



AFSCUS

**AMERICAN
FISHERIES
SOCIETY
COMPUTER
USER
SECTION**

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President's Message

Michael D. Porter

I would like to welcome the new section officers: Doug Beard (Wisconsin DNR) as President-elect and Darren Benjamin (Illinois Natural History Survey) as Software Librarian. Stuart Shipman (Indiana DNR) continues as Secretary-Treasurer and Robert Ball (Indiana DNR) will continue as newsletter editor. In addition, Joe Mion (Ohio DNR) will take the reins as section webmaster.

The section continues to have a strong role in professional activities. We are a sponsor of the 4th Microcomputer Applications in Fish and Wildlife Conference (October 24-27) with the Organization of Fish and Wildlife Information Managers and the Remote Sensing / GIS Work Group of the Wildlife Society.

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President's Message (continued)

To continue this tradition, I have committed the section to sponsoring a Fisheries GIS Symposium for the AFS 2000 meeting in St. Louis, Missouri. The three half-day sessions will focus on marine, lake and reservoir, and river-stream GIS applications. The goal is to provide broad coverage in terms of applying GIS techniques to different types of fisheries and regions. The program is in the planning stage with the symposium proposal due December 15th. Send suggestions for speakers or papers to Michael Porter at mdporter@cypress.mcsr.olemiss.edu. See GIS Symposium in this newsletter.

Gus Rassam is the new executive director for the society. His management experience and decision making are already moving the society onto a firmer foundation. He is committed to learning the fisheries issues, and working with the membership to strengthen our presence as a professional organization of fish biologists.

The section website is a valuable resource in need of updating and streamlining. While Joe Mion will be the section webmaster, he will need input from the membership. To spread the workload for maintaining the website, I am asking the past-president (Gary Whelan), the newsletter editor (Bob Ball), the secretary-treasurer (Stu Shipman), past webmaster (Dirk Miller), and the president (myself) to function as associate web editors.

In addition, we could use volunteers to contribute material or become associate editors. This is an

opportunity to share your knowledge and experience with your colleagues for a minimal commitment. Contact Joe to become an associate editor or contribute material to the website.

Fisheries GIS Symposium Announcement Second Call for Papers

The Computer User Section of the American Fisheries Society is organizing a Fisheries GIS Symposium for the AFS St. Louis meeting Aug. 20-24, 2000. Forward recommendations for possible speakers to participate in the symposium to Michael Porter (mdporter@cypress.mcsr.olemiss.edu) by December 10, 1999.

The symposium will consist of invited speakers and organized into 3 half-day sessions on:

- 1) marine applications;
- 2) streams & rivers; and
- 3) lakes & reservoirs.

We want to showcase GIS as a research and management tool, with the broadest range of applications, techniques, and regional coverage possible. I would appreciate a working title by December 10, 1999.

Presentation time: 20 minutes

Audiovisual: LCD and 2"x2" slide projectors

Deadlines

Participant interest & working title: Dec 10, 1999

Symposium proposal submission: Dec 15, 1999

By organizer:

Acceptance notification: Jan 14, 2000
Finalize speakers & titles: Jan 30, 2000
Speakers submit abstracts: Feb. 24, 2000

Meeting abstracts will be published on a CD.

American Fisheries Society-Computer Users Section Meeting Notes, August 29th, 1999

Doug Beard, President-Elect

The business meeting of the American Fisheries Society-Computer Users Section was held on August 29th in Charlotte, North Carolina. The following are the notes taken during the meeting.

Under Old Business

- Newsletter, 2 were published this year, plan on that many next year
- Membership, we continue a membership decline, but this decline is in society wide section membership.
- Website is up and running thanks to Dirk Miller. Joe Mion will assist in running the web site.
- Society Plan of Work, calls for the section to provide help in electronic transfer of information.
- Web Task Force, being chaired by Brett Johnson, Colorado State University
- AFS CE courses-No new courses during last year.
- Governing Board highlights
 - Society budget for this year is running a deficit.
 - Searching for ways to increase revenue
 - Substantial delinquency in membership renewal
- AFS meeting 2000
 - August 20-24th, 2000
 - Emphasis is on high tech & CE
 - Registration is \$280.
- Asked by other sections to have a short

course on web site administration available.

