

Utilization—The Alachua formation contains the valuable hard-rock phosphate deposits, which, after 50 years exploitation, still retain a billion and a half tons of ore in reserve (G. R. Mansfield, 1942, p. 48).

LOCAL DETAILS

Alachua County—The western part of Alachua County is composed of the Alachua formation, which lies on the very uneven, deeply pitted surface of the Ocala limestone. Old, abandoned phosphate pits at Clark Station show pinnacles of Ocala limestone laid bare by the removal of the ore from around them.

The 40-foot-deep pit of the Cummer Lumber Company's phosphate plant number 6, $1\frac{1}{4}$ miles south of Newberry, shows peaks and ridges of Ocala limestone projecting 15 feet above the general level of the floor. The ore-bearing rock is slightly coherent white sand with white argillaceous matrix containing massive lumps of hard-rock phosphate. This passes upward into orange sand, above which, at the top of the pit, are 2 feet of light-colored sand. Plant number 10, 1 mile north of Newberry, is similar but contains lumps of silicified Suwannee limestone.

Citrus County—The sandy ridge west of Lake Tsala Apopka is underlain by the Alachua formation. In pit number 1 of the Southern Phosphate Development Company, $1\frac{1}{4}$ miles west-southwest of Inverness, the irregular top of the Ocala limestone is overlain by white sand containing the phosphate ore disseminated throughout, usually as large lumps associated with blocks of fossiliferous chert. The chert lumps may occur anywhere within the sand, some of them are at a considerable height above the limestone. Above the ore bed and sharply separated from it is yellow sand of variable thickness. Pit number 3 of the same company is much deeper than pit 1. It is dredged to a depth of 40 feet below water level.

Gilchrist County—The western part of Gilchrist County is believed to lie within the hard-rock phosphate area, but no details of the Alachua formation are available.

Hamilton County—Part of Hamilton County west of Alapaha River contains phosphatic beds presumably residual