

FOSSIL HUNTING RESULTS APRIL 2005

April 9, 2005

This particular weekend brought a solo tour of selected spots along the I-35 corridor in Central Texas. My first stop was a small outcropping of Eagle Ford formation in Hays Co. which gave up 300 shark teeth on the day I found the site. This visit was just as good, with 400 teeth coming to hand if you count the broken ones, along with a few small vertebrae and bone chunks. A couple hundred or so seem perfect, making it well worth the effort. The faunal breakdown was once again dominated by *Squalicorax falcatus*, with some *Ptychodus anonymus*, *Cretoxyrhina mantelli*, *Enchodus*, *Pachyrhizodus*, and *Carcharias*. Of the fish teeth I was most impressed by a large 40 mm *Enchodus* palatine fang surrounded by 4 shark teeth in matrix. There were also a few interesting ray teeth and sawfish rostral spines thrown in for good measure.



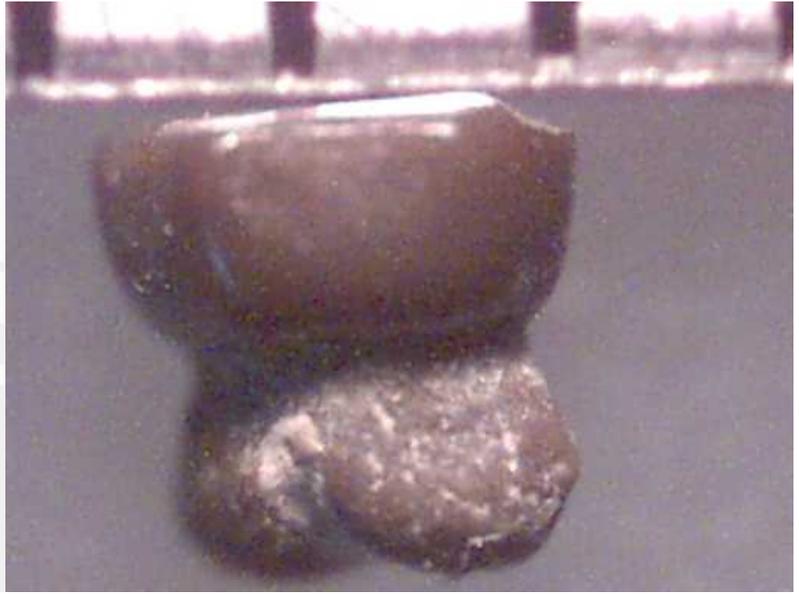
FIGS 1 and 2: Large *Enchodus* fang left, *Cretoxyrhina mantelli* tooth right, both from the Eagle Ford



FIGS 3-8: *Pachyrhizodus* and *Enchodus* fish teeth, fish verts, sawfish rostral spines (possibly *Onchopristis*) top left; reptile vert top right; *Carcharias* teeth middle left; *Odontaspis?* teeth middle right; *Cretoxyrhinae mantelli* and other shark teeth bottom left; misc *Odontaspis* and other microteeth bottom right, all from the Eagle Ford grp, possibly the South Bosque fm



FIGS 9-11: *Squalicorax falcatus* teeth top, *Ptychodus anonymus* teeth bottom left, 5 teeth of 3 species in matrix bottom right, all from the Eagle Ford Grp



FIGS 12-13: *C. mantelli* intermediate tooth left, *Pseudohyplophus* or *Dasyatis* ray tooth right, Eagle Ford Grp

A number of strikeouts followed, but later in the day the Georgetown fm was pretty generous at a few sites in Williamson Co. In a site along the San Gabriel River I was able to extricate a couple *Eopachydiscus* ammonites from some very hard limestone, but not before breaking two big ones while removing matrix with my 19 LB sledge hammer. Later at a construction site some large *Macraster elegans* echinoids and pyritized *Neithea* bivalves came to hand, and when I slipped into a nearby creek, I also landed some *Paracymatoceras* nautiloids, *Mortoniceras* and *Drakeoceras* ammonites, and *Holaster* echinoids.



