

The Newsletter of the Texas Chapter of the American Fisheries Society



Volume 20 (4)

December 1994

PRESIDENT'S MESSAGE

by Pat Hutson

We have completed an outstanding year for the Texas Chapter and are hopefully beginning another. Loraine merits credit for her exceptional leadership and for putting together a high performing team. There were many accomplishments. I hope to continue in the direction established and complete the on-going projects. Congratulations to Mark Webb as President-Elect. I look forward to working with Mark and will value continued involvement by Loraine as past President.

I want to thank everyone involved in the annual meeting at Lago Vista, including the membership for attending. All the hard work is very much appreciated and the success of the meeting is a tribute to the team effort. I think this was the largest meeting in Chapter history and a huge increase to the treasury. Next years meeting will be the responsibility of President-Elect, Mark Webb. Please give him any recommendations you may have to enhance the annual meeting.

I briefly discussed some future goals for the Chapter at Lago Vista. We plan to sponsor a continuing education course for fisheries workers, work with the Texas Aquaculture Association on a student outreach program, increase Chapter visibility during National Fishing Week by sponsoring events, become involved in species-at-risk issues and work with fisheries related groups to get them more involved in preserving the state's natural resources. I would like to see subunits established under the Chapter at various universities to help increase student involvement. I encourage all Chapter members to broaden their base of participation in Chapter activities and support the American Fisheries Society by becoming members. The AFS represents us on a nationwide basis, and needs your support. We will continue to develop the procedures manual and update the Chapter by-laws.

I invite members to take an active role in the Chapter through committee activities. Committees are the heart of our organization, and only though committee work can we continue to move forward. To further increase participation, I will be making some changes in committee chairs. Everyone has done an outstanding job on each committee, however, I would like to broaden participation and allow new involvement. Due to increasing emphasis on species at risk I will create a new ad-hoc committee. Chairs will be contacting volunteers to serve. If you didn't express an interest in a committee on the registration form feel free to contact me or the chair to volunteer.

PAST-PRESIDENT'S MESSAGE

by Loraine Fries

I would again like to thank everyone who supported me and the TCAFS during my tenure in office. Overall, serving the TCAFS was a rewarding experience. Thanks to the help of the EXCOM and committee chairs, we had a very productive year. The highlights, in my estimation, included the past two annual meetings which were resounding success stories, the membership reaching an all time high, exceeding our goals for establishing an endowment fund for scholarships, and production of an informative and well-done newsletter. I would like to emphasize the contributions made by the membership at large. The technical sessions have been great and every presenter deserves a pat on the back. I also want to thank and encourage members to keep up the "member made" arts and crafts donations for our auction and raffle: we netted over \$800.00 at the 1994 meeting from member made items.

My present TCAFS project is the continuing education project. Suggested topics to date include grant writing, news release writing, presentations, fish species identification, and GIS. I would appreciate any and all membership input on this project. If you have additional ideas or would like to "vote" on one of the listed subjects, please contact me at (512) 353-3492 or P. O. Box 947, San Marcos, Texas 78667. Thanks again for your support!



MINUTES of the 1994 ANNUAL MEETING of the TEXAS CHAPTER of the AMERICAN FISHERIES SOCIETY

by Cathy Ramos

The annual meeting of the Texas Chapter of the American Fisheries Society was called to order by President Loraine Fries at 8:30 am on 9 September 1994. Secretary/Treasurer Kathy Ramos certified that a quorum of the membership was present. Past presidents Charlie Inman, Brian Murphy, Bobby Whiteside, Mac McCune, Dick Luebke, Jim Davis and Bobby Farquhar were recognized. A motion was made and seconded to accept the published minutes of the 1993 meeting.

Special guests Paul Brouha, AFS Executive Director and Donald Jackson, President-Elect AFS Southern Division, addressed the group. According to Paul the Chapter is a reflection of the changes occurring at the national level. The Chapter has re-defined goals and is setting up mechanisms to move in those directions. The member surveys, procedures manual and panel discussion topics reflect the climate of fisheries throughout the Northern Hemisphere. Donald Jackson echoed these feelings and expressed a desire for all chapters within the Southern Division to become proactive to the changes taking place. The strength of the group is in diversity and sensitivity to changes in demographics and values with regard to natural resources. Both speakers challenged members to increase outreach to students and other groups that share our agenda. The results can only serve to strengthen the fisheries community.

