

Current Research Projects Related to the Protecting the Environment Grand Challenge

Long Title	Researcher	Primary Unit
Development of molecular diagnostics tools for detection of Cry1Ac/Cry1Ab (Bt) resistance in bollworm ( <i>H. zea</i> )	Pietrantonio, Patricia	Entomology
Effect of Electrostatic Sprayer in the Coverage of Almonds with Organic Chico Wash Antimicrobial Solution	Castillo, Alejandro	Animal Science
The impacts of cover crops and management-intensive grazing management with no inorganic inputs on soil chemical, physical, and biological properties and their relationships with nutrient cycling, soil biological activity, soil water availability, and pla	Teague, William	Vernon Center
TxDoT Native Plant Integration Program for South, Central and West Texas	Muir, James	Stephenville
A Scalar Approach To Quail Populations and Environmental Constraints In the Rolling Plains of Texas: A Continuation With	Peterson, Markus	Wildlife & Fisheries Science
Collaborative Research: The Influence of Low-Carbon Energy Technology Scientists and Engineers on the Composition of Energy Policy	Peterson, Tarla	Institute Of Renewable Natural Resources
Conservation Strategies for the Protection & Propagation of the Federally Endangered Orchid, Navasota Ladies Tresses	Smeins, Fred	Ecosystem Science And Management
Cooperative Forest Genomics - Enhancing and Conserving Tree Populations for a Changing Climate	Byram, Thomas; Islam, Md; Loopstra, Carol	Ecosystem Science And Management
Evaluation AND/OR Assessment for Turfgrass	Chandra, Ambika	Dallas Center
Improving Water Productivity and New Water Management Technologies To Sustain Rural Economies - TAMU	Lopez, Roel	Texas Water Resources Institute
Reducing the Environmental Impact of Gas Shale Development: Advanced Analytical Methods for Air and Stray Gas Emissions and Produced Brine Characterization	Stuver, Susan	Texas Water Resources Institute
2013 Texas Artificial Reef Study	Duerden, Mathew; Kyle, Gerard; Schuett, Michael	Recreation, Park & Tourism
2016 Regional Water Plan Update	Amosson, Stephen	Agricultural Economics
2016 Regional Water Plan Update	Marek, Thomas	Amarillo Center
319(H) Water Quality Management Plan - Upper Trinity Watershed Total Maximum Daily Load (TMDL)	Jaber, Fouad; Wolfe, Clint	Dallas Center
Ambient Compliance Monitoring of Airborne Fine Particulate Matter In Amarillo, Tx	Auvermann, Brent	Amarillo Center
Antlion Systematics: Building Global Expertise In the Myrmeleon- Tidae (insecta: Neuroptera)	Oswald, John	Entomology
ARTS: Taxonomic revision of Aphelinus species of the world using advanced bioinformatics and molecular methods	Woolley, James	Entomology
Assessing the condition of upland vegetation in four intermountain regions parks, and planning for the restoration of grassland prairie habitats in nine national park units	Smeins, Fred	Ecosystem Science And Management

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Assessing the Conservation Status of Rare Endemic Mussel Species (Family: Unionidae) in the Lower Guadalupe River, Texas	Randklev, Charles	Institute Of Renewable Natural Resources
Assessing wild turkey movements, ecology, and susceptibility to harvest related to supplemental feed for bobwhite quail.	Collier, Bret	Institute Of Renewable Natural Resources
Bacteria Growth, Persistence, and Source Assessment in Rural Texas Landscapes and Streams	Gregory, Lucas; Karthikeyan, Raghupathy	Texas Water Resources Institute
Bacteria Modeling in the Arroyo Colorado Watershed	Lopez, Roel; Wagner, Kevin	Institute Of Renewable Natural Resources
Baseline Survey of the Lower Xingu River Rapids, Brazil: a Highly Diverse, Globally Unique, and Immediately Imperiled Ecosystem	Winemiller, Kirk	Wildlife & Fisheries Science
