



NEWSLETTER

Fisheries Management Section American Fisheries Society

David K. Whitehurst, President

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President's Corner

If you have ever taken the time to read the Section's Bylaws carefully, you found that the Section places great emphasis on promoting growth in our profession through meetings, workshops, symposia and publications. Our Section is still young, but I think that we have been productive in meeting this important objective.

The Urban Fishing Symposium was our first assignment, and it was a very successful endeavor. The Proceedings from the Symposium have been available for some time now and sales have been good. This event certainly has stimulated interest in urban fisheries programs and has provided much needed information about this new component of fisheries management.

Our latest effort, a "Symposium on the Role of Fish Culture in Fishery Management" was a joint venture with the Fish Culture Section. Our objectives in developing this symposium were to highlight the cooperative role of fish culture in fishery management, to establish common principles governing the use of cultured fish, and to identify opportunities to improve fish culture in relation to fishery management goals. I feel that these objectives were definitely achieved this spring in the beautiful setting of Lake of the Ozarks. Forty-three papers were presented in five technical sessions and 16 presentations were given in two poster sessions. These presentations covered a very broad spectrum of the use of cultured fish in fishery management throughout North America. Papers from the technical sessions are now in the capable hands of Dick Stroud who is serving as editor for the Proceedings. Our goal is to have the proceedings published within one year.

I would like to express sincere appreciation on the Section's behalf to Del Graff, Chairman of the Steering Committee; Lee Redmond and Ray Hubley,

Vice-Chairmen of the Steering Committee; David McDaniel, Chairman of the Arrangements Committee; Chuck Hicks, Chairman of Local Arrangements Committee; Ed Miller, Symposium Treasurer; and all the members of these committees for their dedicated service to the Section. The Missouri Department of Conservation graciously hosted this meeting and produced a well-orchestrated conference in a wonderful environment. A special thanks goes to Larry Gale, Chuck Purkett, Jim Fry, and their staffs for their support and service.

By now, some of you may be saying, "That's fine, but what's scheduled for the future?" We have been working on that, too, and currently have two meetings scheduled. The first is entitled "Competitive Fishing -- Challenges and Potential Impacts" and is scheduled for the annual AFS meeting in Sun Valley, Idaho on September 10. This subject has received considerable interest within our Section and the Fisheries Administrators Section. Strong interest was also apparent during similar sessions at the Cornell meeting. Therefore, the two Sections decided to sponsor this symposium to increase our understanding of competitive fishing and its effects on our resources and management programs. A program listing is given in *Fisheries*, Volume 10, Number 3, page 38. Be there if you can!

The Section is also planning to cosponsor a workshop with the Pennsylvania Fish Commission and other organizations in August of 1986. This meeting will focus on trout stream habitat improvements in the eastern states. Don Duff and his Riparian-Stream Habitat Management Committee are currently developing the program for this workshop. Let them know if you have ideas to address or would like to be involved in this workshop.

We all know that our profession covers a broad spectrum of interests and encompasses a variety of dis-

ciplines. To date, our meetings have focused on widely varying aspects of our profession, and I feel that this approach is proper. We should always be searching for problems. Do you have any ideas that you would like to see addressed? If so, let a member of the Executive Committee know. We always need good ideas and enthusiastic volunteers to work on them.

I would like to share one final note of concern. Congress is currently drafting a reauthorization of the Public Rangelands Policy Act, and several other grazing issues are active on Capitol Hill this year. Don Duff and his committee will be following these issues and providing input for AFS positions as necessary. However, our most effective actions will probably be to contact our own Congressmen. Please take time to do so and let them know how our valuable public fishery resources are being impacted by improper management activities. Thank you.

Sincerely,

David K. Whitehurst

Section Business

W-B Victory (Again...)

I have been writing W-B articles for most of my tenure as newsletter editor. I first wrote "The Last D-J Expansion Update" followed by the first "W-B Battle Underway". I can now write "The Last W-B Battle Update" for quite some time, I hope, thanks again to the determination and legislative expertise of Senator Wallop and Representative Breaux.

When we last left our heroes (FMS Newsletter 5[1]:2)...Senator Wallop had introduced Senate Resolution 130. The resolution, which at that time had 35 cosponsors, called for compliance with the automatic appropriations and earmarking provisions of Wallop-Breaux Trust Fund, and resolved that funds should not be withheld or delayed. Ultimately, 60 senators signed on as cosponsors, and on May 9, 1985, the senate included full Wallop-Breaux funding, including provisions on permanent appropriations and automatic release of revenues, in its 1986 budget.

