



The Newsletter of  
the Texas Chapter of  
the American Fisheries Society



Volume 20 (2)

April 1994

### ERRATUM

In the last newsletter, Vol 20(1), it was stated that the Cooperative Interjurisdictional Rivers Fisheries Resources Act (H.R. 2500) had been passed. This was an error - it had NOT passed. Therefore, supporters (and non-supporters) are once more encouraged to contact their Congressmen about passage of the bill.

The House Merchant Marine Subcommittee on Fisheries sheduled a second hearing about H.R. 2500 on 20 April 1994. Representative Gunderson (R, WI) is the author of the legislation. —

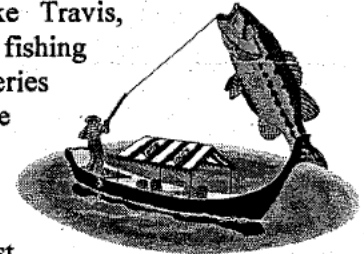
### 1994 ANNUAL MEETING

by Pat Hutson

The 1994 Annual Meeting of the Texas Chapter of the American Fisheries Society will be held on 8-9 September at beautiful Lago Vista located on Lake Travis, near Austin. The technical session will be on Thursday, the 8th. That night there will be the traditional social: a Bar-B-Que dinner, prepared by the renowned Texas cook Kip Portis; a large quantity of liquid refreshments, collected by the generous Charles Leigon; and the raffle/auction hosted by the one-and-only Bruce Hysmith. A large number of items, that we know members cannot do without, will be available for auction. On Friday, the 9th, we will have the annual business meeting, followed by a special symposium of invited speakers. The symposium topic will be "Clean Water For Texas: Contaminants, Advisories, and Discharge". Special guest Paul Brouha, Executive Director of the AFS and Donald Jackson, President-Elect of the Southern Division of the AFS are expected to attend this years meeting.

Accommodations are excellent at Lago Vista. About 50 condominiums are available and each will accommodate up to four people. Also, The Inn on Lake Travis is within walking distance and will provide additional rooms if needed. If enough people are interested, breakfast and lunch on the 8th and breakfast on the 9th will be available. Look for more information on lodging in the next newsletter.

Special activities are planned to incorporate a little fun with the business at hand. Dave Terre, the resident fisheries expert for Lake Travis, will be setting up a fishing tournament so all fisheries biologists can demonstrate their skills. The winner will receive a trophy at the social: the value of the award will be just under the limits set by Texas Parks and Wildlife Department (TPWD) policy, just in case a TPWD employee happens to win. Also, Clell Guest and Glen Alexander will organize a golf tournament on the 7th. There is an excellent 18-hole course nearby that will challenge the pros that I know will participate. The winner will also receive an award of unlimited value. Awards will be donated by HUTSON METAL CRAFT and will be one-of-a-kind items. Additional orderforms will be available if others want one of the one-of-a-kind items.



Please mark your calendar NOW to attend the Annual Meeting on 8-9 September 1994. More details will follow in the next newsletter. —

Less than 0.01% of the world's water is freshwater yet over 40% of the world's bony fishes live there.



## ELECTROFISHING INJURIES TO WARM AND COOLWATER FISHES?

by Steve Magnolia

The ability to effectively catch and then release fish unharmed makes electrofishing an attractive fish collection technique. While the benign qualities of electrofishing have been stressed for decades, recent evidence suggests that for some species the situation may be otherwise. In 1988, N.G. Sharber and S.W. Carothers found a high incidence of spinal injuries (44-67%) among large rainbow trout (14-15 inches) when subjected to pulsed DC. According to Sharber, the violent contraction of the body musculature during electrical shock is the cause of the broken bones. Several researchers also have reported mortality of trout eggs and embryos subjected to electrical fields.

Few studies have evaluated the effects of electrofishing injuries on long-term survival and growth. In 1992, T.T. Taube at the University of Alaska, Fairbanks, not only confirmed Sharber and Carothers findings but also found 35% mortality of rainbow trout after 203 days (under hatchery conditions). He suggested that mortality rate may increase for fish released into the wild. Taube reported no long-term effects on growth.

Rainbow, cutthroat, brown, brook, and lake trout, Arctic grayling, northern pike, walleye, and paddlefish appear to suffer from electrofishing-induced spinal injuries. While reports of these injuries seem to be largely confined to cold and coolwater species not native to Texas, it still is alarming. The possibility of electrofishing-induced injuries to warmwater fishes, or important Texas coolwater gamefish such as walleye and striped bass, must not be discounted, especially where threatened or endangered species are present.

