the Bryological Times
Newsletter of the International Association of Bryologists

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Contents

Awards Announced at IAB Meeting in Mexico

The following grants and awards were announced by IAB Vice-President, Dr RE Longton, at the IAB Biennial Meeting held in Mexico City from 7-12 August:

The Stanley W. Greene Grant in Bryology. A grant of $1,000 was awarded to Dr Jette Lewinsky-Haapasaari as a contribution towards the cost of undertaking a cladistic analysis of the moss genus *Orthotrichum*. The work will be carried out in co-operation with Dr Lars Hedenäs.

The 1995 Sinske Hattori prize for the best paper or series of papers published by a member of IAB during 1993-94, a cash prize of $400, was awarded to Dr Helène Bischler-Causse for her work *Marchantia* L. The European and African Taxa (*Bryophytorum Bibliotheca* 45, 1-129. Cramer, Stuttgart, 1993). This work completes a three-volume, worldwide monograph of the genus involving multivariate analysis and enzyme electrophoresis, as well as more traditional methods, to circumscribe the 36 species now recognized.

The 1995 Spruce Award, recognizing distinguished contributions in bryology during the first 20 years of the recipient's career was awarded to Dr Jan-Peter Frahm. Readers of the *Bryological Times* will need no convincing of the merit of this award in recognition of Jan-Peter's work in such areas as the Bryotrop project, the Taxonomy of *Campylopus*, and the computer column in the *Bryological Times*. Our photograph shows Dr Frahm receiving a handsome plaque from Dr Longton. He was also invited to present the opening paper at the next meeting of IAB.

Participants at the IAB Conference on "Tropical Bryophytes: Biology, diversity and Conservation" in Mexico City, August 1995.

Bryology at the Moravian Museum

From RNDr. Ivan Novotný we have got the following information: Ivan Novotný is now working as the bryologist in the Department of Botany at the Moravian Museum (Brno, Czech Republic). He spent the third year of his Ph.D. studies at the Masaryk's University (Faculty of Sciences, Department of Botany) in Brno, and studied the family Ditrichaceae in the Czech and Slovak Republics. The activities of the bryological herbarium of the Moravian Museum includes the exchange of bryophytes with other herbaria. The herbarium has an almost complete set of Bauer's Musci Europaei (et Americani) Exsiccati, parts of Schiffner's Musci Brasiliensis, and single duplicate specimens from BRNM.

The address of Ivan Novotný is: Moravian Museum, Department of Botany, Preslova 1, CZ-602 00 Brno, Czech Republic. Phone: 05-334345. E-mail: novotnas@cs.brmull.bitnet (bitnet), or novotnas@vm.ics.muni.cz (internet).

Letter from Helene Bischler

IAB has received a letter from Helene Bischler. We think that it should be addressed to all members of IAB.

Dear Dale,

What an honour to receive the Hattori Prize! I was delighted and organized a little party with my collegues to let them know this red carpet for me. I would like to say also that wiothout the help from many bryologists who sent me living and dried specimens, the work would never had been as nice, and this collaboration was and is still possible thanks to friendly ambience maintained by the International Association of Bryologists that we should promote whenever within reach.

My best thanks to the committee members for their work

Helene Bischler

Death

Iwao Nagano, professor in plant taxonomy and ecology at the Saitama University died 11 November 1994 during his term as president of the Bryological Society of Japan.

Ongoing projects

Theo Arts is currently working on a taxonomic revision of the genera *Gymnostomiella* and *Splachnobryum*. A monograph of the African *Splachnobryum* species is in preparation.

All bryologists are invited to send material of *Gymnostomiella* and *Splachnobryum* on loan for revision. Especially wanted are specimens from South America, Asia, Australia and the Pacific.

