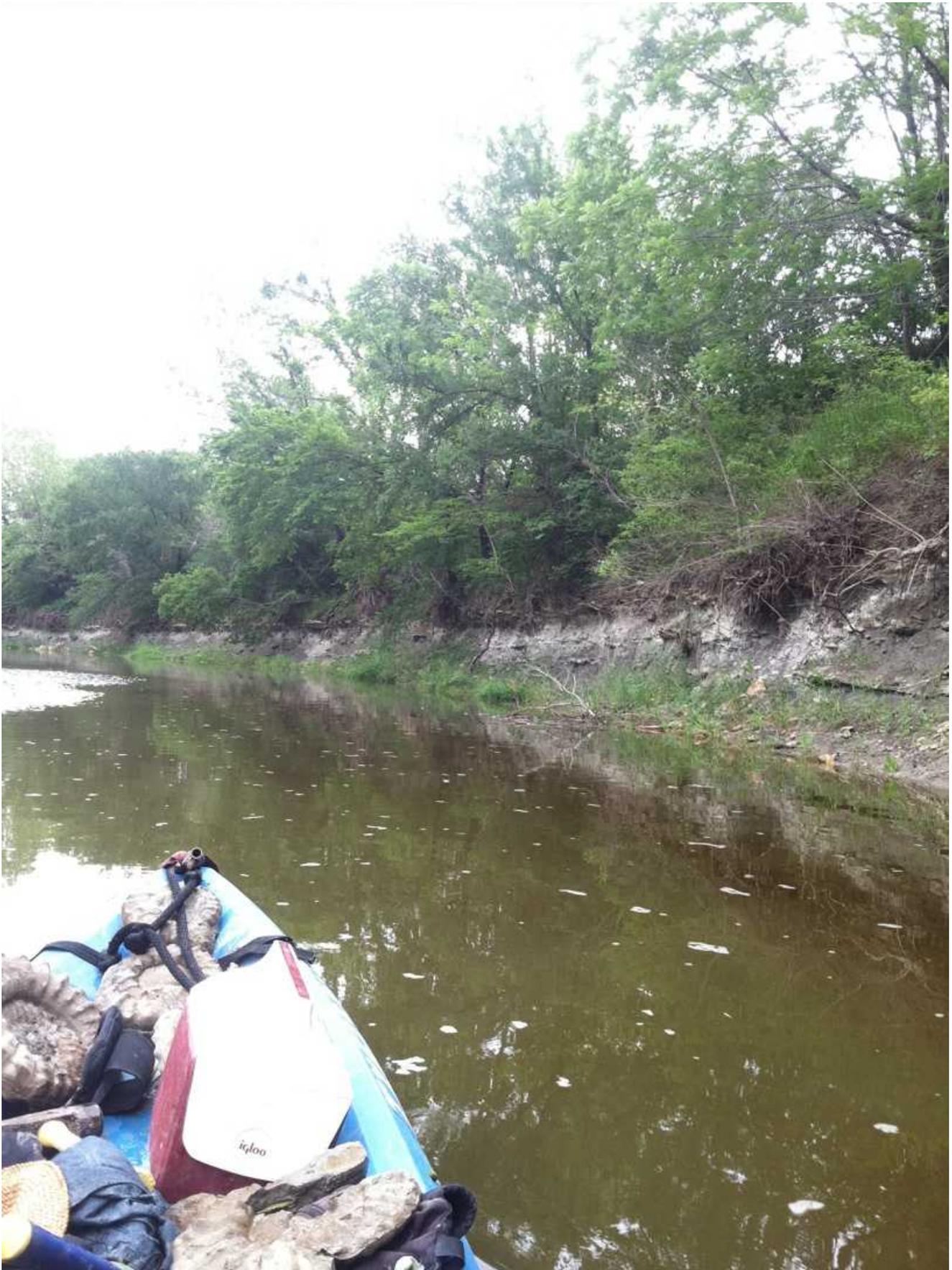




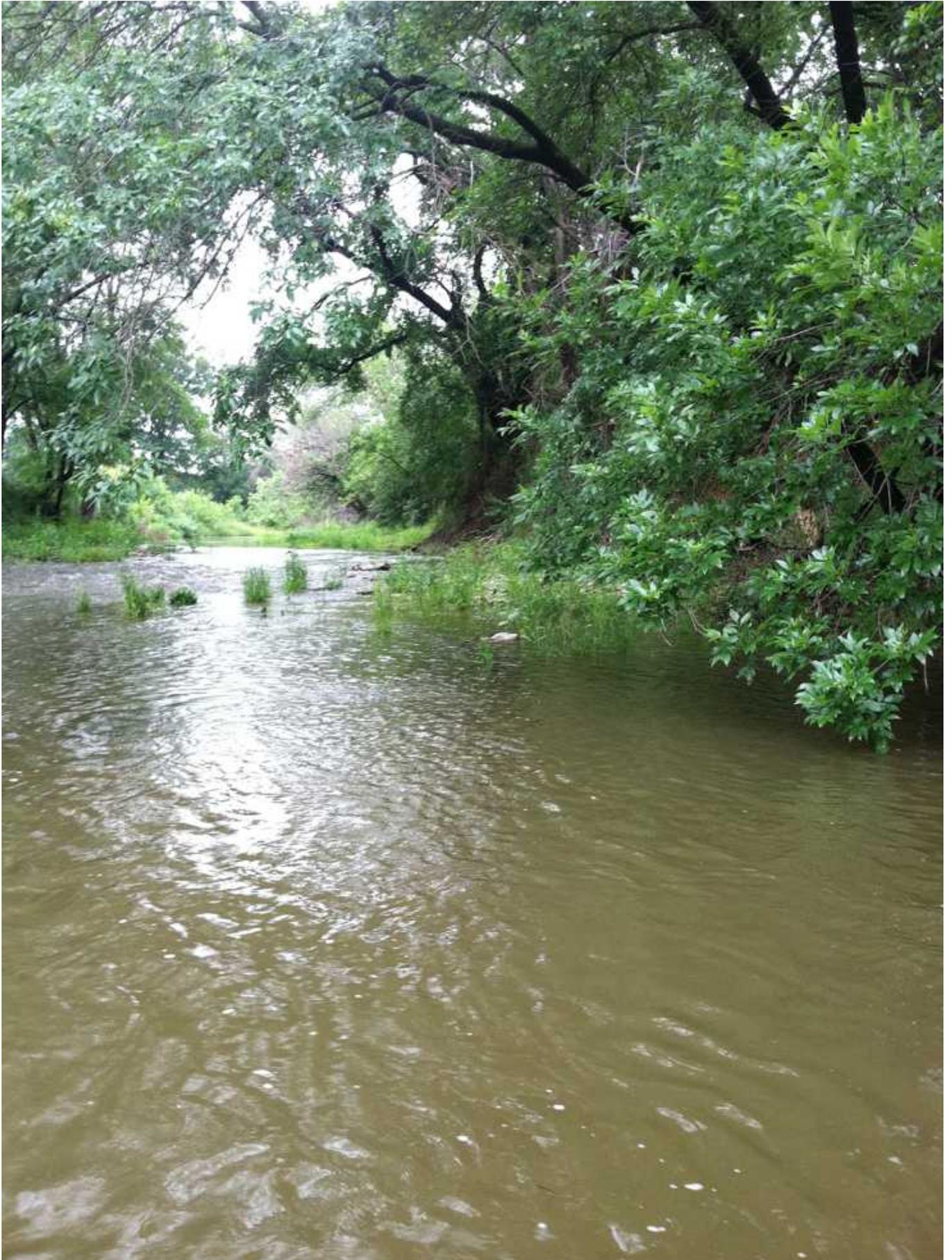








FIGS 258-260: Heading back to port, this and next 2 pages (Site 661)





After heaving finds and equipment back into/onto the car, I headed to the DFW area to meet up with my good friend Brent Dunn. We converged on a Pawpaw Formation (99 MYA) site that we had found together months ago when it was too fresh...and found out that it still is. I found a few *Poecilocrinus* floating crinoids, nice ones, but none of the crabs or shark teeth I've grown to love in this formation.



FIG 261: Pawpaw Formation crab cheliped segment (Site 663)



FIGS 262-264: From the Pawpaw Formation a possible fish fin spine (Site 663)







FIG 265: From the Pawpaw Formation , left to right, an unidentified pyritized ammonite, 2 foraminifera *Nodosaria texana*, and two *Poecilocrinus* floating micro crinoids (Site 663)

Parting company with Brent, I headed to one last site in the Georgetown Formation, possibly Weno equivalent (100 MYA) and scored one decently large *Macraster* echinoid covered with worm tubes, and one more *Mortoniceras* ammonite in the beam of my headlamp.



FIG 266: From the Georgetown Formation a large, oyster encrusted *Macraster* echinoid (Site 511)

I came home to a flooded South Texas, one that will hopefully set me up for some prime collecting in the near future...

