

# NEWSLETTER OF THE EXOTIC FISH SECTION AMERICAN FISHERIES SOCIETY

November, 1983

Neil E. Carter, Editor

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# From the President

The Exotic Fish Section is now entering its fourth year. Our membership has essentially reached a plateau of 200. I have felt all along that most members of the American Fisheries Society have a misconception of what our Section is all about. This situation should change in the near future as the outcomes of many of our initiatives come to fruit, and an increase in our membership should follow.

Our definition quandary has finally been resolved. At our recent business meeting at Milwaukee the Section adopted the definitions as developed by Paul Shafland and Bill Lewis. Many individuals contributed thoughts toward the development of the terminology. The basic premise is that any fish (aquatic organism) moved by man or by his actions is an introduction. There are two categories of introduction -- exotic and transplanted. An exotic is an organism introduced from a foreign country (i.e. one whose entire native range is outside the country where found). A transplant is an organism moved outside its native range but within a country where it occurs naturally (i.e. one whose native range includes at least a portion of the country where found). These definitions are consistent with the way the terms have been used by the Section. However, many authors use the term "exotic" to include any organism not native to a system. Under that definition, nearly every major North American sport fish and forage fish is an "exotic" somewhere in the United States. The terminology adopted by our Section is certainly a more logical approach. We will suggest to the editors of AFS journals that the definitions adopted by our Section be consistently adhered to by

The adoption of definitions brings another question for the Section to resolve. Do we increase our scope to include transplanted species? In other words, should we be the "Introduced Fish Section"? To tangle with this problem, I am appointing a "blue-ribbon" panel comprised of our past presidents (J. McCann, W. Courtenay, and W. Shelton). I am asking Bill Shelton to be chairman of the committee. Their charge will be to develop a position paper on this subject. They will obviously need input from the membership. Please contact any of the members of the panel or your Section officers if you have any suggestions or comments.

Our Section will be convening a mini-symposium at the next annual meeting of the American Fisheries Society. Details of the symposim are contained in this newsletter. We also have in the planning stages a major symposium that will be international in scope. Walt Courtenay and I have been working on this for the past year. We will provide more information on the symposium as our plans solidify.

Contained in this newsletter are assignments to various committees. Anyone who wants to serve on a committee should contact me or the committee chairman. Likewise, if you feel there is a need for any additional committees, please let me know.

Encourage your colleagues, graduate students, etc., to join the Exotic Fish Section. Our coming initiatives are going to have major impacts on both fisheries management and aguaculture.

Christopher C. Kohler

#### Note from the Editor

Hopefully we can get two to four issues of the Exotic Fish Section Newsletter published this year. Material that is of interest to our membership would be appreciated. Please mail in an envelope marked "personal" to me at Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas 78744.

Neil E. Carter

# Officers and Committees Exotic Fish Section -- 1984

President-Elect:

Neil E. Carter

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William L. Shelton Zoology Dept. University of Oklahoma Norman, OK 73019

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Richard Anderson Missouri Coop. Fish. Unit University of Missouri Columbia, Missouri 65211 Protocol Committee:
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Tilapia Committee:
Waler R. Courtenay (Chairman)
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Stephen H. Bowen Michigan Tech University Houghton, Michigan 49931

Grass Carp/Hybrid Committee:

Volunteers?

Scope of Section Committee: William L. Shelton (Chairman) Department of Zoology University of Oklahoma Norman, OK 73019

James McCann National Fishery Center P.O. Box 1018 Shepardstown, WV 25443 Walter R. Courtenay Department of Biology Florida Atlantic Univ. Boca Raton, FL 33431

Other Committees:

Suggestions and volunteers

Minutes of the Business Meeting of the Exotic Fish Section AFS 113th Annual Meeting, August 18, 1983

Called to order at noon meeting; quorum not present; suspended rules and required unanimous vote for all items of business.

Approval of minutes of 1982 meeting. Published in newsletter; R. Noble moved they be approved - passed.

Membership - Shelton commented on EFS level of 218; as of 30 June it was 178, and as of the National meeting it was 196. Voting status in Executive Committee meeting was not questioned. He briefly discussed efforts to solicit membership from the tropical fish industry without success.

The Treasurer's report was read by Shelton and approved by the membership.

Definitions Committee report given by P. Shafland. Discussed written report with suggested definitions. A motion was presented by D. Anderson to accept the report and approve the definitions as presented. Discussion included suggestion by W. Lewis to further define transplants by numerical scale based on ecological

similarity. This idea met with general acceptance. Minor editorial comments were made on the report and the group then approved the report and definitions for section adoption.

Protocol Committee report was given by C. Kohler. He discussed the general ideas and the status with reference to EIFAC (European Inland Fisheries Advisory Commission), and ICES (International Council for Exploration of the Sea). Discussion focused on the Section's position on proposing these guidelines. Kohler pointed out that the protocol would appear as a chapter in the Exotic fishes book and that additional consideration would be given to the subject by the Section. The report was approved as given.

Tilapia Committee - no report.

Nomination/Ballot Committee - J. Stanley reported results of election.

President: C. Kohler; President-elect: Neil Carter; Secretary/Treasurer: Jay Stauffer.

Installation of new officers: Chris Kohler assumed duties of President and presented a plaque to Shelton.