Loraine Fries gave a brief Presidential address which included the reading of a letter from Ed Bond, the Chapter's first President. Joe Fries and Mark Stacell were recognized for their efforts in Newsletter editing and work on the Publicity/Exhibits committee, respectively. Loraine then requested committee reports.

Awards - John Moczygemba: Committee members were recognized for their efforts in improving the nomination and selection procedures. The following awards were presented:

Best Presentation at the 1993 meeting: Jay Rooker, "Ontogenetic Shifts in Diet, Habitat, and Diel Feeding Periodicity of Schoolmaster Snapper".

Outstanding Fisheries Worker Awards:

Administration - Dick Luebke

Culture - Ted Engelhardt

Management - Steve Magnelia

Special Recognition - Bob Howells for work on Freshwater Mussel Project

Endowments - Barry Lyons: Three \$500.00 scholarships were awarded to the following students:

Kathryn Cauble - Southwest Texas State Univ.

(Wetland Habitat Alliance of Texas)

Howard Elder - Texas A&M (Wetland Habitat Alliance of Texas)

Kim Jefferson - Texas A&M (Texas Chapter AFS)

Issues - Earl Chilton: Four issues were presented to the membership for consideration. These are: eradication of black carp in Texas, Red River chloride reduction project, permitting changes in exotic species regulation and use of hatchery reared fishes.

Membership - Ronnie Pitman: Chapter membership has grown to a record 290 members. Work is continuing on alignment of the Chapter membership year with that of the parent society. The possibility of issuing a membership card was presented to the membership.

Newsletter - Joe Fries: There were five issues of the newsletter published this year. Contributions from the membership helped to make it informative and fun to read. The Chapter will be buying desktop publishing software to be passed on from one Newsletter Editor to the next.

Nominating - Bobby Whiteside: The nominating committee recommended the following persons be considered for the position of President-Elect:

Mark Webb (elected)

Billy Higginbotham

Pond Management - Bill Seawell: The committee resolved to continue to depend on the Soil Conservation Service and Texas Parks and Wildlife Department to print and distribute the following Chapter publications: Stocking and Management for Texas Farm Ponds and Corrective Management for Fish Populations in Small Impoundments. The committee began a project to edit/rewrite and update the two publications and is looking for volunteers to help.

Procedures - Joan Holt: A draft of the Procedures Manual is complete and ready for editing. The committee plans to work on the development of long range action plans for the Chapter. Topics will include the increase of information exchange, professionalism and the gathering and dissemination of research information. It was proposed that the by-laws be amended to define term limits for committee members.

Exhibits - Mark Stacell/Camilo Chavez: The committee worked with the parent society to publicize the release of an AFS documentary. The Chapter display was presented at the annual Texas Aquaculture Association meeting in Conroe and at Earth Day activities at Seabrook High School. Fund raising efforts for the meeting far exceeded the committee's expectations.

Student Outreach - Beverly Villarreal: The committee was created to help students stay involved in the Chapter. Complimentary housing and social tickets



were offered to students wishing to attend the meeting. Eight of 13 student attendees took advantage of the housing offer. Packets of display materials were forwarded to 17 colleges and universities to be posted on bulletin boards.

Fisheries Workers Directory - Lance Robinson: Progress on the compilation of names, addresses and phone numbers is coming along slowly. Paul Brouha indicated that the parent society has software resources available to help in the committee's efforts.

Urban Fishing - Charles Munger: The Guide to Urban Fishing Programs has been completed and 250 copies printed. These will be distributed on a limited basis in order to work out any problems.

Treasurer - Kathy Ramos: The previously established money market commercial account was closed on 22, February 1994. Funds were transferred to Merrill Lynch in order to maximize potential for growth. The Chapter's assets just prior to the annual meeting were \$3,488.43 in regular checking and \$17,122.63 in investments for total assets of \$20,611.06. Major expenditures for the year were \$1,026.18 for production of the Proceedings, \$1676.60 for T-shirts and caps and \$1,219.90 for production of the newsletter. Income for the year was \$5,051.00 from the annual meeting at UTMSI. This years auction and raffle raised record revenues. Thanks to everyone for your enthusiastic financial support.

New Business - Ronnie Pitman proposed that the chapter combine continuing education activities with participation in one of the state's many beach or river clean ups.

