

**Short Notice Fossil Field Trip to Purse State Park** by Dave Lines



Since it was only two days until the new moon, it was a no brainer that the strong northwest winds that had started overnight would cause a “blow-out tide”. So I sent out a “Short Notice Fossil Trip Email” to our club members and said that I would be going to Purse State Park (\*no longer a State Park --- now belongs to MD DNR and re-named Nanjemoy Wildlife Management Area) that Tuesday afternoon (April 5<sup>th</sup>) since the predicted low tide was about 12:00 noon.

When I arrived about 11:30 a.m., the beach was deserted and the tide was WAY out. There was an area of larger cobbles at least 15 feet wide below the sandy portion of the beach. It was cold with NW wind still blowing at a good clip. Almost immediately, I found a nice Native American hand axe or chopper made of pink and white quartz laying in the cobbles. And soon afterwards I found the lower half of a very smoothly worn spear point made of tan quartzite in the same area. As I was looking, I heard a faint “yahoo” and I looked back to see Carole and Al waving at me. I joined them and after showing what I had found, we decided to head south to look for fossils. I led and they followed at a slower pace.

The beach along the way was very sandy with fine sand --- unusual for Purse. The typical beach surface at that location usually has drifts of small gravel between the water and the bank --- but there were none – just smooth fine sand. The gravel drifts typically contain small shark’s teeth. This sandy beach structure continued until we were past the second stream draining the second large marshy area. On the gravel bar at the point, conditions were better, but still too much sand. Past the point, the beach

improved as more rocks and coarser gravel were exposed. There also several areas of cliff sections that had fallen to the beach and the winter storms had done a nice job of washing out the fossils from them. Fossil oysters in singles and small clusters were abundant but I only picked up a couple.

Along this stretch of the river, the beach in the summer is only a few feet wide even during the lowest tide, but in the winter and early spring months, it widens (on the lowest predicted tides) to about 10 feet. During a blowout tide, the beach is about 20 feet wide and so it was today. Potential specimen possibilities are numerous --- sea glass, fossil sharks teeth to 1-1/2 inches long, fossil crocodile teeth, fossil oysters, fossil turritella internal molds, fossil skolithos sand worm tubes in quartzite cobbles, native American artifacts, Patuxent River Stone (Maryland state gemstone) and a variety of relatively different rocks --- especially for Charles County--- mica schist, quartz with embedded mica, jasper in several colors, hematite, metabasalt, flint and petrified wood. It is a fun place to look. But you must look carefully because there is so much material that your eyes and brain can get “sensory overload” trying to sort out everything you are seeing at the same time.



By about 2 p.m., Carole and Al caught up with me and we kept looking for another hour or so. The wind began to die down and the water level began to rise again, but there was still plenty of beach exposed. However, we “youngsters” were getting tired, and our buckets were definitely feeling heavier, so we started heading back about 3 p.m..

Overall, it was an excellent trip. Carole found a large “otodus” shark’s tooth that easily was her best find of the day. We all found lots of turritella. I found a nice small “otodus” tooth that had just washed out and it was in perfect condition – sharp with 2 side cusps. I also found a small piece of petrified wood as well as lots of turritella. The weather conditions, although cold for April, had been great for fossil collecting.