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NATURAL HISTORY

29 JUN 1964

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Bournemouth Natural Science Society

JUBILEE SOUVENIR
(1903 - 1953)

*Issued by the Council at their House,
39 Christchurch Road, Bournemouth
April 1953.*

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FOREWORD

On the 2nd day of November 1903, a few ladies and gentlemen met to found the Natural Science Society, which has grown continuously to its present membership of over 500. It was thought that the present members would welcome a brief sketch of the life and history of the Society since its inception; hence this booklet. An exhaustive history of our life and activities would be a task beyond the limits of the present publication, but we trust that this shorter summary will be well received as an appropriate souvenir of our Jubilee.

The following is a list of officers and members of the Society after its formation in 1903:—

MR. J. E. BEALE, J.P., *President.*

MR. A. D. GEORGE, *Hon. Treasurer.*

MISS AGNES ROOPER

DR. J. R. L. DIXON, M.R.C.S., L.R.C.P. } *Hon. Secretaries.*

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REV. E. F. LINTON, M.A., F.L.S.

MISS LUPTON.

MR. J. NEALE, B.A.

DR. W. T. ORD, F.G.S.

MR. H. PAINTER, B.SC., F.C.S.

MISS PARISH.

MR. W. PARKINSON CURTIS, F.E.S.

DR. J. ROBERTS THOMSON, M.D., F.R.C.P., J.P.

MR. W. SAVILLE-KENT, F.L.S., F.Z.S., F.R.M.S.

REV. G. D. SHENTON.

MR. R. V. SHERRING, F.L.S.

MR. G. M. STUBBS.

MR. F. J. TANNER.

DR. A. W. THOMAS, M.D., M.R.C.S.

MR. H. J. WADDINGTON, F.L.S.

Lists of Presidents and Chairmen of Council of the Society (1903-1953)

Presidents:

1903-4	...	...	J. E. BEALE (Mayor of Bournemouth).
1904-6	...	...	G. E. J. CRALLAN, M.A., M.B., M.R.C.S.
1906-7	...	...	H. J. WADDINGTON, F.L.S.
1907-9	...	...	A. RANSOME, M.A., M.D., F.R.C.P., F.R.S.
1909-10	...	...	DR. A. SMITH WOODWARD, F.R.S., F.L.S., F.G.S.
1910-11	...	...	DR. DUKINFELD H. SCOTT, M.A., LL.D., F.R.S., F.L.S., F.G.S.
1911-13	...	...	SIR E. RAY LANKESTER, K.C.B., M.A., LL.D., F.R.S., F.L.S.
1913-16	...	...	SIR DANIEL MORRIS, K.C.M.G., J.P., M.A., D.SC., D.C.L., F.L.S.
1916-17	...	...	THE RT. HON. THE EARL OF MALMESBURY, D.L., J.P.
1917-18	...	...	SIR JETHRO J. H. TEALE, M.A., D.SC., LL.D., F.R.S.
1918-20	...	...	FIELD-MARSHAL LORD GRENFELL OF KILVEY, G.C.B., G.C.M.G., LL.D., F.S.A.
1920-21	...	...	LT.-COL. SIR DAVID PRAIN, C.M.G., C.I.E., F.R.S.
1921-23	...	...	F. G. PENROSE, M.D., F.R.C.P., F.Z.S., M.B.O.U.
1923-24	...	...	SIR F. W. KEEBLE, K.B.E., D.SC., F.R.S.
1924-26	...	...	HUBERT PAINTER, B.SC., F.C.S.
1926-28	...	...	HEYWOOD SUMNER, F.S.A.
1928-29	...	...	CLAUDE LYON.
1929-30	...	...	PROFESSOR F. O. BOWER, D.SC., F.R.S.
1930-31	...	...	HENRY BURY, M.A., F.L.S., F.G.S.
1931-32	...	...	DR. DUKINFELD SCOTT, M.A., LL.D., F.R.S., F.L.S., F.G.S.
1932-33	...	...	J. P. WILLIAMS-FREEMAN, M.D.
1933-34	...	...	REV. F. C. R. JOURDAIN, M.A., F.Z.S., M.B.O.U.
1934-35	..	...	SIR F. W. DYSON, K.B.E., M.A., D.SC., LL.D., F.R.S., F.R.A.S.
1935-36	...	...	HENRY BURY, M.A., F.L.S., F.G.S.
1936-37	...	...	SIR HAROLD CARPENTER, M.A., D.SC., F.R.S.
1937-38	...	...	PROFESSOR JOHN CAMERON, M.D., D.SC., F.R.S.E.
1938-39	...	...	PROFESSOR G. D. HALE CARPENTER, M.B.E., D.M., F.L.S., F.Z.S., F.R.E.S.
1939-40	...	...	W. G. AITCHISON ROBERTSON, M.D., D.SC., F.R.C.P., F.R.S. (Edin.).
1940-41	...	...	REV. PROFESSOR M. C. POTTER, M.A., D.SC., F.L.S.
1941-42	...	...	INST.-CAPT. M. A. AINSLIE, R.N., M.A., F.R.A.S.
1942-43	...	...	WILLIAM C. SIMMONS, B.SC., A.R.C.S., F.G.S.
1943-44	...	...	PROFESSOR S. MANGHAM, M.A.
1944-45	...	...	A. S. HEMMY, B.A., M.SC.
1945-46	...	...	J. F. N. GREEN, B.A., F.G.S.
1946-47	...	...	LT.-COL. C. D. DREW, D.S.O., F.S.A.
1947-48	...	...	W. J. WOODHOUSE, A.C.P.
1948-49	...	...	E. HINDLE, M.A., D.SC., PH.D., F.R.S.
1949-50	...	...	MRS. W. BOYD WATT, M.B.O.U., F.L.S.
1950-51	...	...	PROFESSOR SIR R. A. PETERS, M.C., M.A., M.D., F.R.S.
1951-52	...	...	ERNEST CHAMBERS, F.L.S.
1952-53	...	...	F. WILLIAMSON, F.R.HIST.S.

