



NEWSLETTER
OF THE EXOTIC FISH SECTION
AMERICAN FISHERIES SOCIETY

May, 1983

Christopher C. Kohler, Editor

Volume 3, Number 2

From the President

All of you have now had a chance to read the report on Introduced Species Terminology from the Definitions Committee. I hope that you will contribute your ideas as requested by Paul Shafland, directly to him as well as a copy to Chris Kohler. Chris will summarize comments for subsequent newsletters. Please consider particularly the recommended Standardized Terminology (EFS Newsletter 3(1):5) and these alternative questions; will we: 1) continue to identify our Section and its orientation with exotic fishes, as defined, or 2) consider the inclusion of transplanted fishes in Section orientation?

I hope that you noticed that Volume 3 of the Newsletter had/has a new look in the form of the logo. The current logo was contributed by Carla Zedialis last year. While I am not certain of the formalities required in adopting an official logo, I think our Section should consider one. While the bylaws define and guide our activities, a well-designed symbol of our Section can project the basic message of our orientation. This is not a pressing issue, but I would like to see some effort toward the acceptance of a logo that represents our Section. I have asked Rick Wallace (Fisheries Department, Auburn University, AL) to provide some options to be considered with the ones that have been used in our past Newsletters.

The Exotic Fish Section, by its nature, is sensitive to the International aspect of the Parent Society. The AFS is an international organization by virtue of its membership. The question of the extent of commitment to the international community has been explored in the past and continues to be an issue within the Society. The extent and mechanism of involvement will be considered by the membership in the coming years.

As mentioned in the last Newsletter, the EFS has reached the status of a voting member on the AFS Executive Committee. Vote may be exercised the year following attainment of the necessary membership. Therefore, in 1983-84, the EFS will have full stature on the Executive Committee.

From the Editor

In this issue of the Exotic Fish Section Newsletter we list next year's candidates for Section officers. You will note that we have only one person listed for Secretary/Treasurer, Jay Stauffer. Our past and present officers have concluded that it is more efficient for the same person to perform the task of

the Secretary/Treasurer for at least two years. This is because it is a time-consuming task to develop the mailing lists, billing procedures, and Newsletter promulgation. If you will excuse the absence of the "whereas and therefore bit it resolved" jargon, I want to suggest the resolution that our by-laws be changed to state that the term of Secretary/Treasurer will be for two years. As our Section matures, we may want to consider having the Editor of the Newsletter as a separate office.

We have received a few comments on the Exotic Fish Terminology which I think you will find interesting. Remember, the time to comment on the terminology is now. Don't wait until its time for a vote on their adoption.

Although I hesitate to disagree with Section President Shelton, I like our present logo.

Book Progress

Walter Courtenay and Jay Stauffer report on the progress of the book entitled, Distribution, Biology and Management of Exotic Fishes. The chapter manuscripts were submitted to the Johns Hopkins University Press early last month and ahead of our submission deadline. These manuscripts are now being read by the Copy Editor and will be returned to Walt in batches as they are completed. Each chapter manuscript will be copied and sent to authors for final examination. This will be your last chance to make changes. Along with those manuscripts will be a list of chapter reviewers; if we have left anyone off that list, please let us know when you return the manuscripts.

News Items

Oklahoma passed a resolution during January 1983 to permit stocking grass carp in private waters. Landowners must apply to the Department of Wildlife Conservation and receive a letter of authorization. Stocking of public waters is not permitted under the resolution.

William G. Kepner, Vice-President of the Arizona-New Mexico Chapter of AFS has sent us a copy of a passed resolution regarding the introduction of grass carp and their hybrids (Thatcher, Arizona; 6 February 1982);

RESOLUTION #1

15th Annual Meeting, Arizona-New Mexico Chapter American Fisheries Society
Eastern Arizona College
Thatcher, Arizona
4-6 February 1982

Whereas, the American Fisheries Society is the oldest and largest professional organization of fishery scientists in the world and is the only North American organization certifying professional fishery biologists, and

the membership has a responsibility to their profession and to the people and resources which they serve; and

Whereas, it has been proposed to introduce grass carp and/or their hybrids into Arizona and New Mexico waters as a possible control of aquatic vegetation; and

Whereas, research studies to date have yet to demonstrate that hybrid Asiatic carps provide adequate control of nuisance aquatic vegetation; and

Whereas, 80% of the native fish fauna of Arizona and 49% of that of New Mexico is either extinct or endangered, threatened or protected because of the possibility of their extinction; and

Whereas, the interactions and potential impacts of introduced Asiatic carps with existing fishes of the Southwest are unknown; and

Whereas, both New Mexico and Arizona Game and Fish Departments administer economically important sport fisheries; and

Whereas, there is inadequate assurance that certain Asiatic carp hybrids are sterile; and

Whereas, the ecology of Asiatic hybrids is poorly known; and

Whereas, there are currently extensive research programs on Asiatic carps being conducted in several states, the final results of which are not yet available; and

Whereas, the introduction of Asiatic carps may have an adverse impact upon aquatic habitats and organisms; and

Whereas, exotic parasites have been documented to be introduced with Asiatic carps; and

Whereas, there is a long and well-documented history of impacts associated with the introduction of exotic species into the Southwest; and

Whereas, in light of the present state of knowledge as regards the aforementioned, the potential ecologic and economic consequences of Asiatic carp introduction into the Southwest may outweigh the anticipated benefits; and

Whereas, no environmental impact assessment of the introduction of Asiatic carps, as required for compliance with the National Environmental Policy Act and amendments thereto, has been initiated,

Now, Therefore, Be it Resolved that the Arizona-New Mexico Chapter of the American Fisheries Society, assembled in their 15th Annual Meeting at Thatcher, Arizona, on 4-6 February 1982, is opposed to the introduction of Asiatic carps or hybrids therewith into any waters of the States of Arizona or New Mexico until such time that the liabilities and benefits of such an introduction are known.