Theo Arts, Kerklei. 56, B-2960 St.-Job in 't Goor, Belgium

Change of address

Prof. Dr. S. R. Gradstein
Systematisch-Geobotanisches Institut
University of Göttingen
Untere Karspüle 2
73073 Göttingen
Germany
Phone: (0)551-392229
Fax: (0)551-392329

Australian Anthocerotales

I am almost at the end of a study started in 1992 to revise the Australian Anthocerotales. It is funded by the Australian Biological Research Study which supports work on the taxonomy of plants to be published in "the Flora", a series of volumes covering the total flora of Australia. The Anthocerotales will be included in the Hepatic volume. Until the flora gets published I plan to publish accounts of the various genera which occur in Australia, and of the species known to date.

Australia is a large country and coverage of it for field collections could almost be a lifetime occupation. To date I have relied upon herbarium specimens, which of course have their limitations, but have managed to travel twice to Far North Queensland, the tropical region of Australia, where the highest diversity of hornworts occurs. Dr. George Scott and Mr. Bruce Fuhrer were also able to travel in my place in April 1994 (when I had just given birth to my second child), to the Kimberley region of Western Australia. This area is in the northwestern part of the country and belongs to the dry tropical region.

One thing this study has taught me is the unpredictability of these plants. They are not easy to find and are very seasonal, particularly in the tropical regions of Australia. In the damper, milder areas of Victoria, my home state, I have sometimes collected material in an area one year when the plants were growing in abundance, only to come back the following year to find no trace of them!

I would therefore like to make a request to anyone collecting in Australia in the near and distant future, to please send me any fresh, fertile material. The fruiting season in the northern regions is April to August, and in the south July to October.

D. Christine Cargill, Department of Ecology and Evolutionary Biology, Monash University, Wellington Rd., Clayton, Victoria 3168, Australia.

Renauldia mexicana (Mitt.) Crum is autoicous

Angela E. Newton, Department of Botany, NHB166, National Museum of Natural History, Smithsonian Institution, Washington DC 20560 USA

Members of the IAB who went on the field trip to Barranca de Mexicapa (Mexico Statde, Mexico) on 9 August 1995 saw *Renauldia mexicana* growing in quantity on trees beside the river. These plants were covered with sporophytes, a rarity in the family Pterobryaceae s.s., whose members are almost exclusively dioicous and rarely found in fruit. The abundance of sporophytes arouse my curiosity, and on the return to the lab I found that the plants were in fact autoicous, with small male perigonia present in abundance on plants bearing sporophytes or immature perichaetia. The perigonia were located both on the stem along the length of the branches, either in close proximity to, or distant from, the perichaetia. Most specimens of this species in the herbarium (US) also bear numerous sporophytes and are autoicous, with perigonia in either 1:1 or 1:3 ratio to perichaetia.

C. Müller in the *Synopsis Muscorum* (1851) described *Pilotrichella cochlearifolia* as monoicous. However, this name for the species was a later homonym and was consequently replaced as basionym by Mittens's *Meteorium mexicanum*. Mitten (1869) made no reference to the sexuality of the species, and the majority of other authors have either made no reference (e.g. Bartram 1949), listed the whole family as dioicous (Brotherus 1925, Magill 1994), or described the species as dioicous (Arzeni 1954). The only other species of *Renauldia* immediately available to me in US (*R. hoehnellii* (C. Müll.) Broth., of Africa) is dioicous. The only reference to a monoicous member of the family was made by Argent (1973) who described the new species *Calyptothecium pterobryoides*, also of Africa, as distinct from *Calyptothecium hoehnelii* (C. Müll.) Argent partly on the basis of the difference in sexuality. *Calyptothecium hoehnellii* is usually accepted as a member of *Renauldia*, having a very short, single or double costa and extremely rudimentary endostome, characters which *C. pterobryoides* shares. From Argent's description, *C. pterobryoides* would be another autoicious species very close to *Renauldia mexicana*, differing primarily in the complanate leaves. It remains to be seen whether this non-dioicous element of the Pterobryaceae should be maintained as two species or treated as one species with a distribution in both Africa and America.

References

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Bartram, E. B. 1949. Mosses of Guatemala. fieldiana 25.

Brotherus, V.F. 1925. Pterobryaceae. In A. Engler & K. Prantl (eds.), die Naturlichen Pflanzenfamilien, ed. 2 11:125-154.