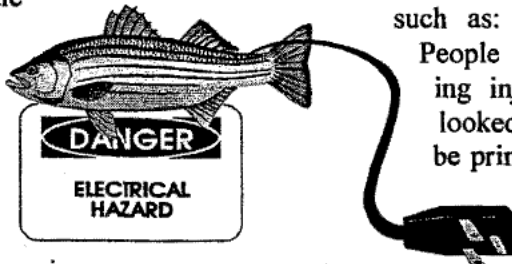
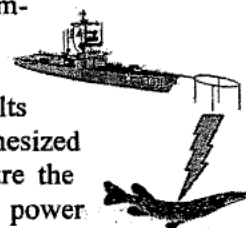
Unfortunately, there seems to be little research being done in this area.

What effect do electrical currents have on the eggs of wild striped bass collected for broodstock? If developing trout eggs and embryos are adversely affected by electrical fields what happens to walleye and largemouth bass eggs and fry during spring electrofishing surveys? Could our electrofishing activities in small reservoirs be adversely affecting year class strength? Are other injuries, such as bleeding at the gills, a cause for concern?

Lee Newman, a researcher with the U.S. Fish and Wildlife Service in Ashland, Wisconsin, has been investigating the effects of electrical fields on walleyes.

Mark-recapture population estimates, where the same shorelines are repeatedly electrofished, are commonly used by management biologists in Wisconsin. Newman was interested in what effect this might be having on adult walleyes and their fertilized eggs. In 1991, using pulsed DC at about 4 amperes, he collected 30 walleye from Lake Superior. This was done in what Newman described as warmwater temperatures. The electrofished walleye were X-rayed for spinal damages. Thirty percent of these fish had sustained spinal injuries. What about eggs? Newman found that a single pass over fertilized walleye eggs at these water temperatures caused high mortalities. He then repeated his experiments in coldwater temperatures (40 °F), using pulsed DC at 2 amperes and found that there were no spinal injuries to adults and no effect on eggs. He hypothesized that at the colder water temperature the muscle contractions don't have the power they do at warmer water temperatures and don't do the damage. However, that doesn't explain the effect on the eggs. He felt the lower amperage used in the spring sample might have made the difference. He said, "...there has to be a line.....we were below the threshold level that causes damages." He cautioned, however, that the complexity of interpreting these data is enormous. Factors such as conductivity of the water and the fish, electrode design, and bottom composition cloud the issue. As Newman said, "This thing is so complex, so difficult, we're just scratching the surface."

The Fisheries Management Section of the American Fisheries Society has set up an Electrofishing Injury Network. The purpose of this network is the exchange of information. The network is addressing questions such as: How wide-spread is this problem?; People who haven't observed any electrofishing injuries, how closely have they really looked?; Most recent information seems to be primarily on trout - how much variation is there among fish species in susceptibility to electrofishing injuries?; What types of equipment effectively collect fish without injury or with minimal injury?; Can there be an agreement on what constitutes a minimal or acceptable amount of injury?; What components of any given electrofishing operation can be or should be modified to minimize injuries. A special symposium will be held at the 1994 annual meeting of the American Fisheries Society addressing many of these issues.



## PRESIDENT'S MESSAGE

by *Coraine T. Fries*

I have been very honored by the opportunity to serve as the President of the Texas Chapter. It has been a pleasure working with the committee chairs - their dedication and professionalism continues to amaze me. This newsletter provides evidence of some of their efforts.

One item discussed at our most recent Executive Committee meeting was the possibility of adding a midyear event. There is some planning in the works to combine a public service effort by the Chapter membership with a training or educational opportunity. Ronnie Pitman is gathering information on beach and lake cleanups that she will present at the Annual Meeting in September. In the meantime, put on your thinking caps and let us know what kind of training or educational workshop would be beneficial to you. Pat Hutson, our President-Elect, has agreed to work on this project, but I know he would appreciate your input (call 512-353-3492).

The long lost "Texas Fisheries Workers Directory" has been recovered, but needs to be updated. So far, only one member has volunteered to help with this project. Dale Shively of Seabrook has agreed to update information regarding Texas Parks and Wildlife employees. If anyone else could offer to help with some other segment of the fisheries workers population (e.g., universities, federal, and other state agencies), the Chapter and I would be quite grateful.

## EXCELLENCE IN FISHERIES EDUCATION AWARD

The AFS "Excellence in Fisheries Education Award" was established in 1988. The award is administered by AFS' Education Section and is presented annually to an individual to recognize excellence in organized teaching and advising in some aspect of fisheries education, as well as traditional college and university instruction. The nomination deadline is 1 June 1994. Additional information can be obtained from:

Matt Sabo  
Excellence in Fisheries Award Committee  
Louisiana State University  
Baton Rouge, Louisiana 70803  
504-388-4560

## FIRST CALL FOR PAPERS

Imagine knowing what topics will be presented at our Annual Meeting before our Annual Meeting begins! It can be done, with your help. If you are thinking of giving a presentation (20 minute maximum) at the meeting, go ahead and summarize the information you'll present and send it in. Follow the format of **Transactions of the American Fisheries Society**.

