
Communication to Members

American Society of Limnology and Oceanography
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MESSAGE FROM THE PRESIDENT

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ACTION ITEMS FOR 1992

The ten-point Action Plan, adopted about a year ago and implemented by the outstanding service of our Executive Director Susan Weiler, is beginning to bear fruit. Here is a summary of recent progress:

1) Membership. Membership in the Society is increasing. The Society Business Manager, Karen Hickey (Allen Press) reports that membership has grown from 2,838 paid members in September, 1990 to 3,384 in September, 1991. This is a substantial increase and one hopes that it will continue in the future.

A record number of members voted this year. A total of 1,186 ballots were cast, compared with 583 ballots last year. This is surely an encouraging trend that reflects renewed interest in the affairs of the Society as a whole. It is also confirmation that a very strong slate of candidates was offered.

We are now collecting demographic information on membership applications and dues renewal forms. Some 40% of the membership supported this initiative on last year's dues notice. Susan Weiler gives a preliminary report on the data elsewhere in this Newsletter. We hope to have a 100% response rate on the next renewal notice. The data will be that much more valuable.

2) Scientific Meetings. The organisers of the ASLO Annual Meeting for 1991 (Halifax) have received many favorable comments on the quality of the meeting: it is clear that the event was an outstanding success. The next major meeting on the ASLO agenda is Santa Fe in Feb 1992. This

meeting is intended particularly to emphasize the common ground between limnology and oceanography. It should be a good one.

In the past, ASLO has started its meetings on Mondays. Steve Carpenter has suggested that we start on Sundays instead (see his article under ASLO Forum) to make it easier for members to take advantage of lower weekend air fares. I plan to discuss this idea at the Business Meeting (Santa Fe). If you have strong views on the issue, and cannot attend the meeting, please send me your comments in advance.

3) Publications. The system of multiple associate editors has been implemented, and is being consolidated. L&O will soon have a designated book reviewer as well. The search has begun for a new general editor (Peter Jumars has announced his intention to step down soon). If you have views on this matter, please let us know.

4) Member Services. One example of the kind of improved service that the Society is able to offer members is the new annual membership directory with its alphabetical and geographic sections. The new Bulletin will be published three times in 1992. We would very much welcome your opinions on the value of the Bulletin and on what you would like to see included that is not already covered, or what you feel could be deleted without loss.

5) Education and Human-resource Initiatives. ASLO continues to answer letters from students and teachers concerning topics in aquatic sciences. Another initiative to be tried this year is intended to make it easier for individuals with small children to attend the annual meeting. The Call for Papers and Program will include names and phone numbers of child-care services. In addition, Susan Weiler will be compiling a list of individuals planning to bring children, to facilitate shared child-care arrangements.

6) Minorities. The CURMLO Program for underrepresented minorities was a major success (again) in Halifax. It will continue at the Santa Fe and future meetings: please see Benjamin Cuker's report in this newsletter. I was very pleased to note Ben's election to the ASLO Board of Directors. He has done the Society a very great service by initiating and pursuing the Minorities program. The Society is also indebted to the National Science Foundation for sponsoring the program through its program manager Joan Mitchell.

7) Public Arena. ASLO has been involved in several important initiatives this year, including the special ASLO Symposium, framing of resolutions on Ocean Fertilization and Atmospheric Carbon Dioxide and the Freshwater Initiative and the development of position papers on the Freshwater Initiative. ASLO members have met with NSF representatives about the status of Limnology in the U.S. Polly Penhale and Susan Weiler represented ASLO at the May 1991 meeting of the Council of Scientific Society Presidents (CSSP). A resolution submitted by ASLO concerning iron fertilization and atmospheric carbon dioxide was discussed and adopted by the CSSP. In addition, ASLO is responding to a request for information concerning the National Institutes for the Environment. The authoritative White Paper on "What controls phytoplankton production in nutrient-rich areas of the open ocean", published so soon after the symposium itself, is reflecting considerable credit on ASLO and the community that it represents.

8) International Arena. The special ASLO Symposium had strong international representation, with 14% of participants coming from outside the U.S. Further, in 1992, ASLO will co-sponsor a meeting in Ireland with the British Ecological Society. Like the Santa Fe meeting, this one has a carefully designed scientific program (given elsewhere in the newsletter). If the program appeals, and if you would like to make new professional contacts, please give the meeting serious consideration.

In the next round of Society elections we intend to make a particular effort to nominate scientists from outside North America to serve on the Board of Directors. If you have ideas on suitable candidates, please let us know.

At present, it is extremely difficult for scientists from some countries to afford the ASLO annual dues. Yet increasingly, scientific exchange is taking place on a global scale. It seems to me that ASLO could provide a valuable service by helping colleagues from less-developed nations become and remain active in ASLO. There are many ways in which this could be done. Please think about how we could best serve the needs of our members and colleagues. I plan to discuss this topic at the Business Meeting (Santa Fe). If you have strong views, but cannot attend the meeting, please send me your comments in advance.

9) Finances. The ASLO special symposium (Feb 1991) was supported entirely by external grants from the U.S. EPA, ONR, DOE, NASA, and NSF. The proposals were written by Susan Weiler. Well done!

With this edition of the Newsletter, we have started accepting advertising. This practice will bring financial support to ASLO while alerting members to new products and product information. One such new product, a Fluorometer by Turner Designs, is being advertised for the first time in this newsletter. We hope you find such ads informative and useful. Advertisements and questions should be directed to Susan Weiler.

On the recommendation of the Financial Committee, the Board has established an Endowment Fund. I hope you will read the article describing it later in this newsletter, and contribute if you can.

10) Volunteers. We are always interested to hear from people willing to work for the Society.

11) Other Matters. A committee is in the process of revising the by-laws, and should complete the task before the Santa Fe meeting. Anyone with suggestions for changes should send them to Kenneth L Webb, School of Marine Science, College of William and Mary, Gloucester Point, VA 23062 (804-642-7351; Omnet VIMS, attn. Ken Webb).

Please think about these and other items, and bring your ideas to the ASLO 92 Business Meeting (Santa Fe). If you cannot attend the meeting, please send me your comments.

The Business Meeting is perhaps one of the things that ASLO does least well. In particular, the procedure whereby important decisions can be taken at the Business Meeting on issues of which the Officers have no prior notice (and therefore cannot provide members the necessary documentation, in advance, to ensure intelligent discussion) is not the best recipe for stable and constructive management of the Society affairs. Hence, as far as possible, I would hope that in Santa Fe, the Business Meeting could follow an agenda determined in advance, with the members voting on issues for which they have the necessary documentation to reach an informed opinion. Please let me have your agenda items well in good time.

ASLO NEWS

ELECTION OF OFFICERS AND PREFERENCES FOR MEETING DATES

Polly A. Penhale, Secretary

The results of the 1991 Election were submitted by C. Susan Weiler, Whitman College, for Tellers Carol Hatch and Amy Holt. A record number of 1,186 ballots were received.

The Vice President is John T. Lehman (University of Michigan). Polly A. Penhale was re-elected as Secretary. New Members at Large are Benjamin E. Cuker (Hampton University), Diane M. McKnight (United States Geological Survey), and Barbara B. Prézelin (University of California, Santa Barbara).

The survey to identify meeting dates preferences showed a strong preference for June over July or August. The favored weeks in June were Second, First, and Third, respectively.

ASLO ENDOWMENT FUND

ASLO has accomplished many things since its inception, both in terms of promoting the exchange of scientific information, and fostering the long-term interests of aquatic science and scientists. Human impacts on aquatic systems make it increasingly important that ASLO not only continue its past efforts, but develop new initiatives as well. These activities will require commitments of both time and money. At the same time, we want to continue ASLO's policy of keeping dues and journal subscriptions relatively low compared with other societies and publishers.

