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recording seven genera and twenty species were collected from twenty different collection sites throughout the state from March 1971 until September 1976. Each of the four physiographic regions of the state (Mountain, Piedmont, Sandhills, and Coastal Plain) are represented by collection sites. Thirteen species of intestinal flagellates were identified: *Chilomastix caulleryi, Hexamitus intestinalis, Karotomorpha swezyi, Monocercomonas batrachorum, Monocercomonoides melolonthae, Octomastix batrachorum, Octomitus neglecta, Retortamonas dobelli, Trepomonas agilis, Trimitus parvus, Tritrichomonas augusta, Tritrichomonas batrachorum, Urophagus intestinalis.* The ecological distribution and host-parasite relationships of these parasites are discussed. The morphological descriptions of the intestinal flagellates are based on specimens impregnated with the silver-protein (Protargol) technique.

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Observations on the Natural History of the Black Creek Crayfish, *Procambarus pictus* (Decapoda: Cambaridae)

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The Black Creek crayfish, *Procambarus* (*Ortmannicus*) *pictus* Hobbs, is endemic to the Black Creek drainage in northeast Florida. Data gathered from a monthly survey of one creek suggest that the species is annual. Females with eggs (or young) were found from April to September and measured 22 to 30 mm C.L. (46 to 68 mm T.L.). The number of eggs per female ranged from 100 to 146 ($\bar{X}$ = 127.8). Form 1 males were observed from November through September, reaching a peak in July. Form 1 males ranged in size from 20 to 28 mm C.L. (45 to 72 mm T.L.). Copulation was observed in both the stream and holding buckets during the spring and summer months. Recruitment of young into the population occurred primarily during the summer months.

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Geologic and Geographic Distribution of Florida's Troglobitic Crayfishes

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The current knowledge of Florida's troglobitic crayfish fauna is reviewed and interpretations of distributional patterns are presented. These crayfishes are restricted to certain geologic formations having light to non-existent clastic overburdens. Areas with moderate to heavy accumulations over the carbonate rocks lack these crayfishes. The Crystal River Formation, a group of highly soluble Eocene limestones, is the most important geological element influencing distributions of most Florida cave-dwelling crayfishes. Members of the *Procambarus lucifugus* complex, *Troglocambarus maclanei, Procambarus acherontis* (?), and *Cambarus cryptodytes* are apparently confined to this formation. *Procambarus pallidus* occurs primarily in the Crystal River Formation, although 2 sites may be in the Suwanee Limestone. The remaining species are confined to still other limestones (*Procambarus milleri* in Miami oolite, *Procambarus horsti* and *Procambarus orcinus* in St. Marks Formation).

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Variations in Operculum Structure in Sporophores of the Acellular Slime Molds (Myxomycetes)

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Sporophores of some species of myxomycetes are characterized by the development of a well-defined operculum that separates circumscissilely when the sporophore matures. *Metatrichia vesparium, Trichia crateriformis*, some species of *Licea*, and *Crateriun* are myxomycetes that have operculate sporophores. Previously, the structure of the operculum has been considered to be similar to that of its associated peridium. Scanning electron microscope studies have revealed a distinctly different operculum-peridial structure for some operculate slime molds. Sporophores of *Licea kleistobolus* and *L. parasitica* have non-cellular opercula with pitted or imperforated surfaces. *Crateriun minutum* has a non-cellular operculum that consists of a closely packed stroma of spherical operculum that consists of a closely packed stroma of spherical lime granules. The operculum of *Metatrichia vesparium* sporangia is like the peridium in being smooth and non-cellular. Sporangia of *Trichia crateriformis* possess the most distinctive type of operculum. It is cellular in structure and consists of a one-cell-thick layer of spore-like units. Its associated peridium is non-cellular.

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Amensalistic Competition between *Corbicula manilensis* (Philippi), the Asiatic Clam (Corbiculidae), and Fresh-Water Mussels (Unionidae) in the Savannah River of Georgia and South Carolina (Mollusca: Bivalvia)

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Previous reports (e.g., Fuller and Imlay, 1976, *The ASB Bulletin*, 23:60) have suggested that *Corbicula manilensis* is especially successful in habitats (1) that have been disturbed by man and (2) whose native benthos, especially fresh-water mussels, has been in some degree eliminated. Unfortunately, we have evidence that the (more agile) Asiatic Clam can compete actively against mussels, even in undisturbed areas. During recent surveillance of the Savannah River macroinvertebrate community, we noticed unusually large numbers of uprooted mussels and often found a unionid, about to be dislodged, surrounded by these clams, including individuals burrowing beneath the mussel. Displacement of mussels was more common on firmer substrates, which presumably offer *C. manilensis* added purchase. This competition conforms to Odum's (1959, *Fundamentals of Ecology*) concept of amensalism and possibly explains reports (e.g., Gardner *et al.*, 1976, *The Nautilus*, 90:117-125) of negative correlation between numbers of mussels and of Asiatic Clams. An uprooted mussel probably will become a dead mussel.