Bioaccumulation and Fate of Trace Metals in Selected South Texas Native Grasses with Potential for Oilfield Restoration	Cassens, Roger; Fox, William; McAlister, Jason	Temple Center
Botswana EcoExist 2013	Stronza, Amanda	Recreation, Park & Tourism
BREC's Ongoing Fort Hood Water Quality Project	Wolfe, June	Temple Center
Brownsville Resaca Watershed Characterization	Berthold, Troy	Texas Water Resources Institute
Ceap (conservation Effects Assessment Program - 2012	Angerer, Jay; Taylor, Robin A	Temple Center
Characterization of High Volume PM2.5 Particulate Sampler Performance	Faulkner, William	Biological And Agricultural Engineering
Clymer Meadow Watershed Discharge Monitoring Program	Fox, William; Wolfe, June	Temple Center
Data Mining: Comparative Habitat Selection of Feral Hogs and Northern Bobwhite In Shrub-Dominated Rangeland	Cooper, Susan	Uvalde Center
Demonstration and Validation of a Linked Watershed-Riverine Modeling System for DoD Installations	Wolfe, June	Temple Center
Develop A Stormwater Runoff Model Using the Swat Model for the Cypress Waters Development	Wolfe, Clint	Dallas Center
Development of Web-Based Conservation Planning Tools	Jeong, Jaehak	Temple Center
Does Community-Based Rangeland Ecosystem Management Increase Coupled Systems' Resilience To Climate Change In Mongolia	Angerer, Jay	Temple Center
Effect of particle size and air exchange rate on particle concentrations within a reduced-scale room	Faulkner, William	Biological And Agricultural Engineering
Endangered Species	Lopez, Roel	Institute Of Renewable Natural Resources
Evaluate the Impact of Using Traditional and Multi-Paddock Grazing in Southern Tallgrass Prairie on Water Catchment Functions	Ale, Srinivasulu; Teague, William	Vernon Center
Evaluation of Low Volume Tsp Sampler for Use In Measuring Agricultural Pm10 and PM2.5	Faulkner, William	Ag Leadership, Education & Communication

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Fishery Habitat Restoration: Establishing Native Aquatic Vegetation in Texas Parks and Wildlife Managed Lakes	Masser, Michael	Wildlife & Fisheries Science
Flow dependent species: Life History and Habitat Associations in Texas Gulf Coast Rivers	Winemiller, Kirk	Wildlife & Fisheries Science
Genetic Transformation of Proprietary Opuntia Germplasm	Gould, Jean	Ecosystem Science And Management
Heron and Egret Population Sustainability Analysis and Management Guidelines for Naval Base Point Loma, San Diego, CA	Mathewson, Heather	Institute Of Renewable Natural Resources
Hydrology Modeling of Al-Hawezih Marsh, Iraq	Srinivasan, Raghavan	Ecosystem Science And Management
Identifying Priority Sites for the Conservation of the Migratory Endangered Bat <i>Leptonycteris Nivalis</i> In the U.S. & N.Mexico	Lacher, Thomas	Wildlife & Fisheries Science
Impacts of Neonicotinoid Insecticides On Northern Bobwhite Populations In Texas	Mora-Zacarias, Miguel	Wildlife & Fisheries Science
Improving Land-Surface Modeling of Evapotranspiration Processes in Tropical Forests	Moore, Georgianne	Ecosystem Science And Management
Integrated Monitoring and Modeling Strategy	Neill, William	Wildlife & Fisheries Science
Integrated Movement Models for Rio Grande Wild Turkey Habitat Selection	Collier, Bret	Institute Of Renewable Natural Resources
Is Chronic Exposure To Low Levels of Aflatoxins Involved In the Quail Decline?	Cooper, Susan	Uvalde Center
Potential Impacts of Highway Construction Noise & Activity On Birds With Emphasis On the Golden-Cheeked Warbler	Lopez, Roel	Institute Of Renewable Natural Resources
