



AS 12 ✓

President Vicki Blazer's Address

I am very proud and honored to have been elected President of the Fish Health Section. With the enhanced awareness of aquatic environmental "health" problems and increased interest in aquaculture, the importance of fish health and competent fish health managers is increasing. Our section introduced and passed resolutions concerning FDA food fish designations for drug administration two years ago. The problems associated with lack of approved drugs continues to be a major problem. A number of members of the FHS are actively involved in addressing this problem. I found, as many of you probably will, the letter I received from Rosalie Schnick (*presented in this newsletter*) very enlightening. I believe we need to continue pursuing solutions for this problem.

There are a number of efforts that were initiated by Charlie Smith, last year's president, which I feel are important to continue. The idea of an International Standards Committee was revived and a number of interested individuals were able to meet during the annual meeting in Newport. The major issue discussed was the formation of an internationally recognized register of fish pathologists (fish health experts). Exactly how this will be achieved is not yet known but two representatives, Doug Anderson and Rosalie Schnick,

were appointed to meet with Barry Hill and other representatives of the European Association of Fish Pathologists in Budapest, Hungary.

Charlie also initiated discussions with the AFS Fish Culture Section and World Aquaculture Society concerning our co-sponsoring a technical session on disease at Aquaculture '92.

Past-President Charlie Smith's Report

When assuming Presidency of the Section, I had visions of completing several ongoing projects as fast as possible and initiating several new projects little realizing that the ongoing business of the Section and the Parent Society also took considerable time. However, reality finally set in and I realized that there are just so many hours in a day, not just for one's self, but for others who are more than willing to help, but who are also busy. Even though busy themselves, most succeed in accomplishing goals set at the beginning of the year and they are to be commended. During 1990-1991 the Fish Health Section concentrated its effort in several areas; some were new, others a continuation of ongoing programs.

The Blue Book Committee continues to make progress. The first draft was sent to committee members by the end of July. After their review the committee met in Seattle, Washington and addressed any comments of concern. Upon completion of the committee review, the Blue Book will go for public review and then to the Technical Committee for final review. Hopefully, the document will be ready to publish by December, 1991. The title of the book is: "Fish Health Blue Book--Suggested Procedures for the Detection of Certain Finfish and Shellfish Pathogens." An attractive cover and illustrations for each chapter have been selected for the book.

The long dormant International Standards Committee was reactivated this year. Dr. Barry Hill, President of the European Association of Fish Pathologists (EAFP) has agreed to chair the committee. Currently there is enthusiasm for establishing an International system for registration of professionals in the fish health field. Goals are to come up with a professional recognition system that will be accepted internationally and that will result in a registry with names of highly qualified, internationally recognized fish pathologists. The FHS/AFS is looked upon as a world leader and probably is the only organization with a program to certify fish health professionals. Working closely with the EAFP and perhaps with fish health groups from other countries will hopefully initiate implementation

In This Issue:

Presidential
Addresses
Page 1-3

Therapeutant
Crisis
Page 3-4

Management
Zones
Page 4-5

Nematodes
Page 5

Annual
Report
Page 6-9

1991

FHS 19(3)

Blazer (cont'd)

I have continued this effort and have agreed to serve as co-moderator. I believe this is an excellent opportunity for our section to interact with the Fish Culture Section as well as the overall aquaculture community.

Another issue which was presented at the annual ExCom business meeting was continuing education sessions at our Annual meetings. I feel this is a good idea and something I'd like to pursue further - not only for certified Fish Pathologists and Fish Health Inspectors but for the general membership as well.

Lastly, I'd like to take this opportunity to acknowledge the people who have served and continue to serve the section as members of various committees. Some of these people serve for many years and the commitment entails much more time and effort than many of us are (or were) aware. I'd like to thank these people and hope we can continue to attract such involved people. This is what makes us successful as a section and I encourage anyone who is interested to make that interest known.

Smith (cont'd)

of such a program. Concepts of such a system were discussed with Dr. Hill and several other U.S. and foreign FHS members in Newport just prior to the FHS meeting in August.

During 1990-1991 the Professional Standards Committee centered their efforts around development of a more comprehensive examination for Fish Pathologists. In addition to the examination, an increase in academic requirements and a continuing education program are being developed that also will help in strengthening the certification program.

Currently there are 54 active Fish Pathologists and 43 Fish Health Inspectors that are certified through the FHS. Two Fish Pathologists were certified this past year after successfully completing the examination last summer. The Chairman of the Certification Committee has suggested that the number of committee members be reduced from 5 to 3 and that the Chairperson's tenure be extended from one year to two years. These matters were discussed at the annual meeting in Newport.