Magill, R. 1994. In A.J. Sharp, H. Crum & P.M. Eckel (eds.), The Moss Flora of Mexico. Mem. NY Bot. Gard. 69.

Mitten, G. 1869. Musci Austro-Americani. J. Linn. Soc. 12

Personalia

Nils Cronberg has received a post-doc position from the EEC to work at the Botanical Laboratory, University of Copenhagen, from Mars 1995 to October 1996. The project titled "Exploration of infraspecific variation in bryophytes by means of molecular methods: diversity in formerly glaciated versus non-glaciated parts of Europe" is planned together with prof. Arne Strid at the Botanical Laboratory.

Mailing address is Dr. Nils Cronberg, Botanical Institute, Gothersgade 140, 1353 Copenhagen K, Danmark , phone number + 45 353 22 172 and email NilsC@bot.ku.dk.

New literature

Gao, C. (editor-in-chief), Li, X. J., Lin, P. J., Cao, T., Chang, K. Ch., Auo, Z. W. & X. Fu. 1994. Flora Bryophytarum Sinicorum vol. 1. Sphagnales, Andreaeales, Archidiales, Dicranales. Science Press, Beijing. 368 pp., 149 plates [In Chinese]. Price: US$ 25.00 (including air mail). Local price: CY 31.80. Available from: Chien Gao & Tong Cao, Institute of Applied Ecology, Academia Sinica, Shenyang, Liaoning 110015, China.

This is the first volume of the Bryoflora of China, that in total will consist of 12 volumes. In this first volume, 315 species and 54 genera, belonging to eight families (Spagnaceae, Andreaeaceae, Archidiaceae, Ditrichaceae, Bryoxiphiaceae, Seligeriaceae, Dicranaceae and Leucobryaceae) are reported from China. For each taxon, a full description, habitat preferences and geographical distribution, as well as figures are included. Keys to the families, genera and species are provided. Thirty-seven species, two subspecies and five varieties of *Sphagnum*, and 169 species belonging to 31 genera of the Dicranaceae are treated in the book. In the family Seligeriaceae, the two genera *Brachydontium* (*B. trichodes*) and *Seligeria* (*S. diversifolia*) are reported as new to China.

Greven, H. C. 1995. *Grimmia* Hedw. (Grimmiaceae, Musci) in Europe. Backhuys Publishers, Leiden. 160 pp., 44 text figures, 32 colour plates. ISBN 90-73348-38-2. Available from: Backhuys Publishers, PO Box 321, 2300 AH Leiden, The Netherlands. Price: NLG 96.00.

This handbook of the genus *Grimmia* in Europe intends to collect the information available on the species, and on the taxonomic and other problems existing in the genus. In the beginning of the book a short overview of the genus is presented. This includes important characters, the subgeneric classification [following Amann & Meylan (1918) and Smith (1978)], and some notes on the history of the genus and its species. Surprisingly, the author states that very few of the sporophyte characters that were earlier used in the genus are reliable. The problematic species of the *Grimmia alpestris* and *G. trichophylla* complexes are discussed, and the *Grimmia* species considered endangered in Europe are listed. In total, 44 European species are recognised in the genera *Grimmia* (41), *Coscinodon* (2) and *Hydrogrimmia* (1).

The keys are not very conventional, with two to eight (usually at least three) alternatives to chose between at each hierarchical level, and with alternatives that are often not directly comparable with each other. This is unfortunately exactly how a key should not be constructed to be easy to use. Each species recognised is then treated according to a standard scheme. The name of the species is given, with the place of publication, then follow selected synonyms, the latter without information about their publication. In the descriptions the often rather sparse information is presented under the headings, *Habit/Habitat, Leaves, Lamina, Costa, Hair-point, Gemmae, Gametangia, Capsule, Ecology*. Again, the characters described under each heading are often not the same, or described differently, for the different species, which probably makes it difficult to chose which is correct in cases of uncertainty. The total *Distribution* is given, and then comes an often extensive *Discussion* that includes information about when the species was discovered, some history of its taxonomy, and characters that separate the species from similar or related species. In the end of each species description the *Specimens examined* the selected specimens that were studied are cited. Here it would have been interesting to know how many were seen for each species, and how well Europe was covered by these specimens. Each species is also illustrated on a one page drawing, and for 32 of the species colour photographs are provided.

