

The BRYOLOGICAL TIMES

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Newsletter of the International Association of Bryologists

February, 1992

No. 65

Recent Developments in the International Association of Bryologists

by Dale H. Vitt, Secretary

Membership

The membership of the ASSOCIATION is up 6% over the past two years. Membership increased from 539 in June of 1989 to 576 in June of 1991. Of our current members, 153 belong to IAB/IAPT while 333 belong only to IAB. In June of this year we had 90 non-paying members from eastern Europe and Asia. Currently, this number has been reduced to less than 10. Some interesting statistics are as follows: We have 239 members from western and central Europe, 23 paying members from eastern Europe (and as of June, 1991 and 87 non-paying members), and 21 from the USSR. We have 123 members from North America, 39 from Japan, 29 from China, 21 from Asia (mostly India), and 26 from Australasia. Unfortunately, we have very few members from Africa (7) or South America (8). In conclusion, our ASSOCIATION is healthy and is increasing in membership. Please remember that dues are now US\$ 10.00/yr for IAB membership alone and US\$ 5.00/yr for combined IAB/IAPT. IAPT members who don't pay their 1991 and 1992 dues in January will be removed from the membership.

Finances

The ASSOCIATION's net worth has increased about 45% over the past two years, from about CAN\$ 5850.00 to our present value of about CAN\$ 10330.00.

Our endowment fund for the STANLEY

W. GREENE AWARD IN BRYOLOGY now stands at CAN\$ 6000.00. In addition, we have an operating bank account of around CAN\$ 3000.00. Because of the kindness of the distribution centres for mailing and copying the *Times*, the ASSOCIATION has been able to move from nearly zero funds in 1987 (when the treasury was separated from that of IAPT) to a small but increasingly stable financial position.

Interest achieved from the endowment fund is used exclusively to finance the STANLEY W. GREENE AWARD IN BRYOLOGY. The first AWARD of CAN\$ 1250.00 was awarded to Jiri Vána at the July, 1991 meeting in Exeter, U.K. for his use to study hepatic material in North American herbaria. The next Award(s) will be given in Tokyo, Japan, in 1993. The AWARDS in 1993 will have the approximate value of CAN\$ 1500.00. A call for proposals will be made in the fall of 1992, and due January 1, 1993.

Distribution of the Times

The Bryological Times has had a very successful three years with fifteen issues produced by the editors Rob Gradstein and Guido van Reenen.

I want to express my appreciation, also on behalf of the editors, to the individuals and institutions who currently copy and distribute *The Bryological Times* for the ASSOCIATION six times per year. This is an expensive and extremely valuable service for which I am greatly appreciative.

Best Books Buys

Bryophyte terminology is specialized and contains many terms not in glossaries intended for vascular plant studies. The recently published *Glossary of Bryological Terms*, presented in seven languages, is indeed a special publication. The price for this 297 page book is remarkably low for one printed in the 1990's. Although just recently advertised, I think it is worth calling to your attention that this is a real bargain at US\$ 12.00 plus postage and handling. Available from Department Eleven, Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A. Add US\$ 2.75 for shipping within the United States or US\$ 3.75 for non-US shipments. Include payment with your order. The reference for this book is as follows: Magill, R.E. (ed.). 1990. *Glossarium Polyglottum Bryologiae. A Multilingual Glossary for Bryology. Monographs in Systematic Botany* 33:1-297.

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It is because of these individuals and their institutions that the ASSOCIATION is financially solvent and is able to make awards for research in Bryology through the STANLEY W. GREENE AWARD IN BRYOLOGY.

North American addresses: Dr. Robert Magill, Missouri Botanical Garden, St. Louis, Mo., U.S.A.

Northern European addresses: Dr. Norton Miller, Biological Survey, New York State Science Service, Cultural Education Building, Albany, New York 12230, U.S.A..

Southern European addresses: Dr. Patricia Geissler, Cons. & Jardin Botaniques, Case postale 60, CH-1292 Chambésy, Genève, Switzerland.

South Pacific addresses: Dr. Heinar Streimann, Australian Botanical Gardens, GPO Box 1777, Canberra, A.C.T. 2615, Australia.

Japanese-Chinese addresses: Dr. Zennoske Iwatsuki, Botanical Institute, Hiroshima University, 1-1-89 Higashisenda-machi, Naka-ku, Hiroshima 730, Japan.

Soviet addresses: Dr. Lars Söderström, Department of Ecological Botany, University of Umea, S-901 87 Umea, Sweden who prepares the mailing and sends it to Dr. Misha Ignatov, Main Botanical Garden, Acad. Sci. USSR, Botanicheskaya 4, Moscow 127276, USSR.

Southeastern Europe addresses: Dr. Sandor Orban, Herbarium Academiae Paedagogicae, Botanical Department, Ho Si Minh Teachers College, H-3301 Eger, Hungary.

Northeastern Europe addresses: Dr. Jiri Vána, Katedra Botaniky Prirodovedecké, Fakulty Univerzity Karlovy, 12301 Praha 2, Benatska 2, Czechoslovakia.

