The Newsletter of the Texas Chapter of the American Fisheries Society

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PRESIDENT S MESSAGE

by Kathy Ramos

Greetings from the sauna of East Texas. The Texas Chapter is moving forward toward the next century with plans and strategies that will keep our members on the cutting edge of our profession. It is difficult sometimes to keep up with our changing world. There are so many "cool" tools and gadgets that can make our lives so easy. If I could only find or make time to learn how to use them correctly I would only have to work half a day. Right! Convenience is a double edged sword. In theory these advances should allow us to store, tabulate and analyze our data more quickly so that we have the time to do the fun parts of our jobs, the stuff that we enjoyed doing in the beginning of our careers. The stuff that you couldn't believe you were getting paid to do. It seems that the more we depend on technology, the more we are enslaved by it. As those who have seen me banging away on my keyboard can attest, there is a point when just enough knowledge can be dangerous. My only saving grace is that I am able to admit that operator error is the cause of most of the problems. In the most recent issue of *Fisheries*, President Coutant writes about fighting the "stupidity complex" and voices many of the same concerns. I agree that everyone should take advantage of any opportunity to learn and pass that knowledge on to the next person. The Chapter will provide four different opportunities for continuing education at our next annual meeting. I challenge you all to take advantage of these opportunities. If these aren't the workshops that you need, feel free to contact the ExCom with ideas for the future. I know that we have some of the best fisheries scientists in the country within our Chapter so I am asking for you to also consider offering to teach a workshop in your area of expertise. The only way "knowledge=power" is if you share it with someone to make their jobs easier and better.

The Fish Culture Section will be hosting a special symposium entitled, "A Century of Fish Culture" at the annual meeting in Monterey, California. Nineteen speakers will discuss the changes in culture techniques for different species from 1896 to the present. Texas Chapter members Joe Warren and Todd Engeling will be covering striped bass and black basses respectively. Pat Hutson who is President-Elect of the section was one of the organizers of the symposium. There will be a repeat performance at the upcoming Aquaculture '98 meeting scheduled for February 15-19, 1998 in Las Vegas, Nevada. I encourage everyone who is interested in getting a global view of aquaculture techniques and philosophies to attend this meeting. The only way for us to stay at the cutting edge is to bite the bullet and interact with others in our field and share ideas and innovations.

Exotic Snail And Trematode Affecting Endangered Fish

by Pam Fuller, Tom Brandt

Tom Brandt of the National Fish Hatchery and Technology Center (USGS/BRD) in San Marcos, Texas has recently discovered that an introduced snail, the red-rimmed melania *Melanoides tuberculata*, and its introduced trematode, as yet unnamed, may be affecting survival of the federally endangered fountain darter *Etheostoma fonticola*. At least three populations of this snail and trematode are known in Central Texas: one in the San Antonio River in San Antonio, another in the Comal River (entire 2 mile length), and the third in the upper 2-3 miles of the San Marcos River. The fountain darter only occurs in the Comal and San Marcos rivers and the trematode has only been found in the fountain darters in the Comal River. The San Antonio and Comal rivers have yellow-crowned night-heron rookeries associated with them while the San Marcos River does not. The adult stage of the trematode (fluke) lives in the intestines of the night-heron. The fluke lays eggs in the intestine which passes in the bird's feces into the river. The eggs hatch and the resulting larvae enter snails. After an appropriate time in the snails, a different larval form leaves the snails and enters the gills of fishes. When an infested fish is eaten by a night-heron, another larval form that developed in the fish develops into a fluke in the bird and the cycle begins again. It appears that the green throat darter *E. lepidum* and the fountain darter are not normal hosts for the trematode since most larvae found on the gills are encysted and dead. Low levels of infection in fountain darters were first found on fish collected during the summer of 1995. By October of 1996, the fish were exhibiting high levels of infections, 50--100 cysts per gill arch. One greenthroat darter was collected with 160 cysts on a single gill arch! Researchers at the San Marcos NFHTC and Southwest Texas State University will sample the Comal and San Marcos rivers monthly to monitor the parasite. Robin Overstreet, Gulf Coast Research Laboratory, Ocean Springs, MS, is in the process of naming the trematode. Harold Murray, Trinity University, San Antonio, TX, is studying the relationships among the snail, trematode, various fishes, and various birds.

Another Exotic Snail

New Zealand mudsnail

Potamopyrgus antipodarum (Gray)

Description - Also known as Potamopyrgus jenkinsi (Smith) An elongate Hydrobiidae in running waters reaching about 5 mm in length with a solid shell. It has basic horn color of our pulmonates, but has an operculum and it is much more solid. They are live-bearing parthenogenetic species that are essentially all female.

An introduced species so far known only in the Madison River, Montana above Hebgen Lake. This population was discovered in the summer of 1995, but the very large population already present must mean that the introduction was a few years old at that time. It is native of New Zealand, but long established in Australia and Europe. This species has been known in North America since 1987 in the Snake River between Shoshone Falls and the C.J. Strike Dam. It is reported to pass through the digestive tracks of fish alive and then give birth! Population levels may exceed 100,000 per square meter, which should be nearly a solid layer of the snails! It occupies wide microhabitat conditions and tolerates some pollution. In the Madison River, it is most abundant in shoreline areas in moderate current on solid substrates. Overhanging grasses might be covered nearly solid with the snails. Lower densities occur on rocks in the mid channel and upon silty sand bars. I did not find any live specimens in thick silt or mud. It seems probable that this species will spread to the upper parts of the Snake River, but I did not find it there in 1995. Its spread is unpredictable until its environmental needs are better known. Substantial impacts on the native Madison River invertebrates and then fish and birds seem likely, but cannot be well predicted. Common pulmonate snails were abundant in 1995. The only native prosobranch in the river, Valvata humeralis is already very rare.

Editor's Note: Other reviewed information indicates this species most likely direction of spread is to the midwest and south, possibly to Texas?. From rivers.oscs.montana.edu