

GEOLOGIC MAP OF THE SOUTHERN PORTION OF THE U.S.G.S. 1:100,000 SCALE CRESTVIEW QUADRANGLE, NORTHWESTERN FLORIDA

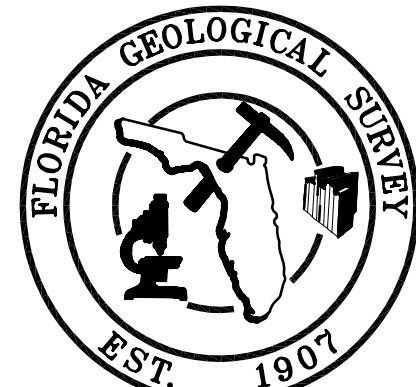
FLORIDA GEOLOGICAL SURVEY
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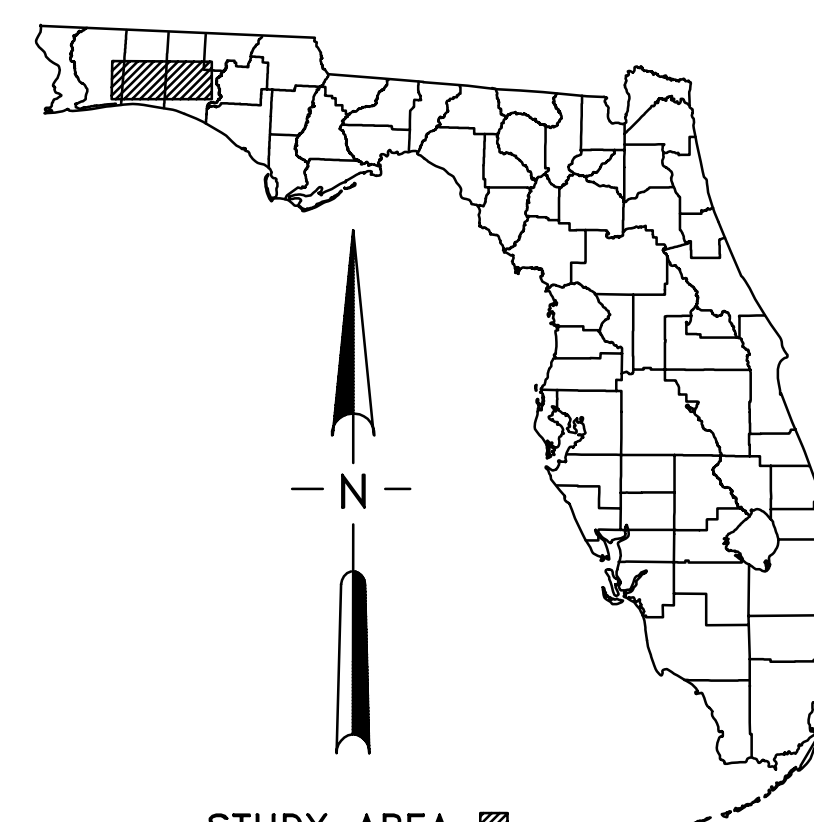
SURFICIAL AND BEDROCK GEOLOGY OF THE
SOUTHERN PORTION OF THE U.S.G.S. 1:100,000
SCALE CRESTVIEW QUADRANGLE, NORTHWESTERN FLORIDA

BY

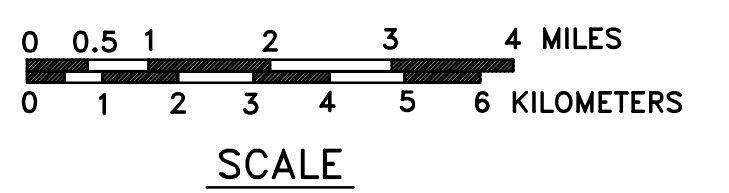
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2001



