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A Summary of the Southeastern Paleoamerican Survey Activities for 2013

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By Albert C. Goodyear

As mentioned in the May 2013 issue of *Legacy*, the Allendale Paleoamerican Expedition for 2013 was cancelled due to Tom Pertierra's medical crisis. According to all reports, he has made a substantial recovery but still has a ways to go. Our thoughts and prayers continue to go out on his behalf for a full return to his normal activities. At the Paleoamerican Odyssey Conference in October 2013 in Santa Fe, New Mexico (www.PaleoamericanOdyssey.com), Tom was honored before the whole conference by an award recognizing his contributions to American archaeology. Congratulations to Tom who is well deserving of this award. There was a substantial number of Topper people at Santa Fe, including volunteers, students, supervisors, investigators and other supporters (Figure 1). Due to a last minute family matter, I was not able to attend but our presentation team ably carried on.

Since the Expedition was cancelled, efforts were directed toward doing specific analyses for the Pre-Clovis presentation at the Paleoamerican Odyssey Conference. My co-authors and I were invited to present a 30-minute paper on the evidence for the pre-Clovis occupation at Topper, including the controversial 50,000-year component (Goodyear et al. 2013). At SCIAA, analysis first concentrated on the cobble size artifacts from the upper Pleistocene alluvial sands and the Pleistocene terrace immediately below (Figure 2). Elizabeth Bell and I examined 225 cobble size artifacts, finding that nearly 90% were modified, mostly as cores and core tools. It was determined that the chert cobbles had not washed down the old river bed but were in place, quarried from the natural outcrop immediately upslope on the side of the hill. Because of the thick cortical surfaces due to thousands of years of weathering, breaking open the cobbles by hurling them against each other proved futile. In order to break them open, a sledge hammer was required, thus eliminating the hill slope as an agent of fracture.

Another study documented the incidence of flakes with striking platforms and bulbs. Joe Wilkinson and I analyzed the excavation levels for 20 square meters of the Pleistocene alluvial sands, recording the size and frequency of "plat-bulb" flakes. This pre-15,000-year zone was shown to have numerous such flakes confirming Megan Hoak King's (2012) findings. These flakes resulted from retouching flakes and cores for tools. They were statistically smaller than flakes from the above Clovis and Early Archaic levels, since bipolar and anvil reduction was used for core reduction and not hard hammers like Holocene age groups. To show that these flakes and the various retouched formal tools had not migrated down from above, the frequency of river cortex chert flakes was plotted showing they were restricted to the early Holocene levels above. At Topper, Clovis people were apparently the first to use the river smoothed, tanin-stained cherts present in the river bed as the Savannah River down cut to the modern bed level at that time or just before. Prior to this down cutting, this chert source was unavailable to preClovis people. As such, it forms a useful tracer of any disturbances coming from above.

Other lab studies included bend breaks and retouched flake tools. Bend breaks occur literally in the hundreds at Topper. These are flakes that are broken into sharp pieces for use as burins or chisels and obtuse angled scraping edges. In a sample of 100, 33% had square or rectangular shapes with the remaining 67% triangular in outline. Edge breakage has a transverse emphasis, as opposed to the radial type fracture. Wear retouch in the form of microchippage was present on 33% of the flakes, some with multiple edges. Like other expediently made flakes, not all pieces were necessarily used. Retouched flakes normally thought of as scrapers are found in the pre-Clovis assemblage, typified by unifacial retouch. In a sample of 50 such flakes, 98 retouched edges were observed, and over 78% were flaked on the dorsal surface. Types of retouched edges included convex or scraper forms, concave or spokeshaves, denticulates, and graver spurs. Small blades have also been found. The Pleistocene terrace (Figure 2) also has artifacts like the Pleistocene alluvial sands, found continuously for at least two meters. Two previous radiocarbon dates came back over 50,000 years, indicating it is beyond 14C dating. Currently, we are waiting for the results of new OSL dates, which are based on the improved single grain method. These are expected before the end of they year. They will serve as a cross check on the possibly dead 14C

Figure 1: The Topper people who attended the Paleoamerican Odyssey Conference in Santa Fe, NM, October 16-19, 2013. (SCIAA photo)