The FHS Awards committee received five nominations for the coveted S.F. Snieszko award. The Awards Committee also solicited nominations from the FHS membership for the newly recognized Special Achievement/Meritorious Service Award. Unfortunately, at time of writing this report there had been no nominations for the new award. This is rather disheartening since without a doubt there are several worthy

applicants that should have been nominated. Criteria for the award were listed in the FHS Newsletter volume 18, number 4, winter 1990. Hopefully, the membership can be again alerted of the Special Achievement/ Meritorious Service Award and the Awards Committee will next year be inundated with nominations! The Awards Committee did approve a Distinguished Service Award to one of the Section's members (Steve Leek) recognizing a long and prominent career in the field of fish health.

Travel awards were given to worthy graduate students needing funds to present a talk or poster at the Fish Health Section meeting in Newport, Oregon in August. This year five individuals received awards totalling \$1,750 from the S.F. Snieszko bequest. Three received \$400 and two received \$250. Differences in amounts does not reflect worthiness of the students, merely that some will travel by air and some are able to drive to the meeting.

The Membership Committee has also had a busy year. A vote by the membership to change the Bylaws to include the Blue Book Committee as a standing committee was overwhelmingly passed. Ballots for the 1991 election were mailed in June and have been counted. Results were announced at the meeting in Newport (see this newsletter). There was a poor response by the membership to a questionnaire to update the FHS membership directory to include not only names and addresses, but areas of expertise as well. Only 112 of 520 members responded to the questionnaire. The directory will be ready for review and comment soon.

The Journal of Aquatic Animal Health has become well established and continues to bring credibility to the FHS. A total of 78 manuscripts were submitted for publication during 1990. Both text and illustrations continue to be very good quality. Turn around time for good quality manuscripts is from 6 to 8 months.

A gift of \$750 was approved by the EXCOM and presented to the AFS Permanent Home Fund this past year. I had the opportunity of attending the AFS mid-year EXCOM in Bethesda this past spring. While there, I was able to visit the new offices of the AFS. I was impressed that the Parent

Society is a strong supporter of Sections. They have an excellent staff that has been most helpful with Section business. The Leadership sessions they provide to new officers at retreats are informative, motivating and well worth attending.

The S.F. Snieszko Committee approved an award of \$700 to Rosalie Schnick to assist in payment of cost to attend the EFAP meeting in August in Budapest, Hungary. Rosalie not only provided introductory remarks for the chemotherapy session but also chaired the session. Probably the most

important aspect of the trip was in making contacts with key people involved in chemical and drug registration in European countries; also, in assimilating data from studies of interest that will hopefully aid in chemical and drug registration in the U.S. and Canada.

I would like to take this opportunity to thank each member of the FHS EXCOM as well as to the members of the Section at large for all the help and support they have provided throughout the year. There is no doubt that without this kind of support things just wouldn't have gotten done. It's been a fun and rewarding year for me. I have had the opportunity to do things that I never would have had a chance to do, to do some things that I undoubtedly should have done at the beginning of my career rather than at the end. There are some things that I would have liked to have seen done that weren't, but in general I feel many positive things have been accomplished. Hopefully, the coming year will see the same support provided to our new incoming officers and committee chairman.

Major Issue Concerning Recreational Fisheries and Endangered Fishes

Rosalie Schnick
Registration Officer
U.S. Fish and Wildlife Service

The Issue

A situation of extreme importance is developing that can adversely affect the fish culture programs of every public agency involved in stocking fish for recreational purposes or in restoring threatened or endangered fish species. The state of Illinois has attempted to obtain Investigational New Animal Drug Applications (INAD's) from the U.S. Food and Drug Administration (FDA) for the use of 9 fishery compounds at Illinois state fish hatcheries. Nine separate

requests were submitted to FDA by the Illinois Department of Conservation on April 8, but as of August 8, 1991, Illinois had received permission to use only two compounds, human chorionic gonadotropin and carp pituitary hormone. For various reasons, FDA declined to grant INAD's for (1) potassium permanganate to treat bacterial, fungal, and protozoan diseases; (2) chloramine-T to treat external myxobacterial disease, bacterial gill disease, and columnaris disease; (3) Hyamine 3500 to treat bacterial gill disease; and (4) diquat dibromide to treat columnaris disease.