LAKE TRAVIS FUN

In addition to the great technical session, panel discussion and social this years meeting also featured a fishing tournament, golf tournament and diving adventure. Suggestions for next year.......

THANKS CHAPTER MEMBERS

by Mark Stacell

Special thanks to chapter members Mike Reed (one day duck hunt), Pat Hutson (metal crafts), Kip Portis (BBQ pit), Nick Parker (wood carvings), Denison Inland Fisheries Management Office (box of re-done lures), Joe Warren (quilt), Dick Luebke (carved duck), Ed Nunez (BBQ pit), Bruce Hysmith (auctioneer services) and Loraine Fries (stained glass) for your donations to this years raffle. Besides adding a personal touch to the auction the items collectively brought in \$856.00.

1994 ANNUAL MEETING RAFFLE DONORS

by Mark Stacell

Thanks to our raffle donors for your generosity: Cabelas, Berkley Inc., Jerry Dunn Guide Service, Hydrolab Corp., Charles Seaborne Guide Service, Yellow Springs Instruments, W.R. Case and Sons Cutlery Co., Dealers Electrical Supply, Wonder World, McCoys Lumber, Red Ewald, Sportsman Conservationists of Texas, Rowland Fiberglass Inc., Karen Holland, Memphis Net and Twine, Mann's Lures, Wade Butler, Nalle Plastics, Nylon Net Company, Tyler Fish Farms, Walker Ranch, Aquatic Eco-Systems, Lake Management Services, Bill Lewis Lures, Texas Reds Steakhouse, McBrides Inc., Shiner Beer of Austin, Turkey Creek Ranch, Brown Distributing Co., Wal Mart Stores. Boat Cycle, GCCA, Lonestar Brewery, Nick Parker, T.G. Canoe Livery, Hill Country Chiropractic, Quail Creek Country Club, Chilympiad, 3D Welding, Redfish Unlimited, KCM Inc., GCCA-Brush Country Chapter, Beach Bait and Tackle, Fishermans Wharf, Biomedics Inc.

EXCOM MEETING MINUTES

by Kathy Ramos

The first EXCOM meeting of the 1994-95 year was held on October 18th. Attending were Pat Hutson, Joe Fries, Gary Garrett, Dick Luebke, Bill Seawell, Mark Stacell, Ray Whitney, Bobby Whiteside, Mark Webb, Malcolm Johnson, Beverly Villarreal, Loraine Fries, Steve Magnelia and Kathy Ramos.

Treasurer - The current checking account balance was \$9,716.99 and investments were valued at approximately \$17,122.63 for total assets of \$26,839.62. Expenses from the annual meeting at Lago Vista were \$1,474.22 including food, refreshments, student rooms, T-Shirts, caps, etc. Total revenues collected from the auction, raffle ticket's, merchandise sales, membership dues and social tickets was \$7,291.00. The net profit added to the checking account was \$5,816.78. A motion was made and passed for the Treasurer to move \$5,000 from checking into the Chapter's investment account with Merrill Lynch. This addition will allow the Endowment Fund to be self perpetuating. Additional revenues may be used in developing other Chapter programs.

Newsletter - Newsletter materials have been transferred from Joe Fries to Steve Magnelia. Desktop publishing software has been purchased.

President-Elect - Mark Webb is pleased by the input he received from members regarding next year's meeting. Del Lago Resort in Conroe seems to be a

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possibility. He has been approached by the Oklahoma Chapter regarding a joint meeting. He would like to plan activities geared toward allowing students to interact with professionals in the fisheries field. He also expressed a desire for hands-on technical demonstrations. Outreach to other environmental organizations and timing of the business meeting and panel discussion were also discussed.

Nominating - We will be seeking nominations for both President-Elect and Secretary/Treasurer. A suggestion was made to publish a biographical profile of the candidates in the newsletter prior to the meeting and offer an absentee voting opportunity. Loraine agreed to research the proposition. The need to shift emphasis away from Texas Parks & Wildlife Department employees was also discussed.

Pond Management - The major goal for this committee in the coming year should be to rewrite or edit existing management publications and to better define the functions of the group. Bill Seawell indicated a need to make the publications less technical and geared toward the general public.

Awards - John Moczygemba reported the selection for Best Presentation has been made. The committee will be re-examining the selection criteria for Outstanding Fisheries Worker in the area of management. A category for technical workers may be created.

Editorial - Bob Edwards will continue as chairman of the committee. He has begun work on the "Proceedings..." of this year's meeting.

