

Texas A&M Student Receives Fellowship for Rural Water Planning Research

Summer 2002 - For over a decade, Matt Wagner has devoted his time and expertise to preserving Texas wildlife, including groundwater resources.

“Over 95 percent of Texas is privately owned,” Matt explained. “More and more landowners are interested in water, groundwater in particular.”

As a Technical Guidance Biologist for the Texas Parks and Wildlife Department, Matt works with 120 landowner Wildlife Management Plans, totaling over 360,000 acres. While assisting them with their immediate management goals, he also educates them about the long-term importance of open space conservation, watershed management, and aquifer sustainability.

“I have reached a stage in my career where I realize that water and open space planning are going to be the keys to conservation in private land states like Texas,” he said. “Although agricultural products remain the most important economic activity in rural Texas, wildlife-based recreation and watershed management for water quality and supply will grow in economic value to private landowners.”

Matt was chosen from among six candidates to be the 2002 NWRI fellow because of his top-ranked research proposal, “Landowner Associations: Forums for Water and Land Conservation in Texas.” With the help of the NWRI fellowship, Matt plans to assess the potential for providing public/private partnerships that will generate incentives for land and water management practices to maintain watershed integrity, aquifer recharge, and wildlife habitat protection.

“As a graduate student, my research goals are to investigate new and innovative sources of economic returns from the land to prevent, or at least slow, the fragmentation of large land holdings into small tracts for development,” he said. “A market-based approach to natural resource management may provide economic alternatives for landowners to protect habitat and open space in the future.”

The potential benefits of his research are numerous, including determining the feasibility of forming local landowner cooperatives within groundwater districts, encouraging private landowners to collectively market their groundwater to meet urban demand, protecting the land surface for compatible open space and wildlife management purposes, reducing the need for more surface water reservoirs, and providing the economic incentive for habitat protection in the future.

“It’s a good thing not just for the landowners, but for people in the cities as well,” he noted. “It’s really a win-win situation.”

Matt recently completed his second year as a doctoral student in the Department of Urban and Regional Studies at Texas A&M University in College Station, Texas, and is

currently working on his dissertation in rural water planning. His interest in Texas wildlife and natural resource management stems from his love of the outdoors: “I’m very much an outdoor person. I’m an avid fly fisherman. My 15-year old son, Devin, loves to do outdoor stuff, too, so we can spend that time together. That’s something I made a priority.”

Balancing doctoral studies and a full-time job “is challenging,” he added. “I’m 45 with a family. But my wife, Kathy, has been very encouraging. She’s really the one who put the idea [to return to school] in my head.”

His employers at the Texas Parks and Wildlife Department also support his academic goals: “They’re allowing me to go back to school, providing some financial support and, more important, the time to pursue my Ph.D. They see it as a good thing as well.”

Matt received a B.S. in Range Science from Texas A&M University in 1980 and an M.S. in Range Science from Montana State University in 1985. He is a certified Wildlife Biologist and a certified Professional in Rangeland Management.

As one of Matt’s professors, Fred E. Smeins, of the Department of Rangeland Ecology and Management at Texas A&M, noted, “Water is fundamentally tied to nearly all natural resource issues, and in Texas, as well as in many other areas, our future success in dealing with these problems rests with individuals who are technically sound, who have a broad perspective, who can communicate, and who have a commitment to practical solutions to these issues. Matthew Wagner has the above qualities and is actively trying to pursue his capabilities.”

Since 1991, NWRI has invested half a million dollars in fellowship awards to graduate students pursuing studies in the field of water-science. These fellowships are meant to encourage the advancement of science and research by training young minds to solve problems in water and wastewater applications.