Illinois did not receive responses on (1) sodium chloride to relieve stress, prevent shock, and control external parasites; (2) sodium sulfite to dissolve the gelatinous matrix in which channel catfish eggs are embedded; and (3) carbon dioxide

to anesthetize fishes. Without the use of sodium sulfite on channel catfish eggs, the hatching success in Illinois was only 28%, compared with over 85% with its customary use of sodium sulfite. Illinois received written emergency authorization from FDA on May 22, 1991 (requested May 14, 1991) to use diquat dibromide to treat columnaris disease on muskellunge and northern pike. The authorization came too late to save over 20,000 northern pike. The state had to wait for an epizootic to occur before it could request emergency authorization. The fish that were treated and survived cannot be released into public waters unless the state of Illinois can show that diquat tissue residues in the fish are less than 0.1 ppm. Illinois must also collect samples (and replicates) of hatchery and waste treatment effluent waters, waste treatment sludges, and digested hatchery fish rearing wastes to analyze for diquat during the period of use.

Implications

The situation in Illinois is not an isolated incident; several other states and the U.S. Fish and Wildlife Service also have encountered difficulty in obtaining permission to use chemicals (e.g., luteinizing hormone-releasing hormone and marking walleye with oxytetracycline) that previously were used without question. Most of these circumstances involve chemicals that have some form of registration or approval for use in aquatic or fishery situations and many are applied directly to the water. Several of the chemicals that are registered pesticides or disinfectants also have therapeutic properties. Most of these chemicals either have no commercial sponsor (e.g., sodium chloride, acetic acid) or the patent protection has expired (e.g., sodium sulfate). Additionally, the significant registration costs, low return on investment, and increasing regulatory constraints has resulted in no one in the pharmaceutical or chemical industries being interested in extending the registrations to include additional therapeutic uses.

Because of increased interest in aquaculture, FDA is closely scrutinizing all uses of chemicals from the control of fish diseases, elimination of pest organisms in ponds, manipulation of spawning, to the marking of fish. The prognosis is not good for fish production from state and federal fish hatcheries as fewer fish will be available each year for recreational and fish restoration programs. Without the use of various critical fishery chemicals in aquaculture, production numbers will be decreased, epizootics will increase, condition of the fish will be reduced, and in some cases, endangered species may be eliminated. Fisheries managers and researchers will also face constraints in their ability to survey and perform research on fish populations.

Recommendations

1. Discuss this issue at the Annual Meeting of the American Fisheries Society at San Antonio in September

1991. The AFS groups involved should include the Fisheries Administrators Section, the Fisheries Management Section, the Fish Culture Section, and the Fish Health Section. Note that there is a workshop scheduled on September 9 at the AFS meeting, entitled "Expansion of chemicals, drugs, and therapeutic use in aquaculture."

2. Actively support the public funding of registration-oriented research on chemicals needed or used in aquaculture.
3. Alert all state aquaculture coordinators concerning this issue.
4. Interact with the various organizations that have been promoting the development of chemicals for aquaculture use and develop a mechanism for information sharing and cooperation.

New Salmonid Disease Control Policy for Washington State Co-managers

Kevin A. Amos
Washington Department of Fisheries
115 General Admin. Building
Olympia, Washington 98504

Question - How many fisheries managers does it take to write a disease control policy? Answer - All of them!

Due to the findings of VHSV and the recognition that traditional egg and fish transfer methods put the resource at risk, the Co-Managers of Washington State have written a new salmonid disease control policy. Co-Managers in Washington include the state departments of Fisheries and Wildlife, and the treaty Indian tribes. Cooperating in the effort is the U.S Fish and Wildlife Service.

It was imperative that in the process from start to finish that all players had input on both the technical and policy level. As you can well imagine, this document was the result of many people spending many hours wrestling with resource issues that are quite challenging in the fish management arena in our state. Members of the core group include Joan Thomas, Bruce Stewart, Ray Brunson, Steve Roberts and myself.

The basic principle of the policy is managing disease risk by restricting to health management zones the movement of live product. We have labeled these zones Egg Health Management Zones (eight EHMZs in the state) and Fish Health Management Zones (fourteen FHMZs). The egg zones are larger than the fish zones because we believe that

pathogen transfer with eggs can be minimized if proper sanitation and inspection procedures are followed. On the other hand, fish rearing in surface waters which contain feral anadromous salmonids of unknown pathogen status present a great risk if there is a desire to transfer them to another watershed outside their own zone. Also, eggs will be allowed to be imported into the state or transferred outside their own EHMZ provided the brood undergo a rigorous inspection and pathogen histories of the watersheds in question are compatible.

Listed in the policy are selected "reportable" pathogens. These are: viral - IHN, IPNV, OMV, VHSV; bacterial - *Renibacterium salmoninarum*, drug resistant strains of *Aeromonas salmonicida* and *Yersinia ruckeri*; and parasitic - *Myxobolus cerebralis*. The presence of the viral pathogens or BKD in the brood will prevent egg movement to a zone where these pathogens don't exist. Generally, the transfer of fish from fresh water to fresh water in another zone will be prohibited. Isolation of any of these pathogens will not necessarily result in destruction of all live product in the facility and/or watershed.

