

Fossil Collecting Report
August 2008
Daniel A. Woehr and Friends and Family

August 10, 2008: Pushing into the Unknown –Now I Know – And I'm Not Going Back

Not wanting to wear out the same old sites I opted to explore a new-to-me 15 mile stretch of one of the dozen or so streams in the state that I like to collect. The first 10 miles of gravel bars were pretty well trampled by cattle so I found little of interest in those areas. The next bar produced a few things worth picking up including a *Bison* astragalus, unidentified distal humerus, possible partial giant armadillo osteoderm *Holmesina septentrionalis*, and other odds and ends.



FIG 1: Unidentified distal humerus (Site 470)



FIGS 2-3: Unidentified distal humerus, astragalus, leg bone, and skull occipital plate above, coyote(?) mandible below (Site 470)

Pressing on I encountered a very localized abundance of freshwater clams eroding out of a bank. I climbed the steep bank to investigate and saw lots of apparently burned wood mixed in with the shells, along with quite a few old looking deer bones. Although I found no lithic artifacts, I felt there was a good chance that I was looking at an old Indian campsite. Soon after I found a similar but smaller site where the clams eroding out of the bank were covered with caliche – did this imply an older campsite? I'm sending one of my museum buddies there to investigate and report back his opinion.



FIGS 4-14: Indian campsite eroding from bank as evidenced by abundant snails and clams, charcoal, and deer bones this and next 7 pages (Site 471)













A subsequent bar produced a couple horse teeth and an old bottle which one of my bottle enthusiast buddies dated for me circa 1910-1930. My final stop produced widely scattered turtle material, a few unidentified partial bones, and one very cool section of deer mandible with one molar intact. This was my best find of the day although there were no museum grade finds to make the entire trip a smashing success.



FIGS 15-18: Horse teeth and old medicine bottle circa 1910-1930 this and next 3 pages (Site 472)









FIGS 19-20: Horse tooth and unidentified proximal humerus this and next page (Site 132)





FIGS 21-22: Turtle shell fragments (Site 132)



FIGS 23-26: Unidentified rib, metapodial, pelvis, vertebra, and ankle bones followed by deer jaw section this and next page (Site 132)





FIGS 27-28: Uniface tool (Site 132)

My trips lately have bounced between landmark success and painful mediocrity, this trip tending toward the latter, so hopefully the next one will work more profitably.

August 16, 2008: Another Hot Date with Ma Nature

My plans of taking Weston to the coast for a little fishing were dashed by the forecast of rain and more wind than a small boat can stand in open water, so I did the next best thing: take the boy out fossil collecting, and invite one of my buddies to join us. A little rain during the previous trip plus thoughts of a cheap weekend helped me to lock in on this particular plan.

John Jackson met us in the Glen Rose formation (108 MYA) at 7:30 a.m. for a fully guided day of collecting. Our first stop was a marl exposure featuring well preserved, diminutive examples of some of the most ornate echinoids the formation has to offer. The clouds soon broke and the sun was bearing down on us by mid morning, but Weston was content to dig holes in the dirt and take a swim every now and then as a change of pace. I was proud of his discriminating young eyes when collecting however. I saw him pick up many tiny *Isocrinus annulatus* columnals, the smallest fossils he has collected to date. In the last several trips he has made the effort to focus not just on large macro fossils when we are out, but he has also dialed in on the finer details and subtly/partially exposed specimens. John and I found 21 echinoids between us, mostly *Salenia* of possibly 4 species, but also 4 *Globator hancockensis* between us, a rare *Orthopsis comalensis* for me and a rare *Goniopygus texanus* for him.

