Cover drawing: Cladonia thomsonii Ahti from the manuscript of John Thomson's major work, "American Arctic Lichens. I. The Macrolichens", soon to be submitted to Columbia University Press. The drawing is by Bethia Brehmer.

The International Lichenological Newsletter is the official organ of the International Association for Lichenology. Membership is open to anyone who has an active interest in lichenology. Dies are \$5-\$10 per 6 years and should be sent to the Association's treasurer (see Vol. 9 no. 1, p. 16). News items intended for the Newsletter may be forwarded to the editor.

The affairs of the International Association for Lichenology are directed by an Executive Council consisting of Teuvo Ahti, president, Rolf Santesson, vice-president, Thomas Nash III, secretary, Hannes Hertel, treasurer, Irwin Brodo, editor, as well as Hans Trass and Oleg Blum. They will serve until the next International Botanical Congress.

international lichenological newsletter

Editor: Irwin M. Brodo

National Museums of Canada Ottawa, Ontario K1A OM8 Canada

Editorial

Fourteen Years Later

In January of 1967, Vernon Ahmadjian asked if I would consider helping him put together a newsletter for lichenologists. I willingly agreed. The first number of The International Lichenological Newsletter appeared in April, 1967 as a two-paged, "mimeographed" letter. In it Vernon outlined the rationale for having a communication vehicle for lichenologists, and he argued for an international association to represent the lichenological community as a whole. The Newsletter was soon firmly established with Mason Hale's help as printer and, in Seattle at the 1969 Botanical Congress, the International Association for Lichenology was officially launched.

. Over these past 14 years, Vernon Ahmadjian and I have tried to establish the Newsletter as the place in which to announce new research projects, new students, progress on old projects, and, in general, research news that is vital for those active in the field of lichenology. We felt that it was intolerable that research efforts might be wasted in duplication because of a lack of communication. This desirable goal ... to publicize in a relatively thorough way proposed and on-going research projects ... has never been entirely realized. There are still many research centres that never send in news or current research and many important projects proceed unnoticed by those who may well be in a position to contribute to the success of those projects. The nightmare of a graduate student in an advanced stage of thesis preparation finding out that someone else

part of the world, has largely completed a very similar study, still occurs in our field, and there is no longer any reason for it.

A Newsletter is only as good as its news-gathering forces. What can be done to increase ours? We have tried the direct approach: sending a question sheet to each member, but this was expensive if sent out just before an up-coming issue, and generated out-of-date news if sent as an enclosure with an issue. "Regional representatives" were used for several years, but the system did not work well largely because the representatives often did not know enough about the research activities in their entire region. For the past few years, when the volume of news was particularly low, I've sent special requests to about 30 members who I thought might be knowledgeable about the news in their countries. This has been moderately successful, but burdensome for both these individuals and the editor. The best coverage of events in lichenology results from news coming directly from the news-makers.

The policy of not printing research results has been maintained from the very beginning of the Newsletter. The reason for this policy was the strong sentiment in several quarters that there was no meed for another lichenological journal, and that every effort should be made to avoid making the Newsletter into a cited publication of primary research. Although there have been some instances of the citation of articles from the I.L.N. (mostly editorials and "Views"), this policy has rarely been challenged. It would probably be a good idea to discuss the policy at the Sydney Congress to see if it still represents the consensus of the I.A.L. membership.

Over the years, patterns have developed and became fixed in the format of the Newsletter. Few if any of these conventions or precedents are "holy" or should be considered immutable. The in-coming editor will almost certainly introduce changes and improvements.

In my efforts to put together these past 5 1/2 volumes, I have received a great deal of help from many people. Outstanding in this regard, however, has been the I.A.L. president, Ted Ahti, who has provided me with innumerable ideas, news items, book reviews, and commentary. I was also extremely fortunate in having Hannes Hertel handling the bills and membership lists. Having these responsibilities dealt with so promptly, carefully, and thoroughly made my job much easier. Tom Nash, the I.A.L. secretary, and Martyn Dibben, the North American treasurer's assistant (and nominee for the post of editor), also helped me in many ways. A very special 'thank you' must go to Mrs. Gertrude Brown, the secretary in the National Museum of Canada's Botany Division, for transforming my stapled and scribbled drafts into letter-perfect typed copy, and for doing it so graciously (never losing patience with my last-minute changes). In conclusion, I would like to thank the I.A.L. members who corresponded with me over the past six years for providing me with news and comments. I greatly enjoyed being editor, and extend to the next editor my best wishes for success.