On the same day, Representative Breaux and 142 cosponsors introduced House Resolution 165, which called for the same thing as Senate Resolution 130. By the end of the month, the number of cosponsors had risen to more than 180. In what seemed to be a different approach, the House of Representatives said nothing at all about the W-B fund in their 1986 Budget Resolution. By remaining silent, the monies

remained intact. According to Representative William Gray, Chairman of the House Budget Committee, the House Budget Resolution's being silent on the issue "...neither directs nor recommends any changes to the automatic and permanent appropriations provisions of this trust fund and to the funding available. It thus provides for the use of these boating and fishing user fees for boating and fishing and enhancement purposes." And since both the House and the Senate agreed on this issue, W-B could not be an item for discussion in their conference to reconcile differences in their respective deficit-reduction packages. In short, we won...this year.

I think it's safe to say that politicians do not like permanent and automatic appropriations because they cannot control or manipulate them. We should probably gird ourselves for another attack relatively soon, or another fight when the bill comes up again for reauthorization in 1988. Attacks can be thwarted in two ways: first, use the money in the way we said we'd use it - for new and innovative programs. Second, by remaining vigilant and maintaining funds to help pay for thwarting future attacks. Towards this latter end, it had been suggested that AFS help market Wallop-Breaux T-shirts. AFS agreed and they're now available from the AFS Central Office for \$10.00. T-shirts feature the faces of Senator Wallop and Representative Breaux with appropriate two-color lettering, and come in three sizes: medium (38-42), large (42-46) and extra large (46-48). Do your part and buy a T-shirt!

At the risk of forgetting someone, I think we need to thank all who had a hand in keeping W-B intact. A large number of individuals and organizations helped. We know about AFS and Sully's efforts; we should also thank the members of the American League of Anglers and Boaters, a coalition of boating and fishing organizations, as well as several bait and tackle corporations. Without the tireless efforts of these folks, as well as your grass-roots efforts in making your legislators aware of W-B's importance, we wouldn't be celebrating victory. And let's not forget Congressmen Wallop and Breaux...

FMS Display

"Be wise, advertise!" is a slogan you hear often from various folks trying to sell advertising space. There's no doubt that a well-made advertisement generates more business for the advertiser. Now, FMS has an advertisement in the form of a new section display.

The brainchild of Missouri's Steve Eder, Dave Jennings and Mark Zurbrick, the display utilizes a series of stationary and moving photographs to depict fish management and the kinds of activities in which FMS is involved.

The display has been available since its unveiling at the FMS/FCS Symposium at Lake of the Ozarks, Missouri last April, and will be displayed both at the AFS Annual Meeting in Sun Valley, Idaho, and the Southern Division AFS Annual Meeting in Lexington, Kentucky, in October.

I assume the FMS display is available for use at other gatherings on a first-come, first-serve basis, perhaps for the price of shipping, but this has yet to be decided. The Executive Committee will probably address this at their next meeting. In the meantime, if you have a Fisheries gathering where this display would be appropriate, and have a 4' X 8' space with an electrical hookup at the meeting site, give Dave Whitehurst a call.

Exerpts from EXCOM

The FMS Executive Committee Meeting was held Monday night, April 1, at Lake Ozark, Missouri, to discuss various items of business for the Section. Present were Wayne Hubert, Ron Lewis (for Larry Olmsted), Lee Redmond, Steve Rideout, Jack Wingate and David Whitehurst. Phil Jeffries, Chairman of the Urban Fisheries Committee; Mercer Patriarche, NAJFM Editor; Carl Sullivan, Executive Director; Rich Wehnes, Newsletter Editor; and several others were also present.

Several housekeeping measures were taken care of initially. Correspondence from the Waterfront Center was referred to the Urban Fisheries Committee for response. Whitehurst was instructed to respond to a letter of inquiry from the Catskill Fly Fishing Center. An invitation from the Federation of Fly Fishermen to nominate fishery biologists for a recognition award was discussed and a nominee was chosen. Whitehurst stated that he would make the nomination to the Federation. Our new Section display was discussed briefly, and everyone thought that it was excellent.

Whitehurst reviewed actions taken during the two-day AFS Executive Committee meeting held on March 30-31. FMS made several motions that were passed. First, the Section requested that AFS contribute \$500 in support of our 1986 Eastern Trout Streams Habitat Improvements Workshop. Our second motion was for AFS to contribute \$500 to support the Large River Symposium. Finally, the Section asked that AFS establish a Computer Software Review Program in coordination with The Wildlife Society and the Southeastern Cooperative Wildlife and Fisheries Project.