May 27, 2013: A Trifecta of Guns, Kids and Mosasaurs

The demise of my favorite Corsicana Formation site has become more drawn out than the death of Rasputin, and this past weekend's 8+ inches of rain in parts of South Texas resurrected the site again, if only briefly. I lost my head and urged one of my good fossil buddies to take a whack at the site all by himself on Saturday, hoping that he'd experience its riches in a way that I've experienced in the past. He scored some nice echinoids including a couple rare regular echinoids *Gautheria* sp. (referred to as *Rachiosoma hondoensis* in my prior reports), but left scratching his head as to the whereabouts of the crabs.

Weston wanted to shoot guns at the range on Memorial Day, so we enjoyed a little father-son time behind my laser equipped Ruger LC9 9 mm at 7 and 15 yards and then with our Colt M4 5.56 mm at 100 yards to sight in the

Burris 3X prism sight riding on top. Weston most enjoyed the M4 and scored a bullseye or two once it was sighted in.



FIGS 267-268: "Downrange Weston" honing his skills

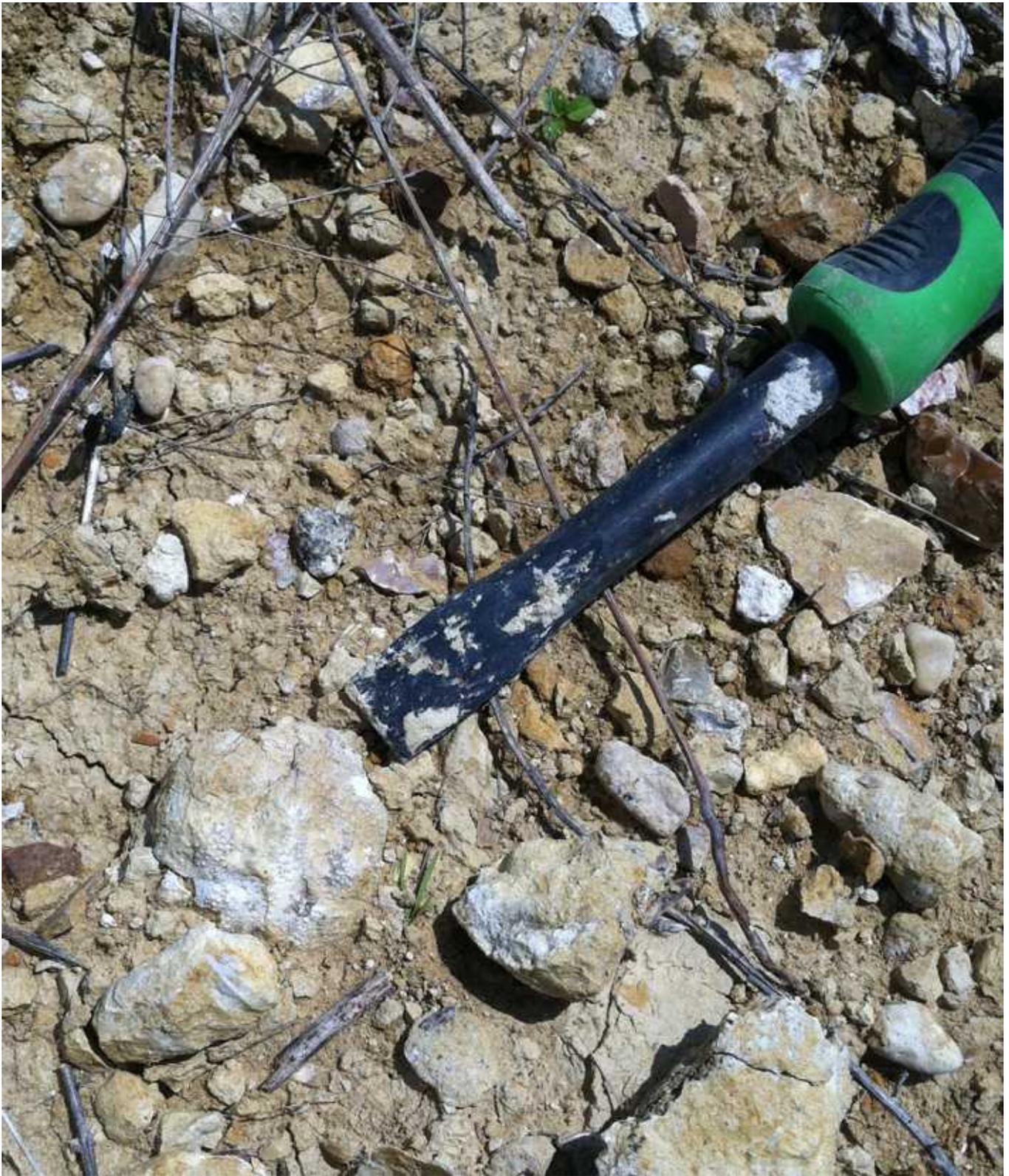


From there we half heartedly sauntered over to the Corsicana site, knowing that sharp eyes had gone over it just a couple days prior. Weston opted to sit in the car with the A/C running so he could play with his iPod in cool climes. This is about the only time I approve of kids and electronics...when Pops wants to fossil hunt.

I guess it rained so hard that with different lighting, 2 good hunts were to be had at the site, and I grabbed 2 *Dakoticancer australis* crabs and 2 *Hemiaster bexari* echinoids within a 1 foot circle just 10 minutes into the trip. But the fun didn't stop there...although I may not have taken any perfect carapaces, 5 or 6 crabs came to hand, and they shared the bag with about 30 echinoids. Most were *H. bexari*, but 3 were *Schizaster variabilis* and one a defaced *Proraster dalli*, the last 4 being scarce in the best of conditions.



FIG 269: An unidentified partial crab claw in the Corsicana Formation (Site 349)



FIGS 270-275: Corsicana Formation crab carapaces *Dakoticancer australis* in situ this and next 5 pages (Site 349)







Explode-a-cancer





Crab and *Hemisterechinoid* just an inch or two apart



FIG 276: Corsicana Formation straight ammonite *Baculites undatus*(Site 349)



FIGS 277-279: Corsicana Formation echinoids *Proraster dalli* below and *Schizaster americanus* above and next 2 pages (Site 349)







FIG 280: Corsicana Formation echinoids *Hemiaster bexari*(Site 349)



FIGS 281-284: Unidentified, weathered Corsicana Formation mosasaur vertebra this and next 3 pages (Site 349)









