

PROCEEDINGS
OF THE
Liverpool Botanical Society.



Seventh—Tenth Sessions.

FOR THE YEARS 1912—1915 (inclusive).

LIVERPOOL :
PRINTED BY C. TINLING & Co., LTD., 53, VICTORIA STREET.

November, 1917.



A. A. DALLMAN, F.C.S.

President, 1914-1915.

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Headquarters :
COMMON HALL, HACKINS HEY.



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GENERAL MEETINGS, 1914.

FRIDAY, JANUARY 16th

Annual Meeting, at the Common Hall, Mr. W. G. Travis in the chair, succeeded later by Mr. A. A. Dallman.

Mr. A. A. DALLMAN submitted the Council's report, and this was adopted on the proposition of Mr. C. Waterfall, F.L.S., seconded by Miss S. J. Shoobridge.

In the course of his financial statement, the Hon. Treasurer—Mr. G. Loftus—showed that the working expenses had been considerably reduced. A discussion followed, in which Mr. F. J. Routledge, as a former Treasurer, congratulated Mr. Loftus on his satisfactory statement. On the motion of Mr. W. G. Travis, seconded by Mr. Routledge, it was agreed "that the Hon. Treasurer's financial statement be adopted, subject to its subsequent acceptance by the Auditors."

On the proposition of Miss D. Delany, seconded by Dr. J. W. Ellis, a cordial vote of thanks was passed to the retiring Officers and Council.

The ballot for the new Council and Executive resulted as follows:

President:—Mr. A. A. DALLMAN, F.C.S.

Vice-Presidents:—Mr. W. G. TRAVIS, Mr. J.A. WHELDON, F.L.S.

Hon Treasurer:—Mr. GEORGE LOFTUS.

Hon. Secretary:—Miss M. B. BARR.

Council:—Mrs. Bangham, Mr. W. Cheshier, M.A., Miss L. R. Cooke, Miss A. B. Gleave, B.Sc., Mr. W. T. Haydon, F.L.S., Dr. W. A. Lee, M.A., Mr. H. S. Marsh, Miss W. M. Parker, B.Sc., Miss S. J. Shoobridge, Miss N. Speakman, Mrs. Wheldon and Miss K. White.

The President announced that, if the meeting desired, he would continue to act as co-secretary. In the course of the ensuing discussion, it was agreed that the dual capacity was not desirable, and the appointment of an additional Secretary was referred to the Council.

Mr. W. G. Travis moved an amendment of Rules 3 and 16, which was seconded by Mr. G. Loftus, and, in the discussion, Dr. Ellis was inclined to object to the proposal to charge for the Society's Proceedings as he considered that every member was entitled to a copy of the Council's report and financial statement gratis. Mr. Routledge thought that the proposed charge was unfair. The

Chairman considered that most of the arguments employed were only repetitions of those which had been considered at previous annual meetings. The proposal was then put to the meeting and carried.

SATURDAY, FEBRUARY 21st.

The eighth Annual Soirée was held in the Church Hall, Hope Street, and after a reception by the President—Mr. A. A. Dallman, F.C.S., and the Hon. Secretary—Miss M. B. Barr—a number of interesting exhibits were shown. The President gave a short address, and a musical programme was rendered by Mr. E. Staveley, Miss Gwladys Roberts, and Miss E. Evans, several recitations being given by Miss Muriel Slade. A series of enjoyable competitions concluded a very successful evening.

WEDNESDAY, MARCH 25th.

At the Common Hall, Mr. A. A. Dallman in the chair.

Five new members were elected.

Mr. J. A. WHELDON, F.L.S., exhibited a specimen of lichen encrusted stone, with eggs of *Tetranychus Lapidus* (one of the stone mites), and remarked on the possibility of confusing these with fructifications of lichens.

Miss BRAY, of Hailsham, sent specimens of flowering shoots of *Ruscus*.

A lecture was then delivered by Professor ROBERT NEWSTEAD, F.R.S., M.Sc., A.L.S., on "The Natural History of Nyassaland." The difficulties and interests of pioneer work, native customs, and the relations between animal and vegetable life, especially in relation to the tse-tse fly, as well as valuable descriptive notes dealing with the ecology of the country, were well illustrated by numerous lantern slides. A hearty vote of thanks was accorded to the learned lecturer on the motion of Mr. J. A. Wheldon, seconded by Dr. Lee

MONDAY, 20th APRIL.

Mr. A. A. Dallman, F.C.S., in the chair.

Two new members were elected.

Mr. J. A. WHELDON, F.L.S., called attention to the following cryptogams found at high altitudes:—A lichen, *Microgena Breadalbana*, new to science, and the following fungi from Ben Lawers: *Tycothecia Euata*, and *T. Gemmata*.

Specimens of *Leucobryum glaucum* sent by Mr. W. H. Burrill, from Stratton, Norfolk, were also exhibited. The plant becomes detached from its place of growth, and continues to grow while free, until it assumes globular masses which travel before the wind.