What's happened between 1989-1991

The 'First International Symposium on the Biology of *Sphagnum*' was organized by Roger Daniels and held during July, 1991. This meeting and field trip

was sponsored through considerable funding by FISONS HORTICULTURE LTD. The biennial meeting of the ASSOCIATION was held in Exeter, U.K., organized by Michael Proctor. Reports of these meetings and field trip were included in the last Times.

Norton Miller is organizing many of the papers presented at 'The *Sphagnum* Symposium' as volume 5 of the *Advances in Bryology* to be published in 1993. Volume 4 of the *Advances in Bryology* should be available early in 1992. All members should remember that we have negotiated with the publisher of the *Advances* that all members in good standing receive a 25% discount on the volumes of the *Advances*. Royce Longton has accepted the editorship of volumes 6, 7, and 8 of the *Advances*. On behalf of the ASSOCIATION, I wish to express my appreciation for the excellent job done by Norton Miller during his editorship of the *Advances*.

Future meetings of IAB have been established for the 1990's. Our next meeting will be in 1993 in Tokyo, Japan in association with the next 'International Botanical Congress'. Zennoske Iwatsuki is responsible for our arrangements, and questions and inquiries should be addressed to him. In 1995, the ASSOCIATION will meet in Mexico City, with arrangements made by Claudio Delgadillo. The theme of that meeting will be "Biology of Tropical Bryophytes with special emphasis on endangered species". In 1997, we are scheduled to meet in Beijing, China, while in 1999, the 'International Botanical Congress' will probably be in St. Louis, Missouri. The '2nd International Symposium on the Biology of *Sphagnum*' is planned for either 1994 or 1996 in North America.

Tomas Hallingbäck is chairman of our committee on endangered bryophytes. His first report is now complete. Benito Tan is chairman of the committee on Tropical Bryology and his first report has been published in *The Bryological Times*. It contained recommendations on how the Asso-

CIATION can be of help to tropical bryology.

The *Compendium of Bryology* is scheduled for a revised format and a new edition within the next several years. The Secretary is actively looking for potential editors of this volume. Interested persons should contact him.

The computer committee and software library has had a very successful two years, with about 800 copies of programs distributed. Jan-Peter Frahm should be contacted by interested users.

The HEDWIG medal will be presented at the 1993 meeting of the ASSOCIATION in Tokyo.

The Secretary has endeavored to establish means whereby all members of the ASSOCIATION are equal paying members and eligible for all benefits of the ASSOCIATION. To this end, local secretariats have been established in eastern Europe and in the USSR. Annual dues payments made by members from these areas will be held by the local secretariats and be used in the future for locally designated projects of the Association. The Josef Podera fund has been established for research carried out in eastern Europe. Misha Ignatov has been appointed local secretary for the USSR, Jiri Vana for north-eastern Europe and Sandor Orban for southeastern Europe.

Call for nominations for the 1993 election of officers

The terms of office of the President (the current president is also eligible, having not been elected to the office), two vice-presidents, and four councilors expire at the 1993 meeting. Nominations for our next executive council can be sent to the Secretary. The President will appoint an election committee in September, 1992.

I would be very pleased to receive any of our members suggestions and recommendations on any of the above, as well as on any topics of concern. Any new ideas are most welcome.

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Request for volunteers

According to present custom, several aspects of the constitution of the ASSOCIATION are not closely followed (see p. 8, this issue). I have been asked by our President to look for potential members who would like to be a part of revising the constitution in order to update it and have it ratified by our membership. Anyone interested, should please contact the Secretary as soon as possible. ♦

author's address

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Letter to the Editor

Dear Sir,

I have the most pleasant duty to address my cordial thanks to the bryologists who were so kind to send me, as a collegial favour, reprints and other sources of information in response to my appeal in *The Bryological Times* 53. I am also expressing my thanks to the staff of the Farlow Herbarium, Harvard University, U.S.A. and the Lichenology and Bryology Laboratory of the Botanical Institute of St. Petersburg.

Dr. G. Dihoru
Curator of Herbarium (BUCA)
Institutul de Biologie al Academiei
Române

pants from Australia. George Scott and Ilma Stone took us into the field and assisted us with identification of specimens collected. These workshops continued for a number of years. Local bryological meetings took on a different form after 1984 when we became involved in the Bryological Forays in New Zealand, now known as the John Child Bryological Workshop (8th Workshop in 1992) and the Australian Bryological Workshop (2nd Workshop in 1991) combining field studies, laboratory work and talks.

The length of the Reference Lists in the *Newsletter* in recent years is a measure of the increase in research on Australasian bryophytes since 1979. Apart from research papers and checklists for all Australian States except Queensland, publications have included important books such as Scott's *Liverworts of Southern Australia*, Scott & Bradshaw's *Checklist of Australian Liverworts* and Streimann & Curnow's *Catalogue of Australian Mosses*. The continued support for bryological projects by the Australian Biological Resources Study towards the Bryological Volumes for the *Flora of Australia* is commendable. The recent meeting on endangered species of cryptogams "Our Forgotten Flora" in Canberra in which a number of bryologists participated indicates that the importance of cryptogams is becoming more widely recognised. In New Zealand research is active on varied projects and include the imminent publication of the larger revised and expanded edition of Allison & Child by Jessica Beever and Alan Fife's work for a new *Moss Flora of New Zealand* to replace Sainsbury.