Bill Kepner also sent us two interesting articles written by Bob Thomas, Outdoor Editor, The Arizona Republic, regarding a "lost population" of hybrid grass carp. Some excerpts:

The Salt River Project has lost 1,100 hybrid grass carp from a Mesa canal and a holding pond.

A SRP spokesman said it is not known if the fish, an exotic grass-eating carp that originated in China, have been killed by accident, stolen by poachers or somehow escaped into the Salt River and were washed downstream by flood waters into Painted Rock Reservoir.

If the missing fish are in Painted Rock, there is a possibility that some could reach the Colorado River because the Army Corps of Engineers is releasing water from the reservoir into the lower Gila River.

Both the SRP and the Arizona Game and Fish Department are reluctant to discuss the whereabouts of the fish.

I wish we could repeat the entire story, but we haven't had time to get the necessary permission. If some of our Arizona-New Mexico readers have any additional information on the whereabouts of those fish, I'm sure our membership would be interested to know. Needless to say, the apparent "loss" of such exotic fish is a matter of concern to our Section. We do promote the wise use of exotic fishes, however, "wise use" implies not "losing" the fish!

More info on Grass Carp and Hybrids was submitted by Rick Monaghan of SIU-C.

Feeding and growth studies involving grass carp and grass carp X bighead carp were conducted by personnel of the Fisheries Research Laboratory at Southern Illinois University. Trials were run at 14, 22 and 30 °C using Najas guadalupensis as food. At 14 and 22 °C, large hybrids took in more food and had a faster growth rate than did small hybrids. Large hybrids lost weight at 30 °C. The results also suggested that it will require at least twice as many hybrids to obtain the same level of vegetation control as the grass carp.

EIFAC Working Party on Stock Enhancement

Your Editor will be serving on the European Inland Fisheries Advisory Commission of FAO Working Party on Stock Enhancement. The terms of reference are as follows:

- 1) to review and recommend to EIFAC a code of practice for the regulation of the introduction of exotic species and procedures for its implementation, and
- 2) to review the present status of stocking and to elaborate guidelines for stocking with various species groups forming part of established fishery management practices.

Our first meeting will be 16-20 May, 1983, at Hamburg, Germany.

Upcoming Symposium

"Paddlefish - A Threatened Resource?" A half day symposium to be held in conjunction with the 45th Midwest Fish and Wildlife Conference in St. Louis, Missouri, on 6 December, 1983. More information is available from Joe G. Dillard, Missouri Department of Conservation, 1110 Avenue, Columbia, Missouri, 65201. (314-499-3761).

Comments on Exotic Fish Terminology

William L. Shelton
University of Oklahoma

I am very pleased with this edition. The rational development and progression of thinking should be helpful in defining the Sections' philosophy. More importantly, it can be the basis for further appropriate developments, as you state.

I agree with the approach of letting the membership react to the report and then move forward on any consideration for further definitional hierarchy.

Clark Hubbs
The University of Texas at Austin

I must take strong exception to your narrow definition of Exotic in the January 1983 Newsletter of the Exotic Fish Section. Simply the definition is a social definition, not a scientific definition. The definition in a scientific dictionary (1939 edition) reads 'signifying an introduced or non-endemic plant'. Other than the botanical complication that would seem an appropriate model. Simply replace plant with fish and we are using a scientific approach. This problem is quite apparent to our living near a national border. A fish seined from the south side of the Rio Grande is an exotic, but one from the north bank is not. Even more critically, a fish from northern Minnesota is not an exotic, yet one moved from the Rio Alamo 100 meters to the Rio Grande is an exotic. The attempt to impose a special definition on a scientific issue should be avoided - an introduction is an introduction no matter how you cut it.

Paul Shafland's comments to Hubbs:

Exotic is a subcategory of introduced (i.e. one not native to the place where found), therefore country borders passing through a species range does not imply it can be moved within its range and considered an exotic.

J.P. Rick Monaghan
Southern Illinois University at Carbondale

I agree with the authors that there is a need to standardize introduced species terminology, however, I see some problems with the possible use of the terms transotic and transferred. Etymologically transotic means "across the ear." This may be a source of confusion to some. Another problem arises from the definition of transotic, particularly in the phrase "a biotic community.... consisting of different indigenous genera belonging to the same class as the species introduced." I believe the hierarchy level of class is too large in this case; maybe family would be a better level. Otherwise I like the proposed meanings of these two terms and I believe this effort is a good start towards a more standardized terminology.

BALLOT

1983-1984 Exotic Fish Section Officers

President:

Christopher C. Kohler
Current President-Elect

President-elect:

Robert G. Goldstein, Head of the
Raleigh Office of the private
consulting of Applied Biology

Neil E. Carter, In charge of the
Exotic Fish Program for the Texas
Dept. of Parks and Wildlife

Secretary-Treasurer:

Jay R. Stauffer
Appalachian Environmental Laboratory

(write-in candidate)

Please mail ballots no later than July 15, 1983 to:

Jon G. Stanley, Nominations Chairman
Maine Cooperative Fishery Unit
Dept. of Zoology
University of Maine
Orono, Maine 04469

DETACH AND MAIL