Chairmen of Council:

1904-5	...	J. ROBERTS THOMSON, M.D., F.R.C.P., J.P.
1905-6	...	J. E. LIDDIARD, F.R.G.S.
1906-7	...	H. J. WADDINGTON, F.L.S.
1907-10	...	W. T. ORD, F.G.S.
1910-11	...	W. T. ORD, F.G.S.
1911-14	...	SIR DANIEL MORRIS, K.C.M.G., J.P., M.A., D.SC., D.C.L., F.L.S.
1914-Dec. 15	...	G. G. HAMILTON, M.A., F.R.C.S.
1916-17	...	SIR DANIEL MORRIS, K.C.M.G., J.P., M.A., D.SC., D.C.L., F.L.S.
1917-Feb. 19	...	W. MUNN RANKIN, M.SC., B.SC.
1919-Mar. 20	...	SIR DANIEL MORRIS, K.C.M.G., J.P., M.A., D.SC., D.C.L., F.L.S.
1920-22	...	HUBERT PAINTER, B.SC., F.C.S.
1922-27	...	J. H. RALPH SMYTHE, J.P.
1927-32	...	REV. C. O. S. HATTON, B.A., F.L.S.
1932-46	...	HENRY BURY, M.A., F.L.S., F.G.S.
1946-48	...	G. BRUMELL, A.R.I.B.A.
1948-50	...	J. F. N. GREEN, B.A., F.G.S.
1950-51	...	S. R. WYCHERLEY, F.R.M.S., F.L.S.
1951-	...	H. E. CLARKE, M.A., B.SC., F.R.I.C.

Officers and Chairmen of Sections, 1953.

President:

F. WILLIAMSON, F.R.HIST.S.

Chairman of Council:	H. E. CLARKE, M.A., B.SC., F.R.I.C.
Deputy Chairman of Council:	W. J. READ, M.SC., F.R.I.C.
Hon. Treasurer:	W. J. WOODHOUSE, A.C.P., 29, Twynham Road, Southbourne (Tel. : Southbourne 44880)
Hon. Secretary:	W. S. BROWN, B.SC.
Hon. Librarian:	A. A. FOYLE
Hon. Editor:	F. COLEMAN, M.C., M.R.C.S., F.D.S.
Hon. Curator:	F. WILLIAMSON, F.R.HIST.S.
Hon. Assistant Secretary:	Miss D. M. LOWTHER, B.SC., Lonsdale, Mayfield Avenue, Parkstone, Dorset (Tel. Parkstone 1219). to whom all official correspondence should be addressed.
Hon. Assistant Secretary:	H. W. LEONARD
(Programme)	
	1, Neville Court, Derby Road, Bournemouth (Tel. B'mouth 5488).
Hon. Assistant Librarian:	MRS. W. PERCEVAL

Chairmen of Sections:

Archæology and History :	F. WILLIAMSON, F.R.HIST.S.
Astronomy :	W. P. WINTER, B.SC.
Botany :	E. CHAMBERS, F.L.S.
Entomology :	W. S. I. COX, F.R.E.S.
Geography :	H. DE CASTRO
Geology :	D. A. WRAY, PH.D., M.SC., F.G.S.
Microscopy :	J. H. MURGATROYD, F.L.S., F.Z.S., F.R.E.S.
Photography :	A. W. LEGAT, M.INST.C.E.
Physics and Chemistry :	H. E. CLARKE, M.A., B.SC., F.R.I.C.
Zoology :	V. DU B. SMYTHE, F.R.N.S.

A Historical Survey of the Early Life of the Society

By W. J. WOODHOUSE, A.C.P., M.I.H.

At a time when we are engaged in celebrating the Jubilee of our present Bournemouth Natural Science Society it is refreshing and helpful to take a glance towards the past and acquaint ourselves with the vicissitudes of the bygone days.

The information concerning the early stalwarts of the primary years of our existence is slowly disappearing with the relentless march of time, and it is well occasionally to refresh our minds, and to pay a tribute of respect to those who endured the early struggles, in order to hand on to posterity our present realised heritage.

The Society as we know it today is the outcome of the existence of two previous scientific societies. The first of these was the "Bournemouth Natural History Society," which commenced its activities somewhere between 1868 and 1870 and membership of which consisted in the main, particularly in its early stages, of active and retired Medical Practitioners; latterly it enlarged its field of activity, to include prominent scientific workers of the general public. This Society continued to function until 1880 or 1882, when it became defunct.

