**Coastal Swamp-Cedar Regeneration 14-Years Post-Hurricane Katrina**
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 **Abstract:**Coauthors: Dr. Joshua J. Granger, Dr. Sandra B. Correa, Dr. Courtney M. Siegert, Dr. Janice L. DuBien The number and severity of hurricanes in the Gulf Coast are increasing, resulting in intensified disturbance to coastal forest communities. Coastal swamp-cedar (Chamaecyparis thyoides (L.) B.S.P.) grows no further than one hundred miles from the coast, making the species and associated plant communities particularly vulnerable to large-scale disturbances such as hurricanes. Occurring primarily along the Atlantic Coast from Maine to Florida, this species does form isolated communities along the Gulf Coast regions of Florida, Alabama, and Mississippi. Coastal swamp-cedar is imperiled and at risk of extirpation by extreme weather events, altered disturbance regimes, changes in hydrology, and management. The primary objective of this study was to evaluate the recovery of coastal swamp-cedar 14-years post-Hurricane Katrina. Pre and post- Hurricane Katrina data were compared with recent data to determine how Southern Mississippi's coastal swamp-cedar has recovered post-Hurricane Katrina. All coastal swamp-cedar â‰¥ 2.5 cm at breast height (1.37 m) were inventoried within a ~4.85 ha study area located within Grand Bay National Wildlife Refuge, Jackson County, Mississippi. This inventory was compared with data obtained after Hurricane Katrina in 2005 to evaluate the long-term impacts of hurricanes on the stand density for this species. Following the 2005 hurricane, coastal swamp-cedar has increased in density across the study site. This increase was spatially correlated with wind damaged and toppled trees previously recorded within this population just after the hurricane. The structural changes caused by the hurricane disturbance supported the regeneration of this imperiled species. Understanding the long-term recovery of coastal swamp-cedar allows land managers and conservationists to more effectively manage for the species on the landscape.