

Nesting Success of American Alligators in a Southeast Texas Coastal Marsh

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Abstract: One of the many factors, and arguably the most important, that affects recruitment into any breeding population of egg laying species is nest success. The nesting ecology of American alligators has been well studied in both Florida and Louisiana, but only one study that concerns alligators nesting in Texas has been published. This study was conducted on an inland site, and probably does not reflect the biology of alligators nesting in coastal marshes. For the past 22 years, locations of alligator nests on the J. D. Murphree Wildlife Management Area (MWMA) in Jefferson County, Texas, have been mapped during annual aerial alligator nest surveys. Nest surveys are conducted during early July, shortly after peak alligator nesting has taken place. Data collected at each nest including its location (levee or marsh), presence of an adult, size of adult, aggression level of adult, evidence of predation and fire ant presence. Preliminary results are that water, topography, and temperature are the limiting factors for American alligators in Texas. Clutch size has declined over time and larger females produced larger clutch sizes.

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