Our bryological community is a friendly one, wide in age range, co-operative and encouraging of individuals. I hope it will continue to grow in strength. If the *Newsletter* has spread the good news about bryophytes and kept the group together its aim has been achieved. ♦

Helen Ramsay

The Australasian Bryological Newsletter: Origin and History

For more than twelve years, since its establishment in 1979, Helen Ramsay and Patricia Selkirk have been editing the *Australasian Bryological Newsletter*. Published biannually, the *Newsletter* has been extremely useful in keeping Australasian bryologists in touch with each other and in providing information on bryological activities in this part of the world. From 1992 onwards the *Newsletter* will be edited by Patric J. Dalton, Plant Sciences Dept., University of Tasmania, G.P.O. Box 252C, Hobart, Tasmania 7001, Phone (002) 202690, FAX (002) 202698. The following text, written by Helen Ramsay, has been taken from the 25th issue of the *Newsletter*.

The first meeting of bryologists in Australia took place at the ANZAAS meeting held at the University of New South Wales, Sydney in 1971. George Scott organised a session of papers on bryophytes — speakers included George Scott, Wilf Schofield, Patricia Selkirk, Helen Ramsay, Rod Seppelt, Helen Hewson — and we enjoyed a field trip to the Royal National Park. Following this meeting, bryological paper-reading sessions were arranged as part of the Botany Section of ANZAAS Conferences in Hobart, Melbourne, Auckland, Adelaide, each time followed by an informal lunch. Both Australian and New Zealand bryologists participated.

Whilst talking informally over lunch at ANZAAS in Melbourne the suggestion was made that with the impending XIII International Botanical Congress

in Sydney in August 1981, it would be useful if we, as a group, could keep in touch in some way. Ella Campbell suggested I might like to do something. Out of this idea for a newsletter, circulating twice a year, developed and with the help of Patricia Selkirk our first issue of *The Australian Bryological Newsletter*, (later in 1980 *Australian Bryological Newsletter*) was produced in October, 1979. At first our *Newsletter* was circulated to about 20 people in Australasia but by October 1980 the circulation had trebled with requests from overseas workers interested in Australasian bryophytes. Our mailing list is now worldwide to about 110 participants.

The first of George Scott's workshops at Monash University to teach bryophyte identification was held in 1979 and attracted a number of partici-

Meetings

The DBLS paper-reading meeting

The 1992 paper-reading meeting of the Dutch Bryological and Lichenological Society will be held on March 7 at the Rijksherbarium, Rapenburg 70-74, Leiden. The program is as follows:

Morning session

PETER VANDER MOLEN: Ecology of hummock-hollow systems in raised bogs of Ireland.

HEINJO DURING: A model for bryophytes with tubers.

GUIDO VAN REENEN: Altitudinal distribution of bryophytes in the Andes of Colombia.

Afternoon session

ROB GRADSTEIN: Systematics of neotropical Lejeuneaceae and Monocleaceae.

ANDRE APTROOT: Bipolar lichens.

HENK GREVEN: Changes in the Dutch bryophyte flora.

PIM VAN DE KNAAP: Lichens and bryophytes of an Antarctic volcano.

ABLS meeting in Hawaii

The 1992 annual meeting of the American Bryological and Lichenological Society will be held in Hawaii, 9-13 August, jointly with the meetings of the American Institute of Biological Sciences.

Our program will begin on Monday, August 10, with the traditional ABLS breakfast, followed by an all day Symposium entitled "Innovations and Traditions in Lichen Systematics - A Tribute to Mason Hale". Four contributed paper/poster sessions will be complimented on Tuesday afternoon by a second Symposium devoted to the experimental study of bryophytes and lichens. Topics will range from the *in vitro* culture of lichens to the impact of cellular and molecular data on evolutionary concepts. Tuesday's sessions will end with the ABLS Mixer, and the

Bryology in Guizhou Province, China

A contribution to the Floristics and Phytogeography Column. Send contributions to the column editors: W.R. Buck, New York Botanical Garden, Bronx, New York 10458, U.S.A., or J. Vána, Department of Botany, Charles University, Benátská 2, CS-12801 Praha 2, Czechoslovakia.

Bryology is a new discipline in Guizhou. Historically this province has been subject of attention of numerous European bryologists and collectors. However, it was not until the time of Prof. Zhong Bengu, in the early 1960's, that Guizhou Normal University became a center of active bryological research. Today, most bryological activity in Guizhou is centered around Guizhou Normal University.

The herbarium of the Department of Biology, Guizhou Normal University (SCGB) holds the largest bryophyte collection in Guizhou, ca. 15,000 specimens. Most specimens were collected from Guizhou, but other provincial collections are also represented. The staff of the bryophyte herbarium consists of Prof. Zhong Bengu and Mr. Zhang Zhaohui.