Finally, a very important part of the policy are the provisions to communicate inspection and diagnostic data between Co-Managers so that all program planning and fish/egg transfer activity is a shared decision making process. Many of the practices prescribed in the policy will require modifications of existing programs and facilities. For example, developing specific pathogen-free water supplies and quarantine systems for certain hatcheries will be imperative. The Co-Managers have provided an implementation period of six years for some aspects of the policy so that dollars can be secured for facility modification. Copies of the policy are available upon request. Please provide a self-addressed and stamped envelope.

Suggestions For Examining Fish For Larval Nematodes

Richard Heckmann
Department of Zoology
Brigham Young University
Provo, Utah 84602

Frank Moravec
Czechoslovak Academy of Sciences
Institute of Parasitology
370 05 Ceske Budejovice
Branisovska 31 Czechoslovakia

Donna Withers
Nevada Department of Wildlife
Division of Fisheries
Las Vegas, Nevada 89121

While examining refuge populations of Pahrump poolfish, *Empetrichthys latos latos*, for parasites, stringlike fragments with nuclei appeared on a few of the blood smears. On further examination these fragments appeared to be pieces of roundworm. Slides were sent to Dr. Frank Moravec in Czechoslovakia for confirmation. He also considered the specimens pieces of larval nematodes. Among fish nematodes, only members of some dracunculoid families may have their larvae in host's blood. The families Skrjabillanidae and Daniconematidae are known from freshwater fishes in Europe. These tissue parasites are usually very fine and are sensitive to osmotic pressure and will rupture in water (fragments of roundworms). Specimens were collected the following year using saline solutions and the fragments turned out to be larvae of bird nematodes (*Contracaecum* sp. and *Eustrongylides* sp). Dr. Moravec still believes skrjabillanids will be found in North American fishes if care is taken during fish examination. The purpose of this note is to inform fish pathologists of a suggested examination technique and for researchers to be aware of nematodes in ichthyofauna.

Suggested Procedure (Moravec)

1. Place scrapings and suspect tissue in physiological saline in a small petri dish.
2. Examine sample with a dissecting microscope. Observe movement of nematodes if present.
3. Fix the nematodes in a small petri dish with a hot mixture of physiological saline and 10% w/v formalin.
4. Mount specimens on glass slides with a suitable mounting media.
5. Observe roundworm with a microscope and classify the specimen.

Larval nematodes were recently found in some European countries with no recorded history of their occurrence. Recently, Moravec and Koie (1987, *Folia Parasitologica* 34:335-340) reported a new species of *Daniconema* using these techniques (*Daniconema anguillae* Gen. et sp. N., A new nematode of a new family Daniconematidae Fam. N. parasitic in European eels).

Nonlethal Sampling Methods

Charlie S. Smith
Past-President, FHS

Since writing the Presidents Message in Volume 18(4) of the FHS/AFS Newsletter encouraging development of nonlethal sampling methods for use in fish disease inspections I have received several letters of support as well as a few publications and drafts of papers dealing with the subject. This has been encouraging. The letters expressed concern

for the losses that occur as a result of killing large numbers of fish. Concern was not only from the economics standpoint, but also the effects repetitive lethal sampling has upon the genetics of small populations of wild and domestic stocks as well as rare and endangered species.

The Northeast Regional Aquaculture Center (NRAC) has undertaken a project to develop nonlethal sampling methods. The project is being coordinated by Dr. Pei Chang of the University of Rhode Island and involves a number of researchers in the northeast. NRAC would welcome the opportunity to collaborate with other agencies in work related to nonlethal sampling techniques. Anyone interested is encouraged to contact Dr. Henry S. Parker, Executive Director, NRAC, Southeastern Massachusetts University, North Dartmouth, Mass. 02747.

Postcard Notes on the AFS/FHS Meeting in Newport

Paul Reno
Hatfield Marine Science Center
Oregon State University
Newport, Oregon 97365

The meeting was well attended, with over 275 participants. The technical sessions and presentations (52 presentations) were timely and went smoothly, for which I'd like to thank the moderators and those presenting papers. In their cozy milieu, the poster sessions were well done and enlightening. The weather was amazingly cooperative: sunny and mild (for Newport), and some Devil-may-care types were spotted on the beach sans sweat-shirts. On Thursday evening, the Western Fish Disease Conference was held at the Hatfield Marine Science Center, and, after a brief discussion on the proper method of choosing leaders for the meeting, developed into a lively parlay about the old and the new in fish health and fish health issues West of the Big Muddy, with some interesting comparative info. from the East. After the banquet, John Fryer regaled us with a slide show of his travels to Easter Island (which way did those statues really face?) and Dr. Kimura was surprised and delighted as the recipient of the S.F. Snieszko Award. Steve Leek received the Distinguished Service Award. Some locals (and not so locals) experienced the Piptide on the Bayfront and were still able to function the next day! In short, a good time was had by all.