The book is a reasonable overview and summary of the European *Grimmia*, *Coscinodon* and *Hydrogrimmia* species. However, if a later edition should appear the author should consider a linguistic revision, as well as making sure that the descriptions of the species are all comparable and that the present key is replaced by a more consistent dichotomous one. [L.H.]

References

Amann, J. & Meylan, C. 1918. Flore des mousses de la Suisse. Première partie. Tablaux synoptiques pour le détermination des mousses. Genève.

Smith, A.J.E. 1978. The moss flora of Britain and Ireland. Cambridge University Press, Cambridge och London.

MUNERA BRYOLOGICA Georgio Szweykowski professori amicissimo et clarissimo septuagesimum vitae annum claudenti oblata. Ed. R. Ochyra, 1995. Fragmenta Floristica et Geobotanica 40(1): 1-544. ISSN 0015-931X. Available from: Ryszard Ochyra, Laboratory of Bryology, W. Szafer Institute of Botany, Polish Academy of Sciences, ul. Lubicz 46, PL-31-512 Kraków, Poland. Price: US $ 40.00.

This volume of Fragmenta Floristica et Geobotanica, is dedicated to Prof. Jerzy Szweykowski on the occasion of his 70'th birthday. It is a heavy volume with almost fifty contributions spanning most of the bryological field. Beginning with two papers about Prof. Szweykowski and his career, we find papers on taxonomy, floristics, bryogeography, anatomy, genetics, cytology, ecology and physiology.

In the taxonomic and floristics section, noteworthy contributions on hepatics are those by Sarie Perold, Eberhard Fischer and Jiro Hasegawa, on African Ricciaceae, the genera *Ricciocarpos* and *Riccia* in Rwanda, and four tropical Asian Anthocerotae newly found in Africa, respectively. Among the moss papers, Johannes Enroth's paper on Australian Cryphaeaceae, especially the genus *Cyptodon*, Howard Crum's on five new American *Sphagnum* species, and the description of *Dicranum crassifolium* from southern Europe by Cecilia Sérgio, Ryszard Ochyra and Ana Séneca are notable.

In the bryogeographical section, with eleven contributions, Jan-Peter Frahm's paper on correlations between the European, tropical African and tropical

South American moss floras, Tamás Pócs' on hepatics from the Indian Ocean islands, and Alexey Potemkin's contribution to the knowledge of North American liverworts could be mentioned.

In the fourth section we find several papers reporting electrophoresis studies, for example a study of *Racopilum chilense* by Bernard van Zanten and Annelies Hofman, and a study of *Sphagnum centrale* and its relations to *S. magellanicum* and *S. palustre* by Maria Krzakowa, Iwona Melosik and Hansjörg Rudolph. In the final section, on ecology and physiology, the span of the field can be guessed from the contributions by Jeffrey Bates, who presents an analysis of the relationships between bryophytes and environmental factors in an area in England, Wolfgang Frey and Harald Kürschner, who studied the life strategies of terrestrial and epilithic bryophytes in Jordania, and Anjali Gupta and R. N. Chopra, who investigated the effects of some heavy metals on growth and archegonia in *Riccia discolor*.

I must congratulate both Prof. Szweykowski and the editor, Ryszard Ochyra, for this volume of high quality bryological papers. Whatever field of bryology we work in, I believe that we all will find something catching the interest, and not necessarily within our own specialities. A copy should certainly be in every good bryological library. [L.H.]

Additional information to the presentation of May-ling So, Hong Kong Mosses and Liverworts (Bryological Times 83/84): IAB members have 10% discount (i.e. the price is US$ 27 including air postage). Please make checks payable to May-ling So personally. Dr. So can not cash checks payable to the university (she had to give the latter checks as donation to the university). Members with North American addresses please send orders with payments (payable to "May-ling So") to Joseph Kwok-leung Yip, Department of Biological Sciences, University of cincinnati, cincinnati, OH 45221-0006, USA, e-mail yipkl@ ucunix.san.uc.edu.

