

AFS-Computer User's Section, Volume XV1, Number 1



AFSCUS

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**Plan to attend the Annual
AFS Meeting in Baltimore:**

August 18-22, 2002

President's Byte by Doug Beard

It is with a bit of trepidation that I write my first column as President of AFS-Computer User Section (AFS-CUS). The previous presidents have laid most of the groundwork for the success of this section and I have the utmost respect for what they have accomplished. Hopefully in the next two years we will be able to continue our sections programs! We have a number of initiatives in progress and are always looking for good ideas and volunteers to help out on these projects.

My major goal over the next two years is to expand the outreach component that our section has been good at over the last few years. I see outreach going in two distinct but cooperative directions. First I would like to have our section take the lead in continuing the work and

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Fisheries Database Summit

Proceedings are now available. See page 5

GIS Symposium

The second annual GIS symposium will be held in September. See page 5 for details.

GIS Workshops to be held

Two GIS workshops to be held at national AFS meeting. See page 6 for details.

Computer User Section Annual Meeting Minutes

August 19, 2001: 5-6:30 pm

Officers Present

Doug Beard, President
Stuart Shipman, President Elect
Andy Loftus, Secretary-Treasurer
Michael Porter, Past President
Dirk Miller, Past President
Judy Gordon, Past Secretary-Treasurer

Members Present

Bill Rodey, Peter Rubec, Christine Lipsky, Stephen Wilson, Dana Schmidt, and Sean Peters

Section bylaws require 15 members to be present at the business meeting before items can be voted on. We failed to meet the quorum requirements for this meeting so no formal votes were taken.

Officer Reports/Remarks

Porter thanked attendees for coming. Announced that the Section was looking for both a new webmaster and a software librarian but he volunteered to continue the webnotes for the short-term, then asked for reports from the other officers present.

I provided copies of the Section financial report that was submitted to the Bethesda. A complete summary of all financial activities undertaken by the Section over the last four years was provided to the Excom and reviewed prior to the business meeting. As of the annual meeting the Section had assets totaling \$8,103.69. Travel expenses to the 2001 annual meeting were provided to President Elect Shipman and Secretary-Treasurer Loftus totaling \$1,144.30 for a balance of \$6,959.39, which is similar to the balance following the 2000 annual meeting. Funds will be transferred to Loftus once new local bank accounts are established and all checks clear the present bank. Loftus talked about moving the Section's funds to a national bank so new accounts do not need to be opened each time a new Treasurer is elected. He will be checking with the parent Society about those options before opening the new accounts. He also recommended that we encourage people from outside the USA to use credit cards for software purchases to minimize issues related to checks drawn on non-USA banks.

Software review summary was prepared by committee chair Gary Ash and reported by Beard. Reviews for both Fisheries Analysis and Simulation Tools (FAST) and AD Model Builder were completed and those packages are now being

sold by the Section. No software is currently under review. Two new software packages (FishXing and BASS-Bioaccumulation and Aquatic System Simulator) have been submitted and we are looking for reviewers. Questions about the Fish Bioenergetics 3.0 software, that the Section agreed to sell at last year's meeting, were raised. Beard will check with Past President Whelan about that package. Members interested in submitting or reviewing new software should contact Gary Ash (gash@rll.ca). Some discussion ensued about endorsements for commercial products that we may be asked to sell. The Section's position is that we will review the product and make it available but will not endorse or support the product.

The software librarian did not file a report. However, we have sold 42 copies of FAST since it was added to the library the first of the year. In addition, 39 copies of FAST were provided to attendees at a Section co-sponsored workshop at last year's Midwest Fish and Wildlife Conference. Some updates to FAST have been developed and the Section is working with Auburn University to make those updates available through a ftp site.

Governing Board Meeting Summary

The issue of page charges for the aquaculture and fish health journals was reviewed. Presently, page charges have been suspended in an attempt to encourage submissions. Because of this and declining subscriptions, both journals are costly to the Society. This is a Society wide issue because carrying these journals uses resources that could support other endeavors. This topic needs additional review.

Gus Rassam was recognized for getting the Society back on stable financial ground to the point that 5% of operating budget was put into reserve. However, some concerns about staff turnover at Bethesda were noted.

Revisions in the AFS constitution were discussed and approved to be voted on at the Societies business meeting. Those changes were also approved at the business meeting. Most of the changes involved moving procedures from the constitution to the procedure manual, removing duplicate information, and increasing flexibility for subunit activities.

Society membership was up slightly in 2001 but is still below the all time high.

Gus Rassam was recognized for getting the Society back on stable financial ground to the point that 5% of operating budget was put into reserve

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Annual Meeting Minutes

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Using the Internet to provide journals to members has not significantly reduced publication cost at this time. Work is in progress to archive all past journals and make them available as an Internet searchable database.

