

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Tennessee Early Childhood Training Alliance (TECTA) 2010-11

Activation Amount: \$440,919.00

Agency: Tennessee Department of Human Services (via TSU)

Personnel:

PI - Sue Bailey, Human Ecology

Support Personnel - Darcey Neyman, Human Ecology

Support Personnel - Jennifer Fields, TECTA Project

Support Personnel - Leslie Hamlett, Human Ecology

Abstract:

The Tennessee Early Childhood Training Alliance is a statewide training system based on the belief that all early childhood education personnel need to acquire the recognized professional knowledge and skills to provide appropriate care and education for young children. Research shows that quality early childhood education plays an important role in prepare children to enter school ready to learn. TECTA training puts current research into practice with a curriculum centered on professional core competencies. The Tennessee Early Childhood Training Alliance provides training, consultation, and financial assistance to agencies and family child care providers seeking higher education.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Healthy Start for Upper Cumberland Families and Young Children 2010-11

Activation Amount: \$11,889.00

Agency: Stephens Center

Personnel:

PI - Martha Howard, Curriculum and Instruction

Support Personnel - Melinda Swafford, Human Ecology

Abstract:

Healthy Start provides families of young children with training, materials, and support to help in the prevention of child abuse and neglect. Families benefit from Healthy Start services by expanding the circle of support and providing in-home contact from family service workers. Family service workers are on-call and available any time of day. This subcontract with Tennessee Tech University aids in providing up-to-date in-service training for Healthy Start personnel in order for them to stay in touch with the latest research regarding best practice for children and families. The goals of this partnership is to enhance the services of Healthy Start by imparting the latest, applicable early childhood knowledge. It is then the goal that family service workers directly apply the learned techniques to Healthy Start's work with children and families in the Upper Cumberland region of Tennessee.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Tennessee Small Business Development Center Online Center

Activation Amount: \$20,000.00

Agency: Tennessee Small Business Development Center

Personnel:

PI - Vicki Henley, Small Business Development Center

Support Personnel - Jennifer Dangelo,

Abstract:

The purpose of this project is to serve as the Tennessee Small Business Development Center Lead Center's Online Counseling and Training Center, responsible to provide initial online counseling to clients who initiate contact via the TSBDC website and request services through the Online Center. The goal of this project is to provide a viable and effective web-based mechanism through which potential clients and trainees can access TSBDC services. In addition, the Online Center will manage and facilitate the DHS Childcare online training and course CEU completion certification process. The Online Center will, after initial evaluation of client needs, redirect clients to the appropriate TSBDC service center for further services. The Online Center will maintain records of counseling and training provided through the Online Center.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: FACS Career Technical Education Grant 2009-11

Activation Amount: \$18,050.00

Agency: Tennessee Department of Education

Personnel:

PI - Sue Bailey, Human Ecology

Senior Personnel - Leeann Jolley, Human Ecology

Senior Personnel - Melinda Swafford, Human Ecology

Abstract:

The purpose of this grant is to provide services to the FACS Middle and High School teachers in Tennessee. Services include: managing and updating website, conducting teacher visitations, and presenting educational leadership and development workshops. Included in the grant is the opportunity to be State Department of Education FACS consultants.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Propagation and Re-establishment of Endangered Tennessee Mussels

Activation Amount: \$30,000.00

Agency: Tennessee Wildlife Resources Agency

Personnel:

PI - James Layzer, Cooperative Fisheries Unit

Support Personnel - Kendall Moles, Water Center

Abstract:

The purpose of the project is to preserve the biological diversity of Tennessee's native freshwater mussel fauna by collecting rare, threatened, and endangered adult mussels from the Clinch and Duck Rivers in Tennessee for natural history research and propagation for release into the Duck, French Broad, Nolichucky, and Big South Fork Rivers.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Center for Manufacturing Research-State Appropriation 2010-11 MOE STIMULUS FUNDS

Activation Amount: \$44,000.00

Agency: Tennessee Higher Education Commission

Personnel:

PI - Kenneth Currie, Manufacturing Center

Support Personnel - Joel Seber, Manufacturing Center

Abstract:

State MOE funds for 2010-11.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Center for Manufacturing Research-State Appropriation 2010-11

Activation Amount: \$1,488,200.00

Agency: Tennessee Higher Education Commission

Personnel:

PI - Kenneth Currie, Manufacturing Center
Support Personnel - Brian Bates, Manufacturing Center
Support Personnel - Cynthia Rice-York, Manufacturing Center
Support Personnel - Darlene Wiegand, Manufacturing Center
Support Personnel - Earl Hawkins, Manufacturing Center
Support Personnel - Joel Seber, Manufacturing Center
Support Personnel - Kenan Hatipoglu,
Support Personnel - Kwun-Lon Ting, Manufacturing Center
Support Personnel - Michael Renfro, Manufacturing Center
Support Personnel - Michelle Davis, Manufacturing Center
Support Personnel - Nan Guo, Manufacturing Center
Support Personnel - Phyllis Stallion, Manufacturing Center
Support Personnel - Rob Reab, Manufacturing Center
Support Personnel - Robert Qiu, Manufacturing Center
Support Personnel - Sue Richardson, Manufacturing Center
Support Personnel - Suzanne Henry, Manufacturing Center

Abstract:

State appropriation for Manufacturing Center 2010-11.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Barrens Heelsplitter Ecology and Population Dynamics

Activation Amount: \$10,000.00

Agency: Tennessee Wildlife Resources Agency

Personnel:

PI - James Layzer, Cooperative Fisheries Unit

Support Personnel - Benjamin Davis, Biology

Support Personnel - Kendall Moles, Water Center

Abstract:

The Barrens heelsplitter is an undescribed mussel that is only found in parts of the upper Duck River drainage, Caney Fork River drainage and Collins River drainage in Grundy, Coffee, Warren, and Cannon Counties, Tennessee. It is found mainly in the headwater reaches of streams that drain a flat landscape feature known as the Barrens Plateau. Virtually nothing is known about the Barrens heelsplitter. This project proposes to examine all aspects of its life history including:

1. Determine its spawning and brooding period;
2. Determine fecundity;
3. Determine age and growth;
4. Determine size and age at sexual maturity;
5. Determine suitable host(s) in the laboratory, and verify their use as hosts in the field;
6. Determine natural glochidial infestation rates;
7. Determine population densities at 3 to 5 sites.

Expected Results: Because of the paucity of information regarding the distribution, ecology or population dynamics of this species, this project will provide insight into each of these research areas.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Tennessee Early Childhood Pilot Program 2010-11

Activation Amount: \$85,038.00

Agency: Putnam County School Board

Personnel:

PI - Jane Baker, Curriculum and Instruction

Support Personnel - Ayse Mitchell, Child Development Laboratory

Support Personnel - Beula H. Baker,

Abstract:

The objective of the program is to provide comprehensive services for 16 three and four year old children and their families. The program will meet the guidelines of Child Care Standards of Tennessee, as regulated by the Department of Education and/or the Department of Human Services. Priority for enrollment would be given to at-risk children.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: MOE Water Center

Activation Amount: \$34,500.00

Agency: State of Tennessee

Personnel:

PI - Dennis George, Water Center

Abstract:

MOE funds for the Water Center for 2010-11.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Center for the Management, Utilization and Protection of Water Resources 2010-11

Activation Amount: \$1,167,500.00

Agency: Tennessee Board of Regents

Personnel:

PI - Dennis George, Water Center
Support Personnel - Amy Knox, Water Center
Support Personnel - Daniel Dodson, Water Center
Support Personnel - Ginger Ensor, Water Center
Support Personnel - Glenda Shanks, Water Center
Support Personnel - Kim Stearman, Water Center
Support Personnel - Mary Williford, Water Center
Support Personnel - Michael Kuley, Water Center
Support Personnel - Sandra Pigg, Water Center
Support Personnel - Sandy Dodson, Water Center
Support Personnel - Sharon Berk, Water Center
Support Personnel - Yvette Clark, Water Center

Abstract:

Funds for the Center for the Management, Utilization and Protection of Water Resources 2010-11.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: MOE for Center for Energy Systems Research 2010-11

Activation Amount: \$26,100.00

Agency: Tennessee Higher Education Commission

Personnel:

PI - Sastry Munukutla, Energy Center

Abstract:

Maintenance of effort funds for Center for Energy Systems Research 2010-11.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Center for Energy Systems Research State Appropriation 2010-11

Activation Amount: \$882,600.00

Agency: Tennessee Higher Education Commission

Personnel:

PI - Subramaniam Deivanayagam, Engineering Administration

Support Personnel - Anthony Greenway, Energy Center

Support Personnel - Etter Staggs, Energy Center

Support Personnel - Linda Lee, Energy Center

Support Personnel - Robert Craven, Energy Center

Support Personnel - Sastry Munukutla, Energy Center

Support Personnel - Wenzhong Gao, Energy Center

Abstract:

State appropriation for Center for Energy Systems Research 2010-11.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Compost Center and High Tunnel Construction and Management

Activation Amount: \$98,525.00

Agency: Tennessee Agricultural Enhancement Program (via TN Dept. of Agriculture)

Personnel:

Co-PI - Michael Best, Agriculture

PI - Kim Stearman, Water Center

Abstract:

This project will address the goal of increasing farm income in Tennessee by encouraging the expansion, improvement, and diversification of agricultural groups and associations, agri-business operations, farms, and university programs. These activities may include, but are not limited to: agricultural market promotion, education, identifying and utilizing new marketing opportunities, increasing sales of diversified agricultural products grown in Tennessee, installation of infrastructure and purchase of specialty equipment.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Collaborative Research: Wideband Cognitive Radio Communication Systems: Modeling, Algorithms and Test-Bed

Activation Amount: \$55,359.00

Agency: National Science Foundation

Personnel:

PI - Robert Qiu, Manufacturing Center

Abstract:

The research objective is to tackle the fundamental problems in wide band cognitive radio, namely statistical information of wideband spectrum and corresponding system design, from both theoretical and implementation aspects. A hardware testbed will be established to demonstrate proposed statistical modeling and algorithms. The inter-disciplinary essence of our proposed research also lends itself to cross-disciplinary collaboration and education, e.g. data mining in the modeling involves researchers in departments such as EE, CS and Math and provides a good joint project for courses like wireless communications and machine learning. The proposed research will bring substantial breakthrough in the research community of cognitive radio. The proposed research will contribute fundamental models, algorithms and testbed to the new arena of wideband cognitive radio. It also provides new methodologies and techniques for fields like statistical modeling, signal processing, communication theory and hardware implementation. The proposed research also encourages active participation from students of underrepresented groups, such as minority students; the PIs have collaboration with the UTK chapter of the National Society of Black Engineers (NSBE) and will periodically provide lectures to NSBE members. Two high school students are working in the one PI's lab through the Pre-college Research Program and will be involved into the proposed research, which helps to attract young gifted high school students into the area of engineering.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Positive Behavior Support and Inclusion (PBS&I) Project 2009-12

Activation Amount: \$320,000.00

Agency: Tennessee Department of Education

Personnel:

PI - Larry Peach, Education Administration

Senior Personnel - Jeff Rippey, Information Technology Services

Senior Personnel - John Wheeler, Education Administration

Senior Personnel - Michael Mayton, Curriculum and Instruction

Support Personnel - Amy Johnson-Gwilt, Curriculum and Instruction

Support Personnel - Charles Long, Learning Resources Center

Support Personnel - Julie Ton, Curriculum and Instruction

Support Personnel - Richard Bumbalough, Curriculum and Instruction

Abstract:

The purpose of the TTU Positive Behavior Support and Inclusion (PBS&I) project will be to deliver (a) technical assistance, (b) consultation, and (c) training in the area of positive behavior supports (PBS) and inclusion to regional LEA's in the 22-county Upper Cumberland region of middle Tennessee.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Collection of Data at Deer Check Stations

Activation Amount: \$750.00

Agency: Tennessee Wildlife Resources Agency

Personnel:

PI - Thomas Roberts, Biology

Abstract:

This study is conducted annually in cooperation with the Tennessee Wildlife Resources Agency (TWRA) to provide data on the size and quality of the white-tailed deer (*Odocoileus virginianus*) herd in the state. Students in the Wildlife and Fisheries Science program work either independently or with a representative from TWRA on the opening week of the regular firearms season at designated stations across the state and collect basic biological information on harvested animals. Data collected at all stations includes: sex, age, antler size, and condition. At some stations tissue samples are taken for evaluation relative to potential infectious diseases. These data in conjunction with that from other stations provide TWRA biologists and managers with the information needed to determine if current management strategies are producing their desired effect at both the regional and state levels. Students participating in active learning projects such as this have the opportunity to utilize the skills they have learned in the classroom and well as gain valuable experience working with wildlife professionals.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Tennessee Small Business Development Center at TTU 2010

Activation Amount: \$2,304.00

Agency: Tennessee Small Business Development Center

Personnel:

PI - Vicki Henley, Small Business Development Center

Support Personnel - Charlotte Gentry,

Support Personnel - Jennifer Dangelo,

Abstract:

Tennessee Small Business Development Center funds for 2010

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Tennessee Association FFA Camp Clements 2011-15