FIGS 14 and 15: Two *Eopachydiscus* ammonites from the Georgetown fm



FIGS 16-21: Echinoids *Macraster elegans* and *Holaster simplex* top left, *Macraster elegans* top right, nautiloid *Paracymatoceras* middle left, oyster *Ostrea carinata* middle right, ammonites *Mortoniaceras* bottom left, pyritized bivalves *Neitheia georgetownensis* bottom right, all from Georgetown fm

On the way home I opted for some bulk sampling in the Glen Rose fm of Comal Co. In the beam of my flashlight I broke out the shovel and filled a few buckets with the marly matrix, which once screen washed and reduced to gravel gave up a handful of notable goodies. 4 or 5 kinds of micro echinoids entered my collection followed by two varieties of crab claws, some quite small as the photos show.



FIGS 22-24: Top 2 photos show top and bottom views of *Paleopagurus banderensis* and *Callianassa?* crab claws, floating crinoids, a fish vertebra, *Orthopsis* and two unidentified echinoids, an unidentified echinoid spine and a *Phyllacanthus* echinoid plate, and a mystery fossil in the middle of the frame. Bottom photo shows 7 *Salenia* echinoids, 3 *Globator* echinoids, 2 *P. banderensis* crab claws, and one *Phyllacanthus* plate, all from the Glen Rose fm

April 16, 2005

With family obligations dominating the weekend, I took care of business first, then sneaked out for a few hours whenever I could. A creek exposure of Pecan Gap chalk about 15 minutes from my house gave up a few *Baculites* from a large fossiliferous bench. I'll wait for interested buddies to come to town to really dig into this site. Still, I came home with a couple semi crushed *Hemiaster* echinoids, a *Trachyscaphites spiniger porchi* ammonite, and a few other goodies after a cursory look. A quick stop in a local ditch later turned up a nice *Coenholectypus* echinoid, one of my best.



FIGS 25-27: Pecan Gap ammonite *Trachyscaphites spiniger porchi* above, apical and oral views of *Coenholectypus castilloi* or *C. transpecosensis* echinoid from the Del Rio/Georgetown contact below

I finished up with another bulk sampling of the Glen Rose which provided a few more echinoids and crab claws for the Woehr Collection.



FIGS 28-30: Glen Rose echinoids *Salenia*, *Orthopsis*, *Goniopygus*, *Globator*, and unidentified top left; echinoid spines, *Phyllacanthus* plate, *Pentacrinus* crinoid columnals, *Neitheia* bivalves, *Nodosaria texana* forams, and mystery fossil (probably partial bivalve) top right; crab claws *P. banderensis* and *Callianassa?* below

April 22, 2005

The spousal unit allowed me to leave town a little early for a 2 day North Texas fossil hunt since I had Friday off work. I got a little overzealous, drove straight through, and ended up in front of Brent Dunn's house at 1:30 in the morning Thursday night where I ended up camping out. I called Brent at 6:15 and got him up a bit earlier than he anticipated.