Send abstracts to:

Bob Edwards  
Department of Biology  
UT- Pan American  
Edinburg, TX 78539

## HELP NEEDED!

by *Barry Lyons*

The Endowment Committee needs your help! I am in the process of updating and expanding the University Mailing List. In order to obtain student nominations from all Universities with fisheries-related programs, I need Chapter members to add to the following list:

Baylor University	Owen Lind
Corpus Christi State Univ.	David McKee
Institute Marine Life Sciences	Andy Landry
Lamar University	David Bechler
Pan American University	Robert Edwards
Sam Houston State Univ.	Andy Dewees
Stephen F. Austin	Jack McCullough
Southwest Texas State Univ.	Bobby Gene Whiteside
Texas A&M University	Brian Murphy
Texas Christian University	Ray Drenner
Texas Tech University	Nick Parker
Univ. Houston, Clear Lake	James Lester
Univ. of North Texas	Earl Zimmerman
U.T. Arlington	Don Whitmore
U.T. Austin	Dean Hendrickson
U.T. Marine Science Institute	Joan Holt
West Texas University	Flavius Killebrew

Please send any additions (contact, address, telephone number) or corrections to:

Barry Lyons  
Texas Parks and Wildlife Department  
2122 Old Henderson Hwy  
Tyler, Texas 75702  
903-593-5077

## CONSERVATION GENETICS AND CURRENT STOCKING PRACTICES - ARE THEY COMPATIBLE?

by *Loraine T. Fries*

## CURRENT AQUATIC RESEARCH PROJECTS FROM AROUND THE STATE (or Who's Doing What Where)

by *Beverly Villarreal*

The subject in this title has been the topic of much debate at many recent AFS meetings. Those of you who attended our last annual meeting in Port Aransas know how emotional and polarizing this issue is. It is fitting for the Texas Chapter to respond to the draft position statement "Protecting Genetic Resources of Aquatic Organisms: Elimination of Stock Transfers" published in the December 1993 issue of *Fisheries*. Unfortunately, our response must be made prior to our next Annual Meeting. In order for the Executive Committee (EXCOM) and Issues Committee to draft a letter that represents your views, you must make them known. The EXCOM's inclination is to oppose the draft in its current form. Specifically, we would like to support the opinion expressed by the Fish Culture Section (FCS). Some of the recommendations of the FCS were to change the demeanor of the document beginning with the title so that it reads "Protecting Genetic Resources of Aquatic Organisms: Careful Consideration Concerning Stock Transfers".

The FCS supports wise-use and informed, rational, scientific management of fishes. The FCS also recommends that the draft address the following:

- ✧ Fishes with no stock structure (e.g., channel catfish, black basses, and desert pupfish);
- ✧ Unknowns about the majority of fish population structures;
- ✧ Extant altered or perturbed habitats (e.g., reservoirs, channelized rivers, aquaculture and farm ponds);
- ✧ Addressing the human "place" in natural and altered habitats;
- ✧ Wise-use or protection and conservation of fishes versus preservation;
- ✧ Natural destruction or alteration of fish stocks (e.g., volcanoes, floods, droughts);
- ✧ Evolution dynamics, natural extinctions, and speciation;
- ✧ Natural colonization and introgressive hybridization;
- ✧ Urban, commercial, and recreational fisheries.

For more information contact:

Loraine T. Fries  
P.O. Box 947  
San Marcos, TX 78667

Earl Chilton, II  
4200 Smith School Road  
Austin, TX 78744

This column was founded as a way to increase Chapter awareness of aquatic-related research being conducted at universities and research facilities around Texas and to contribute to the exchange of scientific and technical ideas.

This column features work being done at at Texas A&M University (A&M), the San Antonio River Authority (SARA), and the San Marcos National Fish Hatchery and Technology Center (SMNFHTC). For more information, contact persons are:

Brian Murphy, A&M 409-845-5777  
Mike Gonzales, SARA 210-227-1373  
Bill Seawell, SMNFHTC 512-353-0011.