- Election results, 50 responses received
 - Doug Beard is president-elect
 - Stu Shipman is secretary-treasurer
 - Darren Benjamin is software librarian

New Business

- AFS-CUS is heavily involved in the Microcomputer Workshop held in Stateline, Nevada in late October. Stu Shipman, Dirk Miller and Doug Beard are involved in developing the meeting.
- We are trying to develop a symposium on Fisheries GIS application for the St. Louis meeting. If interested contact Micky Porter.
- Section Poster Display needs revision. A sample revision will be posted on the web site for folks to look at. Bern Megrey graciously offered to print the new version.
- The World Fisheries Conference will be held on Oct. 31-Nov. 3, 2000 in Beijing, China. We have submitted a proposal to host a continuing education course in conjunction with this meeting.
- We voted to give Transactions \$300 to help catch up with a backlog.

Secretary-Treasurer's Report *Stuart Shipman*

Income since 1/1/99

Dues	.....	\$2,242.00
Interest Income	32.70	
Software Sales	<u>437.00</u>	
Total Income	.....	\$2,711.70

Expenses since 1/1/99

Newsletter	.....	\$937.76
TAFS page donation	.....	300.00
Listserve	.....	300.00
AFS Raffle	.....	100.00
Software purchase	.....	63.55
AFS storage space	.....	80.00
Supplies	.....	25.00
Travel (Whelan)	.....	497.88
Conference Printing	.....	<u>135.02</u>
Total Expenses		\$2,439.21

Balance		\$272.49
Cash on Hand 11/3/99		
Checking	.....	\$1,362.00
Savings		<u>\$3,998.65</u>
Total Assets	.....	\$5,360.65

Overall the Section remains in good fiscal shape with expenses generally below revenues. We do have the opportunity to make some money as a result of our participation in the 4th Microcomputer Applications Conference (Oct 24-28) and an Internet workshop that the Section is co-sponsoring at this year's Midwest Fish and Wildlife Conference in Chicago (Dec. 5). We have not cleared the books for the computer conference at this time so we're not sure what the bottom line will look like. The Section did pledge \$500 toward the conference of which we only spent \$135 for registration materials. Any profits will be split between OFWIM, TWS and AFSCUS.

Our Past President Dirk Miller has agreed to visit Chicago for the Midwest and teach the Internet workshop, if I let him visit the Shedd Aquarium. Reservations are still being accepted for the Internet workshop, so if you would like to attend drop me an email at stufish@fwi.com. Cost is only \$100 for the all day session which will be focused on using the Internet to find information on fish & wildlife resources.

By moving from a printed and mailed newsletter to more of a web-based Acrobat reader format we were able to reduce the cost of providing the letter from between \$700-900 per issue to about \$250. We still need to print and mail copies to just over 100 of our 440+ membership.

**Report on the 4th Microcomputer
Applications in Fish and Wildlife Conference
October 24-28, 1999
Stuart Shipman**

This Conference was co-sponsored by the Organization of Fish and Wildlife Information Managers, Fish & Wildlife Information Exchange, Virginia Dept. of Game and Inland Fisheries, NCTC, TWS GIS and remote sensing workgroup and AFS Computer User Section. I represented AFSCUS on the steering committee and managed the registration. The conference consisted of

a plenary session representing a broad range of technology and information transfer issues followed by 4 symposia including population modeling, habitat relationships, analysis software, and use of technology in research and education, as well as, 26 contributed papers and 14 posters. Presenters came from across the USA and included presenters from Canada, Scotland, Fiji Islands and Africa. A total of 121 participants registered for the conference.

Trainers from USGS, NBII also offered a ½ day training session on development of metadata using MetaMaker II. Copies of Executive Order 12906 (coordination of geographic data acquisition and access) were also provided. This order mandates that all data management projects funded with Federal money must have their metadata made available through a clearinghouse. I attended this session to make myself more knowledgeable about the standard and to receive some training on the legal requirements for metadata. More information on metadata can be found at <http://www.fgdc.gov/metadata/constan.html>.

I got the greatest benefit from two projects that mirrored our efforts in Indiana to develop a fisheries information system. Virginia has spent the last three years developing an ACCESS database for input, verification and analysis of fisheries data collected on reservoirs. Queries were developed that facilitated analysis by location, date of sampling or gear type. Virginia's system has been field tested and will be mandated for use in all management districts next year. Presently, the developer is working on a user guide for the system.

Nebraska has also developed a similar fisheries information system including many of the features demonstrated with the Virginia system. It permits data input based on both water body and gear codes and reports capture summaries accordingly. I'm hopeful that many of the features developed by these two agencies can be modified for use in Indiana. One drawback, that has become evident in all the systems I've examined, is the lack of procedures for back-calculating rates of fish growth from hard body parts. Most states with advanced systems have written SAS routines for these growth calculations, generally only storing summary growth statistics in their information system.