- I.M. Brodo

News and Notes

AHTI, Teuvo (Finland) spent a month in the summer of 1980 in British Columbia, participating in meetings in Vancouver and an excursion to the Queen Charlotte Islands; also did field work with Trevor GOWARD in the Wells Gray Park area. Ted, together with George OTTO, Willa NOBLE, and Irwin BRODO, revived the project for a new lichen checklist for British Columbia. He has completed his manuscript on "The Lichens of Newfoundland" for the book "Biogeography and Ecology of the island of Newfoundland" (ed. G.R. South).

ASTA, Juliette (France) a soutenu sa thèse de Doctorat d'Etat le 30 juin 1980 à l'Université de Grenoble sur le sujet suivant : "Flore et végétation lichéniques des Alpes Nord-occidentales: écologie, biogéographie, écophysiologie, biodétection de la pollution fluorée". 249 p., 71 tabl., 49 fig. Cette thèse est composée de trois parties: - La première partie est une étude écologique et biogéographique de la végétation lichémique dans les Alpes françaises du Nord (départements de l'Isère, de la Savoie, de la Haute-Savoie, des Hautes-Alpes et une partie de la Drome). La deuxième partie consiste en une étude de l'influence de quelques facteurs écologiques sur des associations et des espèces lichéniques, selon une approche statistique. Enfin, la troisième partie aborde le rôle des lichens comme bioindicateurs de pollution fluorée dans les vallées alpines. L'étude a été effectuée à partir de dosages du taux de fluor dans les thalles.

Juliette ASTA continue a travailler sur l'inventaire de la flore lichénique des Alpes françaises du Nord. En lichénologie appliquée, elle poursuit les études de la pollution par le fluor sur les lichens dans la vallée de la Maurienne, avec J.P. GARREC.

- BOISSIÈRE, J.C. (France) vient de terminer la rédaction de sa thèse sur l'étude chimique, cytochimique et ultrastructurale des parois du mycobionte du *Peltigera canina* et de l'*Umbilicaria pustulata*.
- BOISSIÈRE, M.C. (France) écrit, "Un article en français paru en 1979 et un autre en anglais proposé au Lichenologist font le bilan de mes recherches sur la cytologie du *Peltigera canina*. Les réactifs cytochimiques de microscopie électronique utilisés dans ces articles (réactifs des polysaccharides, de la cyanophycine, des phosphates, des phosphatases etc...) avaient déjà donné lieu à des articles publiés depuis 1971. J'ai entrepris depuis, l'étude cytochimique et cytologique comparative entre le *Nostoc* du *Peltigera canina* au sein du Lichen, le *Nostoc* fraîchement isolé (technique proche de celle de KERSHAW) et en culture aprés plusieurs repiquages."
- BRIGHTMAN, Frank (U.K.) will be leaving his position at the British Museum (Natural History) at the end of June 1981. His new address will be: The South London Botanical Institute, 323 Norwood Road, London S.E. 24 9AQ England.