Red Data Book of European Bryophytes.

In the five years since its formation, the European Committee for the Conservation of Bryophytes (ECCB) has been working towards this publication on the status of threatened bryophytes in Europe. The work, with a geographical coverage including Macaronesia and the northern slopes of Caucasus, is in three parts. The first part is an introduction to threatened bryophytes in Europe, including a synopsis of the main bryophyte habitats and a background to legislation for the conservation of bryophytes in Europe. The second part of the book consists of the European bryophyte Red Data List, with detailed accounts of Endangered, Vulnerable and Extinct species. The final part lists a selection of important bryophyte sites in Europe.

The book reveals that about 24% of the European bryophyte flora can be considered threatened. About 73% of the threatened species are represented in sites listed in Part 3. Perhaps the most startling aspect of this publication is to highlight just how little is known about threatened bryophytes in Europe.

Naturally, species status is changing constantly as our knowledge increases and this publication represents nothing more than a snapshot of our knowledge of threatened species at a particular moment in time. Nevertheless, it is an important reference point for those involved in nature conservation and the study of the European bryophyte flora and should be used primarily as a tool for bryophyte conservation Europe-wide.

The book is produced in A4 format, and is 291 pages long. It is available from Lars Söderström, Department of Botany, University of Trondheim, N-7055 Dragvoll, Norway (fax. +47 73596100) at a price of 180.- NOK.

Best Book Buys

In 1950, Leo Francis Koch published a 40 page paper entitled "Mosses of California: An Annotated List of Species". This still is the only checklist of mosses of California and is a nicely documented treatment of the 317 species known at that time for the state. Koch's paper was published in a regional journal, *Leaflets of Western Botany*, published between 1932 and 1966. That is a publication that in general is not easily available.

The Botany Department of the California Academy of Science has some thirty-five copies of Koch's checklist (Volume 6, number 1) for sale at the great price of $1.00 (US) which includes postage. Your one dollar should be sent to Bruce Bartholomew, Botany Department, california Academy of Sciences, Golden Gate Park, San Francisco, California 94118, USA.

Dale Vitt

Important old literature available

Zerov, D. K. 1964. The Flora of Hepatics and Sphagnum Mosses of Ukraine. Kyiv: Nauka Dumka. 356 pp. [In Ukrainian].

This book includes two species of hornworts, 169 liverworts and 29 *Sphagnum* species. Additional information on the hepaticae of the country can be found in "A list of Anthocerotes and Hepatics of Ukraine", which was published in the Ukrainian Botanical Journal (1993, N4: 83-93).

Melnychuk, V. M. 1970. Handbook of Mosses of the Central and Southern Part of the USSR. Kyiv: Naukova Dunka. 444 pp. [In Russian].

This handbook includes descriptions, figures etc. of c. 590 species of Andreaeidae and Bryidae of the geographical area treated.

Both books are available from: *V. Virchenko, Institute of Botany, Tereshchenkivska Str. 2, Kyiv (Kiev), Ukraine*

BBS Centenary Symposium 1996, University of Glasgow, 4 - 8 August.

Local Secretary. Dr J.H. Dickson, Department of Botany, The University of Glasgow, G12 8QQ. Phone 0141 339 8855. Fax 0141 330 4447.

Bryology for the Second Century. This important and forward-looking symposium will comprise invited contributions from an international team of workers at the forefront of current bryophyte research. The programme will include:

P. Apostolakos, Athens, Greece: Microtubules and morphogenesis in liverworts
N.W. Ashton, Regina, Canada: *Physcomitrella* and the mode of action of auxin.
H.J.B. and H.H. Birks, E. Heegaard and B. Jonsgard, Bergen, Norway: Quantifying bryophyte - environment relationships
H. Bischler-Causse, Paris, France: Molecular taxonomy of liverworts.
M. Bopp and Essigmann Capesius, Heidelberg, Germany: The molecular approach to bryophyte systematics
R.S. Clymo, London, UK: *Sphagnum*, the peatland carbon economy and climatic change.
J.H. Dickson, Glasgow, UK: New discoveries in sub-fossil bryophytes.
J.G. Duckett, London, UK: Protonemal morphogenesis
D. Edwards, Cardiff, UK:Origins of land plants: the palaeobotanical perspective.
T.A.J. Hedderson, Reading, UK: Origins of land plants: new evidence from molecular biology.
L. Hedenäs, Stockholm, Sweden: Cladistic analysis of pleurocarpous mosses.
G. Hendry, Sheffield, UK: The biochemistry of desiccation tolerance.
J.A. Lee, Sheffield, UK: Nitrogen and ozone pollution.
R. Ligrone, Caserta, Italy: Conducting tissues in bryophytes.
D. Long, Edinburgh, UK: *Asterella;* taxonomy on a global scale.
R.E. Longton, Reading, UK: Advances in population biology
J. Martinez-Abaigair and E. Nuñez-Oliviera, La Rioja, Spain: Effects of light intensity on aquatic bryophytes.
J.A. Raven, Dundee and H. Griffiths, Newcastle, UK: New perspectives in the biophysics and physiology of bryophytes.
K.S. Renzaglia, Johnson City,Tennessee, USA, and D. Garbary, Nova Scotia, Canada: Phylogenetic analyses of bryophytes and their relationships with other plants.
F. Sach, Ohio, USA: Gravitropism in bryophytes
J. Shaw, Ithaca, New York, USA: Hybridization in mosses.
J. Silvola, H. Vasander and J. Jauhiainen, Joensuu, Finland: Effects of elevated nitrogen and carbon dioxide.
L. Söderström, Trondheim, Norway and T. Herben, Pruhonice, Czech Republic: Modelling the dynamics of bryophyte populations.
D.H. Vitt, Edmonton, Canada: Taxonomy of mosses; relationships of the major groups.
K.C. Vaughan, Mississippi, USA and J. Hasegawa, Kyoto, Japan: Cytoskeletal proteins of bryophytes and the systematic position of the hornworts
T. Wang, Norwich and D.J. Cove, Leeds, UK: Molecular development of *Physcomitrella* (The "Euromoss Project")

Poster Sessions. Offers of posters on any innovative aspect of bryophyte research are welcome and should be addressed to Dr Royce Longton, Department of Botany, The University of Reading, Reading, RG6 2AS.

Accommodation Accommodation will be in Queen Margaret Hall, Bellshaugh Road, Glasgow, at a cost of £20.15 per person per night for a single room. For details consult the Local Secretary.

Registration Fee. There will be a modest registration fee of about £30-00, with a reduction for full-time students.

British Bryological Society Summer Field Meeting 1996

(I) Ballachulish, Argyll, 10-17 August

Local Secretary Gordon Rothero, Stronlonag, Glenmassan, by Dunoon, Argyll Tel: 01369 6281.

The BBS summer field meeting will immediately follow the Glasgow symposium. The first week will consist of a week in the west of Scotland, based at Ballachulish, at the gateway to Glencoe. It is intended to concentrate on the rich Atlantic bryophyte communities of the area with trips to some of the finest oceanic woodlands in Europe, as well as to montane and coastal sites. Further details in next *Bulletin.*

(II) Braemar, Kincardine & Deeside, 17-24 August

Local Secretary Dr Noel Pritchard, Foresters' Cottage, Durris, Kincardine, AB31 3BD. Tel 01330 811215.

It is intended to explore the many and varied habitats to be found in the Braemar and Deeside area, including some classic Grampian and Cairngorm bryophyte sites and some bryologically lesser known ravines, pinewopods, etc.

Participation. The Society looks forward to the participation of bryologists from throughout the world in its Centenary Symposium, and its Summer Field Meeting which will follow immediately afterwards (see below). Booking forms are available from the local Secretary.