On the recommendation of the Finance Committee, the ASLO Board has therefore established an Endowment Fund, which will enable interested members to make a more permanent contribution to the Society. Tax-deductible contributions to the fund will be invested, and the interest will be used for activities such as helping students attend our meetings, informing students about aquatic science careers, making L&O more readily available, and etc.

If you find yourself in an income bracket which permits substantial tax deductions on gifts to non-profit organizations, please think of ASLO. In particular, if you have assets such as stocks or

bonds which have appreciated significantly in value, these can be donated to ASLO at any time, with a concurrent tax benefit to you. Bequests can also be made to ASLO's Endowment Fund.

While we hope you may ultimately want to confer with your tax consultant about how best to donate a large sum to ASLO, you don't have to be a millionaire to take part in this important fund! ASLO was built through the many small contributions by individual members, and cannot reach its full potential without your continued help. So please remember ASLO in your annual charitable giving as well as your estate planning.

The new dues notice will have a space to mark if you wish to contribute something to the Endowment Fund. In addition, you may at any time send a contribution to the ASLO Business Office. Checks made out to ASLO may be sent to Karen Hickey, ASLO Business Manager, P.O. Box 1897, Lawrence, KS 66044-8897. Be sure to specify that the contribution is for the ASLO Endowment Fund.

BACK ISSUES OF *Limnology and Oceanography*

Susan Weiler, Executive Director

Excess copies of back issues are still available from Allen Press. If you would like to obtain back issues for your own collection or local library, most issues are available for the cost of shipping and handling (\$1.50 in the U.S., and \$2.50 elsewhere.) Respond quickly if you are interested. **Back-issue overstocks are scheduled for destruction after Dec. 31, 1991.**

We plan to establish a list of institutions that would benefit from back issues, to take advantage of collections donated by members. Please, if you know of any institutions that either cannot afford to subscribe to L&O, or that subscribe to L&O and need back issues to complete their collections, send me the name and address of the institution and, if possible, the name, address and phone number of a contact person at the designated institution, and any other relevant information you can provide (such as whether or not the institution presently subscribes to L&O, and when the subscription started).

If you would be willing to sponsor a member or a library subscription to L&O, please contact ASLO's Business Manager, Karen Hickey (P.O. Box 1897, Lawrence, KS 66044-8897; Fax 913-843-1274; Omnet Allen.Press).

Special thanks go to Louise M. Dean, who donated David Dean's 1956-87 collection of L&O to Fort Valley State College, Georgia. Fort Valley is a predominantly minority institution with an extremely active aquatic science program. David Dean's collection will be an extremely useful resource for both students and faculty.

PHOTOS AND SLIDES OF LIMNOLOGISTS AND OCEANOGRAPHERS NEEDED

ASLO has begun an archive for clear, colorful, "action" shots of limnologists and oceanographers, for ASLO posters, brochures, & etc. Please send your favorite shots to: Karen J. Hickey, ASLO Business Manager, P.O. Box 1897, Lawrence, KS 66044-8897. Since we anticipate ongoing uses of slides and prints, submissions are always appreciated. Karen hopes to have some posters made in time for the Santa Fe Meeting, and will need slides or prints by November 15; submissions before this date are particularly welcome. If you want your photos or prints returned, please enclose a self-addressed, stamped envelope.

REPORT, ASLO SYMPOSIUM

Early indications suggest that the 1991 symposium on What Controls Phytoplankton Production in Nutrient-Rich Areas of the Open Ocean will be as prominent as the 1971 ASLO Symposium on Nutrients and Eutrophication: The Limiting-Nutrient Controversy, which is still cited and used by policy makers. The symposium report has been widely circulated, and papers will be published in the Dec. 1991 issue of L&O. The Council of Scientific Society Presidents adopted a resolution similar to that adopted by ASLO and included in the Symposium Report. Both resolutions urge that more research be conducted before iron fertilization is considered as a policy option for reducing atmospheric carbon dioxide. Those interested in the policy implications of iron fertilization are encouraged to read "Policy Implications of Greenhouse Warming", 1991, National Academy Press, 121 pp., and "Changing by Degrees: Steps to Reduce Greenhouse Gases", 1991, U.S. Congress, Office of Technology Assessment, OTA-O-482, 370 pp.

ASLO DEMOGRAPHIC INFORMATION

C. Susan Weiler, Executive Director

I want to thank the ca. 40% of ASLO's total membership who responded to my plea for demographic information by completing the short survey on the 1991 dues notice. I hope that ASLO will have a 100% response rate after the 1992 dues notice... In the meantime, here are the statistics to date:

The average age of the 38% who responded to the request for birthdate was 42. Many scientific societies are concerned about losing members over the next decade due to retirements. IF the responses to date are representative of the full society, ASLO should not experience any drastic changes over the next few years. However, younger members may have been more or less willing to provide information than others, so the data may be somewhat skewed. This is why I would be very grateful if more of you responded this year!

Of those responding, limnologists and oceanographers were pretty much equally represented: 40% marked Limnology, 37% marked Oceanography; and 22% marked both limnology and oceanography. Please keep in mind that this information does not state that there are equal numbers of limnologists and oceanographers in the society; it just means equal numbers of limnologists and oceanographers completed the survey (only 40% of members responded). Hopefully this time next year I can give you a more precise account!

Discipline data was given by 40% of the members. Of those who responded, 47% listed more than one discipline. The biological and chemical fields were most often the first answer when members gave more than one discipline (individuals were asked to give codes in order of priority if more than one was listed). The percentages answering any of the following codes, regardless of order, and the percents listing a code first or only are:

Discipline	% Responding	% First or Only
Biological	92%	83%
Chemical	43%	11%
Geological	13%	1%
Optical	6%	<1%
Physical	14%	2%

Of the 40% who answered the Environmental Specialty section, 75% listed more than one. Below are the percentages for those listing a particular environment regardless of priority and as a first priority:

Environment	% Responding	% First or Only
Lakes/Res./Ponds	49%	34%
Rivers/streams	31%	7%
Great Lakes	10%	2%
Wetlands	21%	4%
Estuaries	36%	13%
Coastal Ocean	45%	9%
Open Ocean	28%	12%
Most or all	6%	4%

I know you are all familiar with the uncertainties involved in trying to draw conclusions from a limited sample. I hope you will be sufficiently interested in the trends from this first report to help us complete the data base. Alternatively, if the 60% of you who did not fill in the blanks on last year's dues notice refuse again to become "statistics", I will hound you all again next year! Please, to avoid future harassment, fill in the blanks on the 1992 dues notice, which will arrive with L&O 36(5).

FRESHWATER INITIATIVE

William M. Lewis, Jr., Dept. E.P.O Biology, Univ. of Colorado, Boulder, CO 80302

The Freshwater Initiative (FWI) is an attempt to establish a coordinated interagency program for the support of freshwater science across all US Federal agencies that deal with fresh waters, in order to promote a "predictive understanding of freshwater systems in the context of global change." The Initiative originated from NASA through Penny Firth, a former NASA employee who has now moved to the NSF's Division of Biotic Systems and Resources. Agencies that have

expressed interest in the initiative are quite diverse, e.g., Tennessee Valley Authority, the Corps of Engineers, US Forest Service, and NSF.

The ASLO Board is uncertain of the substance of the FWI meetings because the meetings are closed and will continue to be closed until an interagency agreement is reached. However, the FWI leadership (Penelope Firth) has solicited information from individuals who are members of scientific societies, and from the societies themselves. ASLO was invited to submit suggestions for programmatic components of the Freshwater Initiative. Many ASLO members also received individual solicitations, as did members of other societies. The ASLO Board decided that the Board limnologists (William M. Lewis, Jr., Claire L. Schelske, John G. Stockner, Stephen T. Threlkeld) should formulate a response on behalf of ASLO, and also should attempt to obtain more information about the Freshwater Initiative.