- BRODO, Irwin M. (Canada) has just accepted a position as Chief Botanist at the National Museums of Canada. He hopes it will not cut too heavily into his efforts to complete a revision of the *Lecanora subfusca* group begun in 1969.
- CRUM, Howard (U.S.A.) spent three weeks in Libya at the invitation of the Libian government to study vast populations of Aspicilia esculenta in the northern calcareous rocky deserts with regard to sheep range management. Dr. Crum reports that the problem presents an exceptional opportunity for useful research in population growth and dynamics, range management, and ecological adaptations. He says it would make an excellent dissertation topic.
- GOYAL, Raj (U.K.) has successfully completed her doctorate in the School of Environmental Science, University of Bradford, under the supervision of Mark SEAWARD; her thesis is entitled: "Heavy metal uptake in terricolous lichens."
- HALE, Mason E. (USA) will be continuing studies, of monument erosion by lichens in Honduras in March and will be teaching a course in lichenology at the University of Montana Biological Station June-August 1981. He spent December-January 1981 in Antarctica with Imre FRIEDMANN of Florida State University studying very special kinds of lichens called "crypto-endolithic" by Friedmann. These have their thalli growing entirely within the rock (to a depth of 5 to 20 mm) and cannot be seen until the rock is broken open. Dr. Hale would be interested in hearing of any reports in recent or older European literature of similar growth forms.
- HAWKSWORTH, David (U.K.) reports that his new permanent address is:
 Commonwealth Agricultural Bureaux, Farnham House, Farnham Royal, Slough
 SL2 3BN, U.K. He would appreciate continuing to receive papers on the
 systematics of microfungi (especially ascomycetes), lichens, and
 lichenicolous fungi. He is serving as Scientific Assistant to the Executive Director of the Bureaux.
- KMRNEFELT, Ingvar (Sweden) is presently mapping the world distribution of the *Cornicularia* species. He would appreciate receiving on loan representative material of *Cornicularia* and *Coelocaulon*. The material will be needed for some time as part of a world monograph.
- KALB, Klaus (B.R.D.) has returned to Germany from his sojourn of three years in Brazil. He travelled extensively in Brazil and other parts of South America, recollecting in some of the same localities visited by Malme and Vainio. He found nearly all the lichens reported by Malme and Vainio, some in precisely the same place as the original record. He also collected in Bahia (Caatinga) and on the shores of the Rio Negro (Amazon). In all, he collected about 20,000 specimens on bark and stone and thousands of leaves "with fantastic epiphyllic lichens." Klaus says that he probably has 70% of the species discussed in Santesson's monograph of foliicolous lichens, including, for example, 7 of the 9 known epiphyllic species of Dimerella. He would like to receive reprints dealing with the taxonomy and/or ecology of (sub-)tropical lichens. His address is now: Adalbert-Stifter-Strasse 5b, D 8430 Neumarkt/OPF. W. Germany.

- KANTRUD, Beth (U.S.A.) is renewing her efforts to sort out the taxonomy of the North American species in the *Xanthoria polycarpa* group. She will be requesting loans from the larger herbaria soon, but would be interested in receiving problem material in the group from anyone. Her address is: Northern Prairie Wildlife Research Centre, Jamestown, North Dakota 58401 U.S.A. Beth is spending over a month at the Smithsonian Institution working with Mason HALE on her Appalachian collections of *Parmelia*. She also found time to compile the Index to Volumes 9-13 of the I.L.N. enclosed with this issue.
- KAUPPI, Matti (Finland) defended his Ph.D. thesis on "Methodological Contributions on the Use of Lichens as a Tool for Studying Air Pollution" in November 1980. The thesis consists of six printed articles published (in English) in four journals between 1976 and 1980.
- LALLEMANT, Richard (France) a été nommé Maitre-assistant à l'Université de Nantes (Laboratoire de biologie et cytophysiologie végétales; U.E.R. des Sciences de la Nature; Université de Nantes; le Petit-port; 44300 Nantes, France). Il y poursuivra ses travaux dans les domaines de: l'étude descriptive et expérimentale de l'ontogénèse des lichens et de la synthèse lichénique; l'étude de la colonisation des substrats; diverses applications de la lichénologie (protection des substrats, pollutions) et espère être bientôt rejoint par d'autres. Toute collaboration dans les domaines précités sera d'ailleurs bienvenue. La collection bibliographique et la collection de lames histologiques de R. Lallemant sont maintenant à l'Université de Nantes.
- MOXHAM, Tim (U.K.) has been awarded a Sir Winston Churchill Memorial Travelling Fellowship to be used for a study tour of European countries (particularly France and Yugoslavia) to look at "The Effects of Commercially Harvesting Lichens from Mediterannean Forests." He will be spending three weeks this year and three weeks next year carrying out growth studies on Evermia prunastri and Pseudevermia furfuracea. He will also look at the effects of harvesting other species in the habitat, and will see the effects of air pollution (if any) on the areas where the lichens are collected.
 - Dr. Moxham is also making a compendium of information on lichen growth rates and would appreciate receiving reprints on that subject as well as references to papers in unpublished reports and periodicals of relatively limited distribution.
- PAGE, Fernand (France) écrit "L'Herbier lichénologique F. PAGE, 14, rue d'Arve 74240 GAILLARD, France, recherche, pour étude, des *Usnea* et *Ramallina* de toutes les régions du Globe. Il serait reconnaissant à tous les chercheurs qui voudraient lui faire parvenir les échantillons, si possible Substratum et Altitude."
- PETIT, Patrice (France) écrit que son thèmede recherche est "Contribution à l'étude éco-physiologique, physiologique et génétique de la Symbiose lichénique." Dans le cadre de ce projet de Recherche, il a abordé en 1980 le rôle éventual de quelques lectines de lichens et étudié de ce fait leurs caractéristiques. Il a séjourné un mois chez Otto LANGE et L.

