Photographic Essay

Hanson Ranch Wyoming Dinosaur and Amber Excavation of 1996

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Abstract

The Hanson Ranch in Roxson, Wyoming is located in the eastern part of the state some 80 miles west of Mt. Rushmore, South Dakota, and 15 miles west of Route 85 on Cheyenne River Road. Research was first conducted on this ranch by Dr. Kraig L. Dertsler of New Orleans University, whose team excavated a triceratops. Tiny amber particles were also discovered with the dinosaur. A few years later, our team excavated similar amber particles adjacent to this site, but in the same stratum with the triceratops. This work is published elsewhere in this issue of the *Creation Research Society Quarterly.* The purposes of this photo essay are to show some of the interesting formations, including hoodos, that exist on this ranch; some of the fossil material, like amber, that was C-14 dated; and a few of the many dinosaur bone fragments and carbonized wood that await C-14 dating if funding sources can be identified. C. W. Holroyd and co-workers discussed other research potentials at this site in a previous issue of *CRSQ* (33:136).

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Accepted for publication: December 12, 2005

This essay is dedicated to the many individuals too numerous to mention for their pioneering vision and perseverance that made these excavations possible in the 1995–1996 dig seasons. It's a shame that (through no fault of their own) their project was discontinued on this ranch. Fortunately Joe Taylor and Otis Kline (and others) were able to continue with their cooperative joint field research projects with active field museums like Mount Blanco Fossil Museum, Crosbyton, Texas, and F.A.C.T. Museum and Research Station in Glendive, Montana, respectively.

Figure 1. Screening for bone fragments at a hadrosaur burial site (burial site in background with canvas protection from the weather).

Figure 2. Thirty team members, including eight from Columbus Ohio's Creation Research Science Education Foundation. Joe Taylor of Mt. Blanco Fossil Museum (Crosbyton, TX) and Buddy Davis of Answers in Genesis participated the week of July 7–17, 1996.

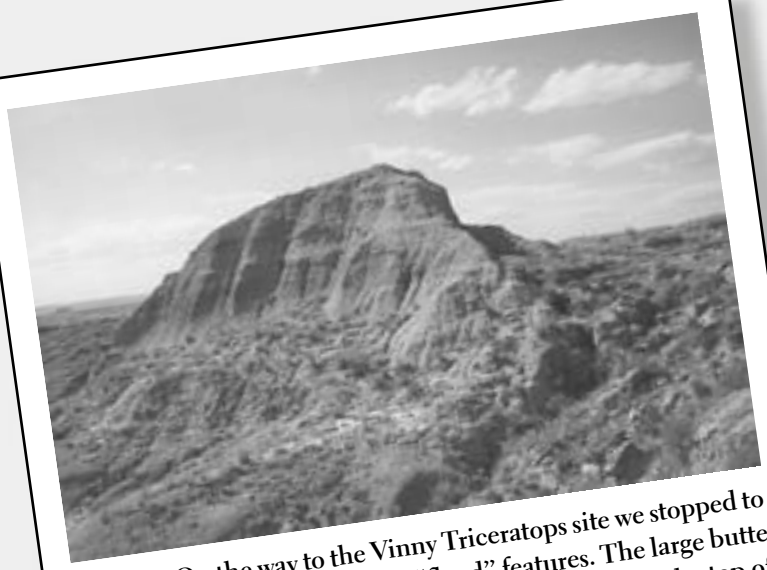


Figure 3. On the way to the Vinny Triceratops site we stopped to take photos of some geological "flood" features. The large butte formation in the foreground was photographed from the top of the unique hoodo-type structures shown in Figure 4.

Figure 4. A top and bottom view of these unique formations. Their rounded surfaces suggest they lithified quickly after water transport, perhaps during a quiet time between transgression and regression. The stratum upon which the sandstone rests appears to have eroded preferentially to the top portion. Co-author Matt Miller is in the foreground (bottom picture), and Andy Greabel is videotaping the scene.