Endowments - Dick Luebke will chair this committee. The committee would like to expand it's contact base and try to reach more students. Howard Elder (Texas A&M) suggested working with financial aide counselors in addition to major professors. Suggestions were made to contact other environmentally oriented groups.

Issues - Nick Parker will be assuming the role of chairman. He will meet with Earl Chilton to discuss the committee's work.

Membership - There are 294 Chapter members including 38 students. One hundred fifty-seven attended the annual meeting.

Publicity - Mark Stacell and Richard Ott will co-chair the committee. Both expressed an interest in meeting with the public and other professional organizations. Pat feels that the group should broaden it's scope and make efforts to lessen the focus on the Texas Parks & Wildlife Department portion of the membership. Mark is working on sending out thank you letters to sponsors and exhibitors of the annual meeting.

Exotic Species - Mike Reed will be the new chair. An upcoming issue is stocking of grass carp in sensitive areas. There is a currently a lobby to stock

them into small lakes on the Guadalupe River. Pat asked that Mike and Nick work on drafting a position statement regarding this matter.

Procedures - Finishing touches on the Procedures Manual are in the works.

Stocks-at-Risk - Gary Garrett will head up this new committee. He sees the group taking an advocacy role in identifying threatened species. Other issues that may be addressed are inter-basin transfers and release of aquaria fishes.

Urban Fishing - Ray Whitney is the new chairman. A limited number of copies of the *Guide to Urban Fishing Programs* have been distributed. The group is waiting for feedback on the document. Pat indicated response has been tremendous and TPWD is behind printing more.

Student Outreach - Student response to the committee has been positive. Those who attended the meeting expressed interest in being liaisons between the Chapter and their respective universities. Some are looking for mentors within the fisheries profession. Beverly would like to start student oriented columns in the newsletter.

OLD BUSINESS

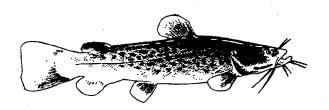
Ronnie Pitman is researching the group's options in combining cleanup activities with the proposed continuing education program. Loraine will be taking on the task of organizing the course which is tentatively planned for late summer or fall of 1995. She welcomes ideas on topics.

NEW BUSINESS

The Texas Aquaculture Association will be holding it's annual meeting during February 1995 in Austin. The Chapter will be helping with student outreach by assisting in a day of hands-on experience to be held at the A.E. Wood State Fish Hatchery in San Marcos. The possibility of setting up an information table, instead of a booth was discussed.

Stephen F. Austin is forming a student subunit under the umbrella of TCAFS. Pat expressed an interest in working with other universities to set up similar subunits.

The Chapter has been approached about co-hosting the 1996 Midyear meeting of the AFS Southern Division with the Oklahoma Chapter. The EXCOM will consider this proposal.





THE GESTALTIC CHALLENGE REVISITED

(the shadows are back...)

by Joe N. Fries

A total of nine persons were willing to guess the common names of the fleeting shadows at the end of the articles in Volume 20(3) of the Newsletter. There were 27 fish to identify, one of which occurred twice (obviously spontaneous generation). The number of correct answers (see below) ranged from 14.5 to 23 great, considering the difficulty of the challenge! Answers that were judged taxonomically reasonable were given partial credit. There was a four-way tie and Gordon Linam, of the Texas Parks and Wildlife Department, was the lucky winner of the tie-breaking drawing (out of Nick Parker's hat, which we assume was an unbiased container). Gordon received a new rod and reel.

*	Amazon molly	*	guppy	-	sockeye salmon
•	anchovy	L	hammerhead	•	stingray
	barracuda	*	lionfish	*	striped bass
*	blue catfish	•	butterflyfish		shortnose
•	bluegill (sunfish)		paddlefish	**	tarpon
*	red drum	**	pollock	*	tetra
(*)	clownfish	-4-(sailfish	*	threespine stickleback
40	coelacanth	+	shark		trout
*	flying fish	*	Skipjack tuna	a t	trunkfish

MENTORSHIPS AVAILABLE

by Beverly A. Villarreal

Two students have requested mentors for the following areas:

Environmental Chemistry

Aquaculture

Inland Fisheries Management

If you would like to share your experiences in one of these areas, please contact Beverly Villarreal at (512) 353-3492 or A.E. Wood Fish Hatchery, P.O. Box 947, San Marcos, TX 78667.