KAPPEN où il a confronté les données écologiques contrées au Spitzberg avec celles rencontrées en Antarctique. Petit a passé un mois avec l'expédition Francaise C.N.R.S. au Spitzberg (Norvège) en juin et juillet 1980 pour évaluer les possibilités offertes par le terrain arctique pour des recherches éco-physiologique sur les lichens. Il envisage de séjourner 5 mois chez le Professor K.A. KERSHAW à Ontario, Canada afin de travailler sur des études sur la photosynthèse et la respiration d'un tapis de *Cladonia rangiferina*, sur le terrain et en simulation en laboratoire.

RENNER, Bernd (B.R.D.) completed his doctoral program at the University of Marburg under the supervision of Aino HENSSEN in June, 1980. The title of his thesis is "Untersuchungen zum Einfluss der symbiotischen Alge auf den Stoffwechsel und die Struktur des Flechtenlagers" (Investigations on the Influence of Symbiotic Algae on the Metabolism and the Structure of Lichen Thalli") (425 pages, 189 figures). The object of the study was to investigate the interdependency of lichen symbionts, especially the influence of the algae on the morphology and chemistry of the intact lichens. He presents a hypothesis explaining the production of lichen substances in lichens by way of a mechanism that operates to regulate the polyketomethylene- and fatty acid synthetase. A limited number of microcard sets are available from Dr. Renner at the Fachbereich Biologie-Botanik, Lahnberge, D-3550 Marburg, W. Germany. The results will also be published in several papers during 1981.

SANTESSON, Rolf (Sweden) spent 3 months in Peru starting in January. He was accompanied for shorter periods by Roland MOBERG (Uppsala), Anders TEHLER (Stockholm) and Göran THOR (Stockholm). The latter two students are preparing monographs of *Dirina* and *Chiodecton* respectively.

SEAWARD, Mark (U.K.) is continuing his research on various aspects of the lichen flora of Poland. A major part of his recent visits there has been devoted to an analysis of the herbarium of the Botanical Institute of the University of Wrocław (WRSL) and to the collection of lichens with Ewa BYLIŃSKA, mainly from interesting heavy-metal sites. Visits to Ireland have also been undertaken in connection with his work on a Census Catalogue of Irish Lichens, and the forthcoming Atlas of the Lichens of the British Isles, Volume 1 (edited by M.R.D. Seaward and C.J.B. Hitch) which is now with the publishers.

SCHMITT, Claire (U.S.A.) has been appointed Adjunct Curator of Lichens at the New York State Museum Herbarium (NYS) in Albany. (See HERBARIA). She currently also serves as the Director of the Lichen Exchange for the American Bryological and Lichenological Society.

SWINSCOW, T.D.V. (U.K.) has obtained the degree of D.Sc. from London University for his published work on the taxonomy and distribution of lichens.

TIBELL, Leif (Sweden) has been in Christchurch, New Zealand, since Septemeber 1980 studying the Caliciales of New Zealand. TRASS, Hans (Estonian S.S.R.) with his collaborators and students: Tiina RANDLANE, Andi PÄRN, René LEVOLL, Kristjan ZOBEL, Sirje PALO-KALATZJAN, all lichenologists; Marica-Maris MIGGUR, Kersti LOOLAID, and Avo ROOSMA (algologists); and Maris LAJA (ecologist) from the Department of Plant Taxonomy & Ecology of the Tartu State University, have been working during the last few summers in the Lake Baical Region of Eastern Siberia, investigating the lichen-flora and -vegetation, as well as the aerophilous and pedophilous algae. They are compiling lichen-indicational maps of the air pollution for this region. During three seasons (1978-1980) over 6000 specimens of lichens and 600 algological probes have been collected and 1000 lichen-coenological analyses have been made as the basis for calculating the "Index of Atmospheric Purity" (I.A.P.) and "Poleotolerance Index" (P.I.).

H. Trass is continuing his work on the Physciaceae for the "Handbook of the Lichens of the U.S.S.R.". T. RANDLANE is studying the lichen-flora and vegetation of the western islands of Estonia with special emphasis on the lichen conservation problem.