Anyone interested in receiving a copy of the abstracts can receive one *gratis* from Paul Reno at 503-867-0147.

sent for



Dr. Kimura receives S.F. Snieszko Award from President Charlie Smith.

Annual FHS Committee Reports

Archives Committee

Five boxes of letters, submissions to the editor, past newsletters and other section materials which Dr. John Rohovec had acquired over the years were sent to AFS in Maryland. Anyone wishing to obtain copies of old newsletters should contact:

Toni Brome
AFS
5410 Grosvenor Lane
Suite 110
Bethesda, Maryland 20814

Her telephone number is (301) 897-8616.

Tony Amandi, Chairperson

Board of Certification

Since the last report, June 5, 1990, there have been 5 applications for Fish Health Inspector. Three of these applicants have been certified and the other two are in the process of completing submission of their application materials. Three Fish Health Inspectors received 5-year recertifications and three others allowed their certifications to lapse. At present there are 43 active Fish Health Inspectors and 7 inactive (certifications expired or FHI retired).

Two new Fish Pathologists have been certified after successfully completing the examination last summer. Four new applications have been made in the past year. One has been denied and one has not completed the application process. Of the remaining two, one (and likely both) candidates will take the qualifying examination this year. Eight Pathologists have received their 5-year recertification and four others have allowed their certifications to lapse. Currently there are 54 active Fish Pathologists and 7 inactive (certifications expired or retired).

There were expenditures of \$94.33 for printing of a set of 250 Fish Pathologists recertification application forms.

Certification Committee Summary to Date:

Fish Health Inspector

Total number applicants	77
Number certified	50
5 year recertification	13
10 year recertification	10
Number inactive	7

Fish Pathologists

Total number applicants	88
Number certified	61
5 year recertification	44
Number inactive	7

Other Comments From Committee Chairperson

- (1) The Chairperson's job has consumed about 11 hours per month over the last 16 months. Most of time is used for record keeping, corresponding with applicants and coordinating the review process by other committee members. I would not have been able to conduct the duties of Chairperson if I did not have the availability of an efficient assistant (Marilyn Wilkinson). Prospective Chairpersons should be aware of the time required to conduct the job.
- (2) I suggest that the reduction of committee members from 5 to 3 be considered for the following reasons. Although the committee members "vote" on applications, there are criteria defined, as precisely as possible, for each of the requirements - three individuals can make these determinations and the Chair, can act as arbiter for disagreements. Committed candidates are difficult to find and, in my experience, some committee members find it difficult to spend the considerable time required to review applications in detail and return them to the Chairperson in a timely manner. A sequence of appointment would need to be followed, perhaps even identifying the prospective chairperson upon first appointment, to ensure one year of experience prior to assuming the chair.

- (3) Officially extend the Chairperson's tenure from one year to two years. It took several months for this Chairperson to have things running smoothly due to the learning curve involved in the process - thus it would make sense to retain this experience and defer to every second year the inevitable delays occurring during transfer of the post.
- (4) The disposition of old records needs to be addressed. There are several heavy boxes of applications and forms from committee actions on specific applications.

Ralph A. Elston, Chairperson

Finance Committee

As of July 5, 1991 we have a total of \$4,304.29 in the General Account (West One Bank, Buhl, Idaho) and \$5,623.90 in the Blue Book Account (AFS Office, Bethesda, Maryland). A detailed accounting of this year's income and expenses are listed below.

	<u>Transactions</u>	<u>Subtotal</u>	<u>Total</u>
FHS General Account			
Beginning Balance			6691.7
Credits			
Monies from 1989 meeting	1080.00		
Section dues	3185.00		
Certificates	360.00		
Prof Stands Meet return	342.40		
Interest	247.21	5214.61	11906.36
Debits			
1990 Meeting	78.99		
Balloting	492.26		
Archiving	83.62		
AFS Perm Home Fund	750.00		
Newsletter	5247.91		
AFS Plaque/Cert Seal	267.50		
Cert Appl Forms	94.33		
Mem Appl Forms	180.00		
Exec Meet Exp	109.90		
Misc Postage	225.76		
Xeroxing	51.80		
Bank Charge	20.00	7602.07	
Ending Balance of General Account			4304.29
Blue Book Account			
Beginning Balance			9398.40
Debits			
1-7-91 Invoice	1396.00		
6-20-91 Invoice	2378.50		
Ending Balance of Blue Book Account			5623.90

Scott E. LaPatra, Chairperson

Blue Book Advisory Committee

I am very pleased to announce that all of the chapters of the Blue Book are in and being converted to first draft at this time.