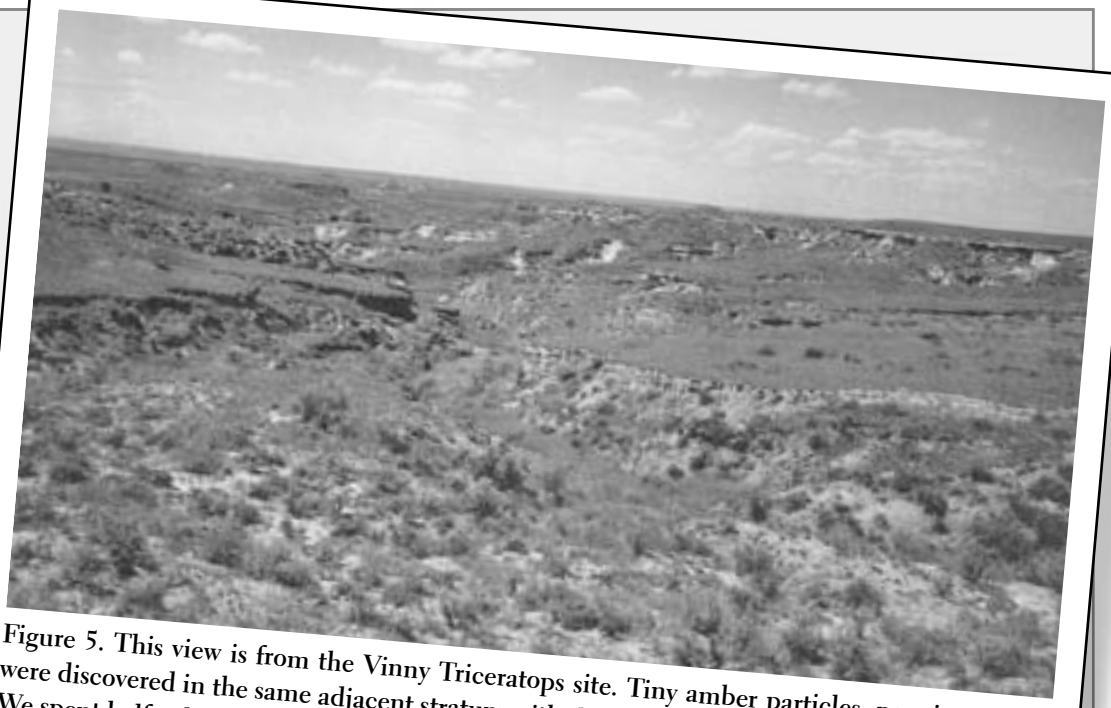


Figure 5. This view is from the Vinny Triceratops site. Tiny amber particles, pea-size or less, were discovered in the same adjacent stratum with the dinosaur, but not in the stratum above. We spent half a day looking in the wrong top stratum until Joe Taylor arrived and provided assistance (www.mtblanco.org and www.omniology.com). Small amounts of amber are also found in other areas of Wyoming and at the F.A.C.T. Research Station in the Montana Badlands near Glendive, MT (www.creationtruth.org).