### SARA

•Nonpoint Source Pollution Study.—This study will assess effects of nonpoint source pollution on fish communities in streams within the San Antonio River Basin using model-simulated nonpoint source pollutant loadings. (Mike Gonzales, project manager)

### A&M

- Management of Largemouth Bass Populations in Cuba. (Brian Murphy, principal investigator)
- Effects of Introducing Florida Largemouth Bass into a New Reservoir. (Michael Brown and Brian Murphy)
- Food Resources Available to Paddlefish in the Trinity River. (Brian Blackwell and Brian Murphy)
- Triploid Grass Carp for Submersed Aquatic Plant Management. (Brian Blackwell and Brian Murphy)
- Evaluation of Grass Carp Populations in the Lower Trinity River. (Howard Elder and Brian Murphy)
- Evaluating Condition of Fish. (Brian Murphy, Michael Brown, David Willis, and Brian Blackwell)
- Fish Community-Habitat Relationships in Texas Streams. (Loren Moriary, Nora Valdes, and Kirk Winemiller)
- Phantom Springs Refuge for Endangered Fishes. (Kirk Winemiller and Allison Anderson)
- Food-Web Dynamics of Aquatic Ecosystems of the Brazos River Floodplain. (Kirk Winemiller, James Cotner, Brian Murphy, Luis Cifuentes, and Brian Blackwell)
- Ecology of Peacock Bass in Venezuela. (Kirk Winemiller, David Jepsen, Alex Schubert, and John Williams)
- Ecology of River Dolphins in Venezuela. (Tamara McGuire, Kirk Winemiller, and Bernd Wursig)
- Influence of Dams on River Fish Communities. (Allison

## AQUATIC RESEARCH (continued)

Anderson and Kirk Winemiller)

•Systematics and Biogeography of *Cyprinella lutrensis* and *Cyprinella venusta* (Cyprinidae) in the Gulf Coastal Plains. (Linda Richardson, Asrun Kristmundsdottir, and John Gold)

•Population Genetics and Stock Structure of Recreationally and Commercially Important Finfish from the Gulf of Mexico. (John Gold, Linda Richardson, Asrun Kristmundsdottir, and Carol Furman)

•Zebra Mussel and Sediment Interactions: Is There an Effect on Nitrogen and Phosphorus Regeneration Ratios? (James Cotner, Rosie Sada, and scientists at the Great Lakes Environmental Research Laboratory)

•Organic Matter Decomposition, Nitrogen Recycling and Oxygen Consumption in the Mississippi River Plume/Gulf Shelf Region. (James Cotner, co-principal investigator)

•Integration of Landscape and Aquatic Ecosystem Dynamics in the Brazos River Floodplain Corridor. (James Cotner, Kirk Winemiller, and Brian Murphy)

•Shrimp Farming: The Most Valuable Aquaculture Crop in Texas. (Addison Lawrence, principal investigator)

•Optimization of Nutritional and Environmental Factors for Intensive Aquaculture of Red Drum. (Delbert Gatlin III, William Neill, Steven Barnes, A. Claire Fernandez, T. Gibson Gaylord, HaeYoung Moon, Eddie Olborny, Michael Schwarz, and Christopher Stahl)

•Advancements in Nutrition, Feeding and Compositional Assessment of Hybrid Striped Bass for Enhanced Aquacultural Development. (Delbert Gatlin III, Brian Murphy, Michael Brown, Chithra Keembiyehetty, and Gholam Nemati-pour)

•Growth Modeling and Electrical-Conductivity Analysis for Improved Product-Quality Evaluation in Channel Catfish Aquaculture. (Brian Murphy, Delbert Gatlin III, Francisco Jaramillo Jr., Charles Bai, and Michael Brown)

•Lipid Nutrition of Red Drum: Effects on Cold Tolerance and Body Composition. (Delbert Gatlin III, William Neill, Steven Craig, and Hector Medellin)

•Saline Aquaculture Program for West Texas. (James Cotner, William Neill, James Davis, R. Lacewell, and J. Moore)

•Development of Competitive Shrimp Farming in the United States. (Tzachi Samocha, principal investigator)

•Educational Material for Aquaculturists and Consumers. (James T. Davis and Max Alleger)

•Characterization of Finfish and Shellfish Aquacultural Effluents. (James Davis and Steven Rawles)

•Effect of Nutrition on Body Composition and Subsequent Storage Quality of Farm-Raised Channel Catfish. (Delbert Gatlin, James Davis, and Max Alleger)

•Aquaculture Food Safety-Residues. (Delbert Gatlin and James Davis)

•West Texas Aquaculture Project. (James Davis and Hector Medellin)

•Net-Pen Production of Finfish in the Gulf of Mexico Utilizing Oil/Gas Platforms. (Russel Miget, Lucho Castro, and Michael Chambers)

•Characteristics, Behavior, Attitudes, Expenditures, Harvest and Management Preferences of Billfish Anglers in Puerto Rico. (Robert Ditton and Don Clark)

•A Statewide Survey of Texas Boat Owners. (Robert Ditton and Jeff Wilemon)

•Longitudinal Panel of Texas Anglers. (Robert Ditton and Don Clark)

•Survey of Texas Spotted Seatrout Anglers. (Robert Ditton and Don Clark)

•Community Fishing Study. (Robert Ditton and Kevin Hunt)

•Statewide Survey of Licensed Anglers in Texas. (Robert Ditton, Kevin Hunt, Don Clark, and Jeff Wilemon)

### SMNFHTC (recent activities)

•Fountain darter - lab culture, food habits, stream flow requirements, larval identification, genetics.