ADVICE FOR FISHERIES STUDENTS

by Kirk Winemiller

- 1. Participation in seminars and extracurricular activities that involve students in fisheries research are most beneficial. If the latter involves a government agency or NGO, so much the better.
- 2. Publish scientific papers. Write your own grant proposals (the amount of funding is not as important as a record of grantmanship).
- 3. Environmental issues, biodiversity, bio-remediation will become more prominent. Traditional commodity based view of resources will wane but not disappear. The latter will remain important in selected regions (e.g. Gulf Coast Conserv. Assoc., Trout Unlimited, etc.)
- 4. Students that get jobs will be those that establish solid "track records" while in school. This takes place largely outside of the classroom, but draws upon classroom knowledge.

MEET OUR STUDENT MEMBERS

by Beverly A. Villarreal

Elizabeth D'Silva is a fisheries science Ph.D. candidate at Texas Tech University. Her graduation date is slated for May 1996. Elizabeth is originally from India and desires to work in bio-remediation for the federal government or a consulting firm. Her interest in ecology and the employment opportunities in aquatic ecology influenced her educational and career goals.

Kristen Drescher will complete a masters degree in marine science at the University of Texas Marine Science Institute in May 1995. Kristen is from Kingwood, Texas, and is interested in pursuing an environmental consulting career. Her career choice was a natural extension of her life-long interest in marine science and the coast.

Jay Rooker is a Minneapolis, Minnesota, native working toward a Ph.D. in marine science at the University of Texas Marine Science Institute. He hopes to complete his degree in June 1997 and then obtain a post-doctoral position in some aspect of fisheries ecology. He received his master's degree in marine science from the University of Puerto Rico where he researched the ecology of coral reef fishes, including feeding ecology, habitat selection, and diel activity. Jay's current research focus is the recruitment process of red drum and spotted sea trout to seagrass nursery habitats, especially the effects of differential fitness, growth, and survival of new recruits. He is receiving



funding from the E.J. Lund Research Fellowship. Jay won the Outstanding Presentation award at the 1993 Texas Chapter meeting for his paper entitled "Ontogenetic Shifts in Diet, Habitat, and Diel Feeding Periodicity of Schoolmaster Snapper."

Ian M. Klein is working toward a B.S. degree in fisheries management and aquaculture at Texas A&M University. After graduation in August 1995, Ian plans to begin work on a masters degree in fisheries. Originally from Porter, Texas, Ian would like to eventually work in Washington, D.C. Presently, though, he would like to work more with the Texas Parks and Wildlife Dept. (TPWD) hatcheries or fisheries management crews through the cooperative education program. Ian has worked with TPWD as a cooperative education student in many areas of the state. He really enjoyed his work experience and would like to continue. He credits Bill Provine, Bill Follis, John Dennis, Roy Bamberg, Spencer Dumont, Mike Reed, and David Campbell for helping him "to understand and work effectively" and for introducing him to the TCAFS. Ian was motivated to pursue his educational and career goals by his feeling that something needs to be done about the environment, whether it be making people aware that there are problems or actively working in the environmental field.

Robert W. Weller will complete an M.S. degree in fisheries science at Texas Tech University in August 1995. Robert was born near Pittsburgh, PA, lived near Niagara Falls, NY, and in Northern Ohio, obtained his B.S. degree from SUNY ESF at Syracuse University, and worked at West Virginia University in Morgantown, WV. His career goal is to work for the state or federal government in fisheries research or management. An enduring interest in biology and anything to do with fish prompted his educational pursuit. Robert's current research is examining seasonal home range, habitat use, and activity periods of flathead catfish in Buffalo Springs Lake using ultrasonic telemetry.

MEMBERS TAKE NOTE!

The parent society has begun including chapter membership dues with the national AFS billing statement. This has caused some chapter members to double pay. Either way is OK just make a note so you don't pay twice.

CURRENT AQUATIC RESEARCH PROJECTS FROM AROUND THE STATE

by Beverly A. Villarreal

This installment highlights work being conducted at the Heart of the Hills Research Station, Texas Parks and Wildlife Department, Ingram, Texas.

Management technique evaluation for small waters involving high density of medium-sized largemouth bass to better control over-abundant sunfishes thus providing high catch rate fisheries. R.K. Betsill and J. Prentice.

Comparison of coppernose bluegill performance (growth, survival, reproduction, catchability...) to Texas native bluegills. J. Prentice.