Very shortly after the dissolution of this Society, about the year 1884, another one was inaugurated, and was known as "The Bournemouth Scientific and Antiquarian Society," under the Presidency of Dr. G. Mahomed. The headquarters of this Society were at The Town Hall Chambers, Town Hall Avenue, Albert Road. Lectures and Papers were given on Photographic, Botanical and Microscopical subjects, whilst outdoor excursions were undertaken to features in the locality. This Society functioned until about 1896, when it too ceased to exist. Library Books belonging to both these Societies are to be found, and possibly some still remain on the shelves of "No. 39" today.

Various attempts were made to revive the work of these Societies. Sections were continued intermittently in Geography and Botany, but it was not until a determined effort was made by Miss Agnes Rooper, of Pen Selwood, Manor Road, Bournemouth, by establishing at her own home and garden a section in Botany, that any real progress was made. She was assisted in this work by her sister and brother, the latter a prominent Inspector of Schools, who was particularly interested in the development of horticulture in schools.

This hard-working and enterprising lady first of all gathered together the gardeners in the locality, and obtained lecturers, including herself, to give gardeners definite instruction in botany and horticulture. The idea gradually attracted not only gardeners but other interested workers in botany and zoology, and these courses of study continued for some time in the homes of various of its members, until it became necessary to take premises with more accommodation in a top floor room, over Thick's Boot Shop in Old Christchurch Road. Here was really started the nucleus of our present Society, and here about 1901 our present Society began to take shape.

The untiring labours of this lady were eulogised by Mr. H. J. Waddington in his Presidential Address in 1907.

Miss Rooper continued to gather around her many notable persons in the realm of science, and it is interesting that she was liberally supported by a very large proportion of medical men in the town, many of whom had been members of the former Societies.

Miss Rooper and Dr. J. R. L. Dixon acted as Secretaries and Conveners and much work on a small scale continued to be done in homes. Dr. Dixon, who lived at Sherbrook, Christchurch Road, Bournemouth, and also at Wootton Gardens, was an untiring worker, frequently continuing work with a few eager supporters until the early hours of the morning, for all invitations to the meetings were printed by the Doctor himself on post cards and frequently included photographs (his own handiwork), of topical and up-to-date items. The subscription was only 5/- per annum and an effort was made to have at least two general meetings per month.

It is difficult to single out particular members, but among the names of those associated with Miss Rooper in the founding of the present Society some few should be recorded, as without them it is possible that the present Society could not have matured. Among those we find the Major of Bournemouth, Ald. J. E. Beale, Dr. E. Hyla Greeves, Dr. Alfred Russell Wallace, W. Saville-Kent, Rev. E. Linton, Dr. J. Roberts Thompson, Dr. A. W. Thomas, Hubert Painter, Dr. G. Crallan, George Brownen, R. V. Sherring, H. J. Waddington, Henry Backhouse, T. B. Goodall, G. Brumell and W. J. Woodhouse.

Sections of workers were organised, in discussions and excursions, and it became increasingly evident that the little room was inadequate for general meetings; so a move was made to accommodate the increasing numbers, to The Cairns Memorial Hall, Shaftesbury Hall Y.M.C.A. (later destroyed

by enemy action), and by this time our present Society was instituted, with Ald. J. E. Beale as its first President.

A study of early Agenda makes most interesting reading and as an example of what was attempted in these early days a Winter Programme for the year 1906 is appended; the names of the two remaining original members are therein contained.

Jan. 13th. Rain. Dr. G. Crallan.

„ 27th. Egyptian Hieroglyphics. Revd. C. R. Honey.

Feb. 10th. Some Personal Observations of the Birds of Poole Harbour. Mr. W. Parkinson Curtis (an original member).

Feb. 24th. A North Wales Cathedral, S. Asaph. Mr. Bax.

Mar. 10th. The Geographical Distribution of Plants. Miss Rooper.

„ 24th. Illustrations, local and otherwise, of the successive Style of Mediaeval Ecclesiastical Architecture. Mr. G. Brumell.

April 7th. The Uses of the Camera. Councillor R. Y. Banks.

„ 21st. The Hub of the Universe: The Sun. Mr. W. J. Woodhouse (an original member).

„ 28th. The Natural History of Hengistbury Beach. Dr. Thomas.

The Summer Excursions included places which are still visited by us, although the longer journeys were not possible by the then available transport.

For some time General Meetings were held in The Cairns Memorial Hall and sectional and smaller meetings continued over 122 Old Christchurch Road. In 1908 the subscription was raised to 7s. 6d.

We now find further additions to the names of prominent men and women connected with the Society, among others, Dr. Ord, Dr. Arthur Ransom, Col. E. E. Markwick, C. J. Hankinson, J. E. Liddiard and H. Le Jeune.

Further Sections were organised and the work of the Society was greatly extended.

In 1909 "The Yellow Paper" (a monthly Programme) made its first appearance in its present form. In this year

too the Y.M.C.A. gave notice that they required the Hall for further extension of their work, and other accommodation had to be found.

The Society now moved to the upper floor of Granville Chambers, Richmond Hill, where more rooms were available. The lower floor of these Chambers was used by the Borough Municipal Council as offices and committee rooms, and the Municipal Council Chamber was next door.

Further prominent members who became associated at this time with the Society include the following: J. F. Rayner, Harry Pouncy, Claude Lyon, H. St. Barbe, E. W. Barlow, Sir Daniel Morris, George de Castro, and Dr. G. G. Hamilton, all of whom contributed much to the work and progress of the Society, and assisted it financially by liberal gifts.