The Board limnologists drafted an ASLO position paper on the FWI, which was submitted to Penny Firth by Trevor Platt. It consisted of a short statement stating that limnology should be an integral part of any US national initiative dealing broadly with fresh water. In addition, the submission itemized a number of major fields of interest among limnologists in order to give the recipients a better idea of the dimensions of the field.

The practical significance of the FWI is that it may be a mechanism by which new funding is directed into the study of freshwater environments. This could mean a better funding situation for limnologists, but could possibly even mean the opposite if funding is diverted away from academic channels or is slanted heavily toward applications and away from academic limnology. NSF is very interested in the program, and may exercise some controlling role, but this remains to be seen.

Penny Firth will chair an evening session on "The Freshwater Initiative: Status and Prospects" at the ASLO 92 meeting. Please come, and contribute to the development of this important initiative. For further information concerning the Freshwater Initiative, please contact Penelope Firth, Biotic Systems & Resources Div., National Science Foundation, 1800 G St NW, Washington, DC 20550.

DAVID W. SCHINDLER AWARDED 1991 STOCKHOLM WATER PRIZE

David W. Schindler was awarded the first Stockholm Water Prize by Sweden's Queen Silvia, at an award ceremony that highlighted the 1991 Stockholm Water Symposium. The award is sponsored by the Stockholm Water Foundation, whose purpose is to promote efforts to improve water conservation throughout the world. The prize, which includes an award of \$150,000, was given to Schindler in recognition of his research regarding eutrophication and acidification of lakes, research that has led to positive changes in environmental legislation in Canada, the USA and the EEC.

Schindler's whole-lake experiments have been instrumental in convincing regulators in the USA and Canada to control phosphates and sulfur dioxide emissions. The Experimental Lakes Project of the Canadian Department of Fisheries and Oceans near Kenora, Ontario, which Schindler founded and directed from 1968-1989, has yielded results important for sustainable development on a world-wide basis. This project has addressed such whole-ecosystem water-quality issues as eutrophication, acidic precipitation, radioactive materials, toxic trace metals, chlorinated organic materials and climatic warming.

Schindler received his doctorate from Oxford University, England, where he studied as a Rhodes Scholar. Author of over 150 scientific publications, he has received many research awards including ASLO's 1985 G. E. Hutchinson Medal. He is presently Killam Memorial Professor of Ecology at the University of Alberta, Edmonton.

REPORT FROM THE COMMITTEE ON UNDER-REPRESENTED MINORITIES IN LIMNOLOGY AND OCEANOGRAPHY (CURMLO)

Benjamin E. Cuker, Center for Marine and Environmental Science, Hampton University, Hampton, VA 23668 (Tel: 804-727-5884).

After the success of our inaugural program at the 1990 annual meeting in Williamsburg, I submitted a second proposal to the NSF Oceanography Program to continue our work for three more years. NSF awarded Hampton University and ASLO a three-year grant to bring underrepresented minority students and professionals to ASLO's annual meetings in Halifax, Santa Fe, and Edmonton.

Some 48 minority students (35 undergraduates and 13 graduates) and 12 professionals, representing over 20 different institutions, attended this year. Twenty of the students also participated in the program at Williamsburg.

We began with a pre-conference workshop on the Saturday evening before the meeting. Trevor Platt gave the welcoming address. In addition to providing background on ASLO's history, mission and structure, he gave a wonderful synoptic history of Halifax and its Black community, which is the oldest and largest in Canada. All of the following day was devoted to overview talks by Brian Bingham, Carol Daniels, Doretha Foushee, Keith Miles, Percy Washington, and Beverly Baker. Matt Gilligan and Ambrose Jearld gave a workshop on table and graph interpretation. We broke in time for students to meet with their "meeting mentors", ASLO volunteers who helped guide small groups of students through the meetings.

A real highlight of the program was a special student session, in which 14 brave young souls gave talks on their research. The session was chaired by two of the graduate students, Alberta Baker and Lionel Sanchez. Students also toured Bedford Inst. Oceanography and the Black Cultural Center. The Program was concluded with a fascinating trip to the Bay of Fundy, Acadia University and environs led by Graham Daborn.

The response of participants was overwhelmingly positive, and all are looking forward to Santa Fe with great anticipation. There was a lot of "networking", and at least two students landed summer internships from contacts made at the meetings. I thank Alan Longhurst, Peter Koeller, Don Gordon and Glen Harrison for rolling out the red carpet, and Meeting Mentors Ambrose Jearld, David Berg, David Millie, Chris Jones, Tom Frost, Percy Washington, Caroline Daniels, Doretha Foushee, Brian Bingham, Beverly Baker, Michelle Wood, Nancy Marcus and Mark Ohman. Thanks also go to Joan Mitchell for her valuable insights on program organization, and Trevor Platt, who attended most of the minority program events, always interacting with the students and doing everything he could to support this program. Finally, this program could not have been a success without the warm reception given by the ASLO membership.

ASLO members wishing to help out with this program by serving as Meeting Mentors in Santa Fe should contact me, preferably by December 15, 1991.

1991 ASLO AWARD RECIPIENTS

RICHARD C. DUGDALE RECEIVES 1991 G. EVELYN HUTCHINSON MEDAL

The 1990 G. Evelyn Hutchinson Medal was awarded to Richard C. Dugdale, Professor of Biological Sciences, University of Southern California. ASLO presents this award annually to the individual who best exemplifies the standards of scholarship and creativity set by Professor Hutchinson's work in limnology and oceanography. Trevor Platt presented the Medal at the 54th Annual Meeting in Halifax, Nova Scotia. The award was given in recognition of Dugdale's work on nutrient uptake kinetics and his introduction of the concept of "new" and regenerated primary production. Seminal papers on these topics are: Dugdale, R.C. and J.J. Goering, 1967, Uptake of new and regenerated forms of nitrogen in primary productivity, *Limnol. & Oceanogr.* 12: 196-206 (this paper has become a keystone in the new discipline of biogeochemistry); and Dugdale, R.C. 1967, Nutrient limitation in the sea: Dynamics, identification and significance, *Limnol. & Oceanogr.* 12: 685-695.

Dugdale is the 10th recipient of the Hutchinson Medal. The other Hutchinson Laureates and their year of award are: Gene E. Likens (1982), John E. Hobbie (1983); Richard W. Eppley (1984); David W. Schindler (1985); Eville Gorham (1986); Lawrence R. Pomeroy (1987); Trevor Platt (1988); Daniel A. Livingstone (1989); and W. Thomas Edmondson (1990). A brief summary of Dr. Dugdale's career and the text of his acceptance speech will appear in L&O later this year.

BART T. DE STASIO RECEIVES 1991 LINDEMAN AWARD

Nelson G. Hairston, Jr., Section of Ecology and Systematics, Corson Hall, Cornell University, Ithaca, NY 14853-2701

The Lindeman Award for 1991 was presented to Bart T. De Stasio, Jr., Cornell University, for the 1989 paper entitled "The seed bank of a freshwater Crustacean: Copepodology for the plant ecologist", published in *Ecology* (70: 1377-1389). This award is presented annually to recognize outstanding work by a limnologist or oceanographer 35 years or younger in age.

Bart's interest in the aquatic sciences was first stimulated during his undergraduate days at Lawrence University. There, Bart participated in Sub Richman's courses in aquatic ecology and coral reef biology, completed an Honors thesis under Sub's direction on phytoplankton community structure in Green Bay (Lake Michigan), and graduated summa cum laude. From Lawrence, Bart travelled to the University of Rhode Island to begin graduate work with me. When I moved to Cornell, Bart moved as well. Initially, he chose to study the community structure of zooplankton in 12 local lakes (a project that is still yielding fascinating results), but soon began a side project on the emergence of naupliar copepods and other crustacean zooplankton from the sediments of Bullhead Pond, RI. As the "side project" grew, it became clear that this was in fact to constitute his PhD dissertation. The Lindeman Award was given for a paper reporting the major portion of this work. In it Bart shows how the seasonal dynamics of the calanoid copepod, *Diaptomus sanguineus*, is driven by its interaction with dormant stages in the sediments, where in the lake basin the principal reservoir of dormant eggs resides, and where the major turnover (settling and hatching) of eggs occurs.