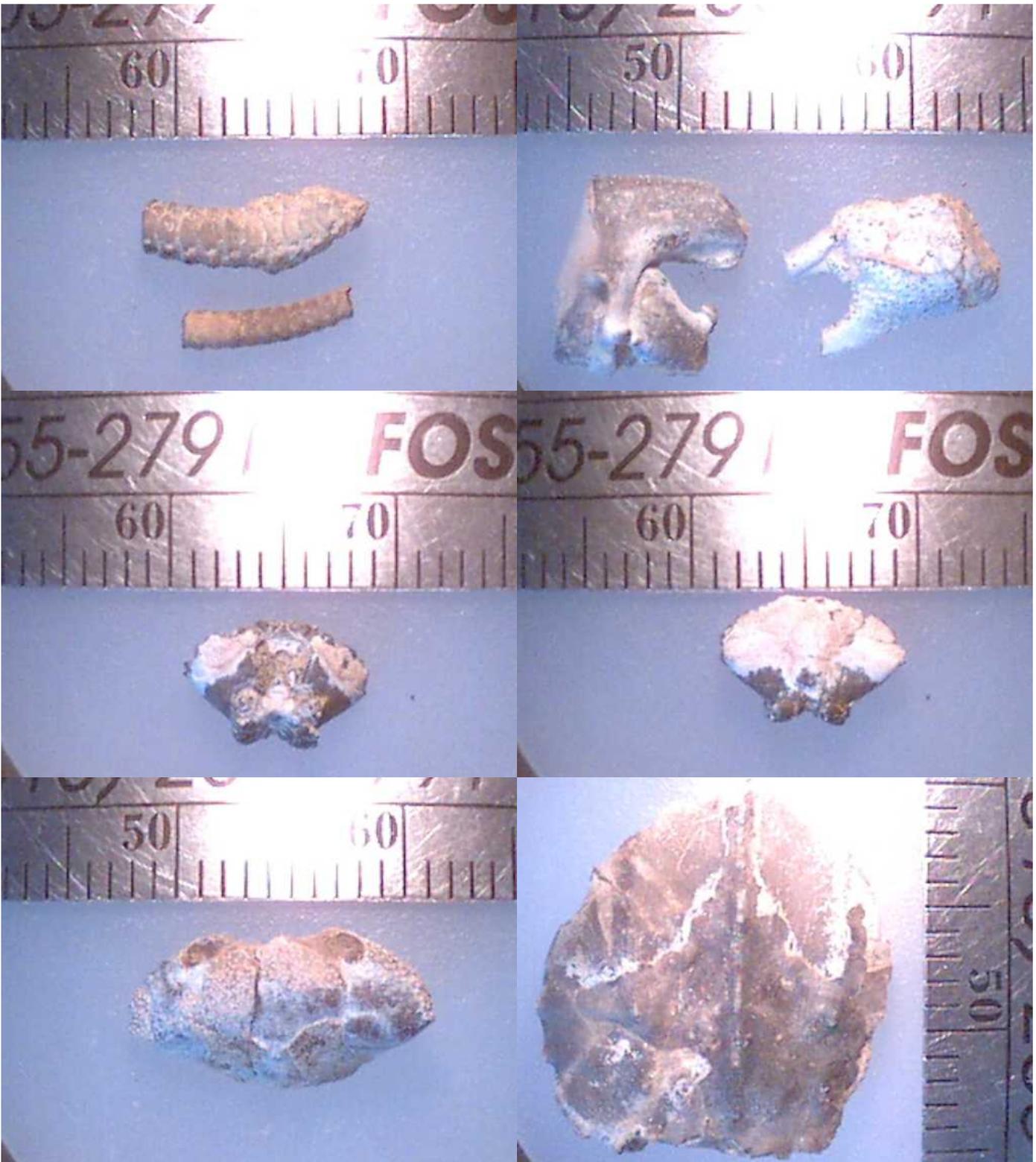
FIG 31: *Cymatoceras* nautiloid from the Grayson? fm

By 8 he had us on a site in the Grayson fm which gave up a few *Cymatoceras* nautiloids, but the real fun began as we entered a small site in the Pawpaw fm (95 MYA). This formation is know for a diverse microfauna of well preserved crustaceans, ammonites, and vertebrate material, and this day, my first time ever in this formation, did not disappoint us. As a matter of fact, it spoiled me rotten!

In short, Brent was quick to locate some shark teeth, a large 75 mm shark vertebra, and a lobster, followed by numbers of crabs ammonites. My final tally was 180 pyritized ammonites, 15 crabs of at least 4 species, 5 partial lobsters, 2 brittlestar arms, 10 shark and fish teeth, and 6 fish vertebrae. This was all well worth the aching knees and slight sunburn.