The Presidential Address in 1911 was given by Sir E. Ray Lankaster at the Princes' Hall, Grand Hotel; this was made an auspicious occasion, as the members and their friends were invited to an "At Home" by the Council; one of the most memorable events of these early days .

Following the success of this another "At Home" was held at Pokesdown Technical Institute, when batteries of microscopes were set around the room, specimens of local interest in botany and geology were shown and, after light refreshments, lantern slides taken by the members at various excursions, were displayed to the guests. Dr. Penrose, Dr. Hamilton and Dr. Coles presented special microscopic exhibits, whilst the two former gave a display of natural colour slides and colour films, made by what were then new processes. It was a very successful effort and a large number of new members were secured to the Society as a result.

Another move became imperative. The Borough Council required the rooms at Granville Chambers and the Society secured accommodation in a small room under the Prince's Hall at the Grand Hotel, while Trinity Church Hall provided a meeting place for larger gatherings.

On the death of Mr. H. Le Jeune, Sir A. Brooke-Peshell became Hon. Secretary, soon to be succeeded by Mr. R. A. de Paiva with Mr. J. F. Spencer as Assistant Hon. Secretary. This latter partnership continued for many years, and the firm establishment of the Society is also largely due to the efforts put forth by Mr. R. A. de Paiva, who was a meticulous worker and organiser.

After the opening of the Municipal College in 1912 the Society was fortunate in securing the permanent use of a room on the ground floor. All previous rooms had been above the ground floor and were therefore not appreciated by the older members. At this time too, the Principal of the Municipal College, W. Munn Rankin, became a very active member of the Society.

All Sectional meetings were held here and, as occasion required, the large Hall of the College was available for larger meetings. This arrangement proved very satisfactory and it seemed that the Society's wanderings were at an end at last. The numbers however continued to increase very rapidly and on many occasions it was impossible to accommodate all those who presented themselves for the lectures.

This was a considerable source of worry to the Council of the Society. But once again it was fortunate, for at the time it numbered on its Council the Rev. C. O. S. Hatton, an indefatigable worker; and when the crisis culminated, the Bournemouth Education Committee having decided that owing to overcrowding at the College, they were compelled to terminate the Society's tenancy, the Council got speedily to work and search was made for a suitable property that might be purchased freehold. Those intimately concerned with this move were Sir Daniel Morris, The Rev. C. O. S. Hatton, R. A. de Paiva, Claude Lyon, S. Whitaker and George Brumell.

After inspecting several properties, it was decided to purchase No. 39 Christchurch Road.

Debentures were issued to effect the purchase, and the Society moved in to the property, of which they were the landlords.

It would be quite impossible in a brief survey to convey our thanks to the many benefactors of the Society. From its inception we have had countless friends who have come to its assistance financially at times of need, and numerous workers who in many and various ways have given eager and willing assistance. May this spirit still survive and may the next Jubilee report record even greater achievement.

It does not appear necessary to proceed further with the history of the Society since it acquired 39 Christchurch Road, as the archives are available and easily accessible on the premises.

THE SOCIETY'S HOUSE: FRONT VIEW

THE SOCIETY'S HOUSE VIEWED FROM GARDEN

The Museum

By F. WILLIAMSON, F.R.Hist.Soc.

From the foundation of the Society gifts of objects suitable for inclusion in a museum began to be made by members. Some of the gifts were of considerable size and must have been difficult to accommodate in the restricted rooms in which the Society then met.

In Vol. V of the Society's Proceedings (for 1912-13) Sir Daniel Morris gave an account of the various objects received up to that date, and it makes quite an impressive list.

Some local specimens of archaeological interest had been received, among them flint implements from Pokesdown antedating the important discovery of a bronze age urnfield in 1926.

The Botanical Section had in its herbarium more than a thousand sheets of dried plants.

The geological collections included fossils from all the chief formations, and also various types of rock specimens.

The most important single collection acquired up to this time was the Dent Collection of fossils from the Barton Beds at Barton-on-Sea, collected many years before by the late Mr. Dent, of Barton Court, and his father, who were owners of the cliffs. The collection was purchased from Mr. Hamilton Dent for the sum of £118 0s. 0d., and before its purchase the Council of the Society obtained the opinion of an expert on the staff of the Natural History Museum, who reported that the specimens were in a fine state of preservation, and that such a series would probably never be obtained again. This collection is in as good condition as when bought, as all the specimens are in glass-topped boxes, and housed in a good cabinet.

Another collection of great local geological interest consisted of a large selection of fossil leaves from beds in the cliffs near Durley Chine, which have now disappeared owing to erosion. The specimens were collected mainly by Dr. Ord and Mr. H. Morden Bennett and presented by them to the society. This collection is still intact, and is of considerable scientific value, as the beds from which the specimens came were very restricted in area, and consequently not many were obtained.

From the beginning of the Society among the officers was a Honorary Librarian, but it was not until the annual meeting of October 1917, that the first Honorary Curator was appointed in the person of the late Mr. W. G. Wallace, son of Sir Alfred

Russell Wallace, the famous naturalist and exponent of Darwin's theory of natural selection. He at once contributed to Vol. X of the "Proceedings" an account of the principal additions to the Museum collections since 1913. Unfortunately Mr. Wallace did not retain office very long, as he resigned in July 1921; he, however, continued membership of the Society until his death in 1951.

