

### DESCRIPTION OF MAP UNITS

**Qa** Alluvium (Holocene)—Sand, gravel, silt, clay, and organic material, pale yellow to dark gray, underlying the meandering and dendritic flood plains of the major rivers and second- and third-order streams; some clayey sandstone is generally well bedded and well sorted. Thickness and distribution of unit changes seasonally because of fluctuations in rainfall and stream discharge, generally 1 to 15 m (3 to 50 ft) thick.

**Qc** Deposits of low alluvial terraces (Pleistocene and Holocene)—Sand, gravel, clay, organic material, and silt, pale yellow to medium gray, underlying broad, relatively unincised areas adjacent to and generally 5 to 15 m (15 to 50 ft) higher than the flood plains of the Chattahoochee and Flint Rivers, generally poorly exposed except in drainage channels or borrow and bank clay pits. Thickness of the terrace deposits is variable; individual lenses of sand, gravel, and clay may be 10 to 15 m (33 ft) thick, total thickness generally less than 15 m (50 ft).

**Qd** Deposits of high alluvial terraces (Pleistocene)—Sand, gravel, clay, and silt, light to medium yellow-orange, underlying flat, moderately dissected, upland areas adjacent to the Flint and Chattahoochee Rivers, and generally 15 to 33 m (50 to 110 ft) above the flood plains. Clay is laterally discontinuous; slopes southwest along the Chattahoochee River and is better preserved on the Flint River. Clay is compact and commonly mottled; quartz and quartzite gravel clasts are iron stained. Thickness is generally less than 15 m (50 ft).

**Tt** Terrace remnant (Pleistocene)—Gravel, sand, and clay, medium to dark reddish-orange, mottled, capping isolated hillsides adjacent to the major rivers generally 50 to 100 m (165 to 330 ft) above the modern flood plains. Unit is deeply weathered; primary bedding features are generally obscured except for coarse crystallization of gravel deposits. Gravel clasts are deeply weathered and partly disintegrating; clay and sandy clay lenses are also deeply mottled. Thickness is generally less than 15 m (50 ft).

**Ud** Upland deposits (Pleistocene-Miocene)—Medium quartz sand, massive, friable, pale yellow to light gray, with sparse clay matrix concentrated in subsurface, containing thick nodules. Locally, includes pods of weathered to fresh, high- and medium-gray sandy clay containing wood. Unit underlies broad interfluvial between the Chattahoochee and Flint Rivers. Thickness is generally less than 5 m (16.5 ft).

**Th** Tallapoosa Formation and younger Paleogene deposits, undifferentiated (Oligocene-lower Eocene)—Fine to coarse quartz sand, largely unconsolidated, yellowish-gray weathering to medium orange-red, contains quartz gravel in lower part. Clay occurs as clasts, shales in crossbedded sand, and as thin, discontinuous beds. Thickness ranges from 3 to 30 m (10 to 100 ft). Undifferentiated middle Eocene strata and westward of the upper Eocene and possibly Oligocene deposits in southwestern part of quadrangle are included in this unit. Maximum thickness of undifferentiated deposits is 50 m (165 ft).

**Hh** Hatchersburg Formation (lower Eocene)—Very fine to fine quartz and glauconitic sand, light to dark greenish-gray, weathering to orange brown, dominantly massive and well sorted, contains intervals of interbedded and laminated clay, silt, and very fine quartz sand. Lower part of the unit is massively bedded and contains abundant glauconite; more bedded sand is common above the base. Ophiolite and thin lenses of dioritic rocks are present in the southwestern part of the outcrop zone. Thickness of the unit is generally less than 7.5 m (25 ft).

**Ta** Tuscaloosa Formation (upper Paleocene)—Interbedded clay (medium greenish-gray) and silt and thin quartz sand beds (medium greenish-gray) weather to dark red and mottled yellow-orange. Sand bed 1 to 1.5 m (3 to 5 ft) of massive, clayey, blue to medium sand containing coarse quartz, glauconite, and phosphate nodules. Interbedded sand clay and silt contains abundant carbonaceous debris and muscovite; sparse burrows are present. Unit is 3 to 18 m (10 to 60 ft) thick.