I will be meeting with the publisher during the Eastern Fish Health Workshop to discuss some final details of format, type of paper, and other problems that may come up.

The first draft should be to the committee members by the end of July. After each of them review it we will meet and address any comments or concerns. Upon completion of the committee review we will go for public review and then to Technical Procedures Committee for final review.

If all goes well and the review process is not too lengthy I would hope to have the Blue Book ready to publish by December.

John C. Thoesen, Chairperson

Membership Committee

The membership committee consists of myself, Pat Chapman and Beth MacConnell. Here is the status of projects we have worked on in the past year:

1. **Membership Directory** - We sent a request in the Winter FHS Newsletter for additional responses to the questionnaire received by the membership in the May 1990 Newsletter. To date, we have only 112 responses total out of 520 members. After discussion with President Smith and my committee members, we decided to include only these responses in the directory. (My thought is that the basic information about the other members can be accessed through the AFS Directory.)

I had intended to have the membership directory information completely entered into a spreadsheet by now...but the spring has been unusually busy. I told President Smith that I would have it done by this summer - I still think that we can have it ready by the August meeting for review and comment. We plan to enter the data in such a way that we can manipulate it as appropriate.

2. **Amendment to the Bylaws** - We sent out a ballot for changing the bylaws of the section, included in the Spring 1991 Newsletter. The ballot was passed, by a vote of 80 for to 3 against.
3. **1991 Election** - The ballots for the 1991 election were mailed during the middle of June. The results will be final before the August FHS meeting.

Kathy Hopper, Chairperson

Newsletter and Publications Committee

A total of 41 submissions have been published in the past four issues of the FHS Newsletter. Submissions have been adequate to ensure 12 page editions. Printing costs average \$570 per issue and mailings \$218 per issue.

New members of the FHS are sent a letter of acknowledgement and back issues, for the past year, of our newsletter.

Randy MacMillan, Chairperson

Nominations Committee

The nominating committee has submitted the names of the following volunteers from the FHS/AFS membership to run as candidates in the 1991 election:

For President-elect (one position)

- Randy MacMillan
- Ralph Elston

Board of Certification (two positions)

- Pete Taylor
- Warren Groberg
- Ted Meyers
- Ray Brunson
- Roger Herman

Nominating Committee (one position)

- Mike Johnson
- Keith Johnson
- Frank Hetrick

Rich Holt, Chairperson

Election Results

President-elect: Randy MacMillan

Board of Certification: Ray Brunson and Ted Meyers

Nominating Committee: Keith Johnson

Congratulations to those elected and thank you to all who were willing to serve.

Scientific Journal Committee Report

The Journal of Aquatic Animal Health has become established with a total of 78 manuscripts submitted for publication during 1990. The number of manuscripts received this year is running slightly behind those received at

this time last year but we have enough manuscripts being processed to finish out the current volume.

The 1991 September (No. 3) issue has gone to the printer and the December issue (No. 4) is being edited. We have caught up with the backlog and well written papers should be published within 6 to 8 months after submission.

W.A. Rogers, Chairperson

Technical Procedures Committee

The Technical Procedures Committee has been inactive over the past year, awaiting the conclusion of the Blue Book Advisory Committee's deliberations on the revision of the Blue Book.

Rodney W. Horner, Chairperson

Time and Place Committee

The site for the Fourteenth Annual Fish Health Section Meeting was Newport, Oregon. The meeting was held in conjunction with the Thirty-second Annual Western Fish Disease Conference on August 1-3, 1991. The host was Paul Reno of Oregon State University, Hatfield Marine Science Center.

The place of the 1992 meeting is Auburn, Alabama. Time will be announced later.

J.S. Rohovec

Acting for R.P. Hedrick, Chairperson

News Release

The new Fisheries Law Section of the American Fisheries Society has been formed and shall hold its first official business meeting Wednesday, September 11, 1991 at 8:30 a.m. in San Antonio Texas at the Annual Meeting of the American Fisheries Society. The Section is currently seeking to increase public and professional awareness of the purposes of the Fisheries Law Section and to expand its membership.