In 1914 a large collection of birds' eggs, skins, and nests, which had been got together by the late Dr. Batley, was purchased for the nominal sum of £25 from his widow, then living in Christchurch. It contains not only a long series of British specimens but also many foreign species. It was carefully checked by Messrs. W. Parkinson Curtis, and E. Harker Curtis, and the specimens placed in glass-topped boxes, so that it is still in excellent condition.

About 1918 a collection of Egyptian antiquities was received from Mrs. Philpott, and also a loan of similar character from Mr. McDougall, which later became a gift. The latter had been purchased at the sale of the collection of Lord Grenfell, the famous explorer of Egyptian sites. These were later added to by the gift of more Egyptian relics from the Blackmore Museum at Salisbury, and the Museum thus became possessed of some interesting and beautiful specimens.

Shortly after Mr. Wallace resigned, the Rev. C. O. S. Hatton was appointed Honorary Curator, a position he filled with success for nine years until his sudden death in 1932.

Permanent premises were acquired by the Society in 1920 at No. 39, Christchurch Road, and until the Lecture Hall was built the present museum room was used for lectures.

In 1922 Dr. Crallan presented his collection of British Lepidoptera in two large cabinets (Nos. 10 and 11) with a total of 80 drawers. This is a comprehensive collection of British species, and is in good condition. It has recently been re-labelled and the nomenclature brought up-to-date. In 1938 Dr. Crallan gave to the Society his collection of foreign Lepidoptera in a large cabinet of 30 drawers.

The Society had in 1920 received a good collection of Indian butterflies, collected by Capt. H. V. Ewbank, filling 28 drawers, so that there is a fine series of beautiful insects.

Not many specimens of birds had been received up to 1924 when Miss E. K. Pearce presented 24 cases of British Birds collected by her father, the Rev. T. Pearce, vicar of Morden, Dorset, most of the specimens having been taken locally. Many additions have since been made to this section, the largest gifts being 48 cases from Salisbury Museum in 1928,

38 cases from Mrs. Penrose in 1932, 15 cases of birds and 15 cases of nests and eggs from Mr. V. J. Adams in 1940, and 30 cases of birds from Lord Malmesbury in 1946. Among many interesting specimens are a few of special interest, for example, the first specimen recorded in this country of a White's Thrush taken at Hurn in 1826, and named after Gilbert White; a Passenger Pigeon now extinct; and a life-like model of a Great Auk, and egg, another interesting bird which has been liquidated by civilised man.

In 1921, Mr. J. H. Scott gave his collection of prehistoric implements, all collected within the borough, and all with full data. Many other local specimens have been added from time to time. In 1927 Dr. R. C. C. Clay presented a number of flint implements from a bronze age urnfield at Pokesdown, which he described in a paper in the *Antiquaries Journal*, vol. VII. Unfortunately most of the urns from this site went to the British Museum, which has more of such material than it knows what to do with, instead of being retained in the area to which they belonged. In 1938 Dr. Kitchin gave his large collection of local palaeolithic implements, in a large cabinet. With these and other smaller gifts the Museum has a fairly extensive selection of local stone implements; unfortunately this is not the case with regard to prehistoric pottery, as apart from fragments there is only one complete urn of late bronze age type, and part of a middle bronze age urn with contents from St. Catherine's Hill, Christchurch.

In 1930, Mr. E. St. J. Burton presented a collection of British land, marine and freshwater shells collected by Mrs. Ada L. Burton, and also a good collection of Barton fossils from his own collection. With these and other gifts, the Museum is well supplied with shells both British and Foreign, the latter exhibited in two cabinets given by Mr. H. Morden Bennett, and by Dr. Crallan.

At the present time the various collections are distributed throughout the Society's premises, in the Museum proper, in the hall, in the Lecture Hall, in a separate Archaeology Room on the first floor, in the Botany Room on the ground floor, and in a Bird Store Room. There is also a Lantern Slide Room where more than 10,000 slides are available for the use of lecturers, all properly labelled, classified and catalogued for easy reference. In the same room is also a collection of picture post cards and pictures, which has just been brought together for use with the epidiascope.

The various specimens are accommodated in 70 cabinets and showcases, and are under regular supervision so as to keep them clean and in good condition.

Since the first Hon. Curator, Mr. W. G. Wallace was appointed in 1917, there have not been many successors. He

resigned after a short term, in 1921, and was succeeded in 1923 by the Rev. C. O. S. Hatton, who continued in office until his sudden death on the 19th February 1932. He was followed in 1932 after a short interval by Mr. Bernard Gorton, who is still an active member of the Society, and he acted until 1937, when he was succeeded by the late Mr. W. C. Simmons, on whose resignation in 1945, Mr. J. F. N. Green took on the duties until his death on the 11th December, 1949. At the January 1950 Council Meeting the present Hon. Curator, Mr. F. Williamson was appointed. Since his appointment several members of the Society have given generous assistance in bringing the various collections into good condition.

The Library

By A. A. FOYLE.

The Library was started in 1910 with a collection of books, which had been presented by Dr. Crallan, the second President of the Society. During that year contributions were made by twenty different donors. Mr. Alexander Scott was the first Hon. Librarian.