Dr. ELLIS exhibited drawings of the following micro-fungi:—*Stagonospora Luzulae*, on *Luzula pilosa*, *S. innumerosa*, on *Juncus effusus*, and *Septoria Sparganii* on *Sparganium ramosum*, all new to Britain. A Discomycete—*Sclerotinia Curreyana*—was found at Hadlow Road on rushes. Dr. Ellis also called attention to a new fungus on *Euonymus*, added to the British flora.

Mr. WHELDON read a communication concerning the proposed Plant Protection Act. It was agreed that "this Society approve of the principle of Plant Protection." A further resolution was amended as follows:—"That this Society approves of a Bill on the

lines of the Wild Birds Protection Act, provided that the opportunities and privileges of botanists be safeguarded."

Mr. W. RAMSAY SIBBALD gave a short lecture on "Enzymes," illustrating his remarks by means of experiments. The reactions were arranged to exhibit the enormous effects a small proportion of enzyme had in rendering available for plant nutrition the oil stored in seeds of the castor oil plant.

A vote of thanks, on the proposition of the chairman, seconded by Mr. Wheldon, was accorded to the lecturer.

MONDAY, MAY 11th.

Mr. J. A. Wheldon, F.L.S., Vice-President, in the chair.

Dr. ELLIS exhibited coloured drawings of a rare fungus, *Mitrophora gigas*, Lév.: found near Erbistock by Miss O'Loughlin. He also showed drawings, in colour, of the flowers of *Viola Riviniana*, in which the spur was long, curved, and acute.

Miss F. M. Thomas sent specimens from the Thames Valley of *Fritillaria Meleagris*, *Campanula glomerata*, *Euphorbia amygdaloides*, and *Viscum album*.

Dr. Lee and Mr. Sibbald exhibited specimens of small immature plants of *Ophioglossum vulgatum*, gathered at Leasowe, in a station recorded in Dr. Green's Flora of Liverpool.

Mr. W. G. TRAVIS read a paper on "Changes in the Flora of Lancashire," dealing with the development of modern floral conditions from the glacial period. A lively debate ensued, in which Miss Lee, Dr. Ellis, Mr. Sibbald, Mr. C. B. Travis, and Mr. J. A. Wheldon took part, to whom Mr. Travis replied in a comprehensive manner. A vote of thanks, proposed by Mr. Sibbald, seconded by Dr. Ellis, was heartily accorded to the lecturer.

MONDAY, JUNE 22nd.

At the Common Hall, Mr. J. A. Wheldon, F.L.S., in the chair.

Mr. H. S. MARSH showed an apparatus for drying plants intended to be added to herbaria, and also some specimens of plants prepared by the method.

Dr. LEE exhibited an old herbarium containing a large number of cryptogams, calling attention to specimens of *Hypnum denticulatum*, var., *angustifolium*, "gathered in the wood at Didsbury," and a fruiting specimen of *Hypnum crista-castrensis*, gathered in Scotland and bearing the note—"Given to me by the Rev. Mr. Dalton, Rector of Croft." The volume was inscribed with the names of two previous owners—"Caroline Powys, 1774," and "John Sacheverell Gisborne, January 8th, 1847." Nothing had been ascertainable about these botanists, but a Rev. Thomas Gisborne, who died in 1846, sent the small form of *Catabrosa* from Parkgate to Sir J. E. Smith, and the owner of this herbarium may have been a relative.

Mr. MARSH mentioned the rapid withering of cut specimens of *Symphytum officinale*, and enquired whether or not this was the usual experience. Mr. Dallman suggested that the explanation might be found in the setting up of negative osmosis when the plant was immersed in water, owing to the high concentration of salts known to obtain in the cell contents of the plant.

Dr. LEE spoke of the finding of albino forms of the common Bugle in marshy ground at Bettws-y-coed, and several instances

of similar phenomena coming under notice were mentioned by other members.

Mr. WHELDON exhibited sea-shore pebbles picked up near the Point of Ayr, Isle of Man, speckled with the lichens:—*Rhizocarpon confervoides* and *Acrospora smaragdula*, remarking on the close resemblance to the eggs of the oyster-catcher, of which a nest was found at the same time, and also of the ring plover, which haunts the shore. Referring to the latter lichen, Mr. Wheldon pointed out that, although plentiful enough here, it is not yet recorded for any continental station. Mr. Wheldon also exhibited specimens of *Pertusaria microstictica* (Crombie) from Laxey shore, found by Mr. J. W. Hartley and himself.

Mr. A. A. DALLMAN, F.C.S., read "A Résumé of the Field Meetings of 1913," and showed photographs, specimens, and lantern slides illustrating his matter. A hearty vote of thanks was accorded the lecturer.

WEDNESDAY, 28th OCTOBER.

In the Common Hall, Hackins Hey, Mr. A. A. Dallman, in the chair.

Mr. ROUTLEDGE exhibited a collection of coniferous plants and dried examples of *Datura Stramonium*, from Ainsdale. He also showed branches of the Medlar, with fruits, from Shropshire. Mr. W. G. Travis showed specimens of *Apera interrupta*, found in quantity near Freshfield by him and Mr. J. A. Wheldon. Miss Bray sent examples of *Lactuca saligna* and *Sibthorpia Europaea*, from Essex. Dr. Lee mentioned the finding by Miss Lee of *Solanum rostratum*, an alien, near Wallasey Church, the plant being a native of Nebraska.