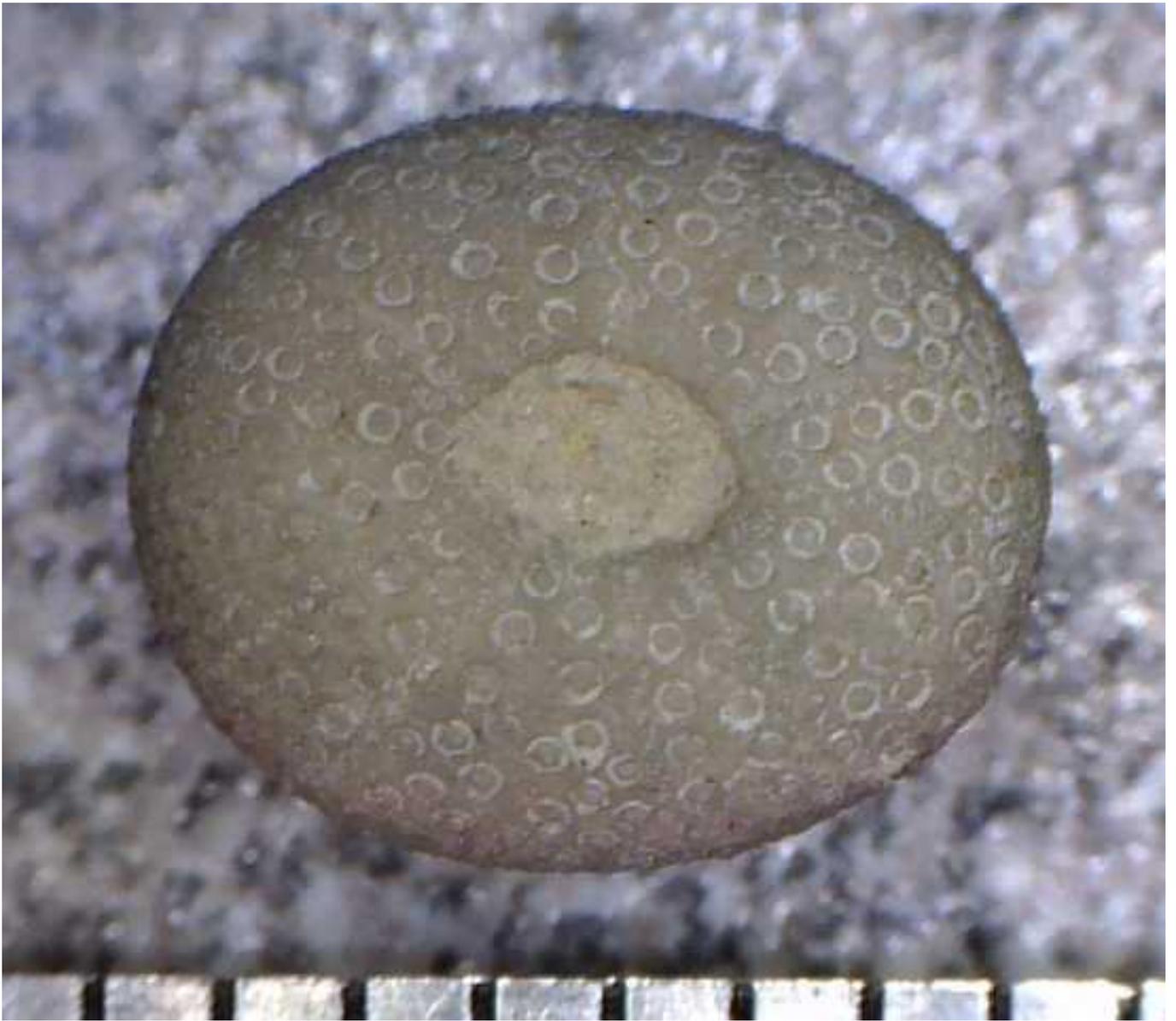


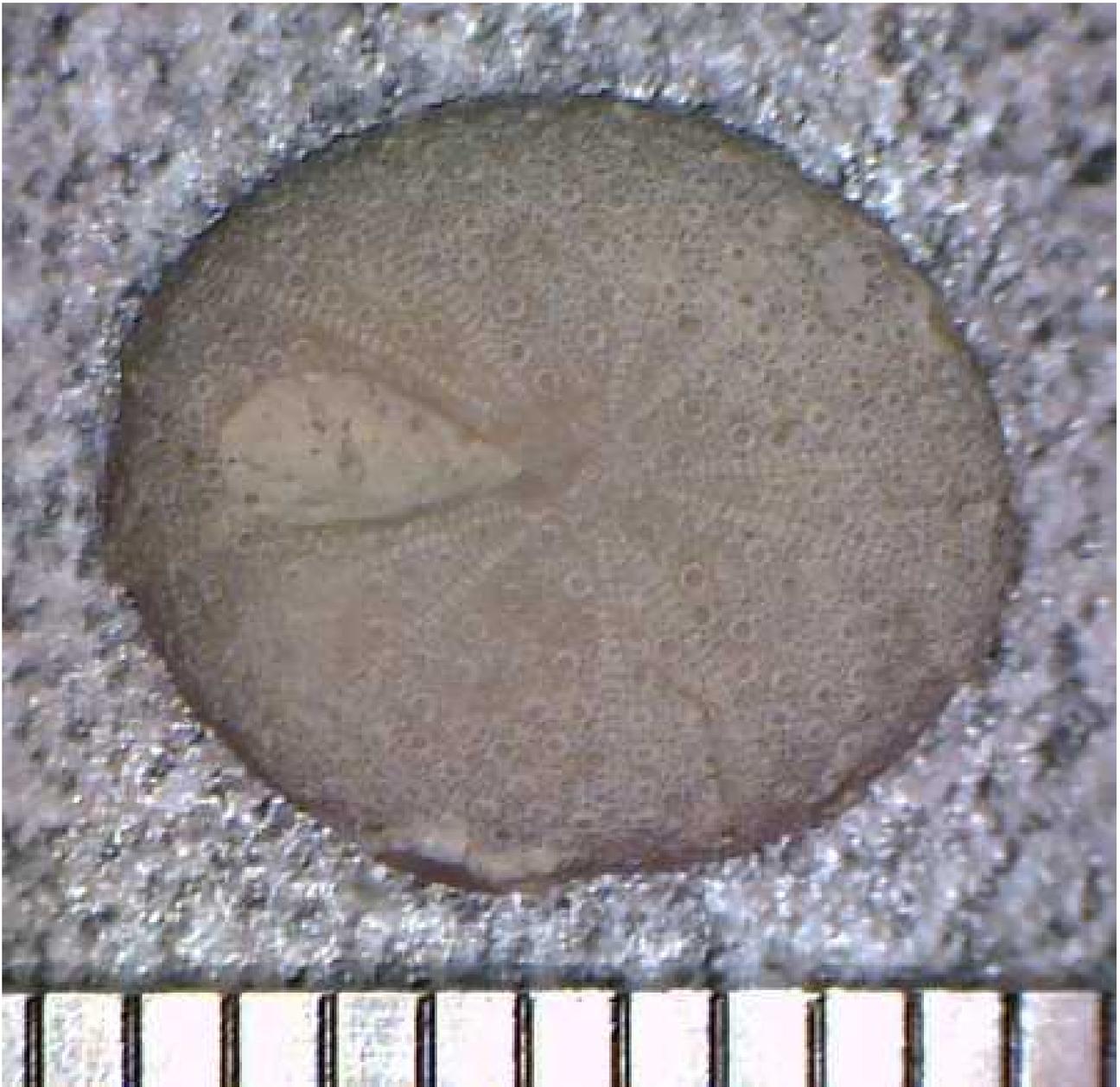
FIG 29: John Jackson's take of Glen Rose echinoids including 7 *Salenia*, one *Goniopygus* sp. and one *Globator hancockensis* (Site 161)



