

tend to be heavy, inflated, and produced basally with a golden periostracum, but specimens in the spring runs become compressed and sub-rhomboidal, ending in a broad biangulation below the medial line with the periostracum usually yellowish or brownish, sometimes with green rays.

OKLAWAHA RIVER DRAINAGE.—The largest tributary of the St. Johns River is the Oklawaha, which enters from the west between Lake George and Palatka where the water is still tidal. Its principal source is the group of large lakes that includes Griffin, Eustis, Harris, and Dora, all mostly in Lake County, and which are separated from one another by peaty muck. The Oklawaha is joined by Orange Creek whose source is Orange Lake in Alachua County. Cooke (1939: 110) suggested that some of the headwaters have been in existence ever since the Sunderland terrace [Upper Miocene] emerged from the sea, though most of the lakes and all of the lower reaches are of more recent origin.

BLACK CREEK DRAINAGE.—This small system enters the St. Johns River from the west between Palatka and Jacksonville. It appears to be of Pleistocene origin as it flows over the Talbot and Pamlico terraces. The unionid fauna is now effectively separated from the St. Johns by salt water. Specimens of *Elliptio icterina* (Conrad) closely resemble those of the St. Marys River, the next system to the north, whose waters are rather acid. Black Creek contains *Elliptio dariensis* (Lea) which is found in the Altamaha River, Georgia, to the north, but not in the intervening St. Marys or Satilla river systems.

JULINGTON CREEK DRAINAGE.—This small system enters the St. Johns River from the east a few miles south of Jacksonville. It is of recent origin like the St. Johns itself. Its unionid fauna is remarkable because of the large size that individual specimens attain.

DISTRIBUTION OF THE FLORIDA UNIONIDAE

REGIONS

In order to understand the distribution of the Unionidae of peninsular Florida and to emphasize the paucity of species found there, a few remarks on the unionid fauna of the regions to the west and north are needed.

The Apalachicolan region has been generally regarded by previous authors (H. and A. van der Schalie, 1950: 450; Clench and Turner, 1956) as consisting of the river systems from the Escambia to the Suwannee that flow into the Gulf of Mexico. Although they flow into the Atlantic Ocean, the St. Marys and Satilla river systems are now also included in this region, as their modest unionid faunas consist entirely of species found in the Apalachicolan region, the dominant species in them being *Elliptio crassidens crassidens* (Lamarck) (Johnson, 1970: 305) and *E. c. downiei* (Lea) (Johnson, 1970:307) respectively. The former is abundant in the Interior Basin and is found in the Alabama-Coosa and Apalachi-