

Team receives ARS Technology Transfer Award

A team of researchers that includes Associate Professor Scott Miller in the Department of Renewable Resources has received a 2008 Agricultural Research Service (ARS) Technology Transfer Award.

The award recognizes the development of the Automated Geospatial Watershed Assessment Tool and the transfer of the tool to government organizations. To date, Miller said more than 600 registered users worldwide are using the free tool.

Miller is part of the Automated Geospatial Watershed Assessment (AGWA) team comprised of the University of Wyoming, University of Arizona, U.S. Department of Agriculture ARS Southwest Watershed Research Center, the U.S.-EPA Landscape Ecology Branch and the USGS.

“This team developed a new computer modeling tool that helps keep our nation’s watersheds cleaner,” said Miller. “More than 80 percent of our fresh water comes from precipitation that falls on watersheds and seeps into groundwater or flows into streams and reservoirs. This tool is a geographic information system (GIS)-driven interface to run hydrologic models for land management decision support since they aid in the interpretation of impacts (positive and negative) associated with land cover transition.”

The AGWA tool helps assess land use and climate change impacts on water yield and quality. Miller said AGWA can use data from many sources and enables the user to visualize and compare results using a GIS software package.

“It can be used to predict land management practices on water resources,” said Miller. “For example, AGWA can estimate trends and the magnitude of sediment effects and chemical yields.”

Prior to the AGWA, no such tool existed, Miller said. “Now, decision makers, land managers, farmers, and environmentalists have a single, comprehensive tool that can provide a long-range model to evaluate large, complex watersheds with varying soils, land uses, and management conditions – and related environmental and economic impact.”

The tool is available for download at www.tucson.ars.ag.gov/agwa.

Proposals submitted

Beck, Jeffrey: \$56,590 to Wyoming Game and Fish Department for “Identifying Habitats for Greater Sage-Grouse Population Persistence within the Atlantic Rim, Wyoming Coal-bed Methane Field,” and \$59,595 for “Comparison of Prescribed Burning and Mowing to Enhance Greater Sage-Grouse Nesting and Brood-Rearing Habitat in the Big Horn Basin, Wyoming.”

Liberles, Jessica: \$45,000 to National Institutes of Health for “Engineering Light Activated Enzymes Using Nature’s Own Building Blocks.”

Paige, Ginger, Ann Hild, and Matt Holloran: \$80,372 to Wyoming Community Foundation for “Quantifying Sagebrush Structure on Ecological Sites in the Green River Basin.”

Paige, Ginger, and Steve Jones: \$30,000 to Wyoming Department of Agriculture for “Greybull River Streambed Processes and E. coli Distribution.”

Calendar

Calendar:

January 7: Wyoming rangeland management school 201, Worland

January 7-11: Western National 4-H Roundup, Denver, Colo.

January 10-11: Shooting sports leader certification clinic, Casper

January 15: Powell Research and Extension Center advisory board meeting, Thermopolis

January 20-22: Commercial pesticide applicator recertification, Casper

January 21-February 1: Shooting sports leader certification clinic, Sheridan

February 3-4: Wyoming Extension’s Strategically and Technologically Informative (WESTI) Ag Days, Worland Community Center

For a statewide calendar, please access the ag college Web site at www.uwyo.edu/UWAG/