Other AFS EXCOM actions that were discussed included funding for the Skinner Memorial Fund, chapter associates, publicity for National Fishing Week, and the 1985 AFS budget. One action of particular interest was the Publications Overview Committee's assignment to develop and recommend an AFS symposium-conference publication series. Such a series would allow subunits sponsoring symposia to have a Society-supported outlet for publication. FMS EXCOM members were interested in this proposal and agreed to consider it further at the next AFS EXCOM meeting in September.

A short review of the planning efforts for the upcoming competitive fishing symposium scheduled for the annual AFS meeting in Sun Valley was given by Whitehurst (see related article).

Communication between AFS subunits was the next item of business. Discussion centered on effective ways to interact with other subunits, particularly chapters, when developing or coordinating responses to various fisheries-related matters. Several alternatives were presented such as a telephone tree or a fisheries concerns committee. No action was taken but the group seemed to favor increasing dialogue between the Section and chapters through the regional representatives. This concern was scheduled for further discussion at the next EXCOM meeting.

The final action of the meeting was a discussion of the need for a dues increase. FMS EXCOM members unanimously agreed that we should leave the cost at \$3 for 1986.

The meeting was adjourned in time to see the last two minutes of the NCAA Basketball Championship between Georgetown and Villanova -- so much for good planning!

Competitive Fishing Symposium

Fishing tournaments: Why do anglers engage in competitive fishing? What impacts are tournaments having on various fisheries? How do agencies perceive and deal with increasing numbers of tournaments? These questions and more will be addressed in a half-day symposium entitled Competitive Fishing - Challenges and Potential Impacts to be presented at the AFS Annual Meeting in Sun Valley.

Sponsored by the Fisheries Management and Fisheries Administrators Sections, the symposium will continue the dialogue began at last year's annual meeting. Nine papers will cover a wide variety of topics, from state regulations and public attitudes to biological assessments of various competitive events.

The symposium will conclude with a panel discussion of state fisheries administrators from different areas of the country and with varying experiences and perspectives exploring the proper role of agencies in tournament fishing.

The symposium is scheduled for Tuesday, September 10, 1985, in Sun Valley. For those of you attending the AFS annual meeting, don't miss the symposium. For those of you unable to go to Sun Valley, the symposium may be summarized in a future issue of Fisheries.

Trout Stream Habitat Improvement

I'm told that work is currently on schedule for the Fifth National Workshop on Trout Stream Habitat Improvement being planned for Pennsylvania next year. FMS is actively involved, thanks to Don Duff and his Riparian-Stream Habitat Management Committee. Those of you who have attended any of the first four workshops know how excellent and productive they are. This one promises to be every bit as good.

Details are sketchy at this time, but I promise to give you more details in an upcoming newsletter. For more information, contact Don Duff, U.S.D.A. Forest Service, 324 25th Street, Ogden, Utah 84401; 801/625-5662.

Items of Interest

Hybrid Fishes

Hybrid fishes are of increasing interest to fisheries biologists...and a few comedians. Colorful names abound...sunshine bass, splake, tiger musky, saugeye, to name a few...and even some not so colorful (our FMS expert, a piscatorial Rodney Dangerfield, cites Ammocrypta beani x Etheostoma caeruleum, the Farmer's Darter, and Micropterus salmoides x Aplodinotus grunniens, the Bass Drum, as examples).

Unfortunately, confusion is clouding the air and, as a result, the AFS Names of Fishes Committee is receiving many requests for a standardization of common names applied to hybrid fishes. Dr. C. Richard Robins, Chairman of the Committee, would like recommendations or comments regarding hybrid fishes that may be of importance to fisheries management, aquaculture, or any other reason. Please send your comments to Dr. C. Richard Robins, Chairman, AFS Names of Fishes Committee, University of Miami, 4600 Rickenbacker Causeway, Miami, Florida 33149.

Carp Book

And now, for those of you that demand the ultimate in cyprinid chronicles, I announce the soon-to-be printed Complete Book on Carp. The AFS Carp Committee, originally chaired by Bruce Shupp and now headed by Steve Flickinger, has been working for the last two or three years to complete the manuscript. The Complete Book on Carp will feature five chapters: Biology of Carp, Carp the Sportfish, Carp the Commercial Fish, Carp the Food Fish and Promoting Carp.

It promises to be a definitive work, and one to make a California steelhead fisherman green with envy. AFS is currently looking for financial backing. A funding request has apparently been rejected by the Saltonstall-Kennedy (S-K) Fund Review Panel. S-K funds are derived from import duties on foreign fishery imports and are traditionally used to support industry-related projects. Depending on the success of arranging finances, the carp book could go to press by the end of the year. We'll keep you posted.