Restoration of multiple wetlands in the Magnolia Beach area, Calhoun County: Phase I Planning	Feagin, Russell	Ecosystem Science And Management
Saltcedar Biological at Lake Meredith and the Canadian River	Michels, Gerald	Amarillo Center
State-Wide Landscape Model Evaluating Quail Declines In Texas	Lopez, Roel	Texas Water Resources Institute
Status and breeding biology of the crawfish frog ( <i>Lithobates areolatus</i> )	Hibbitts, Toby	Institute Of Renewable Natural Resources
Structured Decision Making for Key Deer Management and Recovery	Lopez, Roel; Silvy, Nova	Institute Of Renewable Natural Resources
Surface Water Quality Monitoring to Support the Implementation of the Lampasas River Watershed Protection Plan	Srinivasan, Raghavan	Temple Center
Testing Protocols for Determination of Minimum Explosive Concentrations (MEC) [TX SSP]	McGee, Russell; Parnell, Calvin	Biological And Agricultural Engineering
Texas Conservation Plan for the Dunes Sagebrush Lizard ( <i>Sceloporus arenicolus</i> ) TcP	Lopez, Roel	Institute Of Renewable Natural Resources
To implement the STAR Resource inventory tool utilizing the APEX model in Navarro and Ellis counties	Srinivasan, Raghavan	Ecosystem Science And Management
Translocation of A Freshwater Mussel Population From the San Saba River, Texas	Randklev, Charles	Institute Of Renewable Natural Resources
Use of Amdro To Control Red Imported Fire Ants and Increase Quail Numbers	Silvy, Nova	Wildlife & Fisheries Science

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Validating Soil Interpretations On Regionally Important Soils	Feagley, Sam	Soil & Crop Sciences
Validating soil interpretations on regionally important soils at Stephenville	McGahan, Donald	Stephenville
Water Budgets	Kaiser, Ronald	Recreation, Park & Tourism
Watershed Coordinator Development Program	Wagner, Kevin	Texas Water Resources Institute
Weed Biological Control	Michels, Gerald	Amarillo Center
Air Quality Engineering Teaching Partnership Proposal	Parnell, Calvin	Biological And Agricultural Engineering
Implementing a Verifiable School IPM Program in the Orleans Parish School System	Hurley, Janet	Entomology
NIX, Inc. and Nix of America Year 6	Gold, Roger; Puckett, Robert	Entomology
Validating Soil Interpretations On Regionally Important Soil	Feagley, Sam	Soil And Crop Sciences
Low Impact Development in Fort Worth Service Center	Jaber, Fouad	Biological And Agricultural Engineering
Online Resource Exchange (ORE) Website Development	Lopez, Roel	Institute Renewable & Natural Resources
Preservation of Navasota Ladies Tresses	Hays, Kenneth	Institute Renewable & Natural Resources
2012-2014 Texas Sea Grant Support "Modeling Low Impact Development for Optimal Performance In Texas Coastal Zones"	Jaber, Fouad	Biological And Agricultural Engineering
2013 Sudden Oak Death Detection Survey	Appel, David	Plant Pathology And Microbiology
Brazos Valley WaterMyYard	Fipps, Guy	Biological And Agricultural Engineering
Camp Bullis Vegetation Study	Lopez, Roel	Institute Renewable & Natural Resources
Citizen Survey for White Oak Studio's West University Place Project	Walker, Jamie	Recreation, Park & Tourism Sci.
Coastal CHARM GOMP project proposal for coastal sections of TX / MS / AL	Mikulencak, Steven	Recreation, Park & Tourism Sci.
Coastal Prairie Wetland Restoration at Sheldon Lake State Park	Ondracek, Cullen; Jacob, John; Sipocz, Marissa	Recreation, Park & Tourism Sci.
Geospatial and Information Technology Development and Support—Implementation of the East Wildlife Foundation GIS, Database, and Website	Snelgrove, Robert	Institute Renewable & Natural Resources
Highland Bayou Watershed Protection Plan (WPP), Phase II	Mikulencak, Steven	Recreation, Park & Tourism Sci.