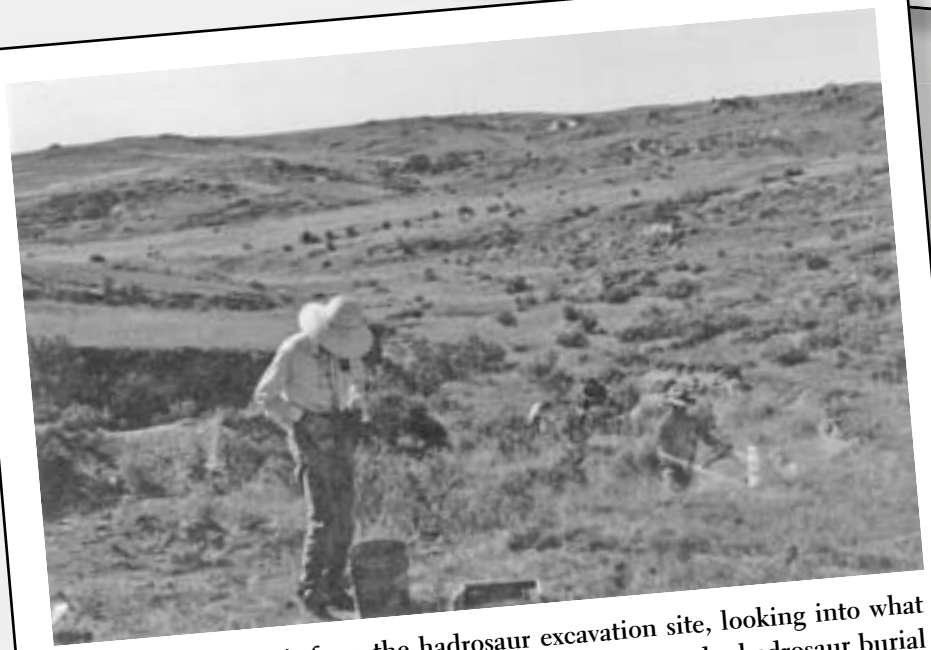


Figure 6. This view is from the hadrosaur excavation site, looking into what has been called the "Dragon's Graveyard." This is indeed a hadrosaur burial ground, but other dinosaurs, including a triceratops and T-Rex (first one ever) are just a few miles away. The late John A. Watson, geology consultant and friend to all, is in the foreground. More about him can be found at www.creationevidence.org.

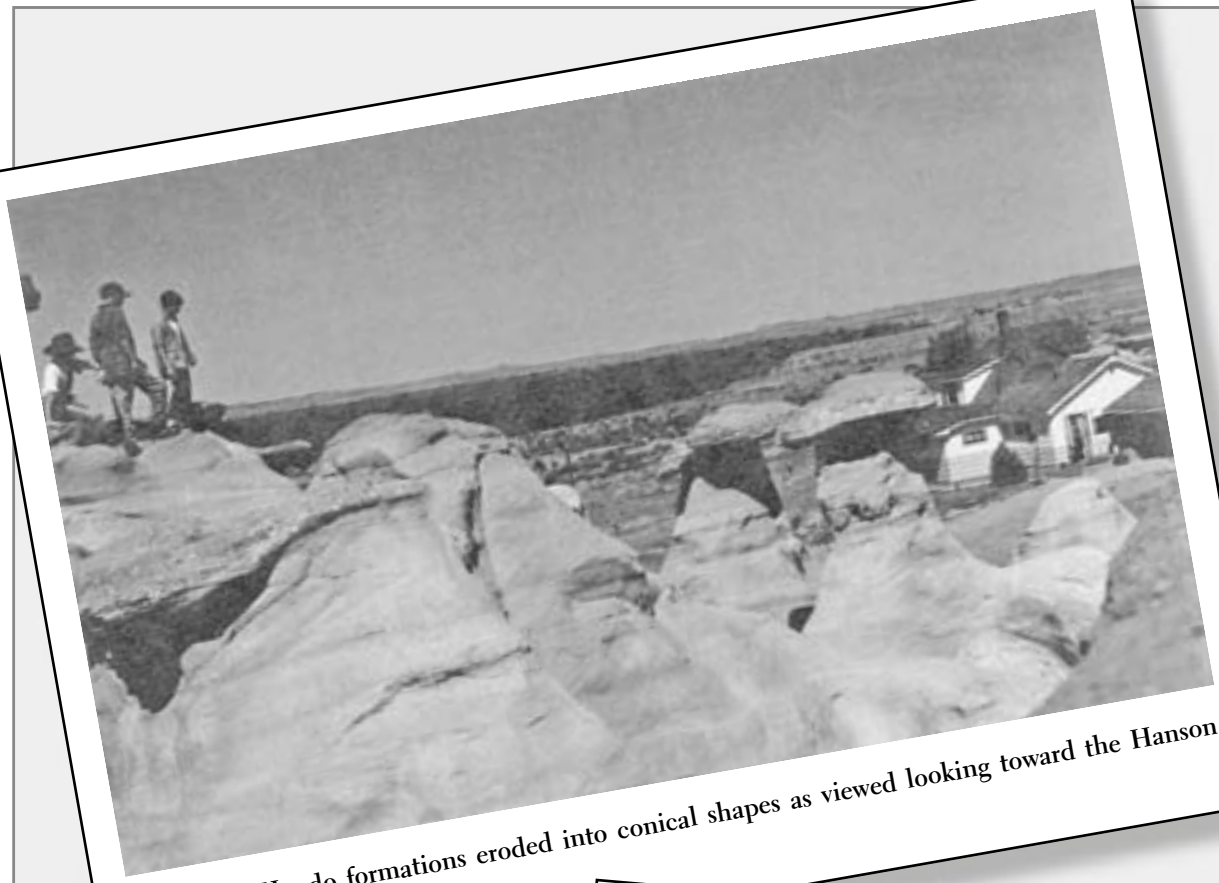


Figure 7A. Hoodo formations eroded into conical shapes as viewed looking toward the Hanson family home.