News from the Missouri Botanical Garden

The Missouri Botanical Garden announces the acquisition by gift of the Bryological Herbarium of the Pennsylvania State University (PAC). This collection consists of about 25,000 specimens, mostly from North America. The collection includes an excellent representation of world-wide *Fissidens* and has strong holdings of Western Hemispheric Erpodiaceae. These two groups constitute the special research interests of R. A. Pursell.

The MO herbarium is rich in Pennsylvania mosses, having previously acquired the CM bryophyte herbarium, the basis for Otto Jenning's formative *The Mosses of Western Pennsylvania*. The PAC herbarium, with its numerous collections from Central Pennsylvania, complements this previous acquisition. The personal herbaria of Monte Manuel, Bruce Allen, and Lloyd Stark, also strong in Pennsylvania mosses, have been deposited in MO. Furthermore, these three collections are strong in mosses from Mexico and Malaysia (Manuel), Maine and Delaware (Allen), and California and New Mexico (Stark).

Bruce Allen, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A.

Book Wanted

Gangulee's Mosses of Eastern India and adjacent regions (7 parts in 3 vols) is now unavailable from Koeltz (the original stockist), and I have been unable to find another source, or a copy at any book dealer. Is there anyone who has a copy to sell, or who knows of one that may be available for sale?

Brian O'Shea, 141 Fawnbrake Avenue, London SE24 0BG, United Kingdom, tel +44 171 738 7463, E-mail: brian@oshea.demon.co.uk

Two Swedish bryologists deceased

During the end of the summer 1995 Sweden lost two of its foremost bryologists, Nils Hakelier and Olle Mårtensson. As a lawyer by profession and an amateur bryologist Nils Hakelier was known as one of the very best field bryologists in Sweden. He had a wide knowledge of both the bryophytes in southern and central Scandinavia and in central and southwestern Europe, and was always happy to share his knowledge. He published a few floristic papers on bryophytes in southern and central Sweden, but is otherwise probably best known to the outside world because of the description of the species *Trematodon laetevirens*, together with Jan-Peter Frahm. Nils Hakelier was also active during the initial stages of the formation of the Nordic Bryological Society.

Olle Mårtensson is probably best known for his studies of the bryophyte flora in the Torneträsk area in northernmost Sweden. His thesis treating this area has become one of the reference works concerning bryophytes in the alpine and sub-alpine zones. Olle Mårtensson did, however, not restrict his interest in bryophytes to this geographical area, but performed numerous studies of bryophytes in many areas of the Scandinavian mountain range as well as on Svalbard. His great general knowledge of the Scandinavian mountain bryophyte flora was appreciated by many of his colleagues. A somewhat less well known field of bryology where he was probably one of the pioneers, was the study of the pigment chemistry in bryophytes. This was a rather natural interest of Olle Mårtensson, because he was a chemist by profession.

Lars Hedenäs & Lars Söderström

DIARY *Continued*

August 9-16. Bryophyte course: "Mosses and Liverworts". Tutor: Dr. Martha Newton, Preston Montford Field Centre, Montford Bridge, Schrewsbury, SY4 1DX. Offering individual guidance at all levels. Details from the Warden, Ms. S. Townsend.

August 16-23. Bryophyte course: "Mosses and Liverworts of the Lake District". Tutor: Dr. Martha Newton, Blencathra Field Centre, Threlkeld, Keswick, Cumbria, CA12 4BR.. Offering individual guidance at all levels. Details from the Warden, Dr. R. Lucas.

August 21-25. Field work at Champex, Valais (Central Alps). Information: P. Geissler, Conservatoire et jardin botaniques, C. P. 60, CH-1292 Chambésy/Genève. FAX 41-22-738 45 97. email: geissler@cjb.unige.ch

August 27-29. The Linnean Society of London is holding a conference in Belfast, Northern Ireland on 'Systematics and Biological Collectons'. Further information from Cathrine R. Tyrie, Department of Botany, Ulster Museum, Belfast BT9 5AB, N. Ireland. Phone 01232 381251. Email: crt@belumreg. demon.co.uk.

September 1-6. Bryophyte course: "Woodland Bryophytes". Tutor: Dr. Martha Newton, Rhyd-y-creuau, Drapers' Field Centre, Bets-y-coed, Gwynedd, LL24 OHB. Offering individual guidance at all levels. Details from the Warden, Mr. K. Iball.