An exchange collection, "Lichenes Offerendi", is being compiled by the Department. The last fascicle (III) has just been distributed to ten institutions. The other centre of lichenological research in Estonia, Tallinn Botanical Gardens of Academy of Sciences of the Estonian S.S.R., is occupied with problems of lichen indication in the Estonian cities (Jüri MARTIN, Ludmilla MARTIN, Siiri LIIV), with studies of Arctic (Taimi PIIN) and Antarctic (Jüri MARTIN) lichens, with investigations of the lichen-flora of Lahemaa National Park (Enel SANDER) and problems of chemosystematics (Eva NILSON).

WALLACE, A.K. (Norway) is working under guidance of P.M. JØRGENSEN with a biometric study of the spore-variation within *Leptogium* sect. *Mallotium* and would appreciate receiving fertile material of as many species as possible.

Deaths

Goeff BRATT, an important collector of Tasmanian lichens with a private herbarium of over 16,000 specimens, died in Tasmania. He had been working on the genus Thelidea and was one of the prime supporters of the establishment of The Australian Lichen Society.

Excursions

Exkursion 1981 von der Bryologisch-lichenologische Arbeitsgemeinschaft f. Mitteleuropa

Geplant ist für die Zeit vom 5.-10. September 1981 eine lichenologisch-bryologische Exhursion im Lungau (Salzburger Land, Osterreich). Der 5. September ist als Anreisetag vorgesehen; das Standquartier wird in Mauterndorf 165 sein (Gastehaus Vitus). Die Führung der Exkursion wird Prof. Dr. Poelt Übernehmen; Dr. Türk hat das Quartier besorgt. Unterbringung in Zwei-, Drei- und Vierbettzimmern, in Einbettzimmern dagegen nur beschränkt möglich. Anmeldungen bis zum 1. Mai 1981 an Prof. Dr. J. Poelt, Institut f. systematische Botanik der Universität, Holteigasse 6, A-8010 Graz. - Die gemeldeten Teilnehmer erhalten rechtzeitig ein ausfuhrliches Programm.

Association Française de Lichénologie (A.F.L.)

Excursion dans le Parc Naturel Régional de Normandie Maine.

18 membres de l'A.F.L. se sont retrouvés du 7 au 13 Juillet 1980 pour une session d'exploration autour d'Alençon. Les résultats scientifiques de cette excursion doivent faire l'objet d'une publication qui sera signalée le moment venu.

Fontainebleau en printemps.

Il y aura deux sorties en forêt de Fontainebleau: 10 mai et 14 juin. Le départ est à la gare Paris-Lyon à 8 h 26 par Fontainebleau (rendez-vous 2ème voiture de tête). Le retour est 17 h 49 (Paris: 18 h 36).

Excursion 1981 en Bourgogne

A l'occasion de l'Assemblée Générale annuelle, une petite excursion sera conduite par M. VAILLE les 12 et 13 septembre près de Dijon. Deux stations sont prévues: couches calcaires des Mammouths et de Fixin où seront étudiés les lichens calcicoles et épiphytes.

Pour plus d'information, écrivez au secrétaire: Michel LEROND; Museum; 198, rue Beauvoisine; 76000 Rouen; France.

British Lichen Society

The B.L.S. is planning a late summer meeting, probably in North Wales, and a long autumn weekend in the Scottish borders. Members of the B.L.S. will be receiving details in their May Bulletin; others should write to the Bulletin editor, O.R. Gilbert; Department of Landscape Architecture; The University; Sheffield, S10 2TN, England.

IV Nordic Lichen Excursion

The IV Nordic Lichen Excursion will take place in the vicinity of Oulanka Biological Station, Kuusamo, N.E. Finland on 5-9 July 1981, with a preceding excursion near Oulu on 3-5 July. The total cost for transportation, all meals, and bedding will around US \$90-120. Numbers are restricted to 40. The excursion may already be fully booked, but those interested in attending should contact (by 31 May): Orvo Vitikainen, Botanical Museum, University of Helsinki, Unioninkatu 44, SF-00170 Helsinki 17, Finland.

Meetings

American Bryological and Lichenological Society

The annual A.B.L.S. meeting wll be held at the Highlands Biological Station in Highlands, North Carolina, 7-12 June. Details were published in the last issue of the I.L.N.

XIII International Botanical Congress, Sydney, Australia, 1981

The program for the Sydney Congress is now firm. The lichenological symposia will be as follows: Lichen Systematics for the 80's: 26 Aug., p.m.; Lichens of Arid Regions: 27 Aug., a.m.; Evolution in Lichenized Fungi: 27 Aug., p.m.; The Role of Secondary Symbionts in Lichen Symbiosis: 28 Aug., a.m.