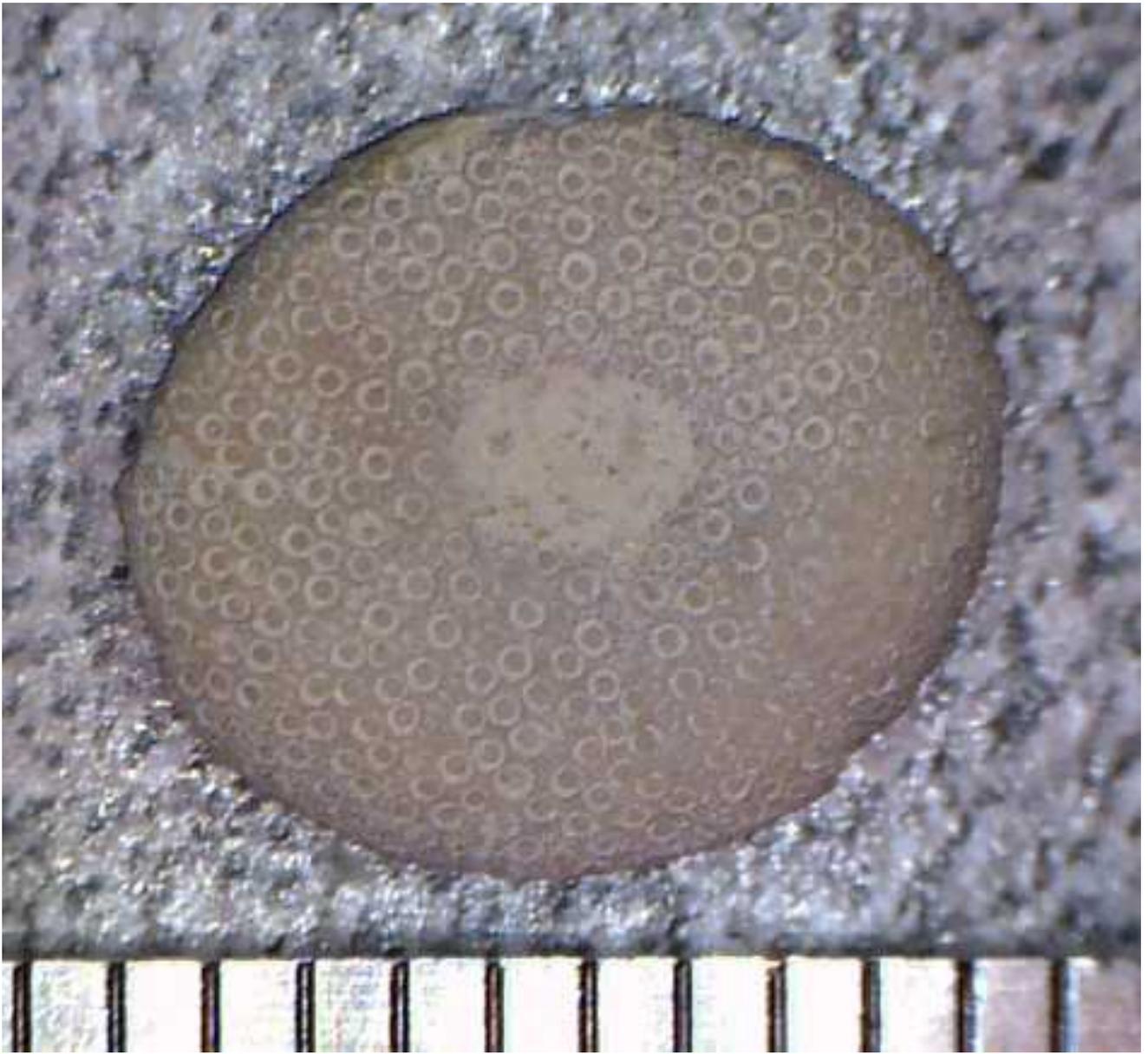
FIGS 30-33: John Jackson's take of crinoid ossicles *Isocrinus annulatus* above, the author's *Globator hancockensis* echinoid as found next to a fragment of *Phyllacanthus* sp., two more views of *G. hancockensis* on next 2 pages (Site 161)