July 26-August 2. Bryophyte course: "Mosses and Liverworts". Tutor: Dr. Martha Newton, Kindrogan Field Centre, Enochdhu, Blairgowrie, Pertshire, PH10 7PG. Offering individual guidance at all levels. Details from the Warden, Dr. A. Gimingham.

October 8-12. International Symposium of Botanic Systematics and Plant Geography, Herbarium Haussmecht, Jena, Germany.

The Bryologial Times is a newsletter published bimonthly for the *International Association of Bryologists*. Items for publication are to be sent to the Editors (preferably LH), **except** for those for the regular columns, which may go **direct** to the column editors

Deadlines for material to the Bryol. Times will be January 15, March 15, May 15, July 15, September 15 and November 15 with the publication shortly afterwards. Shorter notes may be accepted later if there is still space.

Editors

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DIARY

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1995

December 15-16. State of Nordic Bryology today and tomorrow. Nordic Bryological Symposium, University of Trondheim, Norway. Further information from Lars Söderström, Department of Botany, University of Trondheim, N-7055 Dragvoll, Norway, tel. +47 73596061, Fax. +47 73596100, email Larss@alfa.avh.unit.no.

1996

February 3-4. Zürich, Botanical Institute of the University, Taxonomic workshop on *Grimmia*, by Eva Maier. Information: E. Urmi, Insitut für Systematische Botanik, Zollikerstr. 108, CH-8008 Zürich. FAX 41-1-385 44 03. email: bryosymp@systbot.unizh.ch

March 15-17. Bryophyte course: "Introduction to Mosses and Liverworts". Tutor: Dr. Martha Newton, Rhyd-y-creuau, Drapers' Field Centre, Bets-y-coed, Gwynedd, LL24 OHB. Especially for beginners, but others are welcome too. Details from the Warden, Mr. J. Ellis.

April 26-28. Bryophyte course: Sphagnum Weekend.Tutor: Dr. Martha Newton, Rhyd-y-creuau, Drapers' Field Centre, Bets-y-coed, Gwynedd, LL24 OHB. A chance to learn how to recognize most of the British species in the field, and to study them alongside keys. Details from the Warden, Mr. J. Ellis.

May 22-29. Bryophyte course: "Mosses and Liverworts". Tutor: Dr. Martha Newton, Orielton Field Centre, Pembroke, Dyfed, SA71 5EZ. Offering individual guidance at all levels. Details from the Warden, Dr. R. G. Crump.

June 7-9. Annual assembly with paper reading meeting and excursions: Wägital, Schwyz (northern Prealps). Information: P. Geissler, Conservatoire et jardin botaniques, C. P. 60, CH-1292 Chambésy/Genève. FAX 41-22-738 45 97. email: geissler@cjb.unige.ch

July 11-13. Second International *Sphagnum* Field Trip and Symposium in New Jersey, New York and Quebec. Further information from Dr. Line Rochefort, Phytologie, FSAA, Université Laval, Québec, Canada, G1K 7P4, fax (418) 656-7856 or e-mail LROC@vm1.ulaval.ca.

July 13-14. Fourth Annual Canadian Peatland Restoration Workshop at Université Laval, Québec, Canada. Further information from Dr. Line Rocefort (address above).

July 25-28. International Symposium of Plant Character and Diversity of East Asia. Location: Kunming Institute of Botany, Academia Sinica, Kunming 650204, China

July 26-August 2. Bryophyte course: "Mosses and Liverworts". Tutor: Dr. Martha Newton, Malham Tarn Field Centre, Settle, North Yorkshire, BD24 9PU. Offering individual guidance at all levels. Details from the Warden, Mr. K. Iball.

August 4-8. To celebrate the 100th anniversary of the British Bryological Society, a symposium entitled 'Innovations in bryophyte research' will be taking place at the University of Glasgow. Contributions are being invited. The BBS summer field meeting in west will take place immediately afterwards in the west and central Highlands of Scotland.