Mr. JAMES THOMPSON, F.L.S., then gave a lecture on "Edible Fungi," illustrating his descriptions by a large number of lantern-slides of specimens in their habitats, and freshly-gathered examples. The lecturer gave interesting details of the different creatures noted as being at times "fungophagous." Squirrels and mice were particularly fond of some kinds. He also alluded to the practice of the Druids in cutting the parasite of the oak, and held that this parasite was not the mistletoe, as usually believed, since this never occurred on an oak. He considered that the objects collected and most likely to appeal to the wild islanders of the period were the large Roast Beef fungi, which must have been exceedingly conspicuous in the extensive oak woods which then existed.

A vote of thanks, on the motion of Mr. Wheldon, seconded by Mr. W. G. Travis, concluded the meeting.

FIELD MEETINGS, 1914.

Led by Messrs. A. A. Dallman and H. S. Marsh, the Society paid a visit to Saughall and Shotwick on May 2nd, and the following species were noted:—*Hottonia palustris*, *Oenanthe Phellandrium*, *Potamogeton natans*, *Adoxa Moschatellina*, *Listera ovata*, *Hypnum aduncum*, *Physcomitrium pyriforme* (in fruit). A second party, following the route by the road, recorded *Viola odorata*, *Cerastium arvense*, *Galium mollugo*, *Salix triandra*, *Salix purpurea*, and

Apium graveolens. On the old river embankment the Hound's-tongue was plentiful. About the old hall and quaint old church, lichens were abundant. Softly clothing the old tombstones were sombre patches of *Parmelia fuliginosa*, *P. saxatilis*, *Rhizocarpon confervoides*, and *Lecanora atra*. On walls were *Lecidea canescens*, *Verrucaria muralis*, *Lecanora vitellina*, *L. citrina*, and *L. exigua*. *Physcia parietina*, *P. tenella*, and *Lecanora varia* were also prevalent.

Dr. ELLIS found *Puccinia malvacearum* and the *Ustilago* in the heads of *Tragopogon minor*, and, near Saughall Village, was noticed a fine example of the gall commonly known as "Witches'-brooms."

SATURDAY, MAY 23rd.

Dr. W. A. Lee and Mr. W. R. Sibbald led a party over the ground from Moreton Station, working down to Leasowe Common, where the gradual advance of the *Cotula coronopifolia* was noted. A number of sub-aquatic species were seen in the ditches, and *Ophioglossum vulgatum* was discovered in quantity in a pasture-field. The interesting plants occurring on the embankment were again observed, and on the return journey inland several instances of plants prone to haunt the abodes of mankind were noted. These included *Geranium lucidum* and *Vinca major*, the latter being apparently a garden escape.

MAY 29th to JUNE 1st.

A Whitsuntide excursion was arranged to Melmerby, Cumberland, under the leadership of the Rev. W. Wright Mason, B.A., Rector of Melmerby. A small party availed themselves of the opportunity to visit this interesting district, and the time at the disposal of the members proved too short to enable them to do justice to the whole area, and the many attractions indicated by the leader. It was hoped that on another occasion a larger number of members would avail themselves of the excellent opportunity to become acquainted with a flora in some respects dissimilar to that found in the local district.

SATURDAY, JUNE 6th.

The President (Mr. A. A. Dallman, F.C.S.) led the members to Hilbre Island, where special attention was given to the study, collection, and preservation of Algae. The destination proved a rich habitat for these somewhat neglected species and considerable interest was awakened. The Phanerogamia noted disclosed no species not previously recorded.

SATURDAY, JUNE 27th.

Under the leadership of Mr. J. Thompson, F.L.S., a meeting was held, in conjunction with the Chester Society of Natural Science, at Legacy, near Llangollen. The route included lanes, footpaths and wide-spreading heath lands and, in addition to botanising, members were instructively shown various buildings of historical interest.

SATURDAY, 11th JULY.

Under the leadership of Mr. W. H. Halfpenny, the Society visited Marple, and again explored a moorland on which a number of characteristic Cryptogamia were discovered. *Hypericum humifusum* was found in quantity in the lanes and, on the marshy ground near the river, numerous sub-aquatic species were observed. The time allowed for the journey was barely sufficient to permit the members to examine the flora with the attention it deserved.

THURSDAY, 16th JULY.

Mr. F. Collins led a small party on an evening expedition from Heswall along the paths running parallel with the River Dee. The Great Reed Mace was observed in quantity, while *Sparganium ramosum* and *S. simplex* were noted in the ponds. The interest of the expedition was enhanced by the special facilities offered for the study of bird life.

SATURDAY, 28th JULY.

Mr. J. A. Wheldon, F.L.S., acted as leader to a field meeting held at Ainsdale. Ample justice was done to the inland flora and, after refreshment, the party proceeded to examine the sandy ground near the shore, upon which *Datura Stramonium* was found in some quantity. Acquaintance was renewed with a number of species already chronicled from this delightful habitat.