

St. Johns River originated as a lagoonal system situated behind barrier islands during the Pamlico when sea levels were 8-10 m higher than at present. Totals of 58 freshwater species, 8 anadromous-catadromous species, 48 widely-euryhaline marine species, 64 limited-euryhaline marine species, and 3 exotic species have been recorded from the system. The freshwater contingent is derived primarily from stocks that survived on offshore islands during high stands of sea level, from immigrants that entered the developing Oklawaha River (the St. Johns River's major tributary) from a Santa Fe River (Suwannee River drainage) refugium as sea levels subsided, and possibly from subsequent colonization via headwaters of the Santa Fe and St. Marys rivers. Phenetic clustering based on species presence-absence links the St. Johns River freshwater ichthyofauna most closely with those of the Satilla, St. Marys, Aucilla, Suwannee, and Ochlockonee rivers, which are then linked to those of other peninsular Florida drainages including the Everglades, Lake Okeechobee, and the Hillsborough, Withlacoochee, Peace, Alafia, Myakka, Little Manatee, Manatee, and Waccasassa rivers. The widespread and pronounced penetration of fresh waters by typically marine fishes makes the

114

MOLER, PAUL E. Florida Game & Fresh Water Fish Commission--Zooogeography of the salamander genera Siren and Pseudobranchius.

Siren and Pseudobranchius comprise the family Sirenidae. These two genera have undergone parallel radiations which likely resulted from periodic isolation of stocks as a consequence of fluctuating sea levels. Marine transgression of the Suwannee Straits resulted in isolation of mainland and peninsular stocks and led to divergence of species. The central Florida ridge, which extends from near Lake Okeechobee north to the Tifton Upland of Georgia, partially isolates the Atlantic and Gulf coastal lowlands and has also contributed to the radiation of the Sirenidae.

115

WILLIAMS, NORRIS H. Florida Museum of Natural History--Role of the Florida Museum of Natural History in biogeographic and biodiversity studies.

The Florida Museum Natural History in Gainesville maintains large natural history collections that include plants, mollusks, butterflies, fishes, amphibians and reptiles, birds, mammals, and plant, invertebrate and vertebrate fossils. With an estimated 20 million specimens in the collections, the museum is a major resource for studies in biogeography and biodiversity. Large portions of these collections center on Florida, but other parts of the world, particularly the Caribbean Basin countries, are well represented. The museum's collections are available for examination by qualified researchers. For further information, contact individual curators.

116

WILLIAMS, JAMES D.¹ and ROBERT S. BUTLER². National Biological Survey¹ and U.S. Fish and Wildlife Service²--Distribution patterns of the freshwater mussels (Family Unionidae) of Florida.

The river systems of Florida harbor a unionid fauna of more than 60 species belonging to 22 genera. Within this geographic area there are two major faunal regions with a total of 41 endemic species. The Apalachicola Region, encompassing drainages from the Escambia River to and including the Suwannee River, and the Peninsular Florida Region which includes the St. Marys River southward on the Atlantic slope and the Waccasassa River southward on the Gulf slope. There are 58 species of mussels in the Apalachicola Region of which 31 are endemic. In the Peninsular Region there are 17 species of which 5 are endemic. In the two regions 18 species are endemic to a single river system. There are only 11 species that occur in both regions. Two additional species, Elliptioideus sloatianus and Elliptio crassidens, occur as fossils in the Peninsular Region but are found living in Apalachicola Region today. Most of this relatively diverse mussel fauna was derived from western Gulf drainages with the remainder originating from south Atlantic slope river systems.

117

THOMAS, MICHAEL C. Florida State Collection of Arthropods--The Florida State Collection of Arthropods.

The Florida State Collection of Arthropods is the largest insect and terrestrial arthropod collection in the South and one of the ten largest in the United States, with more than seven million prepared specimens. Although the collection is worldwide in scope, its greatest strengths are in Florida, the southeastern United States, the Caribbean, and Central America. It serves as a major repository for types and voucher specimens. As a research collection it fulfills an important role in systematic studies as well as in biogeographical and biodiversity research. Its collection of more than 30,000 bulk samples are a unique and valuable resource.

118

CHOATE, PAUL M. University of Florida--Cicindela highlandensis: proposal for endangered species status and for cessation of collecting at all known sites.

The tiger beetle Cicindela highlandensis was described in 1984 from Highlands County in central Florida. Since then its attractiveness to collectors has resulted in intense collecting pressure and a marked decrease in known populations. Populations at and adjacent to the type locality have been reduced to the point of extinction, and may in fact no longer exist. This reduction in numbers cannot be attributed to habitat destruction. Numerous recent searches for additional localities have resulted in the discovery of several sites harboring small, allopatric populations in Highlands

and Polk counties -overzealous collectors will continue lead to survive, see on collecting must restrictions have invertebrates. If endangered species Furthermore, scrub sites are additional research and simultaneous scrub habitats ecosystems are u

119

Edwards, G. of Arthropods Salticidae

So far, 93 species spiders) have The origins of to be: north southeastern (species), Apalachicola (2 species species). Ter occur rarely in north temperate southeastern (most represent of the Florida Keys and are present as many as 10 origin. Eight six of which a species are or

120

WILKINS, I STITH, RC ROELKE, J University of Florida Fish Commission the Florida comparison of American sub-

The Florida Panther subject of consideration; however, no work in subspecies since 19 unavailable to ear review of the morphologic and recent (N=79), were measured (spectrophotometer) and examined for traits, a mid-dorsal compared to average American specimens character being used provide a basis on which and discriminate between statistical methods. twenty years exhibit The cats inhabiting significantly differ

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