Red Snapper Regulation Results

In the last newsletter, I reported that a 13-inch length limit had been instituted on red snapper in the Gulf of Mexico. Apparently, the regulation was not without its opponents, who argued that if released fish die, the minimum size limit wastes rather than conserves fish.

According to Gulf Fishery News, these arguments were sufficient for the Gulf of Mexico Fishery Management Council to ask the National Marine Fisheries Service to estimate the probability of survival for released fish and to calculate the theoretical effect of catch and release mortality on yield-per-recruit.

On-site measurements of survival were conducted at two locations. The estimated survival probabilities for red snapper were 79% at one location and 89% at the other. A yield-per-recruit model suggested that at a survival probability of 80%, the 13-inch minimum size limit would improve yield-per-recruit by 4 - 26%, depending on the natural and fishing mortalities considered. With a survival probability of 90%, the 13-inch size limit would increase yield-per-recruit by 6 - 35%.

On the strength of these estimates, the Texas Parks and Wildlife Commission adopted a 13-inch minimum length limit for red snapper in coastal waters under state jurisdiction, effective September 1, 1985. The regulations, which allow only 5 snappers per day under the length limit and exempt headboats and legally operated trawls, are identical to those already adopted for federal waters.

PASER

In the last newsletter, I reported on PASER, the Professional Aquatic Scientist Employment Registry that AFS is currently offering free to members. In May, address labels for virtually all employers of fisheries scientists were provided to AFS. Brochures, search forms and an introductory letter were sent to each employer by first class mail in June, which should help in maintaining a current employer list.

In order to maintain the service free to members, PASER's costs must be covered by employers. You can help by bringing the program to the attention of a fisheries biologist employer acquaintance. Tell him or her there are now 410 job candidate names on computer, and that upon request our contractor will perform a prompt data base search and provide resumes from all qualified applicants for the position they want to fill.

Your personal intervention is very important in helping sell this program to employers! The more it is used, the better it will become, so please do your part in getting it accepted.

Michigan Computerized Recreation Information

I'm always curious, but never surprised, by the innovative uses computers are being put to these days. The Sport Fishing Institute recently reported on a computer program written by Michigan's Institute of Water Research that is sure to be a hit at any sports show, sportman's gatherings or if home computers with telephone modems ever are used extensively. Entitled Computer Assisted Recreational Planning Program (CARPP?), it assists the computer user in finding possible recreational activities or facilities in defined geographical areas.

The program features 12 possible recreation activities or facilities from which to choose. The program begins with a color graphics display of a map of Michigan with major cities and highways shown. A movable cursor on the screen is controlled by a joystick and used to pinpoint the location desired.

The user selects three of the twelve activities (currently available: canoeing facilities, vineyards, fishing tournaments and events, fishing boat charters, state parks and activities available, U-pick orchards and roadside markets, inland lake and stream fishing with species of fish, state forest campgrounds, cruises and sailing charters, and fee-fishing and planting stock). Following activity selection, the computer searches its data bases for those activities available in the location previously chosen. While searching, a color graphic of the

event is shown and complementary music played. If only two of the three selections are available in the location chosen, the computer searches nearby counties.

When the searches are complete, the user receives a printout of names and addresses, often with additional information, and a listing of the Travel Information Centers in the state.

In these days where the public desires more and more information and organizations want to serve the public more but are spread thin, it's little "gimmicks" like this that give the public exactly what they want (and then some...), while minimizing time spent gathering the information.

Oh, and the FMS Newsletter staff would like to know more about Michigan vineyards, including samples, of course...

Arkansas Drawdown

Drawdowns can be quite controversial, especially if they occur on popular lakes. The drawdown on Reelfoot Lake in Tennessee this year is an example. But, if the Reelfoot results are similar to an Arkansas drawdown undertaken in 1981, critics won't be vocal for long.

In 1981, Lake Hamilton, an important recreational fishing lake near the resort town of Hot Springs, was drawn down nine feet to improve the lake's fishery. Almost half of the fish population's biomass was comprised solely of gizzard shad, many of which were unavailable to striped, spotted and largemouth bass. By concentrating the prey species through lowered water levels, Arkansas biologists believed that the shad would be more vulnerable to predator fish, and a shift in biomass from shad to bass would occur. As if on cue, opponents predicted an increase in erosion, water pollution and populations of less desirable fish, as well as hampering local fire departments in obtaining water to fight fires.

Did it work? You bet! Not only were the opponents wrong, but bass populations improved each year. Crappie and catfish populations also improved. More importantly, the shift in biomass from shad to game fish occurred as predicted: gizzard shad now comprise less than 17% of the lake's biomass.