The Council has voted various sums in the past for the purchase of books, but the Society has been fortunate in having had the great majority of its books presented to it by many of its members. Their names are recorded in such books and the Society does not forget to appreciate the generosity of the donors. Special mention should be made of the Rev. Prof. G. Henslow and Dr. F. G. Penrose.

A Library Committee was elected in 1918, and Mr. George Grace was the first Chairman.

There are now about 4,000 volumes and they cover the work of all the Sections of the Society from "Archaeology" to "Zoology."

In addition, there is a wide range of scientific periodicals, many of which are given by members, and Proceedings of other societies, received in exchange for ours.

In the course of its existence, the Library has acquired the Proceedings of local societies, viz. Dorset Natural History and Archaeological Society, Hampshire Field Club and Archaeological Society, Wiltshire Archaeological and Natural History Society; which go back for many years. It also possesses bound volumes of "Nature," complete from the first issue.

Botany

By E. CHAMBERS, F.L.S.

The science of Botany has always been an important feature of the B.N.S.S. and, ever since the appointment of Miss C. A. Rooper as its first Chairman 46 years ago, the Section has a continuous record of its work. The reports of its first indoor and field meetings are of interest: "October 26th, 1907. Present Mr. A. Scott, Mr. Backhouse, Dr. Dixon, Miss Laidley, Miss Parish, Miss Lupton and the Chairman. The collection of dried flowers was sorted and arranged." "Nov. 4th, 1907. Fungus Foray in Talbot Woods. Seven members present. Fifteen species were collected and named. They were all found on the side toward the open allotments." The indoor meetings were mostly devoted to the Herbarium based on collections made by Messrs. Backhouse, Scott and others and further augmented by those of Cotton, Sherring and Purchas until, in 1918, the Keeper could describe it as one of the Society's most valuable scientific possessions on account of the large number of species contained and its careful classification and arrangements for easy and expeditious reference. It already comprised over 1,400 species, including nearly all the local flowering plants and ferns. It may here be added that more recently members, including N. Douglas Simpson, the late Mrs. Rothwell and others, have helped to build up a valuable Herbarium of British Plants totalling over 1,800 species.

"Arrangement of dried plants" continued for the first winter (except for a period when the cabinet key was lost). On December 14th, 1907, a resolution was passed that members should subscribe a minimum of 1/- each so that they could take in the Botanical Journal during 1908. This is in significant contrast with the extensive Library available to present-day members. In 1909 "Col. Ross brought in a specimen of *Lobelia urens* which had appeared in his garden" and "Mrs. E. Walker listed 90 species of native plants found in flower on Horseshoe Common in the year. There is nothing rare but *Viola stagnina*." Of Horseshoe Common R. K. Cardew wrote, "Almost any branch of Nature Study may be pursued here and there is no reason to go long distances with this area existing in an almost natural state in the centre of the town." Another early record is of the Bournemouth Lily (*Simethis bicolor*). This was in danger of extermination by building at its only station in Branksome Park, but was conserved in the Public Gardens and flowering in 1908. It was re-discovered by Sherring in 1911. Specimens dried by A. Scott in June 1908 are in the Herbarium.

In March, 1910, it was decided to hold one meeting per month for Lecture, Work on the Herbarium, or Excursion. At first the attendance averaged seven (on one occasion only two, Scott and Sherring) but numbers increased until there were 50 members at Hinton Admiral, led by Rev. C. O. Hatton in June 1917. In 1922, there were registered 130 members of the Botany Section including Miss K. M. Chilver, Henry Bury and N. Douglas Simpson. Remarkable continuity has been shewn in Section officials. During 46 years there have been six Chairmen, Miss C. A. Rooper, Rev. C. O. S. Hatton, Howard Lacey, L. Beeching Hall, Miss L. Child and E. Chambers; and but four Secretaries, Mrs. Rothwell, Miss S. G. Rooke, H. J. Wadlow (who served for 24 years) and Miss E. Banham. When the various Sections merged, the Botany Section provided its programme quota whilst also keeping its own records.

It was appropriate that the first recorded Field Meeting should be a Fungus Foray, as such are always well attended. For many years the Foray had a most capable leader in F. J. Rayner, M.B., whose knowledge of Fungi, Lichenes and Mosses is evident in our Proceedings. In Proc. II (1910) he made over 100 additions to the List of the Fungi of the New Forest and says, "Some of them are of considerable interest and importance. The credit is largely due to the annual forays of the Hampshire Field Club, the Bournemouth Natural Science Society and the Southampton Ramblers' Club." In Proc. III, in his Guide to the Fungi and Mycetoza of the New Forest, Rayner lists 693 Fungi and 50 Mycetoza, and in Proc. IX, the totals are brought up at December 1917, to 909 and 60 respectively. More recently there have been notable Forays e.g. in 1932 when over 100 species were found in the Balmer Lawn area and in 1933 at Brockenhurst Park when J. Vorse and Rev. M. C. Potter led a collection of 120 species. Many members, notably F. L. Lowther, were enthusiastic mycophagists and the interest persists. The work of Dr. Rayner on *Mycorrhiza* in the Forestry Grounds at Bloxworth has been demonstrated to the Section and has stimulated interest in symbiosis between the Fungi and their appropriate trees.

