HABITAT RELATIONSHIPS OF SUBMERSED AQUATIC VEGETATION OF MISSISSIPPI COASTAL RIVER SYSTEMS

James A. Garner and Hyun Jung Cho

Department of Biology, Jackson State University, 1400 Lynch St., Jackson, MS 39217, USA

Abstract: Submerged aquatic vegetation (SAV) communities of shallow waters in channels, adjoining bayous, streams, inlets, and lagoons of the Pascagoula River, Back Bay of Biloxi, and Pearl River systems of coastal Mississippi were surveyed from May 2008 to May 2010. The location of species of submerged aquatic vegetation (SAV), floating aquatic plants, and the shore emergent plants were recorded along with several habitat features: distance to the Mississippi Sound, shore aspect, channel width, and water depth. The survey extended from the river mouth to upstream areas where stream width became narrow and shade from tall trees on the shore restricted SAV growth. These data will be analyzed with the Classification and Regression Tree technique which is a powerful tool for ecological data. We will attempt to relate SAV presence with the preferred characteristics of the nearby plant community, the aforementioned habitat features, and possibly additional watershed features such as stream order and percent forest cover.

Key-words: Aquatic plants, Mississippi, Pearl River, Pascagoula River, Back Bay of Biloxi, SAV, coastal plant communities, watershed