istrative grades, or else have become independent petroleum geologists or consultants. The same pattern of advancement with age appears in the case of the 23 geophysicists. Of the six who have been graduated more than ten years, all are administrators and two are presidents of their companies. Of the eighteen that have been out of school for less than ten years, none has advanced beyond the rank of party chief and only four have attained that rank.

For anyone concerned with geological education, this case history will hold a certain amount of interest. Comparisons of many such analyses for departments ranging from the most liberal to the most technical and scattered over the different provinces of the country might settle some issues that are now being argued largely on the basis of sentiment and prejudice.

Note

A FOSSIL PLIISTOCENE SNAKE FROM DENTON COUNTY, TEXAS.—In May, 1932, on an elementary geology field trip, an anonymous student discovered an articulated skeleton of what appeared to be a small fossil snake. The discovery site was a borrow pit just north of Garza-Little Elm Dam now under construction across the Elm Fork of the Trinity River, in Denton County. Associated fossils which purportedly had been collected previously by Dr. T. E. White, paleontologist with the River Basin Surveys, were a fairly complete Equus, and fragments of a glyptodont, bison and one of the mastodons.

The snake was sent to the Smithsonian Institution. In the letter of acknowledgment, Dr. W. F. Poole tentatively classified it in the family Cohnidae and recognized a marked similarity to the genus *Drymarchon*. The most outstanding factor in this addition is the articulated condition of the skull, jaws and vertebrae. The preservation seems to be associated with the caliche deposits which have acted as cementing agents. The present climate in this region is too moist for the formation of caliche by the precipitation of dissolved salts consequent to the surface evaporation of ground water. The implication is that in this region during a portion of Pliocene time, the climate was such that conditions for preservation of delicate fossils may have been optimum. Therefore, the importance of the find is that truly outstanding data of the evolution of modern living forms may be available in this area.—John W. Harrington.

Geology of the Dallas Quadrangle

Carl N. Roberts

ABSTRACT

In the Dallas quadrangle, the Eagle Ford shale and Austin chalk, both Upper Cretaceous, are overlain over about half of the area by alluvial deposits of the Trinity River. The late Cenozoic history of the area has been one of progressive uplift with alternate episodes of channeling and filling along the Trinity and its tributaries. As a result, three and possibly four ancient floods now stand as terraces bordering the bottom-lands. The uppermost and highest of these terraces above the Trinity level is referred to as follows: Trinity, 25 feet; Love Field, 22 feet; Travis School, 60 feet; and Union Terminal, 32 feet.

The Love Field and Union Terminal terraces are well defined benches, but the Travis School terrace is poorly developed, and consequently, its relative age has not been satisfactorily determined. In this connection, it is significant to note that the area around the Love Field townsite is being actively mined for fluorspar. It may be merely a dissected portion of the Love Field terrace. Or it may represent a distinct terrane interposed between the Love Field and Union Terminal. Finally it may be an alluvial fan of Turtle and adjacent creeks, possibly built out upon the Union Terminal level. Of these three possibilities, the last seems the most probable.

Introduction

The area here described embraces most of the city of Dallas. Bounded by parallels 32°45'00" and 32°52'30" N., and by meridians 96°45'00" and 96°52'30" W., the quadrangle covers approximately sixty-five square miles and is located near the geographic center of Dallas County (Figure 1).

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