Figure 7B. The same hoodo formations near the Hanson Home.

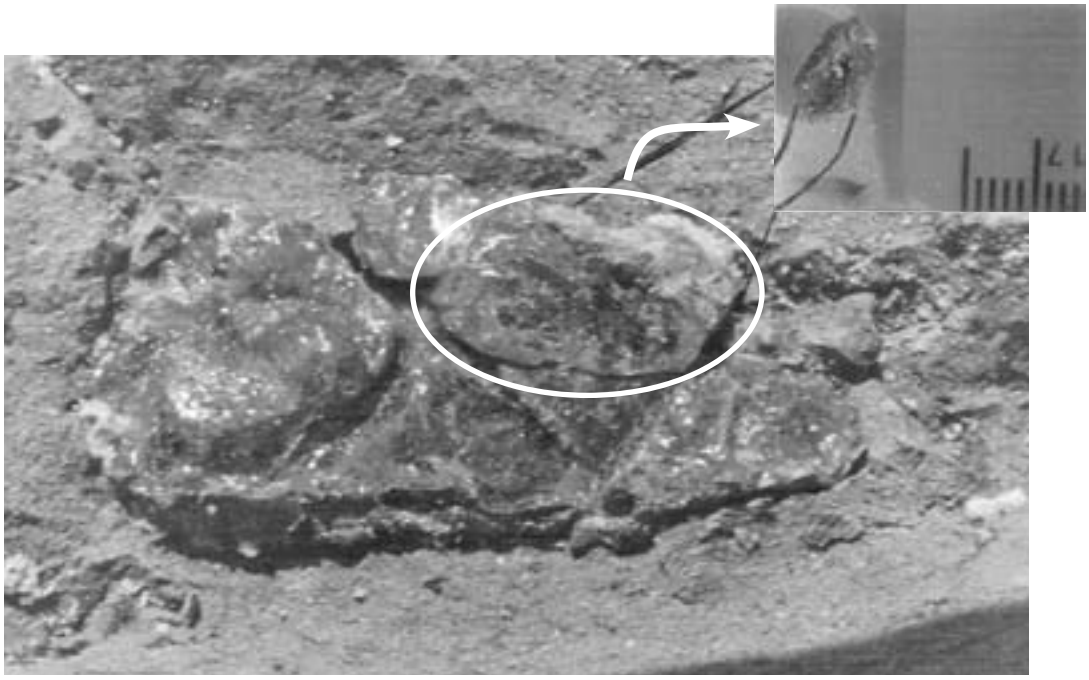


Figure 8A. Photo-macrograph of the largest amber piece with dimensions of 1x2 cm. Note the macro-cracks. One section (circled) eventually exfoliated from the main structure as shown above in the insert.

Figure 8B. In the center of the photo-macrograph is a pea-size amber specimen with white flakes of mica (sodium chloride crystals?). A nearby sliver of carbonized vegetable matter is imbedded in the same clay matrix. Initially, the joke among our discoverers was that the white flakes must certainly be dinosaur dandruff.