Algae have not been keenly studied by the Section as a whole. Of Fresh Water Algae we are fortunate to have a list (Proc. XXXVII. Woodhead and Tweed) of those of S. Hants to the number of 476 species of which 203 were found in Hatchett Pond alone. Many of these are microscopic unicellular forms.

Summer Field Meetings have always tended towards taxonomic Botany, as shewn by the careful lists in our Records. Probably few districts in the country have been so compre-

hensively covered. For 25 years the Section was fortunate in having H. J. Wadlow, (remembered also for adding *Illecebrum verticillatum* to our local flora), and with him such a brilliant all-round naturalist as L. Beeching Hall and others, from whose work and observation present members benefit. The records made more recently by Mrs. Boyd Watt and Miss K. Gorringe may, we hope, yet be published. First mention of Plant Ecology is March 1912, when Prof. G. Henslow gave a lecture on "Ecology or the latest Phase of Plant Geography." He said, "Geographical Botany was formerly limited to the making of Floras. Structure was only studied for classification. Ecology combines all branches of study, but applies the knowledge acquired to plants as they grow in nature." During following years, W. Munn Rankin gave ecological studies of Hampshire Heathlands, Shore Plants and the Origin of the Bournemouth District Flora. L. Beeching Hall also gave "Landscape and Surface Soil," and E. Chambers' presidential address was on the study and application of Plant Ecology.

At the Annual Meeting 1923, Rev. E. F. Linton, M.A., was awarded the Morris Medal for his long services rendered in the study of the Flora of Bournemouth and District and particularly his valuable work, "The Flora of Bournemouth," first published in 1900. A copy of the later 1919 edition, with hand notes by H. J. Wadlow, is in our Reference Library. When, in 1914, members of the Botany Section collaborated in the "Natural History of Bournemouth and District," edited by Sir Daniel Morris, Linton contributed a survey of the Botanical Divisions, Stour, Avon, Forest, Purbeck and Lytchett, which is still the best hand-book for the newcomer. This was preceded by an Ecological survey of the General Vegetation by Rankin. Both these are very interesting in retrospect. In the same work is an account of the Marine Algae from Lymington to St. Aldhelm's Head by A. D. Cotton, giving lists of species of note and a special mention of *Colpomenia sinuosa*, a semi-tropical form which had reached its eastern limit of our south coast at Studland.

Members have carefully followed the development of *Spartina townsendii* in both Poole and Christchurch Harbours. It had been first recorded by J. C. Mansel-Pleydell in 1899 in Poole Estuary near Ower and was then "very rare" in British flora. A report by Groves notes that in 1912 "the numerous dots on the mud are now becoming bunches of grass, the bunches are patches, the patches belts, and so on to acres." Excellent photographs are in Proc. IV. Continuous observation was kept up by Sherring for some years and a regular *Spartina* Report made to the Society. Visits were made to view it in Poole Harbour in 1912 and "walking to Buckler's Hard to see

the *Spartina* in the river" in July 1913. In 1914 he reports that the grass "threatens to alter the land and water area of Poole Harabour" and in 1916 "the growth has been enormous, almost meadowing the whole area" in part of Arne Bay. Two clumps at Gigger's Island then marked the furthest extension up the Frome. In view of the present extent of *Spartina*, the early work of the Section is very interesting.

Arboreal Botany has always interested the members. Morris made "Trees" the subject of his presidential address. Backhouse and Hatton collaborated in preparing lists of Trees and Shrubs in the Winter Gardens, Lower Gardens and Horse-shoe Common. The New Forest Superintendents and other members have demonstrated the trees of the New Forest and most of the Private Parks within reach.

A former feature of the Section was a December meeting at which the "Plants seen during the Year" were discussed as to their points of interest. L. Beeching Hall made much of this opportunity for much more detailed allusion than is possible in the short notices published in the Proceedings. Another custom was the arrangement of a weekly exhibition of wild flowers in the Municipal Library. This was instituted by Miss C. A. Roper in 1917 and carried on by many members, notably H. J. Wadlow.

Although Palaeobotany has not figured in Field Meetings, D. H. Scott gave several lectures on Extinct Plants, Geological History, and various individual Fossil Cycads, etc. Of great local interest was a lecture on *Nipadites* in the Eocene Beds at Bournemouth, discovered by Starkie Gardner. The fruits and leaves of this Palm indicate in the early part of the Tertiary Period the existence of a flora of a more or less tropical character. *Nipadites* is fossil ally of the Palm *Nipa fruticans* of brackish swamps of S.E. Asia. Like *Nipa* the *Nipadites* grew in rich, brackish mud of shores or river mouths.

At least a brief mention must be made of the versatility of the subject matter of Botany lectures covering every phase of Plant Life, Anatomy, Physiology and Economics. Geographical Botany has ranged from Skye, Norway, Tyrol and Dalmatia to Sudan, Ceylon, S. Africa and Venezuela. The practical application of Botanical Science to the needs of mankind has been demonstrated in numerous lectures, of which a few are Woad, Spices, Fibres, Mistletoe, Tea, Cacao, Coconut, Rubber, Mosses and Mankind, Bacteria in Everyday Life, Palms and Man, Grasses and Man, Plants in History, Lime Nutrition, Plant Breeding. One may add such titles as Carbon in Plants, Plant Sensitiveness and Movements, Hydroponics, Photosynthesis, Karyokinesis and the series on Plants' Struggle for Life.