Starting with his title, and continuing throughout the paper, Bart points out the similarities between the dynamics of zooplankton diapausing eggs and the dormant stages of other organisms, plant seeds in particular, where dormant propagule pools are better known. The paper thus ties plankton ecology directly to the other areas of ecological study. Bart is the first person ever to report the seasonal pattern of emergence of a zooplankton species from dormancy and to compare that with the dynamics of the population in the water column. In so doing, he discovered that the influence of emergence lasts much longer (4 months) during the active season than had previously been suspected. He is also the first person ever to put together a budget for the egg bank. He shows clearly why dormant eggs accumulate in the lake sediments, why this accumulation is concentrated at the deepest part of the lake, and why the result is a pool of dormant eggs that survives over multiple years. This is a result with profound implications for both evolutionary and ecological dynamics.

Other papers from Bart's dissertation, either published or in press, show how this and several other zooplankton species are influenced to differing degrees by seasonal emergence from dormancy, and (in a theoretical treatment) how year-to-year variation in mortality might influence variation in emergence time.

Bart's wife, Beth, received her PhD in cell biology from Brown University, and together they returned to Lawrence University in 1988 as Assistant Professors to fill in for Sub Richman during his sabbatical leave. Bart received his Ph.D. in 1989, and was 29 when his award-winning paper was published. Bart has been a Visiting Assistant Professor at Cornell College (Mount Vernon, Iowa) and at Michigan State University's Kellogg Biological Station, and a Lecturer in the Institute for Environmental Studies at the University of Wisconsin. He presently holds a DOE-funded postdoctoral position with John Magnuson at the Center for Limnology at the University of Wisconsin studying the potential effects of global climate change on fishes and plankton of lakes, mediated through alteration of lake thermal structure.

CARMEN AGUILAR AND JUANITA URBAN RECEIVE 1992 STUDENT POSTER AWARD

Two Students shared the 1992 Student Poster Award in Halifax. Carmen Aguilar was recognized for her contribution "Manganese Oxidation by Cyanobacteria", and Juanita Urban was recognized for "Seasonal Phytoplankton Content of *Calanus finmarchicus* and *Oikopleura vanhoeffeni* Feces and Its' Food Web Implications". This Award was instituted in 1988 at the ASLO/Boulder summer meeting. A "tradition" of an award with local significance was initiated in 1989 at the Joint ASLO/Society of Canadian Limnologists Meeting, where the awardee received a brass goldminer's pan and a Canadian \$100 gold coin. This year, Carmen and Juanita each received Inuit soapstone carvings. A similar award, with local significance, will be presented in Santa Fe.

Carmen received her B.Sc. and M.Sc. degrees in Biology from the National Autonomous University of Mexico (UNAM) in Mexico City. During this time she was a NASA Planetary Biology Intern, working on the structure and function of microbial mat communities at the University of Hawaii with Clair Folsome. She also began her first field work in microbial ecology through participation in a NASA-funded summer research program in Microbial Ecology at NASA

Ames Research Center in Moffett Field, Ca. In 1986, after receiving her M.Sc. degree from UNAM, she moved to the Center for Great Lakes Studies at the University of Wisconsin in Milwaukee, where she has worked on her doctoral degree in the laboratory of Kenneth Nealson. This move was made possible in part through a fellowship Carmen obtained from UNAM for graduate study outside of Mexico; Carmen is the first woman to be awarded this type of fellowship in its history. She has also been supported in her graduate research through the NASA Terrestrial Biology Program. Carmen's research has included extensive field work on Oneida Lake, New York, where she has followed the yearly biogeochemical cycling of manganese, and the relationship between carbon cycling and metal cycling in this lake. Coupled to these ground-truth studies has been a joint project with scientists at NASA Ames Research Center in remote sensing of Oneida Lake. An unexpected part of these whole-lake studies was the active participation of cyanobacteria in the manganese cycle through their indirect oxidation of manganese, the subject of the poster presented at the ASLO meeting. After graduation, Carmen hopes to continue her work on metals and microbes, with special emphasis on phytoplankton communities.

Juanita graduated cum laude with a degree in marine science from Southampton campus of Long Island University in December, 1988. While there, she participated in Seamester and a course on tropical marine biology, obtaining her first taste of the sea and conducting research on coral zonation. In 1988 she won a Student Internship Scholarship to work at Brookhaven National Laboratories with Sharon Smith. After graduating, she took a position as a Research Assistant with Sharon Smith at BNL, and continued work on the abundance, distribution, and sinking velocities of copepod fecal pellets. While at BNL, she participated in SEEP II cruises off Virginia and conducted field work in the Greenland Sea. In the fall of 1989, Juanita went to Memorial University of Newfoundland, where she is currently working on her M.Sc. with Don Deibel, on the "Physical and Chemical Characteristics of *Calanus finmarchicus* and *Oikopleura vanhoeffeni* Fecal Pellets." After completion of her M.Sc., Juanita plans to continue her oceanographic work, with a continued emphasis on polar studies.

AD SPACE

1992 ASLO AWARD NOMINATIONS

NOMINATIONS FOR 1992 G. EVELYN HUTCHINSON MEDAL

Nominations are being solicited for the G. Evelyn Hutchinson Medal. The medal is awarded annually to the individual who best exemplifies the standards of scholarship and creativity set by Professor Hutchinson's work in limnology and oceanography. The award is made in recognition of continued excellence in any aspect of limnology and oceanography. Emphasis in selection will be given for work done during the preceding 5-10 years or for contributions of an active scientist whose work continues to be recognized for its importance in aquatic sciences. The award is intended to symbolize the quality and innovations toward which the society strives and to remind its members of these goals. ASLO members who have been honored with this award are: Richard C. Dugdale, W.T. Edmondson, Richard W. Eppley, Eville Gorham, John E. Hobbie, Gene E. Likens, Daniel A. Livingstone, Trevor Platt, Lawrence Pomeroy, and David W. Schindler.

This year's medal will be awarded at the ASLO 92 Aquatic Sciences Meeting, 9-14 February 1992, Santa Fe, New Mexico. Each nomination must be supported by a letter (not to exceed two pages) on qualifications. This letter should be crafted so that it could be the basis of the presentation speech for the nominee who is selected for the award. The nomination package may also include a list of important publications and other pertinent information, but in total this package shall be no more than three pages. A nomination letter can be supported by signatures of more than one ASLO member or a list of supporting signatures can be sent to support the nomination package. Nominations should be sent to the Hutchinson Award Committee Chairman, Dr. Claire L. Schelske, Dept. Fisheries & Aquaculture, 7922 NW 71st St., University of Florida, Gainesville, FL 32606 (Tel: 904-392-3185; Fax: 904-392-3462) Omnet: C.Schelske). **To ensure full consideration, nominations must be received by November 1, 1991.**

NOMINATIONS FOR 1992 LINDEMAN AWARD

Nominations from all ASLO members are invited for the 1992 Lindeman Award, to be presented at the Aquatic Sciences Meeting in Santa Fe, New Mexico, Feb. 9-14, 1992. This award is presented annually in honor of Raymond L. Lindeman (1915-1942), to recognize an outstanding paper written by a young scientist.