At Guizhou Normal University, Prof. Zhong Bengu has been actively engaged in taxonomic, morphological,

and ecological studies of Guizhou mosses for nearly three decades. She has published over 10 papers on Guizhou bryophytes. Now, Prof. Zhong Bengu is studying the family Thuidiaceae, especially the genera *Claopodium* and *Haplocladium*. Mr. Zhang Zhaohui, who has completed his master's thesis on the mosses of Maolan Karst Forest Area, is studying the mosses of the Guizhou karst area.

In the 1980's we have seen two new researchers working on the bryophytes flora of Guizhou. They are Mr. Xiong Yuau-xian (Guizhou Agricultural College) and Mr. Lin Qinwe (Guizhou Provincial Museum).

Correspondence related to the bryophyte herbarium of SCGB should be addressed to: Prof. Zhong Bengu, Department of Biology, Guizhou Normal University, Guizhou Province, People's Republic of China; and Mr. Zhang Zhaohui of the same address. ♦

Annual Business meeting will cap Wednesday's sessions. In summary, we anticipate an exciting 3-4 day program, with a truly international flavor.

The Society is also sponsoring two pre-meeting field trips, one a three-day trip to Hawaii and Maui, and the other a single day trip on Oahu. The former is limited to 20 participants, the latter to 40. Detailed descriptions and procedures for registration can be found in the AIBS registration brochure. For further information on the Program write to: Barbara Crandall-Stotler, ABLS Program Chair, Dept. of Plant Biology, Southern Illinois University, Carbondale, Ill. 62901, USA.

8th Meeting of CEBWG

The Central European Bryological Working Group will hold the next conference at the Teacher's Training College in Eger, Hungary, from Monday June 22th through Wednesday, June 24th, 1992. The subject of the conference will be bryophyte taxonomy, geography, ecology, coenology and chemistry. The conference will also explore bryofaunistic relationships. For information and registration please contact Dr. Sándor Orbán, Eszterházy Károly Teacher's Training College, Eger, Eszterházy tér 1., Pf.: 43, H-3300 Hungary. ♦

News and Notes

Bryological Society Established in Spain

The Spanish Society of Bryologists was constituted on 5 April 1990 at Lumbrals (Salamanca), during the IX National Symposium of Cryptogamic Botany.

The objective of the Society is to facilitate and promote the exchange of information and material and any other activity related to bryology. The Society will issue a semestral newsletter and will be responsible for organizing the Bryological Meetings which are already taking place in Spain biannually.

The Society is domiciled at the Botany Department of the Faculty of Science of the University of Navarra at Pamplona, and the secretariat at Barcelona.

The first committee elected at Salamanca is as follows:

President Creu Casas (Barcelona)
Vice-Pres. M. Jesús Elias (Salamanca)
Treasurer Alicia Ederri (Pamplona)
Member 1 Rosa M. Ros (Murcia)
Member 2 Jesús Muñoz (Asturias)
Secretary Rosa M. Cros (Barcelona)

Secretarial address

Botànica, Facultat de Ciències
 Universitat Autònoma de Barcelona
 08193 Bellaterra (Barcelona)
 Spain

Bloomquist Bryological Foray

The 7th Annual Bloomquist Bryological Foray will be held in northwest Alabama from September 25-27, 1992. The bryophytes are extremely rich in the deep, moist sandstone ravines that occur in this part of the state. Collecting should be very rewarding. For more information, contact Dr. Stephen L. Timme, Sperry Herbarium, Department of Biology, Pittsburg State University, Pittsburg, Kansas 66762 (phone: 316-235-4740; FAX: 316-232-2430).

Exsiccata

New Campylopus Exsiccata

Campylopus Exsiccatae Fasc. VII N° 151-175. Contains material from Ecuador, Colombia, Bolivia, Brazil, France, Zaire and Rwanda.

Campylopus Centrali-Africanæ. Material of the Bryotrop expedition 1991 to Zaire and Rwanda. Sixteen (partly very rare) species in thirty specimens. A representative collection including most species of *Campylopus* from Central Africa.

Available on exchange basis from Jan-Peter Frahm, Universität Duisburg, FB 6, Botanik, Postfach 101503, 4100 Duisburg, Germany.

Old bryophyte Exsiccates Available

At the Swedish Museum of Natural History, we can now offer a number of old bryophyte exsiccates for sale or exchange. In the case of exchange, bryophytes from most parts of the world except Europe and North America north of Mexico are of interest.

The following exsiccates are available (please note that the prices cited do not include postage or our banking costs):

Complete sets

Allorge V. et P., *Bryophyta Azorica*, N° 1-133. 1942. SEK 700

Brotherus V.F., *Bryotheca Fennica*, N° 1-400 (fasc. I-IV). 1910-16. SEK 2.000

Hartman R., *Bryaceae Scandinaviae*, N° 1-450 fasc. I-XV. 1857-74. - 3 sets. SEK 2.000/set

Hübener J.W.P., *Deutschlands Lebermoose*, N° 1-125 (fasc. I-V).