Old Business

Website: Porter recommended that the Section try to find multi-editors for the website to lower the work required and include a boarder band of expertise. Each editor could then focus on areas of knowledge such as GIS/GPS, Linux, database management, or other topic areas. Joe Mion, current webmaster, has not been able to work on the website recently due changes in work assignments. If you would like to contribute to the Section and the Society and help in this area contact Michael Porter at Mporter@uc.usbr.gov. Loftus suggested that the Section more aggressively advertise the availability of software through AFS's website. He will be discussing that issue with Betsy Fritz.

Newsletter: Bob Ball recently resigned after 3 years as editor. Bob did an excellent job over that time period as we moved from a mailed newsletter to an electronic format. The Excom thanks Bob for his outstanding efforts. Craig Paukert (CRAIG_PAUKERT@SDSTATE.EDU) took over the role of newsletter editor this fall and continued the legacy of quality information transfer. If you have ideas or topics relevant to the Section and would like to contribute to the newsletter, Craig would love to hear from you.

New Business

Doug Beard's first official act upon taking over the Section Presidency was to award the President's Plaque to Michael Porter. Great job Micky, please stay involved.

Doug's plan of work will include taking a closer look at the Societies Strategic Plan and identifying what role the Section should take. Dirk Miller will lead that effort and is actively looking for volunteers. The general thought is that we should be able to support the Strategic Plan by just documenting appropriate Section activities.

Doug would also like to have the Section be more involved in information transfer and outreach. To that end we will be re-submitting a proposal to an appropriate funding agencies (perhaps NBII) to coordinate Fish Data Summit II. Loftus is in the process of preparing summary documents from the first data summit and hopes to have that project completed later this year. Data Summit II plans will include a coastal area component as well as identifying what has happened since the first summit.. IAFWA, using a USGS contract, recently hired

a person who is attempting to coordinate how agencies store and retrieve their collection information, so there is national interest in this arena.

Porter will be looking at developing a 1-2 day GIS workshop for next year's annual meeting as a continuing education activity. People interested in helping or attending such a workshop should contact Michael. He also indicated that the Second International GIS Conference will be held next year in England. More information on both these initiatives will be posted to our website.

Bern Megrey has asked that we support AFS's efforts to host the 4th World Fisheries Congress to be held in Vancouver, BC in Spring 2004. The Section agreed to provide \$250 toward this meeting. We have also been asked to develop a computer application or GIS workshop to be held during the meeting. This will be discussed in greater detail later this year.

Finally, we were asked to support the International Section's efforts to create an endowment to support travel of an International member to attend the Societies annual meeting. The Section agreed to provide \$250 toward this effort. The International Section hopes to raise \$10,000 over the next five years including proceeds for the annual raffle to support this program.

With that the meeting was open for general discussion. Loftus suggested that the Section do a better job of advertising who we are and what we do. He took the initiative and contacted incoming AFS President Ken Beal to offer a manuscript for publication in Fisheries, which Beal accepted. Following that the meeting was adjourned.

President's Byte

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goals developed as a result of the first National Freshwater Fisheries Summit meeting. Second I would like to continue to expand our Continuing Education Program.

The first National Freshwater Fisheries Summit meeting in 1998 was an attempt to bring state, federal and other partner organizations together to see if it was possible to develop a national integrated fisheries information system. Specifically we wanted to see what the hurdles would be to implementing a system, how states were developing their own information systems and more importantly if there was an interest in this approach to fisheries information management. The resounding answer to the final question was yes there was interest in working together across geopolitical boundaries, learning from other organizations and providing one portal to information across the nation. Of course we are a long way from realizing that dream, however I think AFS-CUS can take a leadership role in this effort. One of the major recommendations of the summit was to continue these workshop efforts. AFS-CUS

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President's byte

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co-sponsored a proposal for funding a second, expanded workshop (for all interested fisheries folks) for consideration by the International Association of Fish and Wildlife Agencies external grant program. Although unsuccessful, I think this is a very good proposal and we continue to seek funding for this effort. For more information on the results of the first summit, please see the summary report in this issue and if you are interested in the proposal please contact me.

Over the years AFS-CUS has sponsored a number of successful continuing education courses. They have ranged from Microcomputer Applications in Fisheries Science to Introduction to the Internet for Fisheries Biologist and Applied GIS Applications in Fisheries Science. This year we will be sponsoring the Applied GIS workshop in conjunction with the parent society meeting in Baltimore. I believe one way to increase our visibility is to continue sponsorship of continuing education courses. If you are involved with a chapter or other section that is considering conducting courses, please consider offering an AFS-CUS sponsored course. Most of our courses have been accredited by the AFS Continuing Education Committee and can be used for professional certification credits. Please contact me if you would like more information. Further, let me know if you have any new and innovative workshop ideas, we will help you as much as possible.