The initial gift to create a fund for the Lindeman award was made in 1986 by Lindeman's colleague in graduate school, Charles B. Reif of Wilkes College, PA. Lindeman received his PhD in March, 1941 from the University of Minnesota, and in Sept. 1941 began postdoctoral work with G. Evelyn Hutchinson at Yale. His career was cut short by his death in April, 1942; he was only 27. The paper for which he is most remembered was published posthumously in 1942 ("The trophic-dynamic aspect of ecology", *Ecology* 23: 399-418). This paper was a result of his thesis work on Cedar Creek Bog, Minnesota, and he already had a draft version completed when he joined Hutchinson at Yale. The final manuscript benefitted from discussions with Hutchinson, and Hutchinson was instrumental in getting the manuscript accepted for publication (it was initially rejected by reviewers). This paper has since become the foundation for research on the flow of energy in plant and animal communities. For more information about Lindeman, read: Cook, R.E., 1977, Raymond Lindeman and the trophic-dynamic concept in ecology, *Science* 198: 22-26; and Reif, C.B., 1986, Memories of Raymond Laurel Lindeman, *Bulletin of the Ecological Society of America* 67: 20-25).

Previous Lindeman Award recipients are: James W. Ammerman (1987) for Ammerman, J.W. and F. Azam, 1985, Bacterial 5'-nucleotidase in aquatic ecosystems: A novel mechanism of phosphorus regeneration, *Science* 227, 1338-1340; Marlon R. Lewis (1988), for Lewis, M.R., W.G. Harrison, N.S. Oakey, D. Hebert, and T. Platt, 1986, Vertical Nitrate fluxes in the oligotrophic ocean, *Science* 234: 870-873; Cabell S. Davis III (1989) for Davis, C.S., 1987, Components of the zooplankton production cycle in the temperate ocean, *J. Mar. Res.* 45: 947-983; James J. Elser (1990) for Elser, J.J., M.M. Elser, N.A. MacKay and S. R. Carpenter, 1988, Zooplankton-mediated transitions between N- and P-limited algal growth, *Limnol. Oceanogr.* 33: 1-14; and Bart T. De Stasio, Jr. (1991) for De Stasio, B.T. Jr. 1989, The seed bank of a freshwater crustacean: Copepodology for the plant ecologist, *Ecology* 70: 1377-1389.

Eligible papers must deal with the aquatic sciences, be written in English by an author who is no older than 35 years in 1990, and must be published in a 1990 volume of a peer-reviewed journal. Dr. Sallie W. Chisholm will serve as the Chair for the Lindeman Award Committee. Nominations, which should consist of a copy of the paper and a brief letter describing the impact of the paper on the field, should be sent to the Lindeman Award Committee Chair, Dr. Sallie W. Chisholm, Dept. Civil Engineering 48-425, Massachusetts Institute of Technology, Cambridge, MA 02139 (Tel: 617-253-1771; Omnet: P.Chisholm). **To ensure full consideration, nominations must be received by November 15, 1991.**

ASLO FORUM

WHY HAVEN'T LIMNOLOGISTS AND OCEANOGRAPHERS READ EACH OTHER MORE?

Eric L. Mills, Dept. of Oceanography, Dalhousie University, Halifax, NS B3H 4J1, CANADA
(abstracted from 1991 ASLO Plenary lecture)

If the lack of contact between limnologists and oceanographers is not just due to moral laziness, there ought to be evidence in the historical record of why these fields have evolved very largely independently of each other. And a question that needs to be asked is, if limnology and oceanography are so similar (as most agree), why are they different. My contention is that the answer lies in the historical development of social relations among scientific groups, that is, it lies in contrasting scientific interests.

Biological oceanography had its origins in Germany in the work of Victor Hensen and Karl Brandt at Kiel between the 1870's and about 1930. It is harder to find a beginning of limnology, although freshwater biological stations existed in Europe very early. F.A. Forel (1841-1912), often called the father of limnology, began work on Lac Léman in the 1860's. Forel saw limnology as a branch of geography and a fully independent sister to oceanography. Compared to the ocean, lakes had the advantage of small size - they could be experimented upon rather than just observed, according to Forel. By 1901 Forel was not establishing a new field, but in his publications expressing the principles of a well-developed one several decades old. August Thienemann (1882 - 1960), another great European exponent of limnology, rejected a career in marine biology to promote limnology at Plön in East Holstein. The discontinuity of lakes was their great virtue according to Thienemann. Each represented a different stage on which Darwinian processes were played out in a variety of physical and chemical settings, in great contrast to the large scale and uniformity of the ocean.

In North America limnology originated separately from oceanography, taking root first quite independently in a number of mid-western states. E.A. Birge in Wisconsin knew of the oceanographic work at Kiel, but his own research originated not in oceanography but in his desire to understand the vertical migration of Cladocera. At other American sites a similar story may be told: limnological studies arose from local needs and local demands.

The evidence is strong that there was no Golden Age of a unified aquatic science from which oceanography and limnology descended. In fact, the origins of limnology and oceanography were not particularly close. Each represents a disciplinary specialization that began early (limnology was first) and persisted because of the professional power and coherence it imparted to its practitioners. Once established, professional disciplinary groupings such as these had great staying power. By narrowing their attention to their own specialties, limnologists and oceanographers reduced their separate professional worlds to manageable sizes.

Professional disciplinary boundaries, allowing the world of knowledge to be managed satisfactorily, set bounds to the upper sizes of groups and to the extent of their links with other disciplines. This natural process, which derives directly from the social structure of science and what it accomplishes, has its positive features - science gets done best in small, manageable, concept-oriented groups rather in larger, more amorphous ones. But there is a negative side too, especially in a world that is threatened by environmental problems on a global scale. Disciplinary boundaries, so natural for science itself, may be a dangerous luxury if we hope to assure the survival of global ecosystems.

WHY NOT START ASLO MEETINGS ON SUNDAYS INSTEAD OF MONDAYS?

Steve Carpenter, Center for Limnology, University of Wisconsin, Madison, WI 53706, USA

I suggest a scenario in which Saturday is used for business meetings and excursions, and sessions start promptly Sunday morning.

Airlines offer substantially reduced fares when trips are scheduled so that the traveler spends Saturday night at the destination. For a midwesterner travelling to either coast, a typical savings is \$US 400. Let's assume that is a reasonable estimate of the mean savings per traveler. For an ASLO meeting of, say, 800 people, we get a total savings of \$US 320,000! Since most of the travel money comes from scarce research funds, the savings is especially significant to the membership.

A Sunday start may increase the percentage of people that attend the entire meeting. The last day of the meeting would be Wednesday, not Thursday. Thus, one could attend the entire meeting and still get in 1.5 or 2 weekdays at the lab or office that week, by flying home Wednesday night or early Thursday morning. Presently, there is great temptation for busy people to leave midmeeting, especially if they have already spent Saturday night and Sunday at the meeting site to save money.

Every investigator must decide each year how to allocate limited travel dollars among the many aquatic meetings available. I suggest that a Sunday start would give the ASLO meeting a competitive edge.

PARTICIPATION OF WOMEN IN ASLO

Susan Weiler, Executive Director

Questions have been raised about whether women have been sufficiently well represented as session chairs, plenary speakers, and the like. In order to provide some baseline for discussions, I present some statistics on ASLO's membership and the meetings I have been involved with (ASLO Symposium and the ASLO 92 Aquatic Sciences Meeting).

Based on a rough estimate from the proportion of female first names in the 1991 Directory, the ASLO membership is ca. 20% female. Is the proportion of women in ASLO representative of their proportion in the professional community? While I could not find any statistics for females in limnology, some information is available for oceanographers. Females comprise ca. 10% of the faculty at the major oceanographic institutions and ca. 30% of the PhD students in Oceanography, compared with ca. 20% of students in 1980 and even fewer in 1970 (EOS Oceanography Report, Sept. 6, 1988). For many reasons, females are more likely to change fields or follow non-research career paths. The 20% figure for ASLO may therefore be less than the proportion of female PhD's but still representative of the females who remain professionally active.

Approximately 150 scientists participated in the 1991 ASLO symposium on What Controls Phytoplankton Production in Nutrient-Rich Seas. Of these, 21% were female, and of the 40 involved in the program as speakers, chairs or panelists, 6 were female (15%). The steering committee was 33% female.