•San Marcos salamander - lab culture, population estimate.

•Texas blind salamander - population dynamics at Diversion Spring, San Marcos River.

•Longnose darter, other *Percina* spp. - lab culture.

•Striped bass - pond culture, intensive culture.

•Paddlefish - transport, tag location, sunburn.

•Zooplankton - sampling, pond culture, harvest.

•Largemouth bass - culture, artificial diet, spawning, training to eat artificial feed.

•General - transport, aeration.

If you currently are working on a research project that you would like the Chapter to know about, send the information to:

Beverly Villareal  
P.O. Box 947  
San Marcos, TX 78667



Fish and visitors smell in three days.

Franklin, Benjamin. 1700's.

Olfactory Observations.



## TCAFS REPRESENTED AT THE TEXAS AQUACULTURE ASSOCIATION MEETING

by Mark Stacell

Our Chapter was represented at the 1994 Texas Aquaculture Association (TAA) Annual Meeting and Trade Show held at Del Lago Resort at Lake Conroe in February. The Chapter exhibit was attended by Gerald Kurten and Mark Stacell. The objectives for our attendance were to publicize the purpose and function of the TCAFS and to encourage new membership and participation in our activities. Approximately 350 aquaculturists and aquaculture-trade representatives attended the event.

Exhibitor space cost the Chapter \$250.00 (1/2 of \$500.00 regular price), part of which was offset by \$96.00 in sales of t-shirts, caps, books, and koozies. The Chapter donated a t-shirt, cap and koozie to TAA for use as door prizes. Though only one membership was sold at the meeting, 35 TCAFS brochures with membership forms were distributed, as well as 12 Parent Society membership applications and 18 AFS Fish Culture Section membership applications. Fifteen copies of "Stocking Recommendations and Management for Texas Farm Ponds" were passed out, with an additional request of fifteen more for a highschool vocational-agriculture class from Anahuac, Texas. There also was some interest in the results of the 1993 Grass Carp Study Evaluation, as five requests were made for copies of that document. (For those that don't remember, the TCAFS membership voted at the 1991 meeting in Galveston to serve as an "umbrella sponsor" for a statewide evaluation of grass carp stocking).

## EXCOM MEETING MINUTES

by Kathy Ramos

An Executive Committee (EXCOM) meeting was held on 5 April 1994 in San Marcos. Members in attendance were Loraine Fries, Pat Hutson, Beverly Villarreal, Barry Lyons, John Moczygamba, Mark Stacell, Mark Webb, Bobby Whiteside, Brian Blackwell, Joe Fries, Ronnie Pitman, and yours truly.

Ronnie Pitman reported that membership has grown to 234 members. The collection of dues through the parent society has been very successful. A motion was passed that our Chapter operate by the calendar year (like the parent society). This would cause some

confusion at first but would eventually make record-keeping much easier. We might combine a continuing education symposium with river or beach clean-up activities. The Chapter also could participate in several activities sponsored by the General Land Office. This information will be presented at the annual meeting.

John Moczygamba reported that the Awards Committee is working to streamline the awards nomination forms and refine the "Best Presentation" scoring sheets. The forms will be presented in the newsletter.

Manuscripts to be published in the "Proceedings..." have been returned to the authors for final revisions. Brian Blackwell anticipated publishing in June.

Universities have been contacted regarding nominations for student scholarships. The Endowments Committee has not received nominations yet, but Barry Lyons felt that it was still early. Wetland Habitat Alliance of Texas (WHAT) will donate \$1,000 for two scholarships again this year.

The Exotic Species Committee has prepared a news release regarding grass carp spawning in the Lower Trinity River (see p.7). Updates will be released as information becomes available. Mark Webb stated that the group will concentrate efforts on keeping the membership abreast of exotic species issues.

Lorraine Fries asked the Issues Committee to prepare a position statement for the Chapter on stock transfers.

Joe Fries thanked everyone, present or not, for their submissions to the Newsletter. Keep em rollin.

There have been no nominations for President-Elect yet. Bobby Whiteside felt that it was still early.