An index of largemouth bass recruitment for Texas reservoirs: its geographic variation and relation to angler catch. R.K. Betsill.

Factors affecting fishing success ratings by Texas anglers. Determination of components of angler catch having the greatest influence on angler satisfaction. M.E. Costello and R.K. Betsill.

Paddlefish: age and growth, coded-wire tagging, location and evaluation of spawning habitat. V. Pitman.

Largemouth bass growout study: growth rate and ultimate maximum size comparison among fast and slow growing Florida largemouth bass siblings in the ninth year of a 10-year study. R.G. Howells.

Largemouth bass scale and otolith age study: comparison of aging technique accuracy with knownage and known-size largemouth bass of six, seven and eight years old. R.G. Howells.

Freshwater mussel studies: continuing research on freshwater mussels and the mussel fishery in Texas. Includes: statewide distributional surveys, species identification, electrophoretic analysis, spawning seasons, fecundity, glochidial descriptions, identification of host fishes, age and growth, threatened and endangered species, harvest regulations, mussel sanctuaries, and related life history work. A text on the freshwater mussels of Texas is near completion and a questionnaire survey report of commercial musselers has been written in addition to two annual field survey reports. A monthly newsletter describing progress is produced. R. G. Howells.

Fish egg and larval stage identification: descriptions of early life stages of Guadulupe bass (completed) and gray redhorse (in progress); identification assistance to fishery management biologists (e.g., grass carp spawning study TPWD-Bryan office). R.G. Howells.

Exotic fish biology and identification: assistance to fishery management biologists and law enforcement with identification of exotic species. R.G. Howells.

(Aquatic Research Projects.... continued)

Chihuahuan Desert fishes survey: assessment of the current status of each of 10 study species and provide for determinations on federal listing. Dr. G.P. Garrett

Rio Grande fish community study: development of a comprehensive data set on the fish community structure in the relatively pristine reaches of the major bioregions of the Rio Grande in Texas to aid in managing this resource as economic development continues. Dr. G.P. Garrett.

Balmorhea cienega project: development and construction of a naturally functioning desert wetland to secure habitat for two endangered fishes and other indigenous organisms. Dr. G.P. Garrett.

Status and conservation of Pecos pupfish: determination of ecological status and genetic integrity of Cyprinodon pecosensis and construction of barriers to hybridization with sheepshead minnow. Dr. G.P. Garrett.

Guadalupe bass restoration project: to determine if stocking Guadalupe bass into genetically contaminated streams can significantly reduce the proportion of Guadalupe bass x smallmouth bass hybrids. Dr. G.P. Garrett.

Native and Florida largemouth bass project: to determine the methods and feasibility of providing anglers the best sportfishing traits of each subspecies while maintaining the genetic integrity of Texas' native largemouth bass. Dr. G.P. Garrett.

CALL for POSTERS Multidimensional Approaches to Reservoir Fisheries Management Third Reservoir Fisheries Symposium Chattanooga, Tennessee June 12-14, 1995

A national symposium on reservoir fisheries organized by the Reservoir Committee, Southern Division, American Fisheries Society.

The symposium will include invited and contributed presentations on a diversity of subjects vital to controlling reservoir fishes, habitats, and anglers. Posters will be elgible for awards. Deadline for abstract submission is February 15, 1995. Abstracts are limited to 300 words and should be sent to: Steve Miranda, Third Reservoir Fisheries Symposium, Mississippi Coop. Fish and Wildlife Unit, P.O. Drawer BX, Mississippi

State, MS 39762.



1995 SOUTHERN DIVISION MIDYEAR MEETING

February, 23-26 1995 Virginia Beach Resort and Conference Center Virginia Beach, VA

The 1995 Midyear meeting will be held at the Virginia Beach Resort and Conference Center, Virginia Beach Virginia. Symposia scheduled for the technical program include Management of Striped Bass and Its Hybrids, Interbasin Water Transfers and Ecological Issues, Blue Crab Research, Success Stories in Public Education and an AFS point-counterpoint session entitled "Is it appropriate to jeopardize ecosystem integrity to acheive fishery management goals." Contact Edward Christoffers, U.S. Fish and Wildlife Service, 177 Admiral Cochrane Dr., Annapolis, MD 21401; (410) 573-4530.