For ASLO 92, the Steering Committee is 33% female. Of the six plenary speakers, one is female. There are 23 Special Sessions, each with two co-chairs. Of these, 22% are female. We don't know yet what the breakdown will be in terms of meeting registrants, invited speakers, or contributed papers.

Involving women, U.S. underrepresented minorities, and our non-US members as chairs, invited speakers, and other visible positions of authority is important. For instance, the latest NSF survey on salaries again found that female PhD researchers earn less than males in every field and employment sector (median salaries for women were 20-25% less than males; *The Scientist*, Aug. 19, 1991). Women interviewed by *The Scientist* reported that a major reason for this promotion and salary gap is lack of exposure.

STATUS OF LIMNOLOGY IN THE U.S.

Jaroslav Hrbacek, Hekrova 820, Prague 149 00 4, Czechoslovakia

I read with great interest the two comments in L&O (1990: Vol. 35, No. 5) referring to a decrease in prestige and financial support for limnology in the U.S. I was in the U.S. three times, twice for short visits and once (in 1968) as a visiting professor for 5 months at Indiana University

(Bloomington). I used this opportunity to participate in the ASLO Annual Meeting and also to visit several universities in the U.S. and Canada with active programs in freshwater biology.

The "golden years" for science both in the West and in the East were those following the appearance of the first Sputnik in orbit. During those years there were real, yearly increases in financial support for all scientific endeavors. In 1968 the first signs of the return tendency of the pendulum were evident in a decrease of financial support, both West and East, of about 5%. These years have not been used by the leading limnologists in the U.S. to enlarge their programs and departments. In Canada these years have been used to promote the well-known natural laboratory at the ELA.

I was astonished, in 1968, to find a deficiency of investigations concerning general problems, but rather much emphasis on "my lake" or "my *Daphnia*." "My lake" was only superficially defined (e.g. lack of data on input and output and on the fish-stock, even in cases of zooplankton studies), and "my *Daphnia*" was only named with no interest in a real taxonomical evaluation. There was strong opposition to larger projects such as the "International Biological Program" or "Man and the Biosphere" which needed the cooperation of various specialists. At that time I was already convinced that real advances in freshwater biology could be made by the short-term study of interactions within aquatic ecosystems and by long-term observations of the changes of these interactions under changing environmental conditions. My feeling was that it would be difficult to organize broadly conceived investigations and to obtain financial support for them, given the atmosphere at that time. Prior to August 1968, the situation in Czechoslovakia seemed to me more favorable in this respect.

On the basis of restricted information from a distance, it seems to me that in recent times the change to broadly conceived projects in Limnology remains limited. On the other hand (e.g. G.W. Redfield and L.B. Crowder in the September 1989 issue of the *Ecological Society of America Bulletin*), NSF apparently prefers general to special themes. Another aspect which astonished me in 1968 was the great gap between the investigation of unknown processes or interactions (fundamental science) and problem-oriented (applied) investigations. These problems concern fish management, water quality management, etc. In my opinion every fundamental invention has some relation to the solution of everyday problems. Vice versa, the real solution to most applied problems requires advances in theoretical background. In freshwater biology the negative attitude toward international projects (e.g. global change) continues.

This general attitude became apparent in SIL after WW2, when its name was changed from Vereinigung für theoretische and angewandte Limnologie to Int. Soc. Limnologiae--the "applied" part disappeared. I was elected as a representative of IUBS (International Union of Biological Sciences) for three terms to COWAR (Special Committee on Water Research) of ICSU (International Council of Scientific Unions). IUBS is a member of ICSU. Members of COWAR are nominated by individual unions of ICSU that have activities related to water. Due to financial problems this committee is now dormant. All the institutions are nongovernmental. "Man and the Biosphere," the "Hydrological Programme," and other programs of UNESCO are all governmental programs. This means that governmental institutions participate; in nongovernmental programs only scientific organizations participate, usually in the form of a "National Committee for..." I tried to increase the information to members of SIL on water-related international projects, some of which had significant freshwater-related problems. No interest was shown at that time. In UNESCO, water quality problems are in the hydrology section.

There is also little propagation of new discoveries in freshwater biology in publications intended for the interested public compared to those in astronomy or molecular biology or even entomology (I am an entomologist by training). Request for aquatic review papers from the editor of "Trends in Ecology and Evolution" indicates the same thing.

I write this letter because I have a real interest in promoting the prestige of American freshwater biology. Its success serves also to promote Central European limnology and I would be very happy to hear that attitudes are changing. You might ask why, when I think I know the remedy I have not developed a plan of action. I once intended to promote freshwater biology on the international scene, but events after August 1968 in Czechoslovakia considerably reduced my possibilities. I tried to leave via FAO, but was not successful. As I approach my 70s, I can only offer encouragement to others.

AD SPACE

FLATHEAD LAKE BIOLOGICAL STATION

Established in 1896, the Flathead Lake Biological Station (90 miles north of Missoula, Montana, near Glacier National Park) is one of the oldest field stations in the USA. Always an important place for undergraduate courses in field ecology, the Station expanded its mission in the last decade to include an extensive research program in ecology. The program now operates year round.

A modern lakeside laboratory contains state-of-the art optical and analytical equipment for all aspects of lake and stream research. Routine chemical analyses are provided by the lab staff and the Station maintains long-term data bases that describe hydrological, chemical and biological dynamics in Flathead Lake and at selected sites in the catchment. The station operates a 30-foot research vessel that is equipped with a satellite navigation system (Pathfinder) and custom-built hydraulic systems for deploying limnological and fisheries sensors, trawls and nets.

Formal undergraduate & graduate courses are offered each summer during an 8-week session which emphasizes field investigations of the diverse aquatic and terrestrial habitats found at or near the Station. Summer professorships are available annually in Lake Ecology, River Ecology, Plant Ecology, Field Botany, Aquatic Flowering Plants, Ecology of Mammals, Ecology of Birds, Ecology of Fishes, Aquatic Insects, Ecosystem Analysis, Phycology and Mycology. For more information, contact Sue Gillespie, Flathead Lake Biological Station, University of Montana, 311 Bio Station Lane, Polson, MT 59863 (406-982-3301).

ASLO MEETING ANNOUNCEMENTS

ASLO 92 AQUATIC SCIENCES MEETING

David W. Schindler, Dept. Zoology/Botany, Z-811 Biological Sciences Bldg., University of Alberta, Edmonton, AB T6G 2E9, Canada

The 1992 Aquatic Sciences Meeting, to be held February 9-14, 1992 in Santa Fe, will be the only ASLO meeting in that year, in a deliberate attempt to get society members out of their "summer meeting only" or "winter meeting only" ruts.

The program committee for the meeting, which consisted of a cross section of freshwater and marine scientists from a variety of disciplines, has tried to choose a series of topics for special sessions that will interest and attract both freshwater and marine scientists. Most sessions are co-chaired by one marine and one freshwater scientist, often with different scientific specialties. In choosing co-chairs, we have attempted to include scientists of all ages and all sectors of the society. Plenary speakers have been chosen to address topics that are timely and important to both limnology and oceanography.

In my experience, limnology and oceanography have many uncanny similarities. In the course of our many years of collaboration, Wally Broecker came to refer to the oceans as "Lake 1", a parody of our lakes "named" with 3-digit numbers, but reflecting the multitude of similarities that appeared. Oceanographers often has "high tech" equipment and methods that can offer new insights to freshwater problems. Many of these instruments and methods really should be calibrated or tested in whole-ecosystem settings over several seasons, which is seldom possible in oceanography, given the high cost of ship time. On the other hand, limnologists are able to conduct insightful long-term ecosystem-scale studies, experiments, and analyses of entire communities, despite low research budgets and generally "low tech" approaches. Many ecological principles discovered in freshwater have become cornerstones of ecology in general, as anyone familiar with the works of G.E. Hutchinson realizes.