### EXPLANATION OF MAP SYMBOLS

**Contact**—Dashed where inferred, U, upstream side; D, downstream side

**Structure contour**—Elevation in 20-meter intervals, with 100-meter index contours

**Base of Ripley Formation**

**Base of Tallapoosa Formation**

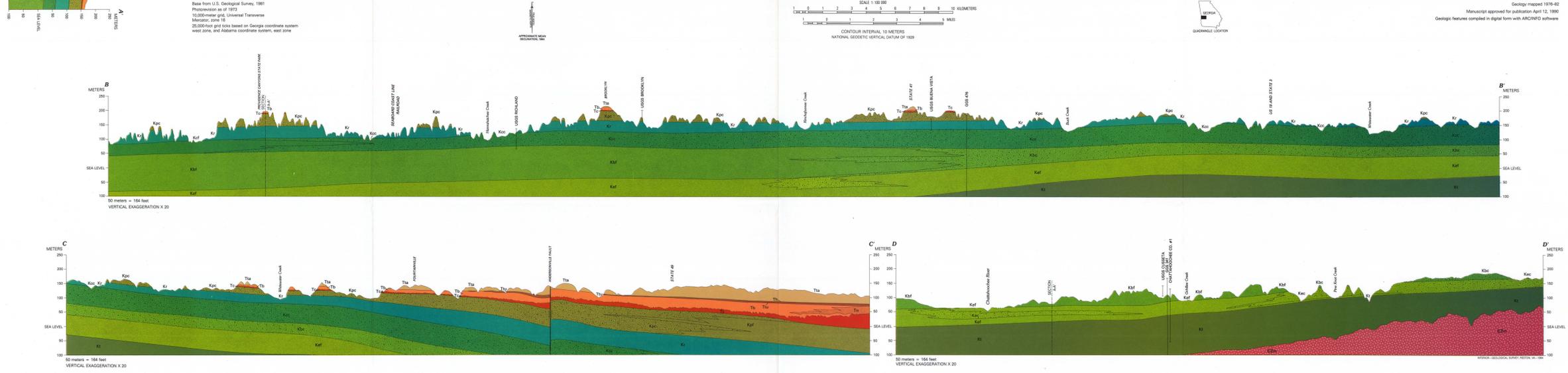
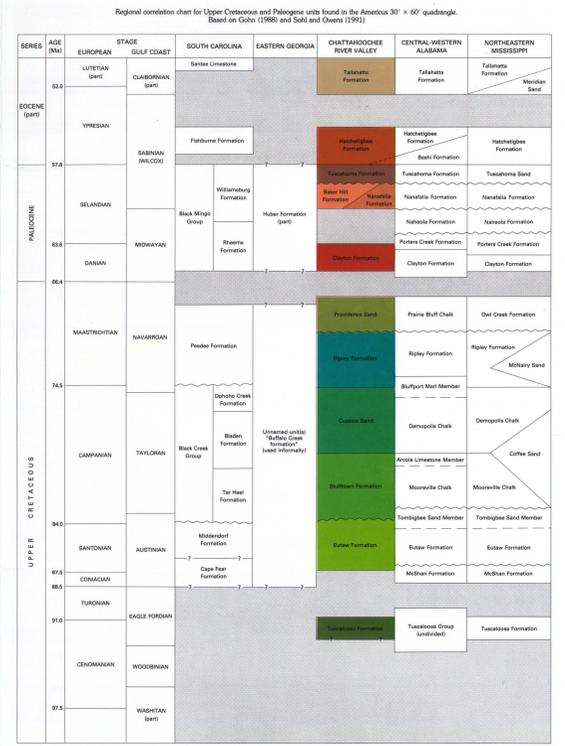
**Outcrop location of fossiliferous contact**

**Drill hole data**—Cores and wells are projected from the perpendicular into the section line and are marked at original elevation

**Core well**—(for U.S. Geological Survey (USGS) well specifically drilled for this study, and one Georgia Geological Survey (GGS) well)

**Well assigned Georgia Geological Survey number; log data incorporated to this study**

**Well assigned Georgia Geological Survey number; log data incorporated only to a limited extent in this study**



GEOLOGIC MAP OF THE AMERICUS 30' x 60' QUADRANGLE, GEORGIA AND ALABAMA

By  
Juergen Reinhardt,<sup>1</sup> J. Stephen Schindler, and Thomas G. Gibson  
1994

<sup>1</sup> Deceased. Formerly with the U.S. Geological Survey; Director of the Wisconsin Geological Survey at the time of his death.

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