Activation Amount: \$103,468.00

Agency: Tennessee Department of Education

Personnel:

PI - Ben Byler, Agriculture

Support Personnel - Brenda Bray, Agriculture

Abstract:

Administrative and staff support for Camp Clements FFA Leadership Training camp.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Advanced Systems Development of the MRWS: A Remote Climbing Robot for Automating Welding Processes in the Ship Building Industry

Activation Amount: \$24,011.00

Agency: Robotic Technologies of Tennessee (RTT) (via Natl Shipbuilding Res Program)

Personnel:

PI - Ahmed Elsayy, Manufacturing and Industrial Technology

Abstract:

Tennessee Tech University (TTU) will support RTT and its partners, Northrop Grumman Shipbuilding Gulf Coast and Bath Iron Works to enhance the MRWS platform to leverage the true potential of this system. The enhanced platform will allow for remote operation across a wide range of weld types in a number of different welding environments. The enhancements will: 1) expand the range of weld tasks the MRWS can address; 2) further reduce support structures (scaffolding, man lifts, etc.) and other time consuming procedures; 3) increase by up to 50% the efficiency of the weld-time process; 4) increase safety levels for workers; 5) enable less skilled (or inexperienced welders) to take on more complex welding tasks; and 6) provide shipyard supervisors flexible labor alternatives for solving construction challenges.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Upper Cumberland Child Care Resource and Referral 2010-11

Activation Amount: \$550,317.00

Agency: Signal Centers of Chattanooga (via Department of Human Services)

Personnel:

Co-PI - Leeann Jolley, Human Ecology

PI - Sue Bailey, Human Ecology

Support Personnel - Adrienne Butler, Human Ecology

Support Personnel - Angela Floyd, Human Ecology

Support Personnel - Betty Vaudt, Human Ecology

Support Personnel - Gayle Callis, Human Ecology

Support Personnel - Heather Bowen, Human Ecology

Support Personnel - Lynn Twitty, Human Ecology

Support Personnel - Paige Paul, Human Ecology

Support Personnel - Stephanie Lazuka, Human Ecology

Support Personnel - Susan Gilbreath, Human Ecology

Abstract:

Upper Cumberland Child Care Resource and Referral (CCRR), a part of Tennessee CCRR Network, provides resources for parents, child care professionals, employers, and the community that support quality care and development of our children. Upper Cumberland CCRR, serving 17 area counties, provides parents with information about quality dependent care and refers parents to available resources. The center also provides technical support and in-service training to the child care workforce, with a special emphasis on birth to three and after-school programs. Center staff partner with local communities to assist in meeting their child care needs.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: TTU Base-TN Teaching Program - 2009-12

Activation Amount: \$95,000.00

Agency: Tennessee Department of Education

Personnel:

Co-PI - Michael Mayton, Curriculum and Instruction

PI - Helen Dainty, Curriculum and Instruction

Senior Personnel - Thomas Willis, Curriculum and Instruction

Support Personnel - Laura Graves, Curriculum and Instruction

Abstract:

Become A Special Educator in TN Teaching Program provides financial support for persons who meet eligibility criteria and desire to earn an initial TN licensure in special education or endorsement in special education. Support involves a commitment to teach in a TN public school two years for each academic year of financial support received, servicing students with disabilities ages birth through 21. Financial support will be in the form of tuition remission for either part-time or full-time study to professional personnel who desire to work in programs for the education of children with disabilities. Participation is limited to post-baccalaureate candidates admitted to teacher education programs (or eligible to be admitted and have provided written intent to seek admission) in approved TN colleges and universities. Educational assistants with at least two years of transferable college credit who are currently employed by a TN public school and service students with disabilities ages birth through 21. TTU will maintain a recruitment program to enroll 10 or more individuals who are either educational assistants in public TN special education classrooms serving students with disabilities who have two years or more of transferable college credit or post-baccalaureate students with a degree other than special education in coursework leading to special education licensure. TTU will maintain selection procedures and protocols and empanel a selection committee to review and make decisions about eligible applicants. Selected participants will be monitored and academic counseling sessions with all participating students will be held to determine the coursework needed and to help facilitate successful completion of the program leading to special education licensure and then employment in TN public school classrooms.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: TDE Special Education Institute - Strand I (2009-12)

Activation Amount: \$191,304.00

Agency: Tennessee Department of Education

Personnel:

PI - Helen Dainty, Curriculum and Instruction
Senior Personnel - Thomas Willis, Curriculum and Instruction
Support Personnel - Amy Locke,
Support Personnel - Jerry Bush,
Support Personnel - Julie Ton, Curriculum and Instruction
Support Personnel - Laura Graves, Curriculum and Instruction
Support Personnel - Melanie Bussell,
Support Personnel - Michael Mayton, Curriculum and Instruction
Support Personnel - Peggy Davis, Curriculum and Instruction
Support Personnel - Rhonda Folio, Curriculum and Instruction

Abstract:

Strand I of the Institute will highlight the Tennessee Department of Education's Personnel Development Plan, which focuses upon the preparation of public school personnel to provide quality education for persons with disabilities. Regular and special educators in Tennessee will be invited to attend and study in depth the most successful methods of teaching students with disabilities, assessment procedures, and the successful management of aberrant behaviors both in the regular classroom and Special Education classroom.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: TDE Special Education - Strand II (2009-12)

Activation Amount: \$55,539.00

Agency: Tennessee Department of Education

Personnel:

PI - Helen Dainty, Curriculum and Instruction

Senior Personnel - Thomas Willis, Curriculum and Instruction

Support Personnel - Elouise Jackson, Curriculum and Instruction

Support Personnel - Jerry Bush,

Support Personnel - Melinda Swafford, Human Ecology

Support Personnel - Michael Mayton, Curriculum and Instruction

Abstract:

Strand II of the Institute will focus on Pre-K-1/Early Childhood Special Education. This institute will be conducted in conjunction and concurrently with the Summer Institute Strand I: Focus Special Education. The overriding mission of the Strand II Institute will be to improve and enhance the ability of 18 early childhood educators and early childhood special educators to deliver best practice services to young children with disabilities in both public school and other service delivery settings.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Monitoring Groundwater Hydrology and Selected Plant Communities at the Three Rivers Mitigation Bank

Activation Amount: \$16,260.00

Agency: Tennessee Wildlife Resources Agency

Personnel:

Co-PI - Kenneth Morgan, Biology

PI - Thomas Roberts, Biology

Abstract:

This study is designed to monitor the hydrology and plant community development at a 760-acre bottomland hardwood restoration site in Obion County, Tennessee. In May 2007 three permanent vegetation-monitoring plots were established in representative areas within each of four elevation zones present. Vegetation sampling was conducted in September. Data collected included species composition, percent cover by species, and tree density. One water level sensor and data logger were installed in one groundwater well located in each zone. The sensors are designed to measure water levels using a pressure transducer. Soils samples were taken within each plot and evaluated to determine if they met the standards for being considered hydric. The hydrology, vegetation, and soil data confirmed that the three lower zones within the project area were jurisdictional wetland. The hydroperiod of the highest zone was not sufficient to meet the criteria for "wetland hydrology." Additional monitoring during periods of normal rainfall are needed to further evaluate the status of this zone.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Special Ed Programs and Services-Assistive Technology Grant

Activation Amount: \$5,000.00

Agency: Tennessee Department of Education

Personnel:

PI - Carl Owens, Curriculum and Instruction

Abstract:

Tennessee Tech University has contracted with the Tennessee Department of Education to make available to students in Special Education teacher preparation programs and students who are required to enroll in "Introduction to Special Education" in Tennessee Institutions of Higher Education, information and practice with various assistive technology programs and devices.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Scientific Support for the Cumberland Habitat Conservations Plans 2010-11

Activation Amount: \$268,000.00

Agency: The Nature Conservancy

Personnel:

Co-PI - Evan Hart, Earth Sciences

Co-PI - Joseph Daraio, Water Center

Co-PI - Malissa Davis, Water Center

Co-PI - Trisha Johnson, Water Center

PI - Hayden Mattingly, Biology

Support Personnel - Christie Peterson, Water Center

Support Personnel - John Johansen, Water Center

Abstract:

Two Habitat Conservation Plans (HCPs) are currently under development on the Cumberland Plateau of Tennessee: the Northern Cumberlands Forest Resources HCP (NCFRHCP), and the Water Resources HCP (WRHCP). In the former, the Tennessee Wildlife Resources Agency (TWRA) is developing an HCP for forest management practices on selected state wildlife management areas on the Cumberland Plateau. For the WRHCP, the cities of Crossville and Wartburg and the counties of Cumberland, Morgan, and Scott have passed resolutions to move forward for planning an HCP to cover commercial and residential development related activities for their area. Tennessee Technological University (TTU) has provided formal scientific and technical support for the Cumberland Habitat Conservation Plans since 2006. In this grant period (July 2010-11), we will continue to providing scientific support with the following objectives: 1) facilitate review of the NCFRHCKP before and after its submission to USFWS during 2010; 2) coordinate and direct the Water Resources Core Team as it develops the conservation program for the WRHCP; 3) coordinate the review activities of nine taxonomically focused Species Working Groups; 4) develop one or more models to predict take of endangered species and/or their habitat as a result of activities related to commercial and residential development for the WRHCP; 5) develop computer software interfaces for WRHCP to facilitate data management, analysis, and annual report writing; 6) publish scientific and technical aspects of the development of both HCPs in scientific journals; and 7) work closely with staff at University of Tennessee-Knoxville and The Nature Conservancy to coordinate development and writing of all required components for both HCPs.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: The Reintroduction of Mussels into the Little Tennessee River at the Calderwood Dam By-Pass, Blount and Monroe Counties

Activation Amount: \$25,000.00

Agency: Tennessee Wildlife Resources Agency

Personnel:

PI - James Layzer, Cooperative Fisheries Unit

Support Personnel - Benjamin Davis, Biology

Support Personnel - Kendall Moles, Water Center

Abstract:

This project will determine the status of mussel species and feasibility of reintroductions to the Little Tennessee River at the Calderwood Dam By-Pass. Qualitative searches using snorkel gear or view buckets will be used to determine species currently present in the by-pass reach. All mussels collected will be identified and measured to determine population structure.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: TBR Marketing RODP Campaign

Activation Amount: \$50,000.00

Agency: Tennessee Board of Regents

Personnel:

Co-PI - Ferdinand Difurio, Economics, Finance and Marketing

Co-PI - J. D. Weinrauch, Economics, Finance and Marketing

PI - Kevin Liska, Business Media Center

Support Personnel - Julie Brewer, Business Media Center

Support Personnel - Michael Aikens, Business Media Center

Support Personnel - Paul Harrison, Business Media Center

Abstract:

The TTU Business Media Center will develop marketing tasks and implement innovative, highly sophisticated marketing solutions that will position ROCC to excel in the dynamic and increasingly competitive online educational market.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Evaluation of Fish Stockings into Tennessee Warm Water and Cool Water Reservoirs

Activation Amount: \$35,850.00

Agency: Tennessee Wildlife Resources Agency

Personnel:

PI - Phillip Bettoli, Cooperative Fisheries Unit

Support Personnel - Benjamin Davis, Biology

Abstract:

In conjunction with Tennessee Wildlife Resources Agency (TWRA) biologists and supervisors, TTU personnel will design and conduct field and laboratory studies to evaluate current and future TWRA coolwater and warmwater hatchery stocking programs in Tennessee reservoirs. Where feasible, TTU personnel will estimate growth rates, survival rates, habitat use, contributions to year class strength, and/or rates of return to the creel for reservoir species reared and stocked by TWRA such as largemouth bass, striped bass, hybrid striped bass, walleyes, saugers, and muskellunge. TTU personnel will investigate the effects of stocking procedures, stocking density, genetic strain, and/or size-at-stocking on survival, growth, and rates of return to the creel of hatchery fish stocked into Tennessee reservoirs.

Grants Awarded Report

From: 7/1/10 to 7/31/10

Project Title: Reservoir Trout Fisheries

Activation Amount: \$70,000.00

Agency: Tennessee Wildlife Resources Agency

Personnel:

PI - Phillip Bettoli, Cooperative Fisheries Unit

Abstract:

The goal of this project is to describe the fate and dynamics of stocked trout populations in Tennessee reservoirs. The Tennessee Wildlife Resources Agency's Trout Management Plan for Tennessee 2006-2016 identified a need for research on these fisheries. This project will allow managers to more efficiently allocate hatchery trout and identify ways improve the management of these coldwater fisheries. Tennessee Technological University students and staff and U.S. Geological Survey employees will evaluate hatchery-supported trout populations in the four largest reservoirs stocked in the state: Dale Hollow, Watauga, South Holston, and Chilhowee. Objectives will be to (1) determine the most cost-effective methods to scientifically sample trout in these reservoirs; (2) estimate the volume of suitable trout habitat in each reservoir and model the relationship between hydrology, temperature, and oxygen profiles; (3) estimate the survival and growth of stocked trout; (4) estimate the relative abundance of prey species; and (5) identify, where feasible, factors limiting growth, survival, and returns to the creel of stocked trout.