



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: TX3261

Title: Fluctuating environmental parameters in red drum nursery habitats: the influence of habitat quality on larval growth and endocrine function

Focus Categories: Ecology, Climatological Processes

Keywords: cortisol, thyroid hormones, diel cycles, growth, settlement, habitat quality, larval development, red drum

Start Date: 03/01/2001

End Date: 02/28/2002

Federal Funds: \$4,825

Non-Federal Matching Funds: \$9,668

Congressional District: 27

Principal Investigator:

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Student, The University of Texas

Abstract

The overall goal of this project is to examine how daily environmental cycles and atmospheric events (storms and cold fronts, for example) may affect the growth and survival of larval marine fish species. The investigation will utilize laboratory studies that will simulate temperature and environmental conditions which exist in the region. The lab studies will be used to examine how the growth and mortality of one important fish species (red drum) may be affected by environmental stresses, and to measure thyroid hormones and cortisol in these fish change in association with these weather variations.