Other lichenological activities at the Congress will include pre- and post-meeting excursions, meetings of the International Association for Lichenology, dinners, and informal gatherings of lichenologists.

Details for all the excursions and symposia have already been published in the last issue of the I.L.N.. There are no significant changes to the information given there. Those planning to attend should be aware that: a) the registration fee is significantly more if sent later than 15 May, b) visas are required for entry to Australia, and c) many field trips are already fully subscribed. At last report, there was still room on field trips 2, 5, 6/1, 7, 10, 14, 15, 16, 17, 18/1/2/4/5, 19/2, 21/1, 23, 28/2, 29, 31, 32, 33, 34, 36, and 37. (* "Mediterranean & Arid Zone Lichens in SE Australia")

International Association for Lichenology

A general meeting of the I.A.L. membership will be held in Sydney, Australia at the XIII International Botanical Congress at a time and place to be announced at the Congress. There is a great deal of important business to be discussed at the meeting. The Council hopes that all those coming to the Congress will be sure to attend. Among the items on the agenda are:

The Constitution: Because no amendments or changes were proposed to the wording published in this Newsletter (13(1):3-4), the council proposes that that text should be the one discussed and voted on at the General Meeting.

Election of Council Members: A nominating committee made up of several members of the present council has presented the following slate for consideration at the General Meeting. At the moment, there is only one candidate per office; if there are contested positions due to additional nominations, an election by majority vote on a closed ballot will have to be conducted.

Since the Association is still operating under rules established at the Seattle Congress in 1969 (see I.L.N. 8(1,2):8), members of the Council are not eligible for re-election. Additional nominations for specific offices can be made by the members by sending the name of the proposed nominee together with his or her signature (confirming their willingness to serve a full six-year term) to the Secretary, Tom Nash, Dep't of Botany and Microbiology, Arizona State University, Tempe, Arizona 85281, U.S.A. Nominations must be received by the Secretary before 1 July 1981. Those proposing names should bear in mind the geographic location of candidates and their special field in lichenology.

The nominees, all of whom have agreed to their nomination in writing, are:

President: Mason E, HALE (U.S.A.)
Vice-President: Aino HENSSEN (B.R.D.)
Secretary: Per Magnus JØRGENSEN (Norway)
Treasurer: Keith PUCKETT (Canada)
Editor: Martyn DIBBEN (U.S.A)
Members-at-large: Marie-Agnes LETROUIT-GALINOU (France)
Isao YOSHIMURA (Japan)

Membership fee for 1981-1987: Dues for membership in the I.A.L. will probably have to be raised for the next six-year period. Questions related to membership fees, old and new budget items, and expenditures for specific projects will be discussed.

Reports of the Lichen Conservation and Lichen Terminology Committees:
Both these committees have been active since their establishment at an I.A.
L. meeting held in Tampa at the Second International Mycological Congress.
An interim report of the Terminology Committee is, in fact, presented below as the basis for discussion at the General Meeting, and to elicit written comment from those not attending the Congress.

Other Business: Some topics to be discussed include plans for the III International Mycological Congress (1983), the site of the Third I.A.L. Field Meeting (1985), and proposals for new I.A.L. activities.

Progress Report of the IAL Terminology Committee: Definition of "lichen".

At the Business Meeting of the International Association for Lichenology held in Tampa, Florida (IMC-2) August 31, 1977, a committee was appointed by President Ahti to consider establishing a formal definition of a lichen. The committee included: V. Ahmadjian, Chairman (USA), A. Henssen (BRD), P.W. James (UK) and P.M. Jørgensen (Norway). D.L. Hawksworth also took part in the deliberations of this committee.

Although the committee has not reached a general recommendation, three members agree in principle that a formal definition of a lichen is a good idea. One member has not expressed any views on this issue, while David Hawksworth has consistently maintained his position that it is better not to rigidly define a lichen. He feels that a formal definition of a lichen will artificially circumscribe a group that in reality has very diffuse boundaries and shows a continuum of development and evolution. He states that since these associations are continually evolving and devolving it is difficult to actually define a lichen.

Although I agree in part with David's arguments, I feel that from a pragmatic view we need to formally define a lichen - i.e., we have to draw the lichenized line somewhere. At present, the decision as to what constitutes a lichen is the judgment of the investigator who describes a fungalalgal association. Thus, in the absence of a formal description, practically any casual fungal-algal association could legitimately be called lichens. Indeed this is already happening for some marine associations which I certainly would not consider to be lichens. I recognize that numerous gray areas exist where the associations cannot be simply categorized as lichens or non-lichens. Such borderline cases are important, and they will help us to understand how lichens originate, but they should not prevent us from recognizing the uniqueness of this association.