Development of the Section has been due in large part to critical legal issues impacting fisheries, (such as the use of drift nets, TEDs, protection of resources, etc.), which are surfacing daily and must be addressed in a competent forum that has both the awareness and expertise to rationally deal with the competing interests.

The Fisheries Law Section of the AFS is open to all AFS members in good standing. Its purposes are:

1. To educate members of the Section and fisheries professionals on matters of law, policy, and regulation involving fisheries;
2. To provide legislative analysis of bills that may have an impact on fisheries;
3. To act as a resource to the American Fisheries Society in the development and analysis of legal positions that are in consonance with the aims and goals of the Society;
4. To organize and conduct programs such as workshops, symposia, etc., dealing with issues in fisheries law.

Section dues are \$5.00 per annum and individuals in this section should contact the American Fisheries Society at (301) 897-8616.

David Karasz, Esq.

AFS Fisheries Law, Section President

Editorial

Fish therapeutants and chemicals historically used by aquaculturists (both conservation and commercial) are receiving careful U.S. Food and Drug Administration scrutiny. Recent FDA actions (Schnick, this newsletter) and policy decisions suggest aquaculture therapeutant practices formerly condoned by FDA may be no longer acceptable. Compounds such as copper sulfate, which has EPA approval, are now being subjected to FDA's critical examination for target animal, human and environmental safety. Questions of efficacy are being raised. Many of the compounds used therapeutically never received the Good Laboratory Practice efficacy or animal safety evaluations currently required by FDA. Costs associated with FDA therapeutant clearance can be great making return on investment by a pharmaceutical company meager, hence there is little interest by these companies to pursue aquaculture therapeutant clearance. Current FDA actions suggest that each target animal, (e.g. trout, catfish, redfish, striped bass or tilapia) must be treated independently, significantly magnifying costs of therapeutant clearance. The U.S. Fish and Wildlife Service suggests that \$35 - 48 million will be required to obtain existing therapeutant clearance for the 58 or so fish species they culture.

The lack of data, expense of clearance and plethora of regulatory hurdles suggest the time is ripe for fish health professionals and conservation and commercial aquaculturists to unite to seek relief. It is suggested that a united presentation of therapeutant priorities and needs, a coordination of funding and concerted lobbying will be more effective than concerned parties working independently. No one group has the wherewithal to provide the data requirements. Most of the

therapeutants of concern are of concern to all aquaculturists because they are used for the same purposes. A coalition needs to be formed to pursue therapeutant registration. The Fish Health Section has an opportunity to play a significant role in this effort.

Randy MacMillan, Editor

Position Announcements

Newsletter Editor: The Fish Health Section is recruiting a co-editor for its quarterly newsletter. Responsibilities include but are not limited to solicitation of newsletter submissions, editing submissions and formatting. The co-editor will assume complete publication responsibilities Sept. 1992 when the current editor retires. Salary is commensurate with experience but will be based on satisfaction associated with volunteer hours and meeting deadlines. Inquires should be addressed to Randy MacMillan, Editor, Fish Health Section Newsletter, P.O. Box 712, Buhl, Idaho. 83316. Applications will be accepted until an offer is received.

Meetings

Annual Meeting of the Southern Division of AFS. November 3-6, 1991. Greenbriar Hotel, White Sulphur Springs, West Virginia. For information: Bert Pierce, West Virginia Dept. Natural Resources, P.O. Box 697, Sutton, WV 26601, 304/364-5695.

12th Annual Meeting of the Society of Environmental Toxicology and Chemistry. Seattle Convention Center, Seattle, Washington. For information: Bill Williams, Program Chair, USEPA-ERL, 200 SW 35th Street, Corvallis, OR 97333, 503/757-4679; FAX 503/757-4799.

Annual Meeting of the North Central Division of AFS. November 30- December 4, 1991. Marriott Hotel, Des Moines, Iowa. For information: Al Farris, Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319, 515/281-5145.

Aquaculture Expo V. Jan. 12-16, 1992. New Orleans, La. For information: Aquaculture Productions, Inc. 4640 S. Carrollton Ave., New Orleans, La. 70119; Phone 1-800-527-7631 or 504-486-9868; FAX 504-488-4135.

Furunculosis Workshop. Richmond, British Columbia, Jan. 30-31, 1992. Contact Mrs. Mona Jane, Aquaculture and Commercial Fisheries Branch, Ministry of Agriculture, Fisheries and Food, 808 Douglas St., Victoria, BC, V8W 2Z7; 604/356-1604; FAX 604/356-7280.

