INVASIVE AQUATIC SPECIES AND THEIR IMPACT ON TEXAS WATER

One of the significant issues impacting the quality and quantity of Texas water is the deleterious effect of exotic and invasive plants and animals. Dr. Tom Arsuffi, of Texas Tech University in Junction, will speak at the at the July 25th meeting of the Hill Country Chapter of Master Naturalists. Dr. Arsuffi will discuss his ecosystem research and both immediate and future implications for Texas.

Biologists regard plant and animal invasion as a major threat to biological diversity worldwide, with global impacts on water resources and economics. In Texas, the applied and policy implications involve inter-basin transfers, instream flows, aquifer management, sport fisheries, endangered species, restorative initiatives, and public education. The ecological impact of aquatic invasives already show dramatic changes in aquatic communities, in increased threats to biodiversity, and in altered ecological structure and function.

Giant *Salvinia* choking a creek

Water losses due to invasives cost Texas hundreds of thousands of acre feet of water per year and millions of dollars in economic consequences. Successfully managing exotic and invasive species in our aquatic ecosystems will require innovative, proactive research combined with awareness and education, along with focused public policy.

Dr. Tom Arsuffi is a leading authority on the science of invasives in aquatic ecosystems and is the Director of the Llano River Field Station of Texas Tech in Junction, TX. He received his Ph.D. at New Mexico State University in 1984 and did a post doctorate at the University of Georgia Marine Institute on Sapelo Island. His research interests are in aquatic and watershed ecology and environmental education; he and his students have worked in a variety of aquatic ecosystems. In addition to teaching and supervising graduate students' research, Dr. Arsuffi serves on numerous national panels that focus on aquatic biology, ecology and environmental impact.

For the past 7 years, he served as a nationally selected member of the Science Review Panel, evaluating environmental studies associated with a $1 Billion inter-basin water transfer project in Texas, and he currently serves as an appointed member of the Nueces River / Corpus Christi Bay "basin and bay expert science team" composed of technical experts with special expertise in development of environmental flow regimes for the major river and estuary systems of Texas. The 80th legislature passed Senate Bill 3 and House Bill 3 to address environmental flows in Texas.

The monthly meeting of the Master Naturalist is free and open to the public. Please join us on Monday, July 25th 2011 at the Upper Guadalupe River Authority's lecture hall, located at 125 Lehmann Drive in Kerrville, TX. Socializing begins at 6:30, with the program starting at 7 pm. For more information, please contact our V.P. of Programs, Bob McKinley [830-535-6211 or (713) 503-3914] or email him at bobmac9827@gmail.com