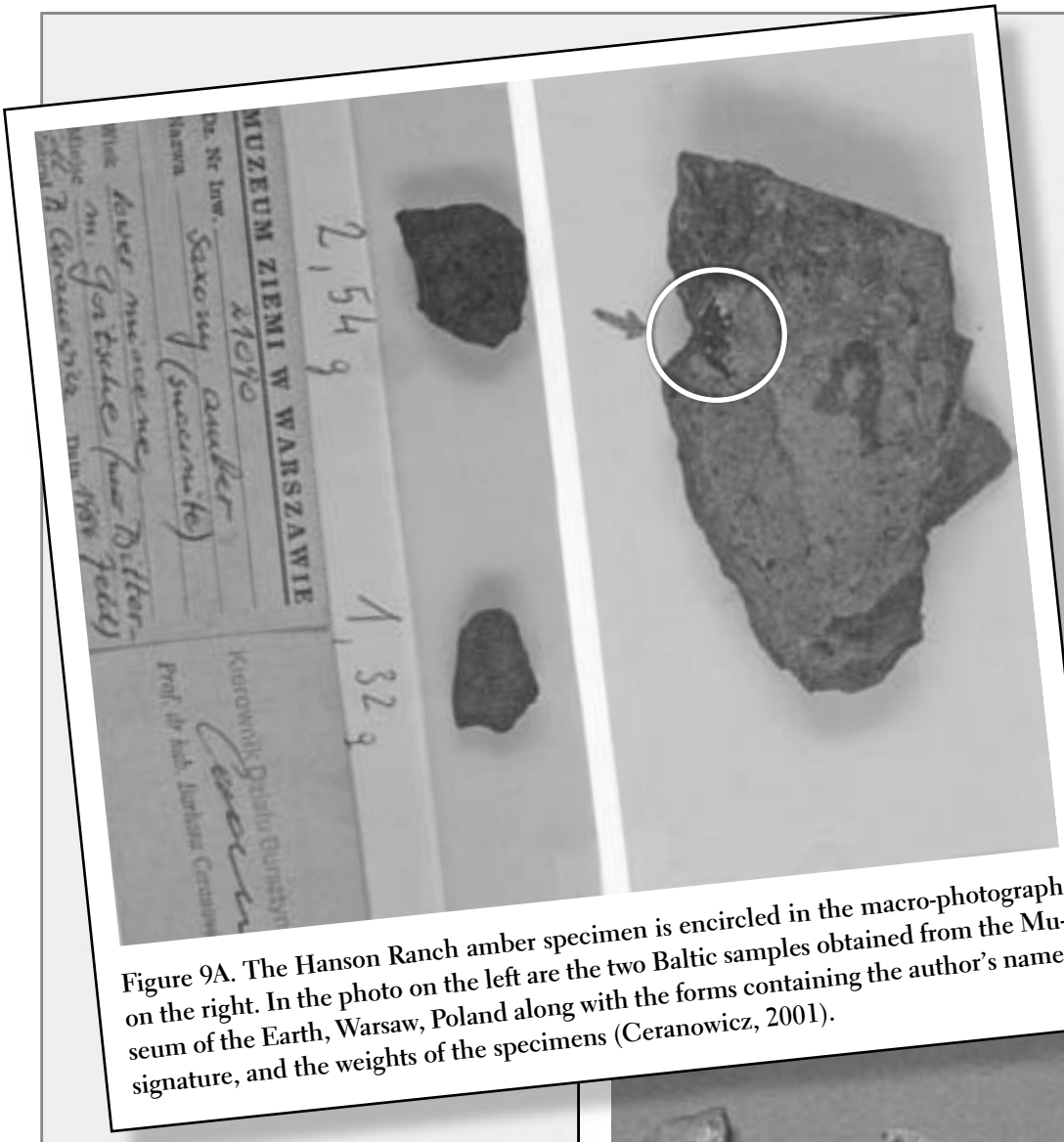


Figure 9A. The Hanson Ranch amber specimen is encircled in the macro-photograph on the right. In the photo on the left are the two Baltic samples obtained from the Museum of the Earth, Warsaw, Poland along with the forms containing the author's name, signature, and the weights of the specimens (Ceranowicz, 2001).

Figure 9B. Photos taken in Poland of the three specimens that were C-14 dated (Ceranowicz, 2001). The specimen on the right is the sample of pea-sized amber still imbedded in the clay matrix from the Hanson Ranch triceratops horizon before it was extracted for AMS-C-14 dating.

Figure 10. This is the first amber-containing cone discovered by our team looking for amber. Both amber and coalified or carbonized wood were found in the specimen. We learned from Joe Taylor that Dr. Kraig Derstler (1994) had also found amber actually buried with the triceratops, so there may still be a sufficient amount available for study.

Figure 11. Jeremy Auldaney (1996, private communication) sent a copy of photos in Figures 10 and 11 to a professor of geological and biological sciences at the University of California, who responded as follows: "The two specimens conform quite closely to cone scales of ovulate (seed-bearing) cone of a conifer described by E. Dorf (1942) as Araucarites longifolia (Lesquereux) Dorf, although neither appears to exhibit the elongate apex of the scales illustrated by E. Dorf (1942)." Paul McDorman of Cincinnati found this specimen as we excavated the adjacent strata but in the same horizon as the triceratops.