M.S. Degree in Biology, with Emphasis on Bryology

One teaching assistantship is available beginning in the fall, 1992 semester. For information contact Dr. Stephen L. Timme (address see left column). ♦

1836-39. SEK 700

Lindgren S.J., Thedenius C.F. & Sillén O.L., *Musci Sveciae Exsiccati*, N° 1-200 (fasc. I-VIII). Ca 1835-44. - 5 sets. SEK 900/set

Kopsch A., *Bryotheca Saxonica*, N° 1-600 (fasc. I-VI). 1919-36. - 2 sets. SEK 3.000/set

Zetterstedt J.E., *Grimmieae et Andreaeae Exsiccatae*, N° 1-50. 1861. - 3 sets. SEK 300/set

Incomplete sets

Flescher M., *Musci Archipelagi Indici*, N° 1-150, 351-550 (fasc. I-III, VIII-XI). 1900, 1905-28. - Missing N° 151-350, 551-600 (fasc. IV-VII, XII). SEK 1.200

Hartman R., *Bryaceae Scandinaviae*, No. 31-300 (fasc. II-X). 1857-63. - Missing N° 1-30, 301-450 (fasc. V). SEK 450

Husnot T., *Hepaticae Galliae*, N° 176-200 (fasc. VIII). Ca 1870-75. - Missing N° 1-175 (fasc. I-VII). SEK 100

Lindgren S.J., Thedenius C.F. & Sillén O.L., *Musci Sveciae Exsiccati*, N° 51-200 (fasc. III-VIII). Ca 1838-44. - 2 sets. - Missing N° 1-50 (fasc. I-II). SEK 500/set

Lindgren S.J., Thedenius C.F. & Sillén O.L., *Musci Sveciae Exsiccati*, N° 101-200 (fasc. V-VIII). 1838. - 2 sets. - Missing N° 1-100 (fasc. I-IV). SEK 300/set

Lindgren S.J., Thedenius C.F. & Sillén O.L., *Musci Sveciae Exsiccati*, N° 151-200 (fasc. VII-VIII). 1838. - Missing N° 1-150 (fasc. I-VI). SEK 150

Rabenhorst L., *Bryotheca Europaea* (Die Laubmoose Europas), N° 501-550, 1251-1300 (fasc. XI, XXVI). 1862, 1875. - Missing N° 1-500, 551-1250, 1301-1350 (fasc. I-X, XII-XXV, XXVII). SEK 200

Please send orders or questions regarding possibilities for exchange to: Prof. Nils Lundqvist, Swedish Museum of Natural History, Department of Cryptogamic Botany, Box 50007, S-104 05 Stockholm, Sweden. ♦

BRYONET, the First Bryological Electronic Conference System

Computer Techniques Column. Send contributions to the column editors: J.-P. Frahm, Universität Duisburg, Botanik, Postfach 101629, D-4100 Duisburg, Germany, or B. O'Shea, 131 Norwood Road, London SE24 9AF, U.K.

During the last few months, Gillis Een (Stockholm) has developed and established an electronic conference system for bryologists. The following text has been downloaded and composed by the editors of the computer column from files distributed by Gillis Een through BRYONET.

It is a truism to say that communication of information and knowledge is important! We read books, journals and newsletters, which are printed and distributed by mail. A number of electronic tools are now used for printing and distribution, and the journal "Tropical Bryology" is a good example of this. Video-tapes and compact disks are becoming quite common.

We also use electronic means for direct person to person contacts. The telephone has been with us for a long time and telefax is used increasingly. Some of us have access to electronic mail and find it very useful for fast contacts over long distances.

We are a number of bryologists, who for a number of months have been discussing a new type of electronic communication, which we have named BRYONET.

What is BRYONET?

BRYONET is a computer supported tele-conferencing system. It combines some of the best features of a live conference with those of electronic mail.

BRYONET is of course just one particular application of a well-known technology. In a system of this kind, every member has his personal mailbox. Furthermore there are a number of conferences, each on its defined subject. The individual members send and receive messages, to and from the conferences as well as to and from other individuals. All messages are received, stored and distributed by a central computer, which is working round the clock.

For the individual member, the system has a number of advantages:

- You can send and receive messages at any time of the day or the week. Geographical distance is not a limiting factor, nor a cost factor.
- Large messages can be sent and received without problems.
- You can ask a question of an individual or the whole network, and you may get an answer from a person you have not heard of before.

For a group of specialists, the system has other advantages:

- You can start an exclusive conference on a special subject with a limited number of members.
- You can use such conferences for many purposes, such as exchange of ideas, editing texts, compilation of data, etc.
- A small and close group of friends, using this tool, can create an atmosphere of trust, openness, generosity and creativity.

BRYONET is more interesting for bryologists in remote areas, where the means of ordinary communication are poor. On the other hand it is becoming quite feasible to instal nodes of electronic communication e.g. in universities in developing countries. The technology is improving and the costs are coming down.