The following definitions have been proposed by members of the committee and interested colleagues:

- (1) A lichen is a stable association of a fungus and an alga which results in a single thallus with a specific structure. (VA)
- (2) A lichen is a fungus in a constant and definite association with an alga in which the two organisms are so intertwined as to form a single thallus of a specific structure. (AH)
- (3) A lichen is a stable association of a fungus and an alga. (DLH)
- (4) A lichen is a stable fungal-algal association resulting in a thallus that usually differs significantly from that of either symbiont in the free-living (i.e., unlichenized) state. Exceptional cases of fungal-algal associations forming rudimentary or ill-defined thalli are considered to be lichens if the fungal symbionts (mycobionts) appear to be related to other, clearly lichen-forming taxa. (IMB)

The Terminology Committee looks forward to a fruitful discussion and resolution of this matter in Sydney. Members of the I.A.L. who will not be attending the Botanical Congress are encouraged to write to me if they wish to express an opinion or offer suggestions.

Societies

New Lichenological Newsletter

The Nordic Lichen Society is publishing a mimeographed newsletter "Nordisk Lichenologisk Forening Informationsavis" (no. 2 published in January 1981, comprising 19 pages). The most recent issue contains, among other things, extensive lists of the species recorded during the Society's excursions to Denmark in 1979 and western Scotland in 1980. The editor is Knud RAMKAER, Institut for Sporeplanter, ϕ . Farimagsgade 2 D, DK-1353 Copenhagen, Denmark.

Association Française de lichénologie (A.F.L.)

l'A.F.L. s'est réunie en Assemblée générale le 1 Juillet 1980 à Alençon (Orne). Elle a procédé à l'élection d'un nouveau bureau dont la composition est la suivante: *Presidente*: Juliette ASTA, *Vice-President*: Chantal VAN HALUWYN, *Secrétaire*: Michel LEROND, *Trésorier*: Jean-Pierre DANLOS.

The Bryological Times

The International Association for Bryology is publishing a lively bulletin (4 times per year) entitled "The Bryological Times". Its news, articles, etc. frequently contain information which is also useful to lichenologists, especially to herbarium curators. The editor is S.W. Greene, Institute of Terrestrial Ecology, Bush Estate, Penicuik, Midlothian EH 26 OQB, Scotland.

__ T. Ahti

Exhibits

Photographic Exhibit in Milwaukee, Wisconsin, U.S.A.

"Lichens: An Unholy Marriage" is the title of a new photographic exhibit now on display in the Milwaukee Public Museum. The pictorial display provides an explanation of lichens, their peculiar features, their role in nature and their uses for mankind. Responsible for the display is Martyn J. DIBBEN who collected many of the photographs over a 12-year period during field trips to the Arctic, North America, Central America and Europe.

Lichens Featured in a new "Hall of Plant Life" in Ottawa, Canada.

The National Museums of Canada, Museum of Natural Sciences, will open its new "Hall of Plant Life" on 29 May 1981. It will include a rather large display of specimens, models, and graphics of lichens to demonstrate their biology as well as their uses in Canada. The display was designed and assembled under the guidance of Irwin M. BRODO.

Herbaria

Carnegie Museum of Natural History, (CM), Pittsburgh, Pennsylvania, U.S.A.

According to a recent article by M.-J. LAI and D.E. BOUFFORD in *Taxon* 29(5/6):675-678 (1980), the Carnegie Museum in Pittsburgh houses an important lichen collection which is generally overlooked by lichenologists. The herbarium contains about 14,000 lichen specimens including several exsiccatae (e.g., those of Howe, Cummings, Merrill, and Plitt). The Taxon article describes the herbarium in much greater detail.