Better fishing has resulted, the opponents are quiet and the Hot Springs tourism industry will share in the benefits. Again, a testimony for the old adage of "Provide good fishing and the public will respond."

Anglers' Organizations Start Acting

I think we all know that organized anglers are an extremely valuable organizational resource. Organized groups can spread the good word about scientific fishery management as well as goodwill by taking kids or handicapped persons fishing. But a number of groups are now becoming more active, perhaps out of a greater conviction of their love for fisheries resources or maybe frustration over a perceived lack of progress on the part of government agencies. Groups are now trying to solve problems, using their own funding. Two unrelated but similar groups came to my attention in the last month, indicating that this trend may continue.

In Arizona, a group of anglers decided it was time to start acting toward solving some of the state's fishery resource problems, so they formed a group known as Anglers United (AU). The role of AU was to fill some monetary gaps by raising money that could be dedicated to particular projects agreed to by both AU and the Arizona Game and Fish Department. Since a 1983 fund-raising banquet, AU funded a trout nutritional study; planted "fish hab" modules in a lake; stocked trout, walleye and catfish; cooperated in a smallmouth bass transplant; and helped support a Tucson Kid's Fishing Day. Other projects being considered include the purchase of a small weed harvester, air fare for Arizona Game and Fish Department's hatchery personnel to attend a hatchery seminar, a white bass study, and purchase of three additional fish transport tanks. AU also donated a personal computer to an Arizona Game and Fish Department's regional office. The AU organization is growing rapidly, with new chapters being established statewide.

A midwestern group, the Midwest Angler's Association (MAA) has proposed the establishment of an "Anglers Trust" to help fund enhancement projects for the upper Mississippi River. MAA would raise money through a percentage of annual membership fees; a percentage of fees collected for advertising in the group's magazine, The Midwest Angler; profits from specific fund raising ventures; and from private donations. Funds would be held in trust in a bank, and would be allocated to projects approved by committee action. I don't know whether appropriate state or federal fisheries agencies have input or are represented on the committee.

These are just two of what probably are a number of organizations that can cooperate and support state fishery projects. In other areas, the seeds of cooperation may be present but an organizer may be needed to get the groups together. Organizations such as these help keep the lines of communication between managers and anglers open. since

they not only provide anglers an opportunity to contribute to their sport's improvement and to see how and where the contributions are being spent, but they also allow the states to undertake projects that might otherwise have been left unfunded. These groups can accomplish much, but cooperation with the managing agency is a must.

New Habitat From Old Ships

Talk about making a silk purse out of a sow's ear! When it comes to enhancing recreational fishing through artificial reefs, sometimes any old junk will do. Several newsletters ago (FMS Newsletter 4[3]:6) I reported on the use of obsolete drilling rigs as artificial reefs in the Gulf of Mexico. Now comes word (only 13 years too late - your editor is really up on things...) that the United States Government has been sinking ships for fish.

The Liberty Ship Act (P.L.92-402) made surplus or obsolete ships from the national Defense Reserve Fleet available to states for use as artificial reefs (after contaminants were removed, of course). To date, 42 ships have been deployed. The 1984 National Fishing Enhancement Act (P.L.98-623) amended and expanded the Liberty Ship Act, stating that any vessel determined to be of insufficient value for commercial or national defense purposes to warrant its maintenance and preservation in the national defense reserve fleet may be an artificial reef candidate.

Similar things are happening on inland waters. The last newsletter reported on concrete and rock rubble artificial reefs in Lake Erie. It has also been suggested that discarded barges be used as fish habitat in the upper Mississippi River (I don't know if these have been successfully placed and evaluated. I'd like to hear from someone with experience.) I'd think that barges and old ships could also be used in the Great Lakes.

With safety and aesthetics as prime considerations, getting the artificial reef to an appropriate place seems to be the biggest job. Getting fish and fishermen to use them follows closely behind, usually without any effort at all...

Exotic Fish Section Name Change

The AFS Exotic Fish Section will soon become the AFS Introduced Fish Section, by a vote of the Section's members and Executive Committee. A majority of members felt that many of the species of interest to the Section were not exotic in the true sense of the word, and thus introduced was a more apt description. Contact Neil E. Carter, President, Introduced Fish Section, 2905 Rae Dell Avenue, Austin, Texas 78704; 512/479-4860 for more information on this section's activities.

Freshwater Clam Die-off

A problem has been brewing in the upper Mississippi River for several years, and it seems to be getting worse every year. The problem? Clams are dying.

