FOR IMMEDIATE RELEASE
DATE: October 17, 2011
CONTACT: Dr. R. Deborah Overath, 361.825.2467; Cassandra Hinojosa, 361.825.2337

Dr. R. Deborah Overath Receives Grant to Plan the Recovery And Reintroduction of the Endangered South Texas Ambrosia

CORPUS CHRISTI, Texas – Dr. R. Deborah Overath, assistant professor of biology at Texas A&M University-Corpus Christi, has been awarded a $136,854 grant from the U.S. Fish and Wildlife Service (USFWS) /Texas Parks and Wildlife Department (TPWD) to provide resource managers with information needed to plan the recovery and reintroduction of the endangered South Texas Ambrosia.

According to the TPWD, loss of habitat has led to the decline of South Texas Ambrosia (Ambrosia cheiranthifolia), an endangered species that is endemic to South Texas. Conversion of habitat to agricultural fields and urban areas has limited the amount of habitat available for colonization. In addition, introduced species such as buffelgrass (Cenchrus ciliaris) and King Ranch bluestem (Bothriochloa ischaemum var. songaricus) compete with this and other natives of the coastal prairie.

Overath, principal investigator for the “Reproductive Biology, Genetics and Ecology of South Texas Ambrosia: Implications for the Management, Recovery and Reintroduction” grant (Section 6 – Endangered Species), says that restoring Ambrosia and other plants of the coastal prairie will aid in recovery of other species, including animals, and assist the recovery of coastal prairie habitat.

“Ambrosia is endangered because its unique habitat, the Texas Coastal Prairie, has been degraded and destroyed in many places,” said Overath. “Loss of habitat and ecosystems can have cascading effects, including the loss of ecosystem function. In the case of the coastal prairie, loss and degradation of habitat has led to erosion and other issues such as problems with invasive species.”

-MORE-
Overath will use molecular markers to study the forms of vegetative or sexual reproduction important in existing populations, the amounts of variation remaining in the species, and the effects of environmental factors, such as mowing, on population growth. Dr. Dave Grisé, professional assistant professor of biology and co-principal investigator of the grant, will study photosynthesis to examine the health of the extant populations.

Overath and Grisé will collect basic soil information and other environmental and ecological data to determine particular environmental factors that encourage the growth of the South Texas Ambrosia species. The collected data will assist in producing a recovery plan as required under the Endangered Species Act.

The research will complement a $23,587 grant Overath secured from Naval Air Station at Kingsville to work with USFWS scientists to study aspects of the genetics and ecology of the South Texas Ambrosia species and provide data needed to manage the species and aid its recovery.

-A&M-Corpus Christi-