An international electronic network can be extremely useful. You can ask a question to the system and get an answer from the most unexpected corner of the world. You can run projects with elements of creative brain-storming. You can transfer files with information. And so on.

I am not suggesting that BRYONET should become a data-base. We have a nucleus of that in our software library, and that can be developed further. On the other hand, when the BRYONET has grown to a size of about 50 active members, it can be used for asking questions of the type: "Who knows anything about this" etc. Thus an electronic network of this kind can become a very valuable source of information.

What we hope to achieve is the following, presented in chronological order:

1. Start a network for general conversation and exchange of information, including open questions and answers.
2. Start smaller groups for co-operation on specified projects or tasks.
3. Have something running in time for UNCED 1992, in order to be able to demonstrate the value of bryophytes as indicators of pollution and environmental change.
4. To actively help bryologists in developing countries to join BRYONET, thus making it possible for colleagues in more fortunate countries to offer support on an everyday basis.

I am planning to apply for a grant from the Swedish aid agency SAREC, to be used for starting up BRYONET and for operating it for a period of three years.

Request for support of BRYONET

We have many plans for the development of BRYONET, and it is my feeling that it would be possible to raise some money for the BRYONET project from our national aid agencies. My

experience is limited, but I am optimistic at least regarding Canada and Sweden. In any case I am prepared to try here as soon as possible.

In order to build up a strong case I need your support. Please send me a letter, addressed to "whom it may concern", in which you express your appreciation of the BRYONET initiative with emphasis on one or two points in the programme, which you think are of particular importance.

Members on 19 April 1991

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VISBMS@UBVMS.BITNET	= ZANDER Richard

BRYONET@KOMSERVE.KOMUNITY.SE = BRYONET conference

If you prefer to reply directly to the conference, you should address your message to: BRYONET@KOMSERVE.KOMUNITY.SE

I would very much appreciate if you would suggest further members of BRYONET, i.e. people who would be prepared to contribute to the start up of this venture.

From 1992 on, BRYONET is operating at the University of Duisburg. Send messages to: bryonet@uniduisburg.de. Incoming mail will be automatically distributed to all participants. For subscription or cancellation of BRYONET, please contact Jan-Peter Frahm by E-mail address hh216fr@unidui.uni-duisburg.de

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PA 19530, U.S.A.

Tropical Bryology by E-mail

Starting with Volume 5 (1992), the journal *Tropical Bryology* is available not only in printed form or on disk, but also by electronic mail. This means that subscribers may receive the journal at the date of issue without any delay.

The E-mail version will be the same as the disk version with the difference that all files are packed in one and are compressed to allow a better transmission. The file is self-extracting and will be unarchived and uncompressed automatically when downloaded to a disk or harddisk. In the trial phase, only text will be available. Since no printing costs are involved, the E-mail issue will have a fixed price of only US\$ 5.

For subscriptions contact Dr. J.-P. Frahm, Universität Duisburg, Fachbereich 6, Botanik, Postfach 101503, D-4100 Duisburg, Germany. tel. +2033792712 (24 hrs), fax +2033793333, telex 855 793 uni du d, E-mail hh216fr@unidui.uni-duisburg.de.

Important notice concerning the Bryophyte Herbarium at Memorial University of Newfoundland (NFLD)

This is to inform you that the Bryophyte Herbarium at Memorial University of Newfoundland (NFLD) is now inactive. The exchange programs which the herbarium had with various institutions are necessarily suspended, and no further specimens should be sent to NFLD on exchange. Nevertheless, the herbarium remains available for on-site use. It contains approx. 50,000 specimens, mainly from arctic and boreal regions and eastern Canada. Special limited requests for loans may still be possible; until further notice such requests should be addressed to:

Bryophyte Herbarium
c/o Department of Biology
Memorial University
St. John's, Nfld., Canada A1B 3X9

Constitution of the International Association of Bryologists

Section 1. Name and Affiliation

Article 1. The Association shall be called the International Association of Bryologists (I.A.B.)

Article 2. The Association shall be affiliated to the International Association for Plant Taxonomy (I.A.P.T.) on the basis of Article 3, section 4, of the Constitution of that Association.

Section 2. Objectives and Means

Article 3. The objectives of the Association shall be to promote international co-operation and communication among bryologists, whether amateur or professional.

Article 4. The objectives of the Association shall be pursued by the same methods and procedures as those provided in the I.A.P.T., either jointly or independently, but normally under the aegis of that Association. The methods of the Association shall include:

- (i) The facilitation and encouragement of fuller co-operation between individual workers;
- (ii) The establishment of committees for special purposes;
- (iii) The organization of meetings and symposia relating to bryology, in which bryologists should be involved and to which they can contribute;
- (iv) The publication of a regular newsletter, the publication of a regular list of all new taxa, at every level, from the world's literature; the periodic publication of an up-to-date address list of the world's bryologists; and issues that are of general interest to bryologists other than original research papers.

Section 3. Membership

Article 5. All persons actively interested in any phase of bryology are eligible for membership of the Association.