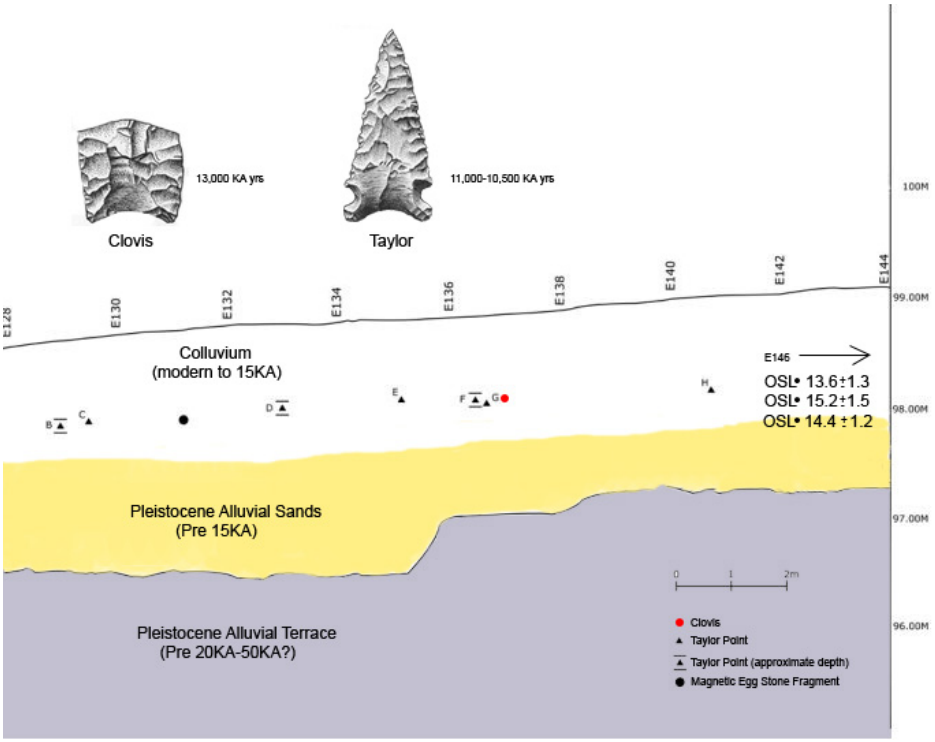

Figure 2: Profile of the Topper site under the Pavilion showing Holocene and Pleistocene age geological and archaeology stratigraphy. (SCIAA drawing)

dates. The question of the association of tools and the obviously old Pleistocene terrace is being investigated by Douglas Sain, as part of his doctoral dissertation at the University of Tennessee. Doug has analyzed approximately 20 cubic meters of this zone, back plotting flakes and tools. He has found that lithic artifacts of all sizes occur down through two meters with no indication of downdrift of artifacts. There is no evidence of small items being deeper, as moved down by disturbances. He also has found evidence of tri-layering of artifacts strongly suggesting that the artifacts were deposited in the terrace as it was building by alluvial deposition.

At the conclusion of our paper, I stated that the Topper preClovis assemblage is a core and flake technology without bifaces. In that sense, it is more Asian than European. Also given its great antiquity, it makes more sense to think of it as Palaeolithic, rather than preClovis. The antecedants of the Clovis culture would be substantially younger than what we have at Topper. Last, I took the occasion of the conference to officially name it the Clariant Complex, in honor of the company that served as our host and benefactor for so many years.

Besides the preClovis presentation, a number of poster programs were given on Topper Clovis. Derek Anderson presented one on the remarkable success he has had with refitting artifacts and documenting the great integrity of the Clovis deposits. Ashley Smallwood presented on dating Clovis at Topper featuring our recent 10,958 BP +/- 65 BP radiocarbon date from the Hillside unit. Randy Daniel and I prepared a poster entitled, *Clovis Macro Bands of the Carolinas* (Daniel and Goodyear 2013), focusing on the geographic distribution of metavolcanic Clovis points presumably coming from North Carolina, as contrasted with the Allendale Coastal Plain chert points originating from the Central Savannah River region (Figure 3). These distinct raw material signatures and prominent geographic clusters may bespeak of two major demographic groups interacting particularly in an aggregation zone demarcated by the Saluda River in the Piedmont and the Congaree-Santee Rivers on the Coastal Plain. The value of nearly 50 years of mapping fluted points in both states is starting to be shown with large and possibly demographically significant clustering being revealed. There is always more to learn, and the varied studies of the Southeastern Paleoamerican Survey are encouraging signs that we are penetrating some of these mysteries.

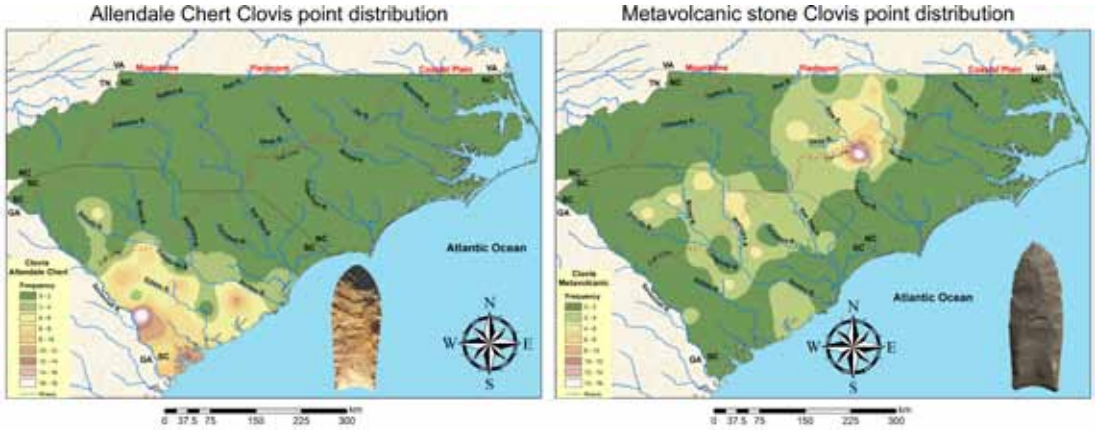

Figure 3: GIS maps of Uwharrie Mountain metavolcanic Clovis points in relation to Allendale coastal plain chert Clovis points. (GIS maps courtesy of Chris Moore)

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