Comments by Kohler were brief because of the short time allocated for the business meeting. Meeting was adjourned at  $1:00~\rm p.m.$ 

## News Items

# Exotic Fish Section Book

Publication of Distribution, Biology and Management of Exotic Fishes, edited by W. R. Courtenay and J. R. Stauffer, is scheduled for publication by the Johns Hopkins University Press in early 1984. Half of the royalties will go to the Section and half to the parent society. Buy a book -- support EFS/AFS!

### Cornell Symposium

The Exotic Fish Section will convene a mini-symposium entitled "Strategies for Reducing Risks of Introduced Aquatic Organisms" at the next annual meeting of the American Fisheries Society at Cornell University sometime between August 12-17, 1984.

Speakers and topics are as follows:

Strategies for Reducing Risks of Introduced Aquatic Organisms

Exotic Fish Section

#### Panel:

1. Christopher C. Kohler, Moderator & Introduction Southern Illinois University-Carbondale

- Robin L. Welcomme, Global Perspective Food and Agricultural Organization of the United Nations
- Carl J. Sindermann, Marine Perspective National Marine Fishery Service and International Council for the Exploration of the Sea
- Walter R. Courtenay, Jr., North American Perspective Florida Atlantic University
- Paul L. Shafland, A State Perspective Florida Non-Native Fish Research Laboratory
- John G. Stanley and William L. Shelton, Aquaculture Perspective Maine Cooperative Fishery Research Unit, University of Oklahoma
- 7. To be Announced, Federal Perspective
  U.S. Fish and Wildlife Service, Gainesville, Florida

# New Exotic Fish Laboratory

An appropriation of \$4,000,000 has been made for construction of a federal exotic fish research laboratory at Gainesville, Florida. Construction is scheduled to commence around the first of the year and finish within 420 days. Approximately half of the 21,000 square foot building is devoted to wet laboratory space. Thirteen acres of experimental ponds are planned when an additional appropriation is made. The primary mission for the laboratory staff is the study of exotic fishes, but some investigations will involve native anadromous and estuarine fishes.

# Now Black Sea Atlantics!

In a new venture into the transfer of species, the Russians have introduced Atlantic salmon fry into the Black Sea near the Crimean coast. It is reported that the fry acclimatized well in these waters and gained rapidly in weight. Ukrainian marine biologists have also been introducing other varieties into the Black Sea. These include striped perch, Pacific mullet, Caribbean eels and anchovy from the Indian Ocean. Taken from Fish Farming International, 1983, 10(6).

## Sea Fish Crossed with Tilapia

An enterprising pond operator in Iloilo province in the Philippines has developed a fast-maturing hybrid by crossing the freshwater Tilapia nilotica with the marine "pisugo." It is called the balangaw (rainbow fish) because of its bright colours. It is said to grow around 30 cm in four months, have the rapid spawning quality of the tilapia, taste like the pisugo, and survive in the worst conditions of salinity, muddy water and overcrowding. Condensed from Fish Farming International, 1983, 10(7).

# Redfish/Black drum Hybrid Produced

Biologists of the Texas Parks and Wildlife Department now report a new hybrid marine fish believed to have excellent potential as a sportfish for freshwater lakes. A hybrid cross between the red drum (redfish) and black drum was successfully produced at the Palacios Marine Fisheries Research Station. About 500,000 fertilized eggs were spawned by a black drum during April, and the resulting fry were stocked in ponds.

Over 86,000 one and a half inch fingerlings were stocked experimentally in Lake Creek Reservoir near Waco. The hybrid more closely resembles the popular redfish in appearance, but it is deeper-bodied like the black drum. It is mottled black and silver in color, lacks the characteristic black tail spot seen on redfish, and also has lost the black vertical bars of the black drum. Condensed from Texas Parks & Wildlife News, August 17, 1983 issue.

# Lake Fairfield Gets Nile Perch

The first-ever introduction of hatchery-produced African Nile Perch (<u>Lates marie</u>) in the United States occurred at Lake Fairfield near Fairfield last week according to officials of the Texas Parks and Wildlife Department. The release of approximately 1,000 of the fish was the culmination of nine years of research. Virtually all the research was conducted at the Department's Heart o' the Hills Research Station at Ingram, but last week's group of fingerlings resulted from the first efforts at rearing Nile Perch in brackish water at the Palacios Marine Fisheries Research Station. Biologists have experimented with three species of Nile perch, and although spawning has occurred numerous times in the past, the fry had failed to survive in the ponds. The 2,500-acre power plant heated reservoir is scheduled to receive about 100 perch per acre in an effort to provide a sportfish to control an existing large population of tilapia. Condensed from Texas Parks & Wildlife News, September 7, 1883 issue.

# Peacock Bass Stocked at Alcoa Reservoir

Peacock bass may have found a home in Texas. In mid-September, Texas Parks and Wildlife Department biologists stocked 3,000 fingerling-size peacock bass in Alcoa Lake near Rockdale. Constant discharge waters from the Aluminum Company of America power plant keeps this lake's water temperatures warm enough to support the South American imports. If the stocking program is successful, Alcoa will be the only lake in the nation where fishermen will have the opportunity to fish for peacock bass. The only other lake in Texas which currently has a population of peacock bass is Johnson Creek in Northeast Texas, which is closed to public fishing. Peacocks stocked in that lake spawned in 1982, but an interruption in warm-water discharges last winter caused considerable mortality and the population has not yet rebounded. This tropical species cannot withstand water temperatures below 68°F. Condensed from Texas Parks Wildlife News, October 26, 1983 issue.