Several years ago, a fisheries biologist observed that an abnormally high number of "mussel meats" were floating in the Mississippi River. At a meeting of the Upper Mississippi River Conservation Committee, this observation was mentioned in passing and, after discussion, was written off as localized, natural mortality. At the same time, interest in commercial clamming rekindled, and clambers began reporting several of these clam die-offs. What was originally thought of as a localized occurrence is now viewed as a major concern.

The problem extends beyond just the Mississippi River; mussel die-offs have been reported in Indiana, Illinois, Missouri, Arkansas and in some TVA streams in Kentucky and Tennessee. A number of species are involved: heelsplitters, 3-ridges, pocketbooks, washboards and pig-toes, among others. At this time, it is not known whether endangered species, or those important to food chains, are involved. The only thing that's sure is that an ecological problem of considerable significance exists that needs to be addressed, because the die-offs may be a signal of an environmental deterioration that could affect man.

The U.S. Fish and Wildlife Service's National Fishery Research Laboratory in LaCrosse, Wisconsin, may be devoting some research time to investigate possible causes. At this time, the Lab admits that the available data are so sketchy and incomplete that it is impossible to make any assumptions as to the probable causes. Environmental contaminants, habitat destruction, parasites, viruses, bacterial pathogens or other ecological factors may be involved. Scientists present during some of the die-offs report that clam gills become occluded and turn brown, but causative factors have so far eluded investigators.

The seriousness of this problem as well as its implications are subject only to speculation. Have clams always died in this manner but to date have escaped being observed? Is it a recent phenomenon tied to contaminants? Is it a disease epidemic that affects only a few species, or can it spread? We'll try to keep tabs on the work being done and bring you updates as they're released.

Underutilized Species

I am always impressed with anyone's ability to take a seemingly unpopular fish and turn it into a culinary delight. Quite often, the species sports-

men throw away today may be tomorrow's prized catch. The Sport Fishing Institute recently reported on a North Carolina study into why sportsmen shun certain unfamiliar species.

Their findings? Anglers preferred species that have white, flaky meat and are easy to catch, store and eat, although some dark meat species such as bluefish, mackerel and mullet were also sought after. Some fish are preferred because of their fight. But fish that are perceived as ugly, difficult to clean, dangerous to handle, poisonous or fish with dark meat (with the above exceptions) were usually rejected by anglers. Often, this rejection is based on hearsay, rumors or downright fertile imaginations. Consider the sea robin, a fish perceived as poisonous because they're ugly; sea robins are an ingredient in Classic French bouillabaisse. When anglers are not discarding species because of misconceptions, they cite the ready availability of preferred species as a reason for rejecting other species. Names also keep a fish blacklisted. Great Lakes freshwater drum are not regarded very highly, yet they are successfully marketed on the east coast as white perch.

Many preferred species such as flounder, grouper and red drum are being overfished, and researchers see a switch to non-traditional fishes as a way to spread out a limited number of fish to an increasing number of anglers. Education is the key, and a program that includes brochures, cookbooks, slide tape shows, and including non-traditional species in fishing tournaments is a start. Researchers believe concentrating on sportfishing opinion leaders, such as marina operators, charter captains, bait and tackle businessmen, outdoor writers, fishing club presidents, etc., will be more effective in changing attitudes than focusing on individual fishermen.

If successful, pressure on existing fish stocks will be eased, and the angling world will be tempted with some gastronomic delights that they heretofore spurned with "you take it off the hook; I'm not touching it", "tastes like diesel oil", or "how can anything that ugly taste good?"

Upcoming Events

August 23-24, 1985. *Oklahoma Pond Management Symposium*. Lincoln Plaza Convention Center, Oklahoma City, Oklahoma. Sponsored by the Oklahoma Chapter AFS. For more information, contact Steve Hensley, Program Chairman, Route 2, Box 1955, Mannford, Oklahoma 74044; 918/581-7458.

September 7-11, 1985. *The 115th Annual Meeting of AFS*. Sun Valley, Idaho. For more information, contact Carl Sullivan, Executive Director, American Fisheries Society, 5410 Grosvenor Lane, Bethesda, Maryland 20814; 301/897-8616.

October 9-11, 1985. *National Workshop on Micro-computer Applications in Fish and Wildlife Programs*. Colorado State University, Fort Collins, Colorado. A follow-up to the first national workshop held in December, 1983, the purpose of this workshop is to provide for an exchange of ideas on and demonstrations of micro-computer-based programs for use in fish and wildlife programs. A survey of applications (statistical analysis, field data manipulation, data base management, geographic information systems, telemetry applications, population models, telecommunications, electronic mail, bulletin boards, etc.) has been conducted this past spring and the results will form the basis for the workshop (who is doing what or who has what concerning micro-computer applications in fish and wildlife programs). Emphasis will be on application, and many of the packages will be on display. For further information, contact Don Schrupp, Habitat Resources Section, Colorado Division of Wildlife, 6060 Broadway, Denver, Colorado 80216; 303/297-1192, ext. 275.