AFS-CUS has a number of other initiatives that it's pursuing. These include development of a long range plan for the section, participation in the International Fisheries GIS workshop, putting together proposals for workshops at the 4th World Fisheries Conference and participation in the Organization of Fish and Wildlife Information Managers meeting to be held in conjunction with the parent society meeting. If you are interested in any of these initiatives or would like to help on anything AFS-CUS is involved with please let me know. Remember the key to our sections success is ready and willing volunteers! I look forward to working with you during the next 2 years. If you have any thoughts, suggestions or ideas, please feel free to get in touch.

AFS-Computer User's Section Cash Flow Report

Opening balance (1/01/01)	7504.06
Inflows:	
Continuing education	436.42
Dues payment	2357.00
Interest income	130.48
Software sales	3720.60
Total inflows	6644.50
Outflows:	
Bank charge	16.00
Continuing ed. (NCD profit)	1636.84
Listserv	300.00
Newsletter	82.39
Office supplies	130.58
Past President's plaque	25.00
Return check : software	15.00
Software comm-Auburn	2730.00
Software purchase	67.10
Storage space	105.00
Travel	1144.30
Total outflows:	6252.21
Net total	392.29
Ending balance (12/31/01)	7896.35

Submitted by Andrew Loftus

Announcing the Release of a New Software Package

FISHERY ANALYSES AND SIMULATION TOOLS (FAST)

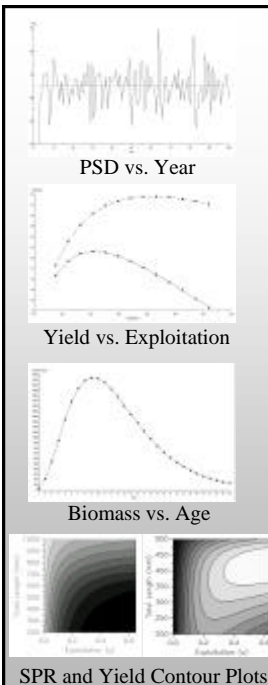
FAST uses age-structure data and Beverton-Holt equations to compute equilibrium yield-per-recruit and dynamic pool models to simulate the dynamics of exploited freshwater and marine fish populations and includes recreational and commercial applications. FAST is user-friendly and requires no programming. Minimum, slot, and inverted slot length limits can be evaluated. FAST also provides the analyst with procedures to compute:

- estimates of growth (von Bertalanffy; weight:length) and mortality (natural and fishing)
- stock density indices (PSD, RSD's) and relative weight
- population simulations under conditions of constant, systematic or stochastic recruitment
- abundance of fish above or below specified length designations
- Spawning Potential Ratio (SPR)

FAST comes with a 140 page manual, fishery examples, and support documentation as PDF files. The software and manual can provide media for instructors teaching advanced undergraduate or graduate classes in fish population dynamics. FAST is available on CD-Rom and requires 15 MB of disk space, and can be installed on any PC with Windows 95 or higher. FAST was developed by Jeffrey W. Slipke and Michael J. Maccina, Dept. of Fisheries, Auburn University, AL 36849 USA.

Cost: \$75 per copy for single user

To purchase: Send check or purchase order to the AFS Computer User Section, Attention: Darren Benjamin, Software Librarian, Atlantic States Marine Fisheries Commission, 1444 Eye Street, NW 6th Floor, Washington, DC 20005 USA email: dbenjamin@asmfc.org



For further information go to <http://www.ag.auburn.edu/dept/faa>

Second GIS symposium announced

We are pleased to announce the 'Second International Symposium on GIS/ Spatial Analyses in Fishery and Aquatic Sciences'. That is to be held on September 3-6th, 2002 at the University of Sussex, Brighton, UK. The Symposium title has been altered from the previous one, i.e. 'First International Symposium on GIS in Fishery Science', reflecting two changes in the current situation. 'Spatial Analyses' has been added because GIS alone implies just the tool and we are essentially more interested in 'Spatial Analyses using GIS', and 'Aquatic Sciences' has been added because there is now a strong realization, manifest especially in the ecosystems approach to fisheries management, that neither inland nor marine fisheries or aquaculture can be studied in isolation from the aquatic environment in which the activities take place.