Article 6. Membership is acquired by application in writing to the Secretary of the I.A.B. or I.A.P.T and payment of the appropriate fee.

Article 7. Membership of the Association shall be open without payment of an additional fee to any personal member of the I.A.P.T in good standing, who may desire to become a member of I.A.B.

Section 4. Council

Article 8. The affairs of the Association shall be controlled by a Council which shall consist of a President, a First and Second Vice-President, the Immediate Past-President, a Secretary and ten Councillors. Normally not more than two members of the Council shall be residents of the same country when elected.

Article 9. The President, Vice-Presidents, Past-President and Secretary shall constitute the Executive Committee whose role will be to maintain general control over the affairs of the Association and carry out the duties that may be delegated to them by the Council.

Article 10. The President and Vice-Presidents shall hold office between two Business meetings of the Association and shall not be eligible for re-election to the same office. The Councillors shall hold office between three Business Meetings; five of them shall retire by rotation at each Business Meeting and shall not be eligible for immediate re-election to the same office. The Secretary shall hold office between three Business Meetings and shall be eligible for re-election.

Article 11. Any vacancy occurring during the term of office of a Council member, other than that of President, shall be filled by the Council. In the case of a vacancy in the presidency, the Past-President shall fill the remaining term of office. If the Past-President is unable to serve, the First Vice-President shall act as President until the next Business Meeting of the Association.

Article 12. The Council may at any time co-opt additional members for special purposes; for example, the Association will eventually need the services of an Editor and a Bibliographer.

Article 13. The Council shall have power to appoint committees to further the objectives of the Association and shall define the composition, duties and powers of such committees.

Section 6. Meetings and Elections

Article 14. The Association shall meet at each International Botanical Congress. Other meetings may be arranged by the Council when deemed appropriate. A Business Meeting shall be held at each International Botanical Congress or at an appropriate International Congress. The time interval between two Business Meetings shall normally be at least four years and not more than six years. Notice of the Business Meetings shall be sent to members at least four months before the date of the meetings.

Article 15. The Council shall be elected by a majority of the votes cast by members in a mail ballot conducted at least four months prior to the Business Meeting of the Association. The votes cast for nominated candidates for one of the offices of the Executive Committee shall count for their election as Council Members if they are not elected for an office.

Article 16. At least seven months prior to a Business Meeting of the Association, the President shall appoint an ad hoc Election Committee to conduct the election of Council. The Election Committee shall consist of at least three and not more than five members.

Article 17. The Election Committee shall call for nominations of the candidates for the ensuing period from the membership of the Association. Nominations shall be sent to the Chairman of the Election Committee and they shall form the basis of the ballot. If nominating additional candidates, the Election Committee shall strive, as far as possible, to take account for the diverse interests of bryologists as well as the varied geographical areas of candidates residency.

Section 7. By-Laws and Amendments

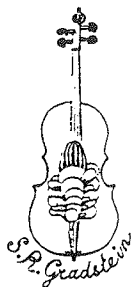
Article 18. The Council shall have the power to make by-laws for carrying into operation the terms of the Constitution.

Article 19. Amendments to the Constitution may be proposed in writing by any members of the Association. Such amendments receiving the approval of a majority of the Council shall be submitted to the members for a mail ballot. Adoption shall require a favourable vote of two-thirds of the votes cast.

However, amendments rejected by the Council may be re-submitted by the mover for discussion at the next Business Meetings of the Association, and if a favourable decision is then obtained, they shall be voted upon by mail vote.

By-Laws for IAB Committees

1. Such Committees as may be required to fulfil IAB's purposes shall be created on a temporary or unlimited basis, upon the decision of the Council.
2. The Chairman and Members of each Committee shall be appointed (and can be dismissed) by the Executive Committee. Unless otherwise specified, their commission ends with that of the Council, during which they were appointed; it can be renewed. The President and the Secretary of the IAB are ex-officio members of each Committee.
3. Within the limits of their tasks and competencies, as defined by the Council, the Committees are autonomous in their action.
4. Every January, the Committees shall submit annual reports of their activities to Council through the Secretary of IAB who shall circulate them and report back to the Committees any comments received from Council members.
5. Funds that may be put at the disposal of a Committee shall be administered under the personal liability of the Chairman of that Committee, their use being fully accounted for in the Committee's reports.



Rob Gradstein playing MOZART on Compact Disc

The Dutch "Kromme Rijn Fluitkwartet", established in 1975 and consisting of flute, violin, viola, and Rob Gradstein as violoncellist, has recorded the four Flute Quartets by Wolfgang Amadeus Mozart (KV 285, 285a, 285b, and 298) on CD.
Price: Dfl 35,- (US\$ 20), including postage.

Please send your orders to S. Rob Gradstein, Institute of Systematic Botany, Heidelberglaan 2, 3584 CS Utrecht, The Netherlands.