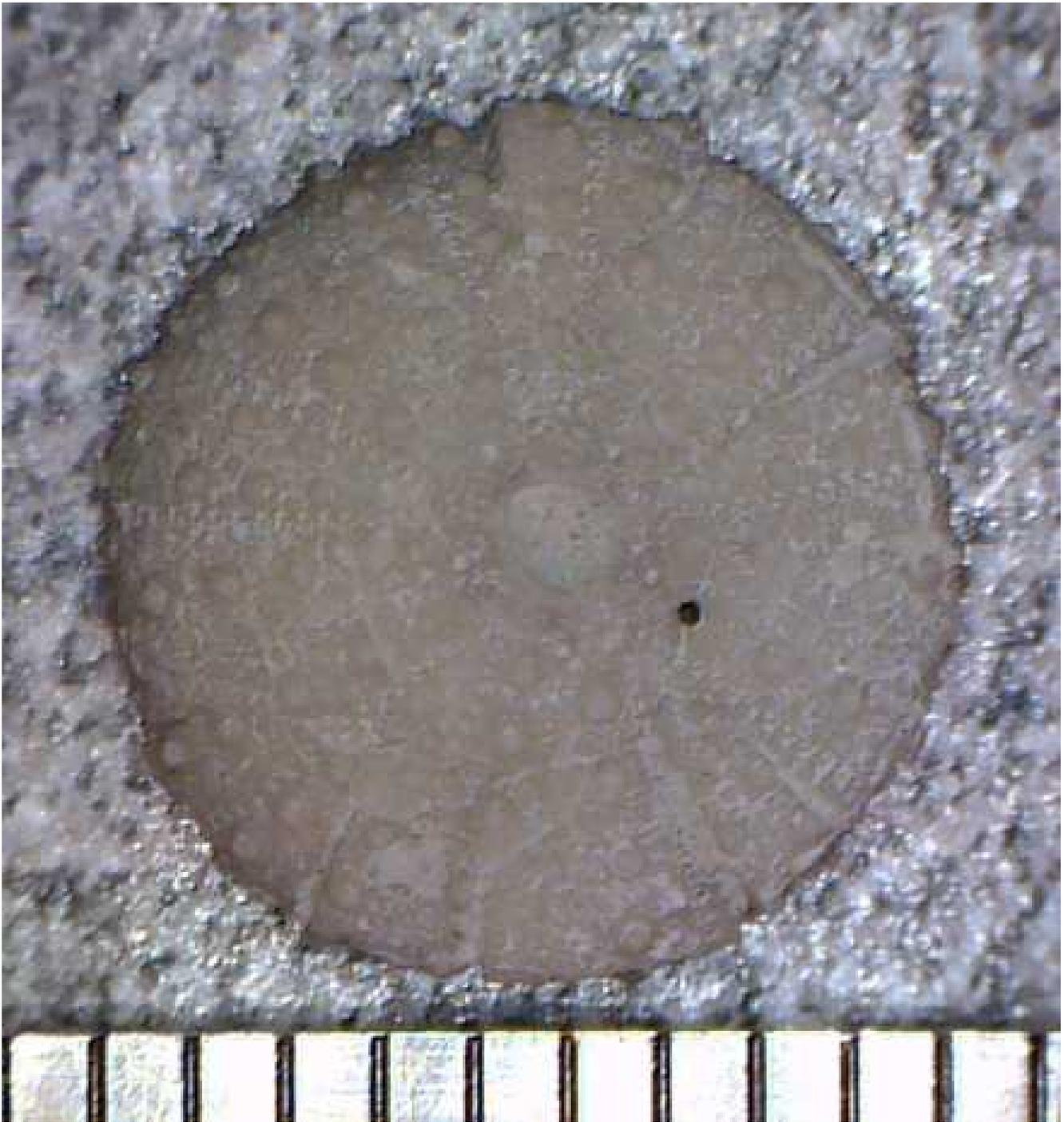


FIGS 34-35: Another *G. hancockensis* this page and next, this one slightly compressed (Site 161)





FIGS 36-38: *Orthopsis comalensis* as found plus 2 detail views this and next 2 pages (Site 161)