Implementing Biological Control of Saltcedar in the Upper Colorado River Watershed	Knutson, Allen	Entomology
Lockney Water Conservation Demonstration Project	Klose, Steven; Trostle, Calvin	Agricultural Economics
Quail Education & Res Initiative	Cathey, James	Wildlife And Fisheries Sciences

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Support for Implementing Total Maximum Daily Loads (TMDLs) for Bacteria in Dickinson Bayou and Three Tidal Tributaries	Jacob, John; York, Charriss	Recreation, Park & Tourism Sci.
Texas Master Naturalist Extension Associate Project Coordinator	Cathey, James	Wildlife And Fisheries Sciences
USFWS Habitat Stakeholder Assistance	Jacob, John; Mikulencak, Steven	Recreation, Park & Tourism Sci.
Water Saved for Storage in Buchanan and Travis Lakes by Drought Management Options for the LCRA Area	Finch, Calvin	Texas Water Resources Institute
Wildlife Damage Management Program - Fort Bliss	Bodenchuk, Michael	Wildlife Services
Wildlife Management Program	Bodenchuk, Michael	Wildlife Services
Sentinel Landscapes Resource Programming in Support of Military Readiness for Marine Corps Installations East (MCIEAST)	Snelgrove, Robert	Institute Renewable & Natural Resources
Integrating Spatial Educational Experiences (ISEE) - Mapping a New Approach to Teaching and Learning Soil Science	Morgan, Cristine	Soil & Crop Sciences
At last! A Second, Independent Method: Estimating Fugitive PM 10 Flux from Commercial Cattle Feedyards Using the Integrated Horizontal Flux Approach	Auermann, Brent	Amarillo Center
Electronic Survey of Licensed Texas Anglers: Potential Revisions to Regulations Impacting Spotted Seatrout and Flounder Fisheries	Kyle, Gerard; Schuett, Michael	Recreation, Park & Tourism
Managing Insect Pests and Diseases in Multi-Use Landscapes of Bioenergy and Conventional Cropping Systems in the Gulf Coast	Henne, Donald	Weslaco Center
Water-use Efficiency and Water Capture Applicable for Agriculture	Hall, Samuel; McWhorter, George	Borlaug Institute For Int'l Agriculture
2014 Insect Pest Management in Texas High Plains Cotton	Parajulee, Megha	Lubbock Center
2012-2014 Texas Sea Grant Support " Investigation of Short-Term Fluctuation In Shrimp Abundance In the Gulf of Mexico "	Fujiwara, Masami	Wildlife & Fisheries Science
An Integrated Approach to Enhance Water Use and Drought Tolerance in Texas Cotton Production	Fernandez, Carlos; Rajan, Nithya; Cothren, J	Corpus Christi Center
APEX Analysis of Pesticide Fate in Cotton Production Systems	Wang, Xiuying	Temple Center
Application of Raman Spectroscopy for Detection of Aflatoxins in Corn	Lee, Kyung Min	Office Of The State Chemist
Assessing the Climate Change Impacts on Cotton Production in the Texas High Plains using the DSSAT CROPGRO-Cotton Model	Ale, Srinivasulu	Vernon Center
Assessment of the Survival and Movement of Helicoverpa zea Between the New Lep Product and non-Bt Plants in a Refuge in a Bag (RIB) Configuration in 2014 US Field Trials	Brewer, Michael	Corpus Christi Center

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Assessment of the Survival and Movement of Spodoptera frugiperda Between the new Lep Product and non-Bt Plants in a Refuge in a Bag (RIB) Configuration in 2014 US Field Trials	Brewer, Michael	Corpus Christi Center
Conserving Water in Rural and Urban Vegetable Farming	Leskovar, Daniel	Uvalde Center
Evaluation and demonstration of VTA effectiveness to protect runoff water quality on small pork production facilities in Texas	Wagner, Kevin	Texas Water Resources Institute
Impact of Cotton Cropping Systems on Soil Properties in the Texas Rolling Plains and High Plains (#13-453TX)	De Laune, Paul	Vernon Center