Conference abstracts and in some cases copies of the demonstrated software will be available later this year on the OFWIM website at

<http://www.fwie.vt.edu/ofwim/meet99.html>. If anybody has interest in receiving a copy of the abstracts drop me an email (stufish@fwi.com) and I'll send it to you.

4th International Conference on Integrating Geographic Information Systems (GIS) and Environmental Modeling

Date: Sep. 2-8, 2000 at The Banff Centre for Conferences, Banff, Alberta, Canada. Sponsors to-date: NSF, NCGIA, NASA, USFS, EPA, NOAA, USGS, USACE/DOD, NRCS

Abstracts are invited for book chapters, journal articles, tutorials or workshops method/technique/ tool demonstrations, and electronic or static "poster" presentations contributing to the 4th International Conference on Integrating GIS and Environmental Modeling. The meeting will be held in dedicated, full service facilities at The Banff Centre for Conferences in Banff, Alberta, Canada, September 2-8, 2000.

Self-explanatory abstracts in English should be 1-2 pages in length and must include title, author (s), institutional affiliation (s), explanation of completed work to be described, and 5-10 author-assigned key words. Clear relevance must be shown to predictive, numerical modeling approaches to environmental problem solving. A special conference theme will be human-environment interactions, and the role that GIS and modeling have in their improved understanding and prediction.

The forum will retain its cross-disciplinary, pan-scientific, and problem solving emphases consistent with a concern for better integrated understanding of complex whole systems, their integrity and sustained functioning, and particularly (but not exclusively) their interactions with human activity. Spatial, statistical, temporal, and other methodological considerations are expected to be given balanced treatment with issues of science theory, new data sources and sensors, computing technologies, and application techniques.

Abstracts should be submitted no later than 5:00 pm (Pacific Standard Time) on December 17, 1999 (extended from Nov. 19) via a web-active form available on the conference web page at

<http://www.colorado.edu/research/cires/banff/>. This URL also contains other important information about contributions to the conference. Email correspondence may be addressed directly to the Conference Secretariat at GISEM4@colorado.edu. If you must submit an abstract by some means other than the web page and its web-active form, or if you have other urgent questions about the conference, please contact one of the following or send correspondence directly to:

Conference Secretariat, GIS/EM4, Cooperative Institute for Research in Environmental Sciences (CIRES), CIRES Building 216, University of Colorado, Boulder, CO 80309-0216 USA.

Conference Director and Co-directors:
Dr. Bradley Parks, Cooperative Institute for Research in Environmental Sciences (CIRES), Campus Box 216, University of Colorado, Boulder, Colorado, 80309-0216. Email: bparks@colorado.edu, Tel: 303-497-6330, Fax: 303-497-6513.

Mr. Michael Crane, US Geological Survey, EROS Data Center (EDC) 47914 252nd St., Sioux Falls, SD 57198-0001. Email: mcrane@usgs.gov, Tel: 605-594-6041, Fax: 605-594-6150.

Dr. Keith Clarke, National Center for Geographic Information and Analysis (NCGIA) 3510 Phelps Hall, University of California, Santa Barbara, CA 93106-4060. Email: kclarke@geog.ucsb.edu, Tel: 805-893-7961, Fax: 805-893-3146

USGS Makes New SSTemp Software Available

John Bartholow, US Geological Survey

I am responding to "Recommendations for freeware/shareware, other computer software, books, GIS, personal data assistants, websites, or other computer-related items are appreciated" as listed in the e-news for CUS activities.

For years, we have supported a DOS-based set of programs used to predict daily mean and maximum stream temperature. These models (SSTEMP, SSSHADE, and SSSOLAR) work together to predict (1) solar radiation as a function of site latitude, elevation,

and meteorological conditions, (2) riparian shading as a function of both topographic and vegetative shade, and (3) stream temperature as a function of net heat flux and one-dimensional heat transport. These models have been a part of your distributable CUS library and were designed to help aquatic biologists and engineers predict the consequences of stream manipulation on water temperatures.

Recently, these models have been combined and implemented in a Windows format. The new SSTEMP is available for free download at http://www.mesc.usgs.gov/rsm/rsm_software.html.

Short Software Notes

Michael D. Porter

StarOffice is a recent entry in Office Suite software. Now owned by Sun Microsystems, StarOffice is available for Windows, Macintosh, and Linux operating systems. Individual users can register for free and download the program (64 MB) from www.sun.com or order the CD for \$20. With the same power and functionality as Microsoft & Corel office suites, it is a viable alternative for a reasonable price.

Geographic Resource Analysis Support System (GRASS) 5.3 is available from www.baylor.edu/~grass. This GIS package runs under UNIX/Linux with graphical user interfaces (GUIs) improving the usability of the package. The UNIX/Linux download (17 MB) is free. A Windows version, Grasslands is also available for a sliding license fee. The website has user manuals and links to other GRASS resources.