Colophon

The Bryological Times, founded in 1980 by Stanley Wilson Greene (1928–1989), is the bimonthly newsletter of the INTERNATIONAL ASSOCIATION OF BRYOLOGISTS. It is published in Edmonton (Canada) and distributed from Albany (U.S.A.), Canberra (Australia), Edmonton (Canada), Eger (Hungary), Geneva (Switzerland), Hiroshima (Japan), Moscow (Russia), Praha (Czechoslovakia), St. Louis (U.S.A.) and Umea (Sweden).

Important change from no. 57/58 onwards: all items for publication in *The Bryological Times* are to be sent, preferably on diskette, to the Managing Editor, Guido B.A. van Reenen, University of Amsterdam, Hugo de Vries-laboratorium, Kruislaan 318, 1098 SM Amsterdam, the Netherlands, **except** those for the regular columns, which may go direct to the column editors.

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For details regarding membership of the INTERNATIONAL ASSOCIATION OF BRYOLOGISTS (currently US \$10.00 p.a.) write to the Honorary Secretary, Dale H. Vitt, Department of Botany, University of Alberta, Edmonton, Alberta, Canada T6G 2E9. All correspondence concerning mailing to Sandi Vitt at the same address.

Deadlines for Contributions

10 January, 10 March, 10 May, 10 July, 10 September, 10 November

Diary

Send contributions to D.H. Vitt,
University of Alberta, Department of Botany, Edmonton, Alberta, Canada T6G 2E9.

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Spring. Bryologisch-lichenologische Arbeitsgemeinschaft excursion to western Anatolia, Turkey. Inquiries: Dr. V. John, Pfalz museum, Hermann-Schäfer-Str., D-6702 Bad Dürkheim, Germany.

April 8-15. BBS Spring Field Meeting, Oswestry, United Kingdom. Inquiries: Ron Shoubridge, 8 Mary Elizabeth Road, Ludlow, Shropshire SY8 1LW, U.K.

April 29-May 3. Dutch Bryological and Lichenological Society excursion to Luxemburg, Berdorf and vicinity. Inquiries: André Aptroot, W. van Velzenstraat 11, 1962 WS Heemskerk, The Netherlands.

May 22-24. Vereinigung für Bryologie und Lichenologie annual assembly, paper reading session and excursions. Weisstannental near Sargans (SG) (northeastern part of Central Alps, subalpine vegetation). Inquiries: Dr. K. Ammann, Syst.-Geobot. Institut, Altenbergrain 21, CH-3013 Bern, Switzerland.

June 22-24. 8th Meeting of The Central European Bryological Working Group, Eger. Inquiries: Sándor Orbán, Eszterházy Károly Teachers' Training College, Eger, Eszterházy tér 1., Pf.: 43, H-3300 Hungary.

July 13-17. III Latin American Symposium of Bryology, Mexico City, Mexico, covering all aspects of Neotropical bryology with lectures and contributed papers and two short field trips. Inquiries: Claudio Delgadillo M., III Simposio Latinoamericano de Briología, Apartado Postal 70-367, Delegación Coyoacán, 04510 México, D.F. México.

July 27-August 5. Dutch Bryological and Lichenological Society excursion to France, Pyrenees, near Tardets. Inquiries: André Aptroot, W. van Velzenstraat 11, 1962 WS Heemskerk, The Netherlands.

July 29-August 12. BBS Summer Field Meeting, Ullapool and the Uists. Inquiries: Gordon Rothero, Stronlach, Glenmassan, by Dunoon, Argyll PA23 8RA, and Peter Pitkin, Nature Conservancy Council Scotland, 2/5 Anderson Place, Edinburgh EH6 5NP, U.K.

August 3-9. Nordic Bryological Society Annual Meeting and excursion in Kilpisjärvi, extreme NW Finland. Preliminary registration and further information from Krister Karttunen, Department of Botany, University of Helsinki, Unioninkatu 44, SF-00170, Finland. FAX: 358 0 708 4830; Telephone: 358 0 708 4725/4724

August 9-13. ABLS, Honolulu, Hawaii. Annual meeting in conjunction with American Institute of Biological Science annual meetings. Inquiries: Vernon Ahmadjian, Clark University, Department of Biology, Worcester, MA 01610-1477, USA.

September 9-13. Vereinigung für Bryologie und Lichenologie, in conjunction with Bryologisch-Lichenologische Arbeitsgemeinschaft für Mitteleuropa paper reading session and field trips. Gvshenen (Gotthard massif, Central Alps). Inquiries: Dr. E. Urmi, Institut für Systematische Botanik, Zollikerstr. 107, CH-8008 Zürich, Switzerland.

September 26-27. BBS Annual General Meeting and Symposium Meeting, East Sussex. Inquiries: David Streeter, Sussex House, Falmer, Brighton, Sussex BN1 9RH, U.K.

October 31-November 1. BBS Bryophyte Workshop, Polytechnic of East London. Taxonomic workshop on the genus *Fissidens*. Inquiries: K.J. Adams, 63 Wroths Path Baldwins Hill, Loghton, Essex IG10 1 SM, U.K.

November 26-December 1. 8th John Child, Mt. Ruapehu, New Zealand. Inquiries: Barbara Polly, c/o Botany Department, National Museum, Box 467, Wellington, New Zealand.