FIG 285: Corsicana Formation gastropod *Striaticostatum bexarensis*(Site 349)



FIGS 286-287: Unidentified Corsicana Formation gastropods this and next page (Site 349)





FIG 288: Corsicana Formation gastropods *Anchura*, *Gyrodes*, *Bellifusus*, *Turritella* and others (Site 349)



FIG 289: Corsicana Formation bivalves *Liopistha protexta* above, *Crassatella* sp. lower left, *Teneo parillis* (Site 349)

The find of the day however was a rough but diagnostic mosasaur vertebra, my first (and most certainly last) from the site. Weston found a very weathered one some years ago, and it is in one of our Riker mounts, but I've always wondered why the site didn't hold more reptilian vertebrate material. Now I have my token piece!

May 31, 2013: Play Time in the Pleistocene and Holocene

I was able to structure my time Friday in order to snoop around a stream bed that has been kind to me in the past, producing on average one point every other well timed visit...this day would be one of the better visits. Big rains had recently fallen in South and Central Texas, so I opted to see what may have eroded out.

This particular network of banks and gravel bars was clearly an Indian campsite at one point in Archaic times, and some burned midden rock on this outing once again provided sign of previous habitation. Along an overgrown gravel bar, I got down on hands and knees to root through the weeds to allow examination of the gravel trapped in between. My efforts were soon rewarded with a very nicely knapped little Ellis point, Archaic in age, estimated

at 2700-4000 years of age, one that will assume an exalted spot in one of my frames...this artifact marked the end of a long string of my "uglifact" finds.



FIGS 290-295: A beautiful Ellis point this and next 5 pages (Site 611)







UNITED STATES OF AMERICA
IN GOD WE TRUST
E PLURIBUS UNUM
FIVE DOLLARS

611







FIGS 296-297: A rough artifact this and next page (Site 611)



But this point didn't indicate earliest use of this area...a nearby gravel bar produced a nice brown Pleistocene horse lower molar as well as an unidentified limb bone. The bone is infilled with gravel and to me shows signs of age, but I can't decide if it is from Indian times or perhaps Pleistocene.



FIGS 298-300: Pleistocene *Equus* lower molar (Site 611)







FIGS 301-303: Diaphysis of a potential Pleistocene bone this and next 2 pages (Site 611)







FIG 304: "Cartifact" (Site 611)

This outing was the capstone of a very productive month of collecting, coming in just under the wire with a couple nice finds to round out the age spectrum for the month.