

Webster Lake, Graham Co., Kansas

June 16, 1973

(at 1.8 mi. W from P.O. at HELL City to turnoff
and then N up drainage approx. 1/2 mi).

Left camp and drove to HELL City site, at approx. 2 mi. E of HELL City examined ⁷³⁰⁶¹⁶⁻¹ a Pleistocene profile of sandy soil which in most parts of the area overlies the Cretaceous. This soil is deep and grades to gravel. Because these soils are coarse the century plants finds suitable conditions for growth. It is believed that these plants are indicators of Pleistocene stream channels. Aerial maps would probably lend support to this idea. The plants generally occur on slopes associated with present drainage systems. The group includes (from left to right) Jones, Marples, Brungardt, Williams, Miller, Martin, Lewis, Chrouelli, Sams, Hill, Conley, Altman. Mammoth or mastodon flange from pit 1/4 mi W of above. no. 730616-1a

730616-2 Closer profile of Pleistocene deposits. Williams and Conley are finding small gastropods in the soils. The extent of the root system of the century plant is indicated. Note also the small plants originating? from the parent root system. The upper layer on left is darker than at right and has not been disturbed or eroded.

730616-3 HELL City site of Smoky Hill Chalk ^{member}. This site is approx. 2 mi. W and 3/10 mi. N HELL City post office. The *Gillicus* fish is in upper layers of exposed cliffs. Students at site. Lewis' Fiat and Paleo carryall at base of cliff.

730616-4 Martin and Bonner at *Gillicus* site. Bonner, on previous trips had ^{partially} exposed this fish and with additional work this A.M. had prepared the fish final casting. The tarp was later to be placed over the fish so that the rock could be removed on the W side of the specimen.

730616-5 *ibid*

730616-6 *Gillicus*. The rock beyond fish is to be removed back to approx 2 feet from the fish in order to give clearance for undercutting. The darker part of skeleton is a hardener used to harden both the bones, scales and rock matrix. The darker layer is bentonite, a volcanic marker and white lines of selenite. After the bank of rocks have been removed the fish will be further exposed for final casting.

730616-7 Close-up of tail. The plaster will contact bone & matrix.

730616-8 Close-up of head. This fish is a filter feeder and has small teeth less than a mm long & a fraction of that in width (almost hairlines).

730616-9 Bonner excavating chalk from skeleton. Took a hook with 2 sharp edges.

730616-10 Some of the tools used in excavating. Brush, curved tool, syringe for harder application, flat end shovel and to the extreme left a lightweight pick. All matrix is removed by ^{thin} layer technique