Mark Stacell reported that the Chapter booth at the Texas Aquaculture Association Meeting was financially unsuccessful. However, the booth was an information clearinghouse and made we some good contacts.

Beverly Villarreal is working on a poster to be distributed to colleges and universities. It will advertise the Chapter and the benefits for students at the Annual Meeting.

Old Business - Video copies (VHS) of the 1993 panel discussion will be made available to Chapter members and each of the speakers will receive a complimentary copy. The possibility of giving a "Best Student Presentation" was discussed.


New Business - Pat Hutson discussed the site for this year's Annual Meeting, Lago Vista Resort, and the topic of the panel discussion. The Chapter has been invited to have a booth at the Clear Lake High School Earth Day Celebration. Mark Webb will investigate this further.

The next Executive Committee meeting will on 11 July 1994.

## CULTURED FISHES AND AQUATIC ECOSYSTEMS


An AFS-sponsored "Symposium on the Uses and Effects of Cultured Fishes in Aquatic Ecosystems" was held in Albuquerque, New Mexico, from 12 to 17 March. A total of 64 papers and 27 posters were presented. Also, during each evening, often lively "Point-Counterpoint Sessions" were held. Although most of the examples given in the presentations were related to salmonid culture, the concepts were applicable to the culture of other fishes. Some ideas presented included:

- ☞ hybridization resulting in sterile offspring is genetic extinction
- ☞ hybrid vigor occurs only between two inbred parental stocks
- ☞ hatchery environments promote selection
- ☞ fitness is reflected by allele dominance
- ☞ stock transfers can result in outbreeding depression
- ☞ hatchery-reared fishes can help restore fisheries
- ☞ hatchery-reared fishes can enhance sport fishing
- ☞ hatchery-reared fishes can damage wild stocks
- ☞ private and non-profit groups are becoming involved in wild stock enhancement

Although unanimous agreement was not reached regarding the uses of hatchery fishes (or on the statements above), genetic awareness seemed to be in the air. We have not heard the last of hatchery fishes and their effects on aquatic ecosystems. 

## WANTED ARTS AND CRAFTS ITEMS

by *Lorraine T. Fries*

I would like to encourage the membership to once again contribute handmade treasures (i.e., arts and crafts) to the Texas Chapter auction/raffle. Last year's auction was one of the most successful auctions ever and at least part of the draw were the items contributed by the membership. Keep up the good work so that our Chapter can continue to grow. 

There are no freshwater fishes in Antarctica.



## GRASS CARP SPAWNING IN TEXAS

by *Robert G. Howells and Mark A. Webb*


Ichthyoplankton samples taken in the lower Trinity River of Southeastern Texas in 1992 were found to contain large numbers of grass carp eggs (see Fisheries 18(3):36). These eggs included many that were viable and developing at the time of collection. Although successful grass carp spawning had been reported at many locations within the Mississippi River basin, these collections appeared to be the first in another U.S. river system. However, no larval or juvenile grass carp were found during the 1992 sampling, leaving questions as to the success of hatching and survival to juvenile stage.

As in 1992, ichthyoplankton samples taken in the Trinity River during spring and summer 1993 contained grass carp eggs which appeared viable and were developing; however, 1993 sampling also yielded recently-hatched larvae in substantial numbers. These samples confirmed not only that a second successful spawn had occurred but also that large numbers of larvae were being produced.

Additionally, a grass carp (TL, ca. 65 mm) was collected from the Houston Ship Channel (downstream from the Texas Parks and Wildlife Department [TPWD] collection sites) by the Texas Water Commission in July 1993. The Resource Protection Division (TPWD) also reported 65 grass carp juveniles between 102 and 178 mm (TL) during a fall 1993 fish kill investigation in a bayou off the Houston Ship Channel. Although stocking grass carp recently has been allowed under permit in Texas, legally stocked triploid and illegally stocked diploids generally are 150 mm (TL), or larger, at the time of stocking. Collection of the small juveniles suggests a natural spawn and the possibility that successful grass carp recruitment as well as spawning, egg development, and hatching occur in the Trinity River.

A formal paper on these data is being produced. For additional information contact:

Bob Howells  
Heart of the Hills Research Station  
Ingram, Texas 78025 210-866-3356

Mark Webb  
Inland Fisheries District Office  
1004 East 26th Street  
Bryan, Texas 77803 409-822-5067 

## OUTSTANDING FISHERIES WORKER OF THE YEAR

by John Moczygemba

Yeah! Yeah! Yeah! "Outstanding Fisheries Worker of the Year" So what? What does it mean? It means someone in the Chapter has made some special effort in a fisheries-related area worth acknowledgment by peers. It also means the Chapter has members who are professionals capable of contributing something meaningful to society. I feel there are many members that do excellent work during the year to warrant some recognition. The important part of the equation is a peer taking the time to make a nomination to acknowledge a member's hard work. Nominations were received for only one area last year. Although the deadline to make a nomination will be sometime in September, I feel it is not too early to think about it.