October 23-24, 1985. *Wetlands and Water Management on Mined Lands*. Pennsylvania State University, University Park, Pennsylvania. For more information, contact Agricultural Conference Coordinator, Wetlands Conference, The Pennsylvania State University, 409 J.O. Keller Building, University Park, Pennsylvania 16802; 814/865-9547.

October 27-30, 1985. *Thirty-ninth Annual Conference of the Southeastern Association of Fish and Wildlife Agencies*. Radisson Plaza Lexington, Lexington, Kentucky. For more information, contact Peter Pfeiffer, Division of Fisheries, Kentucky Department of Fish and Wildlife Resources, #1 Game Farm Road, Frankfort, Kentucky 40601.

November 5-8, 1985. *Twelfth Annual Aquatic Toxicity Workshop*. Thunder Bay, Ontario, Canada. Under the suggested theme of utilizing laboratory-derived data to protect real world ecosystems from pollution effects, the workshop will include a field trip to the Environmental Research Laboratory in Duluth, Minnesota. For more information, contact J. Howard McCormick, Environmental Protection Agency, Duluth, Minnesota 55804; 218/727-6692 or George Ozburn and Alasdair Smith, Lakehead University, Thunder Bay, Ontario P7B 5E1; 807/345-2121.

November 13-16, 1985. *International Symposium on Applied Lake and Watershed Management*. Americana Great Gorge Resort, Lake Geneva, Wisconsin. For more information, contact the North American Lake Management Society, P.O. Box 217, Merrifield, Virginia 22116; 202/833-3382.

November 14-16, 1985. *Seventeenth Annual Symposium of the Desert Fishes Council*. Death Valley National Monument, Furnace Creek, California. For more information, contact Phil Pister, California Department of Fish and Game, 407 W. Line, Bishop, California 93514; 619/872-1171.

December 15-18, 1985. *Forty-seventh Midwest Fish and Wildlife Conference*. Anway Grand Plaza Hotel, Grand Rapids, Michigan. For more information, contact Midwest Steering Committee, Department of Fisheries and Wildlife, Natural Resource Building, Michigan State University, East Lansing, Michigan 48824; 517/353-0647.

January 28-30, 1986. *Economic and Social Values of the Wildlife Resource*. Hotel Syracuse, Syracuse, New York. While this international symposium, sponsored by the New York Chapter of The Wildlife Society, may be oriented towards terrestrial wildlife, fisheries workers should find a wealth of valuable information. Session topics include: The Value of the Wildlife Resource, Wildlife Resource Values Measurement, Direct Economic Uses of the Wildlife Resource, Wildlife and the Quality of Life, Using Values Information -- Practical Application of Values, Wildlife Resource Value Needs, and a mini-workshop. For more information, contact William Porter, Arrangements Chairman, Wildlife Values Symposium, 253 Illick Hall, S.U.N.Y. College of Environmental Science and Forestry, Syracuse, New York 13210.

March 9-13, 1986. *Common Strategies of Anadromous and Catadromous Fishes*. Park Plaza Hotel, Boston, Massachusetts. Sponsored by the Northeastern Division AFS. For more information, contact Mike Dadswell, Fisheries and Oceans, Biological Station, St. Andrews, NB E0G 2X0; 506/529-8854.

May 12-16, 1986. *First National Symposium on Social Science in Resource Management*. Oregon State University, Corvallis, Oregon. The goal of this symposium is to exchange information between social scientists and managers about research issues and research findings on people and human behavior in parks and forests. Examples of the application of social science within planning and decision-making processes will be featured. Tentative subject areas

are visitation issues in parks; natural resource communication; social change and resource management; wilderness recreation; depreciative behavior in outdoor recreation; human dimensions in wildlife; environmental and resource perceptions; river recreation and water resource issues; tourism in parks and forests; recreation and marketing in tourism; community and natural resource development; international aspects of social forestry; social science and micro-computers; recreation policy; social impact assessment; energy development; carrying capacity; applied science issues in management; personnel management issues for the 80's and 90's. A call for papers has been issued. For more information, contact Donald R. Field, NPS Cooperative Park Studies Unit, College of Forestry, Oregon State University, Corvallis, Oregon 97331.