Improving Soil Quality To Increase Yield and Reduce Diseases In Organic Rice Production	Dou, Fugen	Beaumont Center
Leaf Disc Bioassays on T0 and T1 Plants with Lepidopteran Pests	Parajulee, Megha	Lubbock Center
Mechanisms of Hypoxic Adaptation in Storage Insect Pests	Zhu Salzman, Keyan	Entomology
Optimised Production of Black Soldier Fly	Tomberlin, Jeffery	Entomology
Protocol Development for Farm and Field-scale Soil Mapping in Argentina	Morgan, Cristine	Soil & Crop Sciences
Sequoia Farm Foundation:Crop Performance and Water Use Efficiency Assessment Using Three Irrigation System Methods	Marek, Thomas; Porter, Dana	Amarillo Center
Use of Genetic & Genomic Tools In Sorghum To Enhance Our Under- Standing of Developmental Processes Limited Yield In Grass	Klein, Patricia	Institute Plant Genomics & Biotechnology
Identification of Plant Nematodes and Pathogens of Regulatory Concern	Ong, Kevin	Plant Pathology And Microbiology
iSchool Pest Manager - Website, App and Interface	Hurley, Janet	Entomology
Texas Turfgrass Crop Profile & Pest Management Strategic Plan (PMSP)	Reynolds, William	Soil And Crop Sciences
Assessment of Field Performance of S2399 in Sorghum	Isakeit, Thomas	Plant Pathology And Microbiology
Control Strategies for Emerging Problem Weeds in Minimum Tillage and Glyphosate Tolerant Cotton	Drake, David	Soil And Crop Sciences
Educational Programming on the Use of Herbicides for the Control of Cotton Plants Post-Harvest in the Lower Rio Grande Valley of Texas	Sekula, Danielle	Entomology
Educational Programming on the Use of Herbicides for the Control of Volunteer Cotton in Corn, Grain Sorghum and Sugarcane in the Lower Rio Grande Valley of Texas	Sekula, Danielle	Entomology
Integrated Pest Management in the Coastal Bend of Texas	Biles, Stephen	Entomology
INTEGRATED PEST MANAGEMENT OF COTTON FLEAHOPPER	Biles, Stephen	Entomology
Investigating the Invasive Sugarcane Aphid in the LRGV	Sekula, Danielle	Entomology

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Reducing Fall Armyworm and Western Bean Cutworm Damage In Strip Refuges Through Toxic Pollen From Nearby Bt Corn	Bynum, Edsel; Porter, Robert; Vandiver, Monti	Entomology
Salinity Management in Irrigated Cotton Production in the Permian Basin TransPecos and Rolling Plains	Drake, David	Soil And Crop Sciences
Southern Region IPM Center's Regulatory Information Network: Leadership for the Southwest Sub-Region	Matocha, Mark	Ag & Environmental Safety
Strengthening of Soil and Water Testing Services and Crop Validation Strategies	Norton, Roger	Borlaug Institute For Int'l Agriculture
Supplemental Psyllid and Citrus Survey for Detecting Citrus Greening in Southeast Texas	Appel, David; Ong, Kevin	Plant Pathology And Microbiology
Texas IPM Program	Allen, Charles	Entomology
Application of the Swat Model To Determine the Environmental Sustainability of Feedstock Product of Biofuels In Hawaii	Srinivasan, Raghavan	Temple Center
Determining the Influence of Sandcapping Depth and Texture on Bermudagrass Fairway Performance, Irrigation Requirements, and Drought Resistance	McInnes, Kevin; Thomas, James; Wherley, Benjamin	Soil & Crop Sciences
Fundamental and Applied Development of AIP Technology	Huang, Yongheng	Biological And Agricultural Engineering
Impacts of Oil and Gas Interests on Private Lands Conservation in Environmentally Sensitive Coastal Areas of Texas	Kreuter, Urs	Ecosystem Science And Management
Robust Visnir Models to Measure TPH in Petroleum Oil Contaminated Soils	Ge, Yufeng	Biological And Agricultural Engineering
The Effect of Coir as a Surface-Applied Topdress to Improve St. Augustine Grass Grown In	Wherley, Benjamin	Soil & Crop Sciences
Improvement of Spatial Data Management	Bonaiti, Gabriele	Biological And Agricultural Engineering