Let me refresh you on the areas for "Worker of the Year": Administration, Culture, Education, Management, and Research. Nominations can be made only by members in good standing. The recipient must be a member in good standing. The award is based on fisheries-related work accomplished between Chapter meetings. Awards Committee members are ineligible. To make it a little easier, the Committee will come up with forms for nomination letters that will be in the next newsletter. I would like to point out that honorable mentions may be awarded if more than one nominee in a category is considered outstanding by the Committee (that would be great to have that many nominees). On the flip side, if the members do not feel there is a suitable nominee for a category, then an award will not be given for that category. Let me introduce the other members of the Committee to you:

**Administration:** Gene Wilde, Fisheries & Wildlife Division, Texas Parks & Wildlife Department, 4200 Smith School Road, Austin, Texas 78744, 512-389-4655.

**Culture:** Jake Isaac, A.E. Wood Fish Hatchery, P.O. Box 947, San Marcos, Texas 78667, 512-353-0572.

**Education:** Brian Murphy, Department of Wildlife & Fisheries Science, Texas A&M University, College Station, Texas 77843, 409-845-5777.

**Management:** Ken Sellers, Texas Parks & Wildlife Department, 8680 LaVillage Ave. #4, Waco, Texas 76712, 817-666-5190.

**Research:** Jim Winter, Range & Wildlife Department, Texas Tech University, Lubbock, Texas 79409-2125, 806-742-1983.

There also is an award called, "Special Recognition in Fisheries Work", which is based on fisheries-related work done in Texas, but can span more than 1 year. The work does not have to fit into the five areas listed above. The recipient may be an individual or an organization and may or may not be a member. However, the nomination can be made only by members in good standing. More than one award can be given each year, as happened at the last meeting.

Hopefully this has really piqued your interest. The Committee will be looking forward to lots of mail this September.

### NOMINATION INSTRUCTIONS

When nominating a person for "Worker of the Year", submit the nominee's place of employment. Please use specific accomplishments to meet the criteria for each area. A short paragraph (100 words or less) at the end of each nomination can be used to list accomplishments which do not exactly fit criteria. Please be concise so the Committee members can be objective in making their choices. The goal is to make the nominations in each area more comparable, which will aid the Committee in making the best choice for "Worker of the Year".

### CRITERIA FOR:

#### Culture

- Development of techniques that produced fish more safely, more efficiently, or more economically.
- Development of methods which produced species not formerly cultured.
- Development of techniques that produced more fish.
- Participated in the development of equipment that benefitted fish culture.
- Promotion of fish culture.
- Participation in the production of a record number of fish (may be station or species specific).

#### Education

- Development of an innovative approach to fisheries education as illustrated through development of a new or revised course or curriculum.
- A publication (journal article, extension publication, book, or book chapter) that contributes significantly to fisheries education.
- Notable service in public education programs.
- Development of educational media (software, videotape, slide-tape, etc.) that contribute significantly to fisheries education.





Outstanding contribution to the profession through service as an officer or other leader of an educational organization (e.g., the Education Section of the American Fisheries Society).

#### Management

Development of management plans or strategies or implementation of management practices (reservoir or pond management plans, pre-impoundment work, habitat work, development of urban fisheries). This would include private water work.

Activities in educating the public in areas of fishing or fisheries management (conducting fishing clinics, educational programs, contact with various media, development of brochures, newsletters, bulletin boards, fliers, popular articles, etc.)

Work with different agencies (cities, counties, or federal government) or reservoir controlling authorities to develop or implement management strategies.

Participation in professional scientific organizations in the fisheries field to include offices held, committees served on, or other activities accomplished for the organization. —

## DONATIONS FOR TCAFS ANNUAL MEETING SOUGHT

by Mark Stacell

Although the Chapter's 1994 Annual Meeting is still 5 months down the road, it's not too early to start thinking about sponsorship and donations. Importantly, we will again need items for Bruce Hysmith to auction and raffle during the social. It would be great to get all members out there beating the proverbial bushes for donations of fishing equipment, arts and crafts, aquaculture equipment, etc. Letters will be sent to traditional sponsors of our event, but new sponsors would only help us in our efforts to raise more money for the Chapter. If anyone has ideas about new sponsors or donations, please contact either Camillo Chavez or Mark Stacell of the Publicity/Exhibits Committee. We would like for Bruce to have lots to auction this year, and I can hardly wait to hear, "The lucky raffle number is 36721, come on down and claim your "Bait-a-hole"! —

## A REPRINTING OF "ON THE DYNAMICS OF EXPLOITED FISH POPULATIONS"

First published in 1957 but long out of print, Beverton and Holt's great work remains the most frequently cited fisheries book ever produced. It established the basis for modern age structured approaches to fisheries management, and it remains a deep source of inspiration and insight for scientists today.