Lichen Herbarium in the Botanical Institute, University of Poznan (POZ)

The lichen herbarium of the above Institute was established in 1930 by F. KRAWIEC; by 1950, when the present curator Z. TOBOLEWSKI took over, there were about 5,000 packets. During the past 30 years the collection has grown to about 25,000 packets. The major part of the herbarium consists of material collected by Krawiec and Tobolewski from the northwest region and from the Karpathian and Sudety mountains of Poland. The herbarium is strong in Caliciales, Caloplaca and Cladonia material. Both Krawiec and Tobolewski have published exsiccatae of Polish lichens , the former having prepared 2 fascicles, and the latter 18 fascicles to date. Tobolewski has also incorporated his own collections from Austria (especially the Alps) and the Tatry region of Czechoslovakia, and collections from Yugoslavia and Finland (Seili) are being studied prior to accession into the herbarium. Exchange duplicates (including exsiccatae) from foreign countries (mainly Scandinavia, Austria and Czechoslovakia) are also incorporated. The material is in excellent condition: separate packets are well organized in boxes in dustproof cabinets. Research workers wishing to make use of the collection are welcomed, and much of the material is available on loan. Requests for such should be addressed to Dr. Z. TOBOLENSKI, Institute of Systematics and Plant Geography of the A. Mickiewica University in Poznan, ul. Stalingradzka 14, 61-713 Poznan, Poland.

- M.R.D. Seaward

New York State Museum Herbarium (NYS), Albany, N.Y., U.S.A.

Renewed activity should be in evidence at NYS with the appointment of Claire Schmitt as Adjunct Curator of Lichens. The collection of approximately 10,000 specimens represents primarily New York State, but also includes specimens from other areas.

The Herbarium has recently moved to the Cultural Education Center in the new Empire State Plaza. Visitors are welcome as are loan requests, reprints, and exchanges. Address: Herbarium (Lichens); New York State Museum & Science Service; Room 3132 CEC; Albany, New York 12230, U.S.A.

Books

Dr. Yasuhiko Asahina's Lichenological Bibliography. The Lichenological Society of Japan. 37 pp. 1980. US \$ 10.00. cloth bound. (Available from Academic Scientific Book INC. Daido Bldg. 2-39-6, Hongo, Bunkyo-ku, Tokyo 113 JAPAN).

This fine little volume contains titles of 281 articles on lichens which were written by the late Dr. Y. Asahina. The contents of the book are as follows: a porttait, a calligraphy, part of a manuscript written by Asahina, preface, brief biographical sketch, lichenological bibliography (arranged in chronological order, abbreviations of the titles of periodicals.

- H. Kashiwadani

Flechtenflora:Okologische Kennzeichnung und Bestimmung der Flechten Südwestdeutschlands und angrenzender Gebiete. Volkmar Wirth. Verlag Eugen Ulmer, Stuttgart. (Uni-Taschenbücher 1062). 552 pages, 61 plates. 1980. DM 29,80.

Those interested in the lichens of south-central Europe will now have an excellent, complete, and up-to-date flora to work with. Wirth's book presents diagnostic keys to all species and supplementary notes on many. The illustrations, both photographs and line-drawings, are of good quality. The keys are by genus, but recently segregated or confusing genera are always keyed again with their morphologically similar counterparts (e.g., 2-spored Micareae with Catillaria, Lecidella with Lecidea, etc.). There is a useful introduction and glossary and an index to epithets. The pages are not sewn, but the covers are of a sturdy paper with a vinyl-like surface.

- Irwin M. Brodo

Miscellaneous

Lichens make it to the "big-time" in Australia.

Lichenologists travelling in Australia this summer may find accommodation at a new luxury hotel that has just joined the Hilton chain in Perth, Western Australia. It is called the "Parmelia Hilton International". The ads say, "The Parmelia, a legend in the west, has now joined Hilton International... (It has) 322 rooms including 69 suites. Exquisite decor. Rare objets d'art. Three restaurants. Four bars. Impeccable service." Need we say more?

Translations

Translation of Keys from "The Lichens of the U.S.S.R."

In the last issue of the I.L.N. (p. 16), I announced that an English translation of the keys from the five volumes of "Handbook of the Lichens of the U.S.S.R." was available and could be duplicated and sold at cost if the demand was high enough. So far only 13 orders have been received, not enough for ordering the duplication at a reasonable cost. It now appears that many colleagues who might want a copy missed that notice. I am therefore announcing it here again.

The firm price for printing 25 copies is CAN \$20.00 per copy. The cost of binding is \$3 and the cost of mailing is ca. \$3. Therefore, anyone wanting a copy should send a cheque for \$26 in Canadian funds to: I.M. Brodo, National Museums of Canada, Museum of Natural Sciences, Ottawa, Ontario, Canada, KIA OM8. As soon as sufficient orders (and cheques) have been received, I will order the duplication and will send out the translations.

.(Note: Only one respondent ordered a micro-fiche copy, so that alternative has been dropped.)

- I.M. Brodo