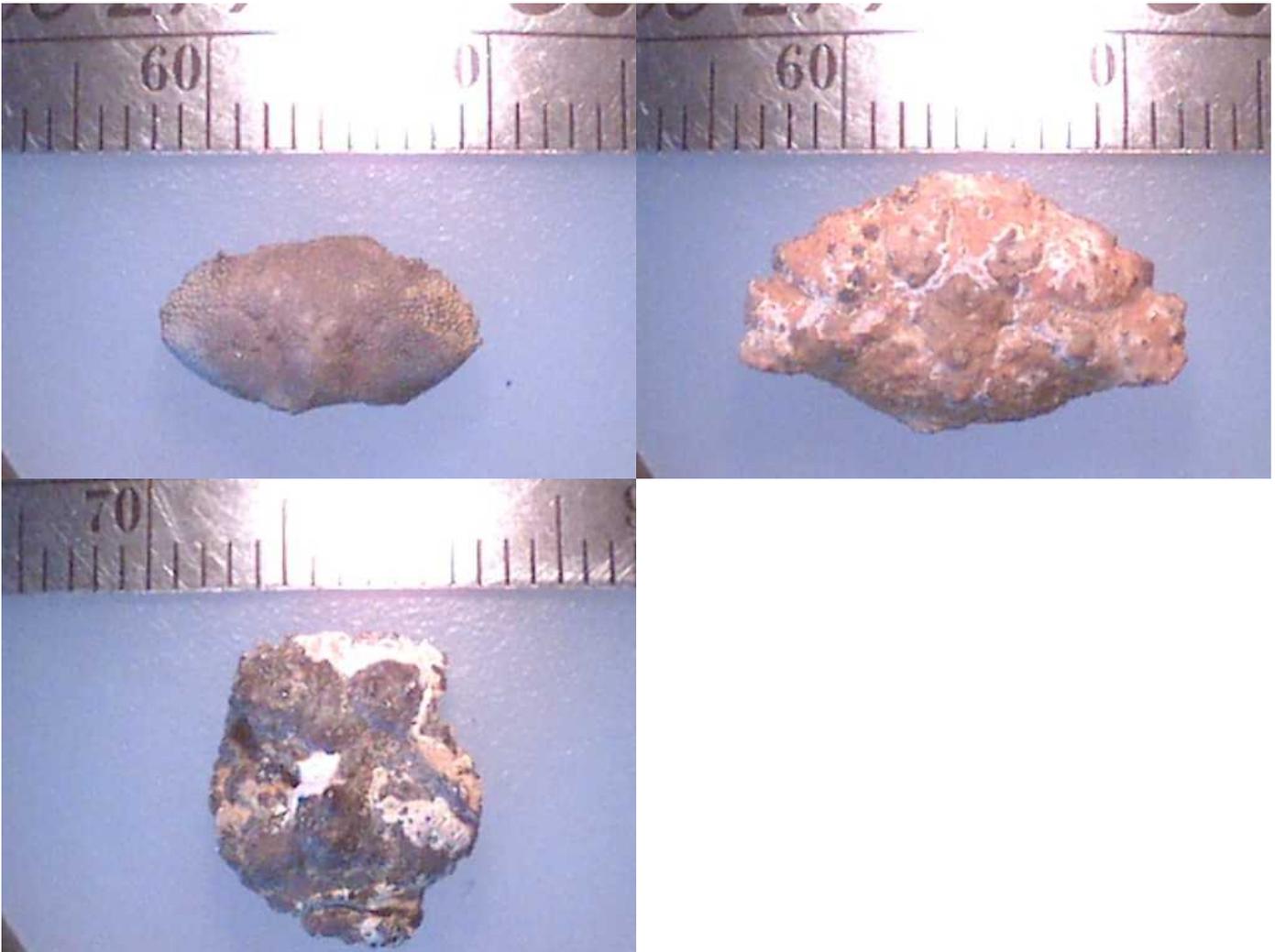
FIGS 32-37: Fossils from the Pawpaw fm including *Engonoceras serpentinum* ammonites top two photos; *Scaphites*, *Mantelliceras worthense*, and other ammonites middle left; *Mariella* (*Plesioturritites*) ammonites middle right; *Hoploparia*? lobsters bottom left; fish vertebra, fish teeth, and shark teeth including *Cretolamna* and *Leptostyrax* bottom right