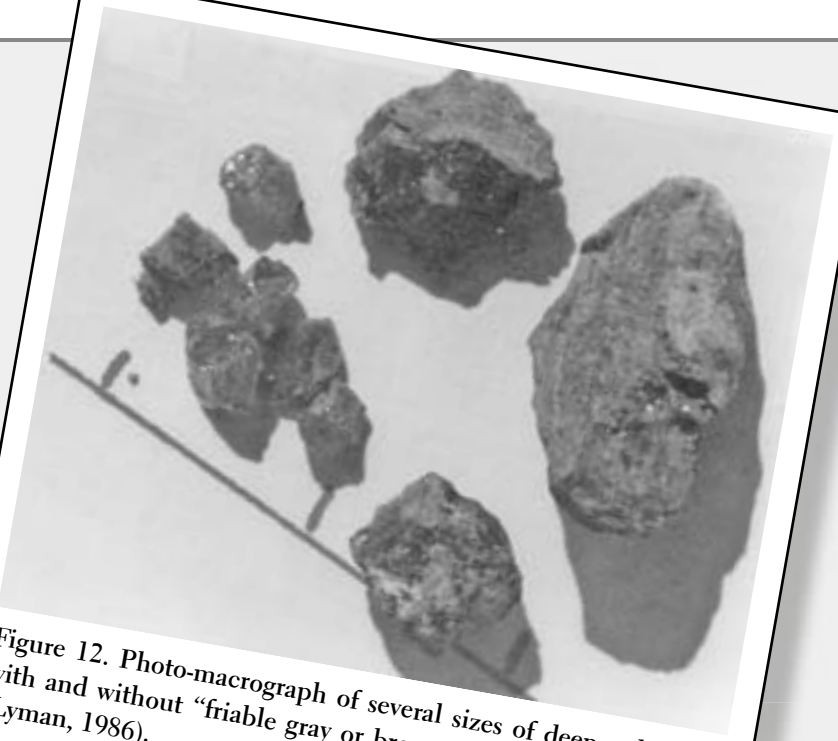


Figure 12. Photo-macrograph of several sizes of deep red amber with and without "friable gray or brown crust due to alteration" (Lyman, 1986).

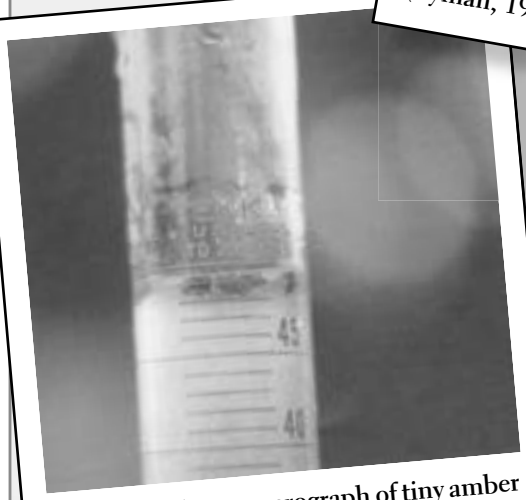
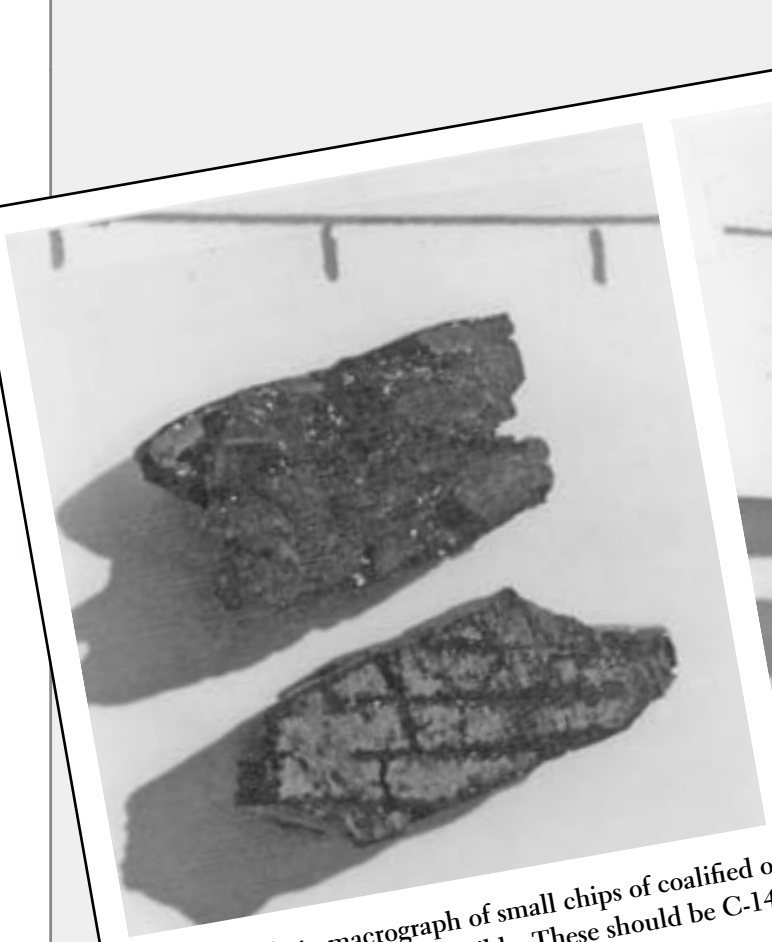