The book's value to fisheries students and professionals has been limited by its scarceness. Now, "On the Dynamics of Exploited Fish Populations" is back in print, issued by Chapman & Hall (London) as Number 11 in its "Fish and Fisheries" series. The American Fisheries Society is the designated distributor of this book in North America.

Beverton and Holt's text is reproduced exactly. Preceding it are new forewords written by Tony Pitcher and Daniel Pauly. A useful addition is a list of corrections to the original text, compiled by John Hoenig for the AFS Marine Fisheries Section and approved by Professor Beverton.

This classic belongs on the bookshelves of all serious fisheries professionals throughout the world.

Books may be purchased from the American Fisheries Society. Prices: \$84 Nonmember; \$67 AFS Member; \$59 AFS Student Member; and \$59 Marine Fisheries Section Member. Prices include shipping within the United States (for orders shipped outside the US please add \$3.00 per book). You can place your order by writing or calling AFS, 5410 Grosvenor Lane, Suite 110, Bethesda, Maryland 20814, 301/897-8616; FAX 301/897-8096. —

## NEW POND MANAGEMENT VIDEO

A new 24-minute pond management video covering weed control, fertilization, stocking, and other aspects of management is available from Texas A&M University. The video is close-captioned. Contact:

James T. Davis  
Dept. of Wildlife and Fisheries  
Texas A&M University  
College Station, TX 77843  
409-845-7471 —



**MEMBERSHIP APPLICATION AND RENEWAL  
TEXAS CHAPTER OF THE AMERICAN FISHERIES SOCIETY**

for the 1994 calendar year       for the 1995 calendar year

Name \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Primary Field of Interest \_\_\_\_\_  
Affiliation \_\_\_\_\_

Check the two that apply:  
  
 Regular Membership (\$8/yr)  
 Student Membership (\$5/yr)  
  
 AFS Member  
 Non-AFS Member

Send dues to: Kathy T. Ramos  
P. O. Box 947  
San Marcos, Texas 78667

If you have an interest in serving on a committee, check one (or more) of the following:

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Awards           | <input type="checkbox"/> Editorial          | <input type="checkbox"/> Endowments    |
| <input type="checkbox"/> Issues           | <input type="checkbox"/> Membership         | <input type="checkbox"/> Nominating    |
| <input type="checkbox"/> Pond Management  | <input type="checkbox"/> Publicity/Exhibits | <input type="checkbox"/> Newsletter    |
| <input type="checkbox"/> Exotic Species   | <input type="checkbox"/> Procedures Manual  | <input type="checkbox"/> Urban Fishing |
| <input type="checkbox"/> Student Outreach |   |  |

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**NEWSLETTER EDITOR**

Joe N. Fries  
 500 East McCarty Lane  
 San Marcos, Texas 78666  
 512-353-0011  
 512-353-0856 (FAX)

**NATIONAL FISHING WEEK**

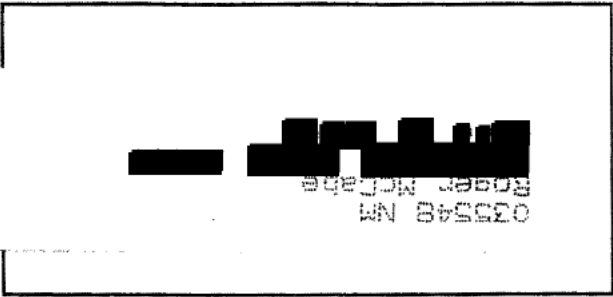
National Fishing Week will be 6-12 June 1994. You may want to do something during this week to "connect" to the public. For more information contact:

National Fishing Week  
 2944 Patrick Henry Drive  
 Ste. 15  
 Falls Church, VA 22044

**AMAZING**

Once again, because of contributions of Chapter members (10 individuals, not counting myself), the newsletter is rather informative. We now have an amazing 242 members! Let's keep the info flowing and send in your articles for the next newsletter (due out in July 1994). Or just send in some original fish humor, fish cartoons, fish recipes, or fish anything.

Other than what you are reading now, this page is blank. Just think, your material could go here.



NEWSLETTER EDITOR  
500 EAST MCCARTHY LANE  
SAN MARCOS, TEXAS 78666



**THE NEWSLETTER OF  
THE TEXAS CHAPTER OF  
THE AMERICAN FISHERIES SOCIETY**