May 25-31, 1986. *First Asian Fisheries Forum*. Manila, Philippines. For more information, contact the Chairman, Asian Fisheries Forum, MCC P.O. Box 1501, Makati, Metro Manila, Philippines.

September 14-17, 1986. *The 116th Annual Meeting of AFS*. Providence, Rhode Island. For more information, contact Carl Sullivan, Executive Director, American Fisheries Society, 5410 Grosvenor Lane, Bethesda, Maryland 20814; 301/897-8616.

Publications of Interest

Marine Recreational Fisheries

Marine Recreational Fishery Statistics Survey - Atlantic and Gulf Coasts, 1981-82 published by the National Marine Fisheries Service is part of a series of surveys to obtain estimates of participation, catch and effort by recreational fishermen in marine waters of the U.S. The publication is divided into a number of sections. The first section describes the survey methodology and estimation procedures, followed by a discussion of sampling variances and estimate precision. The results section begins with several technical considerations in interpreting the data. A brief summary of the survey findings precedes the tabular results of the survey. Tables following each year's data describe the classification of species groupings. Samples of the telephone and intercept survey instruments and a glossary appear in appendices. Copies can be obtained from the U.S. Department of Commerce, National Marine Fisheries Service, National Fishery Statistics Program - F/S2, Washington, D.C. 20235.

Fishery Management

Fishery Management by J. L. McHugh treats managing fisheries from a broad, multi-disciplinary approach. Using case histories to describe success and fail-

ure, Fishery Management integrates oceanography, economics and law to attempt to achieve a broad understanding of how domestic and international fisheries are managed. Dr. McHugh analyzes success and failures and proposes a new kind of thinking about fisheries - better management through learning from experience. Fishery Management is available for \$15.00 from Springer-Verlag New York, Inc., 175 Fifth Avenue, New York, New York 10010.

Stream Alterations

The Effects of Stream Alterations on Salmon and Trout Habitat in Oregon by D. L. Bottom, P. J. Howell and J. D. Rodgers reviews salmonid habitat requirements, the impacts of land use practices in Oregon on salmonid habitat and production, and techniques for developing stream restoration projects and habitat management plans for the river basins in Oregon. Copies can be obtained from the Oregon Department of Fish and Wildlife, 506 S.W. Mill Street, P.O. Box 5303, Portland, Oregon 97208.

Editor's Corner

One of the things that Dave Whitehurst and I have wanted to accomplish through the newsletter is to provide a medium for members to communicate with one another. Unfortunately, I don't think the newsletter has done much of that in the past year (with a few exceptions). In order to help give the newsletter a more balanced approach, as well as help foster communication, I have set up five regional editor positions, drawn generally along AFS Division lines. These regional editors will be writing about activities going on in their respective region, but will attempt to concentrate on ongoing work. A tremendous amount of valuable work is currently aimed at the oceans, lakes and streams of this continent, some summarized only in memos or annual reports, others happening without the knowledge that similar or complementary work may be going on elsewhere.

Each regional editor will be writing a regional summary appearing in each newsletter which will report on what fellow fisheries workers are doing, and will encourage those with like interests to contact each other. These editors will be asked to use names, addresses and telephone numbers to encourage communication. Regional summaries will be written in a "newsy" sort of way; they will not dwell in depth on any particular aspect of ongoing or recently completed work, nor will they be allowed to display any graphical or tabular data. That's what Transactions and NAJFM are for.

At this time, I have four regional editors:

Canadian Regional Editor

Chris Brousseau
Ontario Ministry of Natural Resources
Box 3000
Cochrane, Ontario P0L 1C0
705/272-7038

Southeastern Regional Editor

Tim Cross
Turcotte Research Lab
Route 3, Box 70
Canton, Mississippi 39046
601/859-3421

Northcentral Regional Editor

Mike Vanderford
Federal Aid Office
U.S. Fish and Wildlife Service
660 Federal Building
Ft. Snelling, Minnesota 55111
612/725-3596

Western Regional Editor

Chuck Willis
Oregon Department of Fish and Wildlife
506 SW Mill Street
P.O. Box 3503
Portland, Oregon 97208
503/229-5437

Northeastern Regional Editor

Vacant

I need a representative from the Northeastern Division. If you are interested in serving, please drop me a line.

These editors will be undertaking a time consuming and difficult job. They need your support, and they need information. Please don't hesitate to contact them if you have something newsworthy, and share your work with them when they contact you.

The Fisheries Management Section Newsletter is a publication of the Fisheries Management Section, American Fisheries Society. Address all correspondence to Richard E. Wehnes, Editor; P.O. Box 180; Jefferson City, MO 65102; 314/751-4115.

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