Figure 13. Photo-macrograph of tiny amber particles floating in concentrated table salt having a specific gravity of 1.18, like seawater. To be buried with the ponderous triceratops bones the burial must have been rapid, otherwise the amber would have floated away regardless of the specific gravity of the water.

Figure 14. Photo-macrograph of carbonized dinosaur "cartilage" from the hadrosaur site with broken and unbroken sections. Because of the carbonized inter-surfaces of these specimens, they could be carbon dated (as were bone surface scrapings of the Acrocanthosaurus from the Paluxy River, TX). These small cartilages were often observed on surfaces of cow trails as one walked the Hanson Ranch.



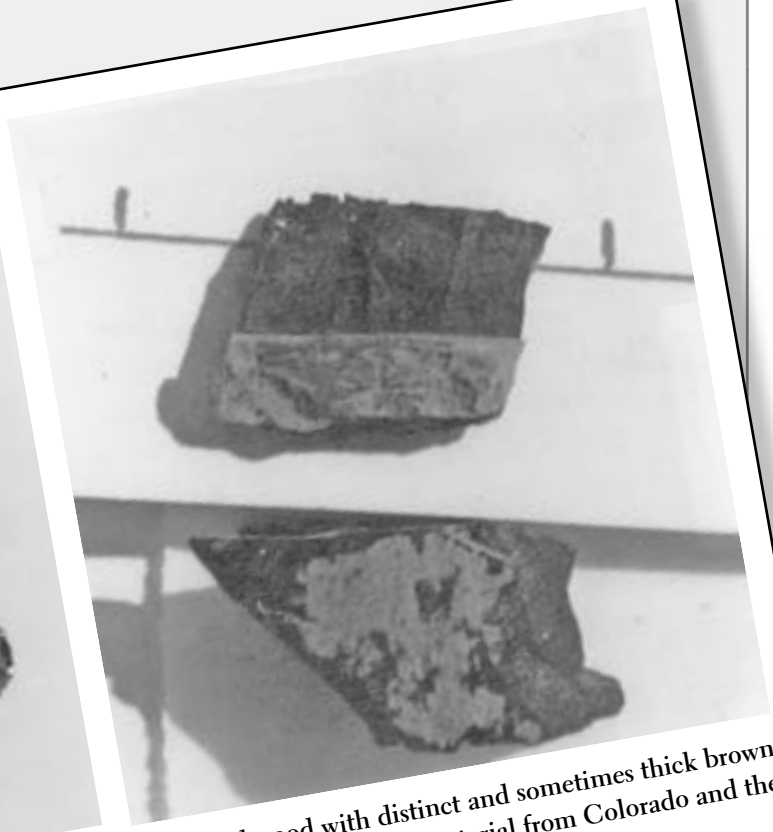


Figure 15. Photo-macrograph of small chips of coalified or carbonized wood with distinct and sometimes thick brown woody-colored surfaces still visible. These should be C-14 datable as were carbonized material from Colorado and the Paluxy River, TX.

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