1995 MID CONTINENT FISH CULTURE WORKSHOP

February 14-15, 1995 Ramada Hotel, Kansas City International Airport

A workshop for individuals to present papers outlining fish production methods, research, success stories, and even failures that may help other culturists efforts. With no real theme almost any topic you want to present will be acceptable. Papers do not have to come from a scientific type design. Persons interested in attending should contact: Tommie Crawford, Milford Fish Hatchery, 3100 Hatchery Drive, Junction City, KS 66441.

HOLIDAY SHOPPING WITH TCAFS

by Mark Stacell

The Chapter is offering mail order service for a limited time this fall. So, for those of you that didn't buy enough TCAFS merchandise at the annual meeting, or were unable to attend now is your chance to get started on your holiday shopping. On the next page you will find an order form. Please send a check or money order payable to TCAFS. Happy Holidays!



TCAFS MAIL ORDER FORM

ORDERED BY:	NAME	
	ADDRESS	

		, , , , , , , , , , , , , , , , , , , ,
	PHONE	

Item		Size (Circ	ele)	Price	Quantity	Total
TCAFS T-Shirt						
Natural w/Green Logo	M	L	XL	\$12.00		
Ash w/Blue Logo	M	L	XL	\$12.00		
Micro Stripe w/Burgandy	M	L	XL	\$12.00		
Hunter w/Tan Logo	M	L	XL	\$12.00	•	
TCAFS Twill Cap						
Camouflage				\$10.00		
Solid Navy				\$10.00		
Solid Burgandy				\$10.00		
Solid Hunter				\$10.00		
Natural w/Navy, Hunter, Burga (Circle color choice)	ındy o	r Black	Bill	\$10.00		
Guadalupe Bass T-Shirt						
Adult	S	M	L XL	\$10.00		
Child	M	L		\$10.00		
Tomelleri T-Shirt						
Rainbow Trout	M	L		\$12.00		
Largemouth Bass	M	L		\$12.00		
1991 Spawning Run T-Shirt	M	L		\$5.00		
TCAFS Koozie				\$1.50		

Send orders to:

Mark Stacell A.E. Wood State Fish Hatchery P.O. Box 947 San Marcos, TX 78666 (512) 353-0572 Subtotal_____
Postage_____
(\$3.00 for orders up to \$20.00 and \$5.00 for >\$20.00)
TOTAL_____



MEMBERSHIP APPLICATION AND RENEWAL

	CHAPTER OF the 1994 calenda		ICAN FISHER ☐ for the 1995	
Name				
Address	Check the two that apply:			
Work phone FAX	Regular Membership (\$8/yr) Student Membership (\$5/yr) (full-time students only)			
Primary Field of Interest Affiliation	AFS Member Non-AFS Member			
Send due	Kathy T. 11045 Sp Tyler, Te	our 164 xas 75709	c one (or more) of	of the following:
Issues Mem Pond Management Publ Exotic Species Proc		Editorial Membership Publicity/Ex Procedures Fisheries W	hibits	EndowmentsNominatingNewsletterUrban Fishing
PAST-PRESIDENT			March 15, June 15, 19	n deadlines: , 1994February Issue 1995April Issue 995July Issue 995Special Meeting Issue
COMMITTEE CHAIRPERSONS AWARDS EDITORIAL ENDOWMENTS ISSUES MEMBERSHIP NOMINATING POND MANAGEMENT PUBLICITY/EXHIBITS	Bob Edwards Dick LuebkeNick ParkerRonnie Pitman Bobby Whiteside Bill Seawell	Ott	Submissions are enco	suraged. Both a hardcopy and a diskette should be I be returned.
AD-HOC COMMITTEES EXOTIC SPECIES	. Lance Robinson . Joan Holt . Ray Whitney			

NEWSLETTER EDITOR Steve Magnelia

STOCKS-AT-RISK......Gary Garrett

P.O. Box 947

San Marcos, Texas 78666

512-353-0072

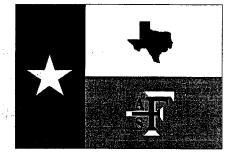
MECOTIVED PRINTENT WAS A DECOTEXAS

035548 NM Roger McCabe 1601 East Crest Drive Waco, TX 76705

L998L

SAN MARCOS, TEXAS P.O. BOX 947





THE NEWSLETTER OF

THE TEXAS CHAPTER OF

THE AMERICAN FISHERIES SOCIETY