I believe that the scarcity of scientists who can think on a truly ecosystem or global scale is a direct result of increasingly narrow specialization. Restricted scientific perspectives limit ASLO's ability to respond to new problems and to think in new ways, much as a small gene pool restricts a species' ability to adapt to new and unfamiliar conditions. I believe that the society must take strong action to prevent it.

The Call for Papers was mailed to all ASLO members in August. We have received a large number of inquiries from the international community and from non-ASLO scientists. I am confident that the Santa Fe meeting will be an exciting one for all members of the society.

**BRITISH ECOLOGICAL SOCIETY AND ASLO JOINT SYMPOSIUM, 1992,
CORK, IRELAND**

The British Ecological Society and ASLO will co-sponsor a symposium on "Aquatic Ecology: Scale, Pattern and Process", to be held April 5-8, 1992 at University College, Cork, Ireland. The programme has been structured around the water cycle, from stream headwaters to the deep sea. The main theme will be how the scale of approach determines our perception of patterns (such as patchiness) and important processes (such as disturbance and species interactions) in aquatic communities and ecosystems. Integration across scales and between freshwater and marine habitats is an important objective of the overall programme.

The scientific programme will consist of Plenary Sessions, involving an international panel of freshwater and marine ecologists, and Contributed Poster Sessions. Plenary topics include: The land-water interface (Henri Decamps); Patchiness, species interactions and disturbance in stream communities (Alan Hildrew & Paul Giller); Disturbance, succession and ecosystem processes in stream systems (Nancy Grimm); Community ecology and patchy freshwater habitats (Nori Tokeshi); Longitudinal patterns and processes along river systems (Bernard Statzner); The role of fluid motion in the dynamics of phytoplankton in lakes and rivers (Colin Reynolds); Control of pelagic community structure in lakes (Bill Neill); Paleocology in lakes-community persistence and variability (Rick Battarbee); Speciation and biodiversity of freshwater fish communities (A. Ribbink); Patterns and processes in intertidal and shallow water rocky communities (Paul Dayton); Patchiness and disturbance in shallow water marine benthic assemblages (Steve Hall, Dave Raffaelli and Simon Thrush); Fine scale physical structuring and distribution of size in oceanic plankton (Ken Denman); Long-term, large scale patterns in marine pelagic systems (Martin Angel); Scale dependent patterns and species interactions in the marine nekton (David Schneider); The effects of dispersal on the composition and dynamics of marine soft-bottomed assemblages (Frederick Grassle and Judith Grassle); Patch dynamics in deep sea benthos and vents (Tony Rice and John Lambshead); Paleocology of marine systems (Barbara Molfino); Biogeographic patterns in marine systems (Alan Myers); Scale, pattern and process in freshwater systems (Stuart Fisher); and Intrinsic and extrinsic rhythms in the marine environment (David Bird and Trevor Platt). In addition there will be Contributed Poster Paper Sessions.

In order to receive the Symposium Registration Form and further travel and Programme details, please xerox and complete the form below and return **as soon as possible to:** Dr. Paul Giller, Dept. of Zoology, University College, Lee Maltings, Prospect Row, Cork, Ireland (Tel: 021-276871 ext. 4137; Fax: 021-274034).

Symposium Pre-Registration Booking Form
Aquatic Ecology: Scale, Pattern and Process
University College, Cork, Ireland 5-8 April 1992

NAME _____ MALE/FEMALE _____

ADDRESS _____

TEL/FAX _____

NUMBER OF NIGHTS ACCOMODATION REQUIRED (Please Circle)

Fri. Apr. 3 Sat. Apr. 4 Sun. Apr. 5 Mon. Apr.6 Tues. Apr. 7 Wed. Apr. 8

LIKELY TRAVEL ARRANGEMENTS (Please Circle)

AIR CAR/FERRY COACH/FERRY TRAIN CAR

I WISH TO PRESENT A POSTER _____ YES _____ NO

PRELIMINARY TITLE _____

ASLO 1993 ANNUAL MEETING

The 56th annual ASLO meeting will be held in Edmonton, Canada, May 30-June 3, 1993. The meeting will cover the full range of aquatic sciences, with an emphasis on the management and preservation of northern aquatic and wetland resources. The meeting will be cosponsored by the Society of Wetland Scientists (SWS) and hosted by the University of Alberta. The scientific program Co-Chairs are Ellie Prepas (ASLO) and Dale Vitt (SWS). Edmonton offers access to the Canadian Rocky mountains, the northern boreal forest, parkland, and northern short-grass prairie. Wetlands cover about 21% of the province of Alberta. There are several thousand freshwater and saline lakes in the Province, including a range of oligotrophic to hyper-eutrophic systems. The 6th GAP International Workshop will be held in Saskatoon, June 7-15. Buses will be available to transport registrants from Edmonton to Saskatoon.

The scientific program will consist of Plenary Sessions, Symposia, Special Sessions on selected topics, Contributed Paper Sessions, and Poster Sessions. About 30 symposia with specific topics will be organized. The program will include presentations on aspects of management, preservation, manipulation, hydrology, ecology, biology, geochemistry, paleoecology, and ecosystem dynamics.

For more information, please contact the Environmental Research and Studies Center, University of Alberta, Edmonton, AB T6G 2E9, Canada (403-492-6659).

JOBS

Graduate Assistantships in Aquatic Ecology available on project testing response of benthos & benthic-pelagic links to whole-lake manipulations of fish & nutrients. Write/call: David Lodge, Dept. Biological Sciences, Univ. of Notre Dame, Notre Dame, IN 46556 USA, 219-239-6552.

Science Scholars Fellowship Program: The Mary Ingraham Bunting Institute of Radcliffe College is a multidisciplinary center for advanced study which sponsors women scientists, scholars, writers and artists through year-long residential fellowships. Funded by the Office of Naval Research, the 1992/93 Science Scholars Fellowship Program will provide eight fellowships to women who have held a PhD for at least two years in one of the following fields: astronomy, molecular/cellular biology, biochemistry, chemistry, cognitive and neural sciences, mathematics, computer science, electrical engineering, aerospace/mechanical engineering, materials science, naval architecture and ocean engineering, oceanography, and physics. Deadline for 1992/93 is October 15, 1991. Contact Fellowships Office, The Mary Ingraham Bunting Institute of Radcliffe College, 34 Concord Avenue, Cambridge, MA 02138 (Tel. 617-495-8212).

CALENDAR OF EVENTS, 1991-1992

5th INTERNATIONAL CONFERENCE ON TOXIC MARINE PHYTOPLANKTON

Dates: October 28- November 1, 1991

Location: Newport, Rhode Island, USA

Topics: Taxonomy, cellular and molecular biology, physiology, biochemistry, toxicology, ecology, environmental regulation, public health, aquaculture and mariculture issues of toxic, harmful and nuisance blooms and species of marine phytoplankton. Peer-reviewed conference proceedings will be published.

Contact: Dr. Theodore J. Smayda, Conference Convenor, 5th Int. Conf. on Toxic Marine Phytoplankton, University of Rhode Island, Graduate School of Oceanography, Narragansett, Rhode Island 02882-1197, USA.

2d ARGENTINIAN ASSOCIATION OF LIMNOLOGY MEETING (RAL'91)

Dates: November 4-8, 1991

Location: La Plata City, Buenos Aires Province, Argentina

Format: Symposia, conferences, oral presentations and poster displays

Topics: Paleolimnology, lacustrine environments, estuarine environments, fluvial systems, biogeography, environmental policy.

Paper deadline: Past

Contact: Organizing Committee President of RAL'91, Instituto de Limnologia, Dr. Raúl A. Ringuelet, UNLP, C.C. 712-1900 La Plata, Argentina (Tel: 021-3-9125).

