

sites have yielded fossil vertebrates of older Pleistocene and even Latest Pliocene age. These Blancan sites are of particular interest, inasmuch as they constitute the first samples from eastern North American (Webb 1974a). This report is the first systematic study of one of the Latest Pliocene sites.

The Haile XV A locality is situated on the property of Parker Brothers Limestone Products Incorporated, near Haile, T9S, R17E, Section 25, NW 1/4 of SW 1/4, Alachua County, Florida. In 1964 the site was discovered and some specimens collected by Phillip Kinsey of Jacksonville Beach, Florida. Further excavations were carried out in the same year by S. David Webb, Robert Allen, and myself with the support of National Science Foundation Grant GB 3862.

ACKNOWLEDGMENTS AND ABBREVIATIONS

Fossil material was examined from the American Museum of Natural History (AMNH), the University of California, Museum of Paleontology (UCMP), the Florida State Museum (UF), the University of Houston (HCT), the University of Kansas (UK), and the United States National Museum of Natural History (USNM). I wish to thank the persons in charge of these collections for the opportunity to study the materials in their care.

I also wish to thank S. David Webb, Thomas H. Patton, and H. K. Brooks for their encouragement and help during the course of this study.

GEOLOGY

The Haile XV A deposit lies at an elevation of about 90 ft above sea level and is a filled fissure in the Ocala (Eocene) Limestone. This fissure measures approximately 10 m along its east-west axis, and its north-south dimensions range irregularly from about 3 to 5 m (Fig. 1).

The bottom of the fissure-filling sequence lies at a depth ranging from 1 to 7 m below the land surface. It consists of a stratum of dark brown, compact, iron-stained clays (or "hardpan"), with a thickness ranging from 2 to 6 m.

The fossil-bearing matrix overlies the "hardpan," and consists of an alternating sequence of sands and clays. The lowermost unit is a coarse gravelly sand, containing calcareous cement and concretions. It is the thickest unit in the fossiliferous sequence, ranging from 2 to more than 6 m in depth, and is the most productive fossiliferous horizon. Many of the included larger bones are encrusted with cemented sand and gravel. The clay units are pure, greenish in color, massive in texture, and vary from 10 to 20 cm. The sand layers decrease in thickness upward through the sequence, with the uppermost sands being less than 1 m thick. The clays vary little in thickness, except that the uppermost unit in the fossiliferous section is nearly a meter thick.