

cola river systems. It is missing in the Ochlockonee and Suwannee river systems and from peninsular Florida and the Southern Atlantic slope regions, both as defined below. *E.c. crassidens*¹ appears in the Pliocene of peninsular Florida, indicating its presence in this general area for a long time.

The Apalachicolan region as defined above has a unionid fauna of 49 species. Of these, 19 have affinities with species to the west; 9 are endemic to the region; 3 others extend into peninsular Florida; and 11 more are restricted to individual river systems. Three species that were probably once endemic to the Apalachicolan region have spread into the Atlantic Slope region, and four Atlantic Slope species have spread in the opposite direction through a onetime confluence of the headwaters of the Apalachicola and Savannah river systems (Johnson, 1970: 268, text fig. 1).

To the east and north of the Apalachicolan region is the Southern Atlantic Slope region, which extends from the Altamaha River system in Georgia to the James River system in Virginia. This fauna contains 37 species, of which 4 are found in the Apalachicolan region as well.

The peninsular Florida region, defined here as a separate region, is that area below the Suwannee River system in the west and the St. Marys

¹ Described as *Elliptio pachyodon* Pilsbry 1953 [in] Olsson, A. A. and A. Harbison. Pliocene Moll., Southern Florida, Acad. Nat. Sci. Phila., Monog. 8 p. 117, pl. 65, fig. 8 (St. Petersburg [Pinellas Co.], Florida; holotype ANSP 18586).

FIGURE 2. Species of Unionidae that appear to have migrated into peninsular Florida subsequent to maximum Pliocene flooding, mostly from the west.

A. *Uniomereus tetralasmus* (Say). Widely distributed in the Interior Basin, West Gulf Coastal region, Alabama-Coosa River system, and Apalachicolan region: Rio Grande River system, Texas, east to the Suwannee River system, Florida; Peninsular Florida; Southern Atlantic Slope: Altamaha River system, Georgia, north to the Nottaway River of the Chowan River system, North Carolina. As this species is absent in the two intervening river systems between the St. Johns and the Altamaha, it probably spread into Florida from the west.

B. *Villosa vibex* (Conrad). West Gulf Coastal region, Alabama-Coosa River system and Apalachicolan region: Pearl River system, Mississippi, east to the Suwannee River system, Florida; Peninsular Florida; Southern Atlantic Slope: Altamaha River system, Georgia, north to the coastal ponds of the Cape Fear River system, North Carolina. As this species is absent in the two intervening river systems between the St. Johns and Altamaha, it probably spread into Florida from the west.

C. *Elliptio (Elliptio) icterina* (Conrad). Apalachicolan region: Escambia River system, Florida, east to the St. Marys River system, Georgia; Peninsular Florida; Southern Atlantic Slope: Altamaha River system, Georgia, north to the White Oak River, North Carolina. The ecophenotypic variation in this species suggests that it entered Florida from both the west and north.

D. *Carunculina parva* (Barnes). Widely distributed in the Interior Basin, Apalachicolan region, and Peninsular Florida. It is replaced in the Southern Atlantic Slope region by *C. pulla* (Conrad) and must have reached peninsular Florida from the west.