ESTUARINE RESEARCH FEDERATION 11th BIENNIAL INTERNATIONAL CONFERENCE

Dates: November 10-14, 1991

Location: San Francisco, California, USA

Topics: The meeting will begin with a Plenary Session to celebrate ERF's 20th anniversary -- "A Reflection on 20 Years of Estuarine Science and a View to the Future", and it will include over 20 contributed sessions devoted to a broad diversity of topics relevant to estuarine science and management. There will be special symposia on The NSF Land-Margin Ecosystem (LMER) Program, Estuarine Fronts, Information Exchange Between Estuarine Scientists and Managers, Comparison of Large River-Delta Estuaries, and three special sessions on Comparative Cycling of Natural and Contaminant Materials in Estuaries (Geochemical Cycling, Microbial Biogeochemistry, and Trophic Cycling).

Abstract Deadline: April 26, 1991

Contact: Jerome Williams, ERF Executive Director, POB 544, Crownsville, MD 21032-0544.

NALMS 11th INTERNATIONAL SYMPOSIUM, LAKE, RESEVOIR AND WATERSHED MANAGEMENT IN A CHANGING ENVIRONMENT

Dates: November 11-16, 1991

Location: Denver, Colorado, USA

Topics: Special topics include mini-symposia on wetlands, the environmental effects of reservoir construction and operation, and tailwater ecology.

Contact: Jim LaBounty, Bureau of Reclamation, D-3742, P.O. Box 25007, Denver, CO 80225 (Tel. 303-236-6002).

INTERNATIONAL CONFERENCE ON LAND-WATER INTERACTIONS

Dates: December 7-14, 1991

Location: New Delhi, India

Topics: Objectives are to review the state of knowledge of different kinds of interactions, their impact on the structure and dynamics of various freshwater, estuarine and coastal ecosystems, and their value to management of water quality and conservation of aquatic resources. Special emphasis shall be given to the studies related to ecosystem processes in the land-water interface and their significance for open water ecosystems. Several Plenary sessions with invited speakers are planned. There shall also be both oral and poster presentations of contributed papers. Proceedings of the Conference shall be suitably published within a year after the Conference.

Sponsors: Societas Internationalis Limnologiae (SIL); organized by the National Institute of Ecology and International Society for Tropical Ecology.

Contact: Dr. Brij Gopal, School of Environmental Sciences, Jawaharal Nehru University, New Delhi 110067, India.

1st ASIA-PACIFIC CONFERENCE ON ALGAL BIOTECHNOLOGY OPPORTUNITIES FOR THE THIRD WORLD

Dates: January 29-31, 1992

Location: Kuala Lumpur, Malaysia

Topics: The theme of the meeting is algal biotechnology, with special emphasis on stimulating and encouraging the development of algal biotechnology in the developing countries of the Asia-Pacific Region. Micro- and macro-algae from both marine and freshwater sources will be covered in the context of: taxonomy of economically important species; ecology, growth and physiology; tissue and cell culture/protoplast production; genetics & genetic manipulation; bioreactors & mass culture; algae in environmental and pollution control; products from algae; commercialization of algal biotechnology.

Contact: Dr. Phang Siew Moi, Organizing Secretary, Institute for Advanced Studies, University of Malaya, 59100, Kuala Lumpur (Tel. 03-7577000; Fax 03-7573661).

ASLO 92 AQUATIC SCIENCES MEETING

Dates: February 9-14, 1992

Location: Santa Fe, New Mexico, USA

Topics: The theme of this meeting is the unity of aquatic sciences. There will be 20 Special Sessions, with co-chairs representing limnology and oceanography. Co-Chairs have a mandate to include both limnological and oceanographic papers in each session. The deadline for abstracts is Oct. 10, 1991. The Program will be mailed in November,

Scientific Program Organizers: Evelyn J. Lessard (Co-Chair), David W. Schindler (Co-Chair), Greg J. Brunskill, Stephen R. Carpenter, David M. Checkley, Eric O. Hartwig, and Bruce J. Peterson.

Contact: Dr. David W. Schindler, Dept. of Zoology/Botany, Z-811 Biological Science Bldg., University of Alberta, Edmonton, AB T6G 2E9, CANADA (Tel. 403-492-1291; Fax 403-7033; Omnet D.Schindler); and Dr. Evelyn J. Lessard, School of Oceanography, WB-10, University of Washington, Seattle, WA 98195 (Tel. 206-543-8795; Fax 206-543-0275; Omnet E.Lessard).

BORDEAUX AQUACULTURE 1992, PRODUCTION, QUALITY, ENVIRONMENT

Dates: March 25-27, 1992

Location: Bordeaux Lac, France

Topics: Production, quality, and environment as related to aquaculture

Contact: BCS, Palais des Congres, Quartier du Lac, 33300 Bordeaux Lac, France (Tel. 33-56-50-84-49; Fax 33-56-43-17-76).

BRITISH ECOLOGICAL SOCIETY/AMERICAN SOCIETY OF LIMNOLOGY AND OCEANOGRAPHY 1992 SYMPOSIUM

Dates: April 5-8, 1992

Location: Cork, Ireland

Topics: The programme will be structured around the water cycle, from stream headwaters to the deep sea. The main theme will be how the scale of approach determines our perception of patterns (such as patchiness) and important processes (such as disturbance and species interactions) in aquatic communities and ecosystems. Integration across scales and between freshwater and marine habitats is an important objective of the overall programme.

Contact: Dr. Paul Giller, Dept. of Zoology, University College, Cork, Ireland (Tel. 021-276871 x 4137; Fax 021-274-034).

CONFERENCE ON GROUND-WATER ECOLOGY

Dates: April 27-29, 1992

Location: Tampa, Florida, USA

Topics: Ecological effects of ground-water and surface-water interaction, distribution and population dynamics of ground-water organisms, and impacts of scientific advances in ground-water ecology on protective laws and policies.

Contact: John Simons, Technical Program Chair, US EPA, Mail Code WH550G, 401 M St. SW, Washington, DC 20460 (Tel. 202-382-7091)

RBA 1992 SYMPOSIUM, TRANSBOUNDARY RIVER BASIN MANAGEMENT AND SUSTAINABLE DEVELOPMENT

Dates: May 18-22, 1992

Location: Delft, Netherlands

Topics: Transboundary river basin management and water quality control, influence of point and non-point sources and sludge control; planning for transboundary river development and conservation; environmental impact assessment in transboundary rivers; and project studies of transboundary rivers

Contact: Prof. J. Wessel, Delft University, Kanaalweg 2 B, 2628 EB Delft, Netherlands (Tel. 015-783565; Fax 015-787105)

COURSE, SEAGRASSES: FROM THE MOLECULE TO THE ECOSYSTEM

Dates: August 24-Sept. 20, 1992

Location: Stazione Zoologica di Napoli, Italy

Topics: A practical and theoretical course for graduate and post-doctoral students. Course will cover the eco-physiology and molecular biology of seagrasses. Course will be taught by R.S. Alberte (Univ. of Chicago) and I. Mazzella (Stazione Zoologica di Napoli, Italy)

Contact: Jean Gilder, Congressi snc, via G. Quagliariello 35/E, I-80131 Napoli, Italy (Tel: 39-81-546-3779 Fax: 39-81-546-3781).

ASLO LOGO CONTEST

The search for a logo continues; submissions will be reviewed at the ASLO 92 meeting in Santa Fe.

ASLO MEMBERSHIP APPLICATION FORMS

ASLO Membership Application Forms are now located on the last page of each issue of L&O.

Please xerox the membership application form from your issue of L&O, and give it any aquatic scientist you think might be interested in joining the Society. If you are not doing so already, please make a point of providing each of your students with a copy of the form, and encourage them to join.

TARGET DATES for 1992 submissions to ASLO Communication to Members

March 10, July 10, & Nov. 10, 1992. Submit, preferably by e-mail, to:
Susan Weiler, Dept. Biology, Whitman College, Walla Walla, WA 99362
Tel: 509-527-5948; Fax: 509-527-5961; Omnet: S.Weiler

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