Annual Meeting Catfish Farmers of America. Feb. 26-28, 1992. Perdido Hilton, Orange Beach, Alabama. Contact Bill Glasscock, Little Rock, Arkansas; 501-225-6102; FAX 501-223-8230.

World Fisheries Congress. May 3-8, 1992. Athens, Greece. For information: World Fisheries Congress c/o AFS, 5410 Grovesnor Lane, Bethesda, Maryland 20814. USA.

FHS Officers and Committees 1991-1992

Executive Committee

Voting Members

Vicki Blazer, Chair and President 404-542-1165
Randy MacMillan, President-elect 208-543-8217
Charlie Smith, Immediate Past-president 406-587-9265
Scott LaPatra, Secretary-Treasurer 208-543-8217
John Hawke 504-346-3308

Non-Voting Members (Chairs of Standing Committees)

Toni Amandi, Archives
Pat Chapman, Membership
John Civitanich, Professional Standards
Rod Horner, Technical Procedures
David Locke, Awards
Ted Meyers, Board of Certification
Ed Noga, Time and Place
Bill Rogers, Scientific Journal

Standing Committees

Nominating

John Hawke, Chair
Paul Reno (2 years)
Keith Johnson (3 years)

Newsletter

Randy MacMillan, Chair
Martin Chen
Bob Durborow
Rod Getchell
Leni Oman

Newsletter (cont'd)

Ed Noga
Ron Thune
Chris Wilson

Professional Standards

John Civitanich, Chair 503-746-1442
Mike Kent
Martin Chen
Roger Herman

Board of Certification

Ted Meyers, Chair
John Hnath (1 year)
Ron Thune (1 year)
Bob Olson (2 years)
Ray Brunson (3 years)

Technical Procedures

Rod Horner, Chair
Kevin Amos
Dennis Anderson

Finance

Scott LaPatra, Chair
Pat Chapman, Membership
Randy MacMillan, Newsletter

Awards

David Locke, Chair
Steve Leek
Margaret Ewing

Time and Place

Ed Noga, Chair
John Rohovec
To be named

Ad Hoc Committees**S.F. Snieszko, Student Awards**

Pete Walker, Chair
Ron Thune
Rod Getchell

International Standards

Barry Hill, Chair
Bruce Nicholson
Pierre de Kinkelin
Victoria Rasheed
Hisatsuga Wakabayashi
Doug Anderson
Rosalie Schnick

Procedures Evaluation

*Emmett Shotts, Chair
(*Streptococcus*, *Lactobacillus*)
*John Hawke (*Edwardsiella ictaluri*)
*Yolanda Brady (CCV)
Phyllis Barney
*Cliff Starlipper (*Flexibacter*, gill diseases)
Howard Jackson
Ron Hedrick
*Diane Elliott (*Aeromonas salmonicida*)
*Robert Durborow (Warmwater parasites)
*Roselynn Stevenson (*Yersinia ruckeri*)
Jeff Teska
*Phil McAllister (VHSV)
*Russ Kelly (IPNV)

Long Range Projects and Planning

Ron Hedrick, Chair
Standing Committee Chairs

Scientific Journal

Bill Rogers, Chair
John Plumb
John Grizzle

Blue Book Field Advisory

John Thoesen, Chair 717-726-6611
*Scott LaPatra (IHNV)
*Jack Frimeth (Coldwater parasites)
Chris Horsch
Diane Elliott
*Steve Roberts (*Renibacterium*)
*Jack Ganzhorn (*Vibrio*)

Criteria for Best Paper Award, JAAH

Bruce Barton, Chair
Phyllis Barney
Carl Schreck
Dave Groman
Doug Anderson

*Designates Disease Committee Network Chair

**Deadline for Winter Newsletter
November 30, 1991**

Fish Health Section Newsletter

The Fish Health Section Newsletter is a quarterly publication of the Fish Health Section of the American Fisheries Society. Submissions of any length on a topic of interest to fish health specialists are encouraged with the understanding that material is not peer reviewed. Submissions should be addressed to the editor or to a member of the publications committee.

Editor:

Dr. Randy MacMillan
Director of Research
Clear Springs Trout Co.
P.O. Box 712
Buhl, Idaho 83316
208-543-8217
FAX 208-543-5608

Editorial Assistant:

Mrs. Elaine Thompson
Division of Research
Clear Springs Trout Co.
P.O. Box 712
Buhl, Idaho 83316

FHS/AFS Newsletter
Clear Springs Trout Co.
P.O. Box 712
Buhl, Idaho 83316

Bulk Rate
Non-Profit
Paid
Buhl, ID
Permit # 20

003534 DR 9112
Glenn L. Hoffman
Rt 3 Box 36
Kearneysville WV 25430