For details, please refer to the Web site at:
<http://www.esl.co.jp/Sympo/sympo10.htm>

In addition, a limited number of Proceedings of the 'First International Symposium on GIS in Fishery Science' is now available. Those who want to know more about this publication and those who want to purchase this publication, please look at the following Web-sites :

Publication details:

http://www.esl.co.jp/Sympo/sympo7_2.htm

'Preface and Overview' quoted from the Proceedings:

http://www.esl.co.jp/Sympo/sympo7_3.htm

Webmaster Needed For Computer User's Section

AFS Computer User Section is seeking an enthusiastic individual with a little spare time to serve as its webmaster in a volunteer capacity (<http://www.fisheries.org/cus/>). The successful candidate will work with Section officers to develop and implement a workplan to revamp the current site into a user friendly and up-to-date tool for the Section. Although the individual will work closely with Section officers, they will have a great deal of flexibility to apply original ideas and concepts on their own. This is a great opportunity to serve the Society, develop marketable skills, network with other professionals in the field, and build your resume. The Section will provide FrontPage to manage the site. You don't need to be an expert, just have the desire to get more involved and make a contribution. Please consider utilizing your unique skills to make the CUS site the best AFS site on the web. If you have interest please contract Doug Beard at eardT@mail01.dnr.state.wi.us

National Freshwater Fisheries Database Summit Report Available

By Andrew Loftus and Doug Beard

In February 1998, the first-ever *National Freshwater Fisheries Database Summit* was convened, bringing together representatives of 47 state fisheries management agencies and several federal and private organizations in a facilitated forum to address issues regarding information management and sharing. This Summit was initiated by the states and funded the USGS State Partnership Program, with additional funding provided by the U.S. Fish and Wildlife Service Division of Federal Aid (through the Sport Fish and Wildlife Restoration Program) and the USGS National Aquatic Gap Program. Members of the American Fisheries Society-Computer User Section were instrumental in the Summit organization and implementation, and provided important technical advice to make it a success.

Now, thanks to a combined effort of the International Association of Fish and Wildlife Agencies (IAFWA) and the USGS, a synthesized proceedings is available. Copies of the Proceedings have been sent to every state agency director urging them to review the recommendations that were collectively made by state agency staff to improve freshwater database management. The 2000 Annual Meeting of the IAFWA focused on new technologies to assist agencies to manage information and the recommendations and implementation steps outlined in these proceedings may offer one mechanism for states to work together to apply these new technologies.

Follow-up evaluations of the Summit reflected an overwhelming belief by state participants that this meeting significantly benefited their agency. The goals of the summit were to:

- , Promote improved databases and access to databases;
- , Improve coordination and communication between database managers;
- , Obtain input about major issues confronting database development at the state level;
- , discuss methods for enhancing collaboration and exchange of data among states and federal agencies;
- , Explore how federal agencies and states can work together to advance state fisheries information systems.

A pre-summit survey characterized the current state of information management systems within state agencies. Survey results indicated four general areas of possible improvement. Successfully addressing each area would help to achieve the aforementioned goals and were subsequently addressed in detail at the summit:

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Fisheries Database Summit

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- , What would go into a "model" database structure?
- , How can states improve Internet applications for data sharing?
- , What improvements are needed in metadata standards and records?
- , How do states address information access/data security issues?

A number of actions were identified by the summit participants that would be useful in aiding the development of their fishery information systems, including:

- , Compilation of established protocols for state data collection procedures.
- , A compilation of state laws/regulations/policies governing the access to, and use of, computerized fisheries data.
- , Development of "model database" protocols used successfully by states.
- , Analysis of commonly-used variables in state aquatic species databases.
- , Periodic reconvening of state database managers similar to the 1998 summit.

Action plans for achieving these recommendations, as well as complete results of the summit, are detailed in this report. Copies of the report can be downloaded at www.IAFWA.org.



GIS Workshops to be Held at Annual AFS Meeting in Baltimore

By Michael Porter

Basic GIS Techniques for Fish Biologists

Michael Porter

Phone: 505-248-5907

Email: mporter@uc.usbr.gov

This course is designed to provide basic skills in using Geographic Information Systems for fisheries biologists. The course will teach participants basic GIS skills using examples common to fisheries problems. These skills include importing a base map and other map layers; creating data tables and importing data from other sources; creating point, line, and polygon themes; an overview of map projections and map coordinate systems. Workshop topics will include:

- Maps, map coordinates, map projections.
- GIS, map layers / themes, layer types (point, line, polygon), and formats (vector, raster).
- Databases, spreadsheets, text files, geo-referencing data, adding and converting coordinates, record organization, exporting / importing data, and creating data tables.

Advanced GIS Techniques for Fish Biologists

Michael Porter

Phone: 505-248-5907

Email: mporter@uc.usbr.gov

This course is planned to provide advanced skills in using GIS for analyzing fish communities. The course will consist of lecture, discussion, and specific exercises. Students will be able to:

- Convert vector & raster formats.
- Use raster format for variable data, x,y,z coordinates, digital elevation models (DEMs), slope and path functions.
- Manipulate themes using intersect, union, and split functions.
- Import aerial / satellite photos, overlay DEMs.
- Create spatial analysis, analyze slope and gradients, proximity and nearness, movement and home range.
- Analyze geostatistics, correlation,