25. REPORT ON PEDOLOGIC OBSERVATIONS MADE AT

THE "CAPAY MAN" SITE IN WESTERN YOLO COUNTY

By Frank Harradine

The human burial was embedded in a small dome-shaped, softly consolidated and calcareous substratum comprising non-marine sediments (Fig. 2). This formation underlies much of the eastern foot slopes of the Coast Ranges in this area. A small stream has cut through the more or less isolated rounded knoll exposing a grave about 30 inches below the apex.

Soil material has been deposited by a stream action on top of this formation at some time after the grave was dug.

There is no way to estimate the time lapse between the time of burial and the beginning of the deposition of soil material which now caps the formation. A considerable time must have elapsed, however, because the back-fill above the burial is uniformly consolidated and there is no evidence of soil mixing from above. This calcareous substratum material could easily have been reconsolidated and redistributed uniformly with little or no trace of disturbance, providing there was a time lapse of several hundred years before the present soil material began to be deposited on top.

The age of this formation is probably late Pliocene, but this fact gives no helpful clue as to when the grave was actually dug. All that can be stated from observations is that the burial presumably was made at some time before the present soil mantle was deposited on top of the formation.

The soil now lying uncomfortably on top of the Pliocene sediments is quite similar to the Zamora series of soils as identified in adjacent counties. This is a youthful secondary soil and a profile of this character could form in about 800 or 1000 years under a mediterranean type of climate which prevails in the area at the present time.

The lack of cherty pebbles in the upper soil profile and an abundance of them in the underlying substratum is good evidence that the over-lying soil did not form in place but has accumulated as transported alluvium.

As a rough approximation of the time of burial, considering the condition of the back-fill, topography, and character of soil profile formed, I estimate about 2000 years have elapsed since the burial took place.

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^{*}Mr. Yerington's opinion was that the burial-containing alluvium is "Pleistocene or younger" (i.e. post-Pleistocene).