FIGS 38-43: *Ophiura* brittlestar arm fragments top left; crab claws top right; crab carapaces *Xanthosia aspera* middle left, middle right, and bottom left; unidentified crab carapace bottom right



FIGS 44-49: More crabs from the Pawpaw fm including unidentified specimen top two photos, remaining photos *Xanthosia aspera*



FIGS 50-52: More Pawpaw crustaceans including *Xanthosia aspera* top left, *Xanthosia wintoni* top right, *Necrocarcinus scotti* below

We pushed on to another site in the Duck Creek or Fort Worth fm where Brent loaded up on *Macraster* echinoids as well as *Mortoniceras* and *Drakeoceras* ammonites. I got a few *Macraster* and *Holaster* echinoids, a large *Mortoniceras* ammonite, and a rotting \$20 bill folded up and half buried...I truly hit "paydirt!" Tattered as it was, it still bought my dinner that night.



FIGS 53 and 54: Two *Mortonicer* ammonites and a *Macraster* echinoid from the Duck Creek or Fort Worth fm

Having been ill for days, I stumbled back to Brent's house like a whipped dog for some much needed slumber.

April 23, 2005

On Saturday morning Brent and I ran south to the Chemical Lime Quarry in Clifton, TX and searched Lower Cretaceous Edwards, Kiamichi, and Duck Creek exposures for fossils with 35-40 other Dallas Paleo Society members. It was good to see many of the friendly folks I've grown to know over the past couple years. Richard Benefield was kind enough to give me a large whale vertebra from a phosphate mine in North Carolina, a welcome addition to my collection. I'm not sure of the age of this piece, but I'm guessing Miocene or Pliocene.



FIG 55: A large whale vertebra gifted by Richard Benefield, a great display piece.

I targeted the Kiamichi this trip, easy to spot as its gray, flaky clay texture could be seen from a distance. I was quick to find a small slab containing two tiny *Salenia mexicana* echinoids followed by a *Carcharias?* shark tooth. Not a bad start. On top of the quarry wall I followed the Duck Creek/Kiamichi contact and found a couple of ammonites. A climbed on top of a pile of large limestone slabs coated with patchy shell hash. This hash contained numerous shark and pycnodont teeth, and I grabbed about 20 teeth before it was time to go. I think I got *Leptostyrax* and possibly some others. I kicked a weathering hunk of Duck Creek on the way out and secured another ammonite in matrix. I saw that some folks were lucky enough to find nice regular echinoids such as *Goniopygus* and *Coenholectypus* much to the envy of the other collectors.



FIGS 56-59: *Salenia mexicana* echinoids from the Kiamichi fm top left; ammonites *Mortoniceras* from the Duck Creek fm and *Oxytropidoceras* from the Kiamichi fm top right; misc shark teeth including *Leptostyrax* and others from the Kiamichi/Duck Creek contact bottom left, pycnodont teeth from the Kiamichi fm bottom right



FIG 60: Pyritized *Epiaster whitei* echinoids from the Kiamichi fm

Moving on to another pit, I again targeted the Kiamichi and got a handful of shark teeth, a pycnodont mouth plate with 8 teeth, and a handful of nice *Heteraster* and *Epiaster* echinoids. I was actually pretty ill all weekend, so I didn't complain when we had to leave at 3.

Farley Katz followed me back to San Antonio, and we did a little exploring along the way. I took him to a creek exposure in the Georgetown fm where I had good luck in fading light weeks before. Farley was soaked to the beltline in the cold creek, but was rewarded with a nice *Drakeoceras* ammonite for his trouble. I landed a smashed *Holaster* and a large, inflated *Macraster* echinoid to round out a good haul. Farley and I have some other high potential trips in mind for the near future.



FIG 61: Large *Macraster* echinoid from the Georgetown fm