Contributions Needed

The idea behind Short Software Notes is a paragraph on software that section members may find useful. Any member may contribute, submissions are not reviewed, and should be informative. Send to Newsletter Editor. A web address or other contact information should be provided with the contribution, and contributor will be acknowledged.

Editor's Corner

Bob Ball

Notes and ideas regarding new software, fisheries applications of commercially-available software, or

information on uses of Personal Data Assistants (PDAs), GPS units, etc. can be contributed to the newsletter by writing me at the address on page 1, or emailing me at rball@kiva.net. If you have a useful application for commercial software or an original program you wish to make available through the Computer User's Section, contact our Software Review Chairman, Gary Ash at gash@rll.ca. His mailing address is also on the front page.

Our current software listings are available from our website, <http://www.glfsc.org/afsprog/cuslib.htm>.

The deadline for our next newsletter is Mar. 15, 2000.

Acknowledgments for Section Meeting

We acknowledge two companies that donated door prizes for the AFSCUS section meeting:

LinuxMall supplied a "Plush Tux" stuffed penguin, won by Gary Whelan and 5 Linux Mall CD's of the Linux operating system awarded to: Bern Megrey, Jim Breck, Gary Ash, Joe Mion, & Larry Conner.

RedHat Linux supplied a RedHat Travel mug sent to Pamela Haverland, and their full Linux Operating System package was awarded to Steve Hewitt.

American Fisheries Society Computer User Section

FOR DESCRIPTIONS OF SOFTWARE AND OPTION TO DOWNLOAD OFF THE

INTERNET: Contact the following web site <http://www.glfsc.org/afsprog/cuslib.htm>. Ordering information is presented and the \$10 packages can be downloaded at no charge, although a request for donation will be added for nonmembers.

DISKETTE ORDER FORM — IBM-PC COMPATIBLE SOFTWARE

Ship to: _____

Order must be prepaid or accompanied by
 a written purchase order.

Please provide a street address that pack-
 age delivery services can deliver to.

TELEPHONE: _____

Check the desired disk size. Low density 5.25" or high density 3.5" disks are available except where indicated. FishCalc89-DisBCal89 is available only on 5.25" disks. AFSCUS-36, 37, and 38 are available only on 3.5" high density disks.

The following packages are \$10.00 each. An asterisk indicates that printed documentation is supplied with the package.

3.5	5.25	<u>3.5</u>	<u>5.25</u>
___	___ AFSCUS-10 PREFER	___	___ AFSCUS-28 Habitat Suit. Indices for Lotus 1,2,3
___	___ AFSCUS-13 CAGEAN	___	___ AFSCUS-30 MOCPOP VERSION 2.0
___	___ AFSCUS-16 GENMOD	___	___ AFSCUS-31 GRASCARP Version 1.0
___	___ AFSCUS-19 FISHPARM	___	___ AFSCUS-32 FISHPROG
___	___ AFSCUS-20 Microfish electrofishing anal.	___	___ AFSCUS-33 TROUT4X4
___	___ AFSCUS-25 Stream temp/shade/solar rad*	___	___ AFSCUS-35 SUNRISE
___	___ AFSCUS-26 Trout Dynamics	___	___ AFSCUS-36 OPCPLOT (3.5" disks only)
___	___ AFSCUS-27 Fish Hatchery Mathematics	___	___ AFSCUS-38 Early Life History Biblio. (3.5" disks only)

The following package is \$30:

___ ___ AFSCUS-37 Marine Fish Images (six 3.5" disks only)

The following package is \$5:

___ ___ AFSCUS-21 Sebastes bibliography in text format *For free revised stream temp. modeling program, go to Web site /www.mesc.usgs.gov/rsm/rsm_software.html.

COMMERCIAL SOFTWARE: Prices as indicated.

___	___M1 FishCalc89-DisBCal89 5.25" disks only	___	\$40.00
___	___M2 AbaSim	___	\$53.00
___	___M3 Aquafic 1.10	Non-AFS members	___ \$249.99
		AFS members	___ \$199.00
___	___M4 FishBase 96	___	\$99.00

\$10 Packages ___ X \$10.00 = ___
 \$30 Packages ___ X \$30.00 = ___
 \$5 Packages ___ X \$ 5.00 = ___

COMMERCIAL SOFTWARE----- = ___

U.S./Canadian 1st class and international air mail is included in disk prices.

TOTAL COST \$ _____

Make check payable to: **AFS Computer User Section** (U. S. funds only, please)

Send your order to:

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