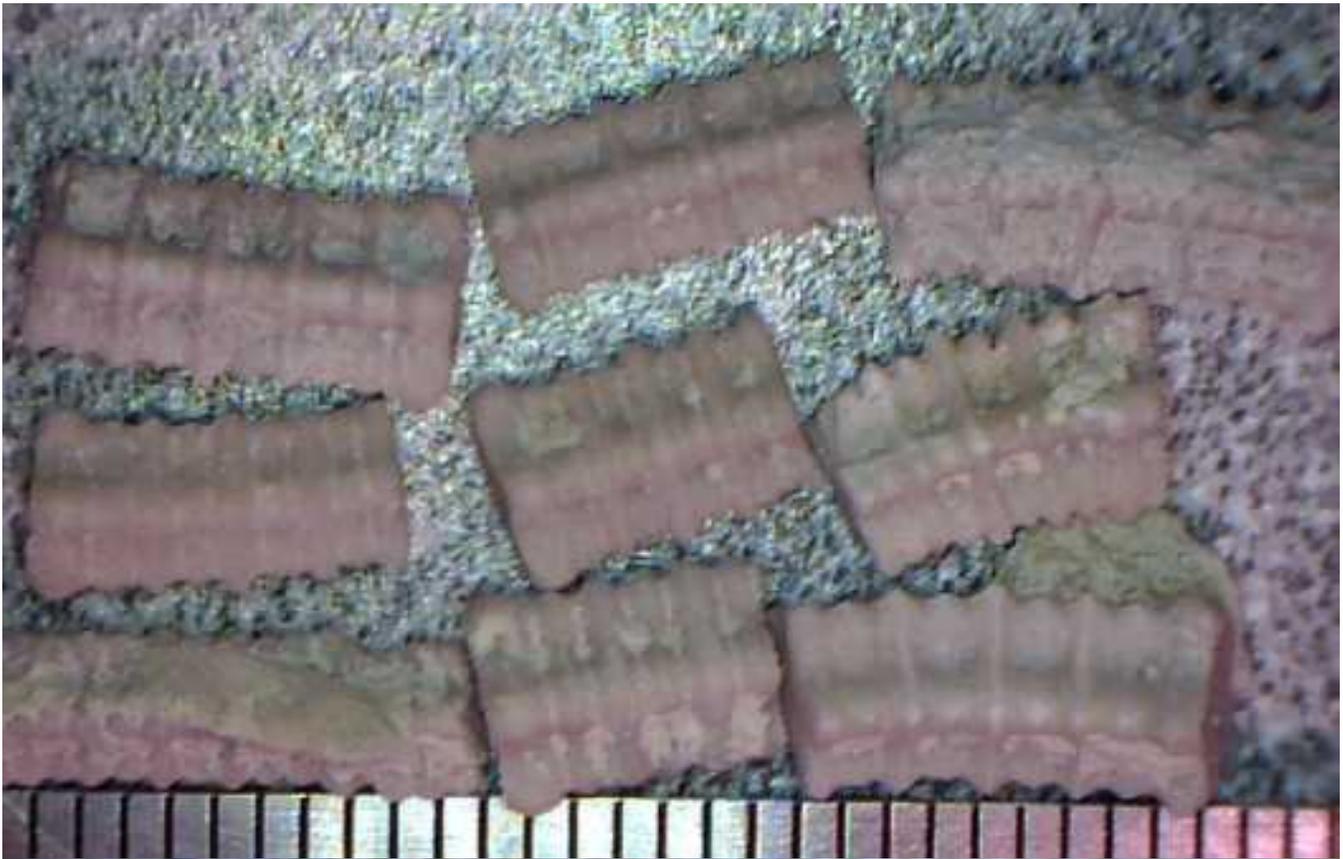


FIGS 39-41: *Salenia* sp. echinoid this and next page (Site 161)





FIGS 42-45: *I. annulatus* ossicles this and next page, note worm tubes , followed by hermit crab claw fragment *Paleopagurus banderensis* (Site 161)



Pushing on we made a quick stop at a small Upper Glen Rose exposure bearing the echinoid *Loriolia rosana*. In 20 minutes we probably rounded up 10 between us, with possibly half of them being of decent quality.



FIG 46: *Loriolia rosana* echinoid (Site 249)

Oppressive August conditions prompted me to drop off the boy at home while John and I pushed on to the Corsicana formation. Working the first target graded area produced a few finds for us including a couple *Linthia variabilis* and *Hemiaster bexari* echinoids in addition to a partial *Discoscaphites* ammonite and one *Dakoticancer australis* crab carapace brandishing part of one claw with the other safely buried in matrix, later to be revealed for the first time in 68 million years.



FIGS 47-48: *Dakoticancer australis* crab from the Corsicana fm (Site 348)

Shifting our focus to another graded area I explained the zonation of the site and related faunal distribution to specific lithologies which could be seen before us, then turned John loose. A quick study, he was soon speed bagging echinoids like a kid under a freshly busted piñata. Most of our echinoid finds were *H. bexari*, but we got

several *Proraster dalli* and I think John grabbed a *Plesiaster americanus* or two along the way. I was elated to find out during the cleaning process that I had taken *Cardiaster leonensis*, one of the “super exotics” from the site. We took about 90 echies in total.

While John was locked in on the echinoids, I on the other hand paid particular attention to the crabs around us. I’m certain I found a dozen, about half being “Explode-a-cancers”, but 6 looked worth taking home, at least a couple having claws intact. 2 or 3 carapaces appeared to be in perfect form, including the one that gave away its presence by poking just the tip of one leg above ground level. This is the way to find them, protected by matrix, as exposure to the elements tends to break them apart quickly. We finished things off with my little *Squalicorax pristodontus* shark tooth and then moved on.



FIG 49: John Jackson surveying the Corsicana formation (Site 349)



FIGS 50-54: *Dakoticancer australis* crabs from the Corsicana formation this and next 3 pages (Site 349)









FIGS 55-57: *Dakoticancer australis* crab above and echinoid *Proraster dalli* below (Site 349)



FIGS 58-61: *Cardiaster leonensis* echinoid this and next page followed by echinoids *Hemiaster bexari* (Site 349)