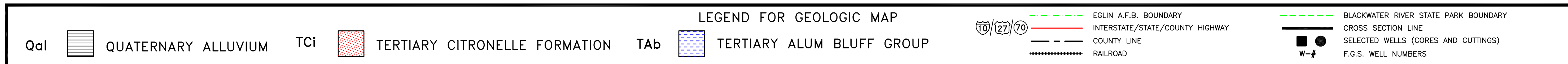
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STUDY AREA



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SURFICIAL SEDIMENTS MAP OF THE SOUTHERN PORTION OF THE U.S.G.S. 1:100,000 SCALE CRESTVIEW QUADRANGLE, NORTHWESTERN FLORIDA

Surficial sediments and soils of the southern portion of the U.S.G.S. 1:100,000 scale Crestview quadrangle are comprised primarily of four lithologic components: quartz sand, loam, muck, and clay. Combinations of these components constitute the four sediment units represented on this map. Data utilized in creating this map was derived from a variety of sources, including United States Department of Agriculture Soil Surveys, field observations, and well cuttings. Surface samples, and hand-sorted samples. Sediment types shown on this map represent soil from within the upper 6.6 feet (two meters) of land surface.

Between 25 and 70 different soil types are recognized, depending on the county, by the United States Department of Agriculture (Overing, et al., 1986; Overing and Watts, 1986; Sullivan, et al., 1975; Watts, et al., 1980). In these soil surveys, soil types were categorized based on factors such as slope, moisture content, texture, distribution of organic matter, acidity and other physical properties. In order to organize these soil types into meaningful lithologic units, soil types were grouped based on shared characteristics. Therefore, the reader is urged to consult the soil survey for more detailed information about soils in the map area.

Quartz sand is the most common unit throughout the study area, and is generally associated with the Citronelle Formation. Each sediment type shown on this map contains at least some quartz sand. In some places, the unit mapped as sand may contain minor percentages of organic material and clay. Sand/loam is a unit of quartz sand and loam in which the sand concentration is greater than 52 percent. In the eastern portion of Walton County, the sand/loam unit often coincides with Alum Bluff exposures. This unit is also prevalent north of the Yellow River and the Shal River in Santa Rosa and Okaloosa Counties, where it is generally associated with the Citronelle Formation.

Loam, which is defined as "soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt, and less than 52 percent sand particles" (Overing and Watts, 1986, p.136), is generally associated with orange features and bays. There are large areas of loam in Santa Rosa County, within the Blackwater River basin, and within the Yellow River basin in Santa Rosa and Okaloosa Counties.

Muck, which is slowly decaying organic material containing varying amounts of sand and silt, is most common along the Yellow River basin and other rivers and creeks throughout the study area. It has a more restricted areal extent than the previously mentioned lithologic constituents, and is generally confined to swampy regions and drainage basins.

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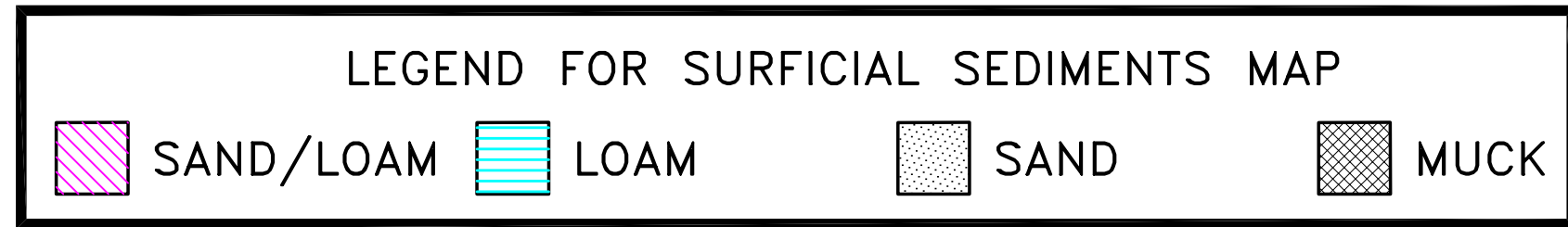
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