In short, it would interest newer members to peruse the Lecture Programme titles of nearly half a century; it would arouse gratitude for the educational work so freely and willingly performed by members and friends.

It is obvious that space only allows a sketchy account of the Section, but the foregoing is a history as it appeals to the present Chairman.

Zoological Section

By V. du BÉDAT SMYTHE, F.R.N.S.

In the early days of the Society it was decided to sectionalize its activities. Owing to the fact that most of its work lay then in the departments of marine and freshwater biology, in which much careful research work was carried out, this Section was combined with that devoted to Microscopy, and later, with the Entomological Section for somewhat similar reasons.

From 1904 its path was guided by a succession of chairmen, many of whom were of considerable scientific attainment, such names being included as G. E. Crallan, M.A., M.B., M.R.C.S.; A. W. Thomas, M.D., M.R.C.S.; H. B. Wells, F.R.M.S.; W. Munn Rankin, M.Sc., B.Sc.; T. B. Goodhall, F.R.C.V.S., F.L.S.; F. G. Penrose, M.D., F.R.C.P., F.Z.S., M.B.O.U.; the Rev. F. C. R. Jourdain, M.A., F.L.S., V.P.B.O.U.; S. C. Scarsdale Brown, L.D.S., R.C.S.; culminating with the only lady to occupy the chair, Mrs. Winifred Boyd Watt, F.Z.S., M.B.O.U., whose efforts on behalf of the Section have been unsparing. Unhappily, the majority of those mentioned have passed on, but Mrs. Boyd Watt and Mr. S. C. S. Brown are still with us.

Despite the fact that the half century which has elapsed has unhappily been interrupted by two wars of global magnitude, which have seriously interfered with the even functioning of the affairs of the Section, it is still of interest to recount some details of what has been accomplished.

From 1908 to 1910, dredging operations were carried out in Poole Harbour and Swanage Bay. Tow-netting yielded the Zoea and Megalope forms of the Shore Crab (*Carcinus maenas*), cydippe, numerous medusae, hydroids, sponges, and ascidians. In the New Forest, near Ober Water, Dr. Thomas recorded polyzooan *Fredericella*, rare in this district. Netting off Bournemouth Pier during the months of April and May produced copepod *Monstrilla anglica*, and also, *Thaumaleus clapedii*, both also rare.

H. J. Waddington, F.L.S., was also successful at this time in rearing the Common Lobster (*Homarus vulgaris*) over a period of three years, and recorded the ecdyses photographically.

During 1911-12, the Portuguese Man-of-War (*Physalia pelagica*), one of the siphonophores, appeared in the Bay in prodigious numbers.

In 1914 an important paper was communicated by W. Omer Cooper, F.L.S., on "Rare and interesting Local Isopods", with a list of species.

Gradually ornithology began to occupy an increasingly prominent position, as interest in this branch of Natural Science intensified. Owing to war restrictions, Field Meetings were few, while the demands of military service reduced the availability of lecturers.

In 1917-18, a marine conchological collection, made by Mr. T. E. Belcher, and natural-colour photographs of birds in their normal surroundings, taken by Dr. Penrose, were on exhibition. Dr. Penrose's photographs have recently been presented by his daughters to the Society.

The years 1920-1928 showed the Section recovering from the stress of war, and many lectures of note were delivered. As a cross-section of these may be mentioned "Marine Mollusca of Bournemouth", by E. St. John Burton, F.G.S., F.Z.S., "British Birds", by Dr. S. H. Snell, M.B.O.U.; two lectures upon the British Ophidia by L. Beeching Hall, F.L.S., and Howard Lacey, B.A.; "A Naturalist's Holiday in Provence", by Hugh Main, B.Sc., F.E.S., F.Z.S.; "British Owls (*Strygidae*)," by Dr. Snell; and many most instructive discourses by Henry Bury, M.A., F.L.S., F.G.S., erstwhile Fellow of Trinity College, Cambridge, who is still with us.

During this time, and subsequently, much field-work was carried out, and numerous Field-Meetings were conducted in the New Forest area, Dorset, and elsewhere; there were also visits to the Zoological Gardens at Bristol and London.

In 1938 the Section was represented at the International Ornithological Congress, by the Rev. F. C. R. Jourdain, and C. J. Pring.

Among the many Keepers of Records, Mr. Jourdain was perhaps best known as an ornithologist of world-wide repute, and also as a co-author of the "Handbook." He was ably assisted by Miss F. C. Popham, M.B.O.U., and upon his decease, was succeeded by F. L. Lowther, B.A. who also rendered invaluable service in this connection.

The war years 1939-45 resulted in even more proscribed conditions than previously; hostilities were conducted literally upon the doorstep, as the Society's premises escaped summary destruction through enemy action only by a miracle.

However, despite all, work continued to be carried on successfully, and from 1941-52 Mrs. Boyd Watt maintained the standard of efficiency in a most able manner.

Prominent events of recent date include a lecture at the Society's dinner of 1950 by Major A. Radclyffe Dugmore, veteran pioneer naturalist, artist, author and big game photographer, who has presented a large number of slides to the Section; at the Winter Gardens in the same year, a lecture by Peter Scott, M.B.E., D.S.C., founder of the Severn Wild Fowl Trust, to whose reservation the Society made a visit; again at the Winter Gardens in 1951, Field Marshall the Rt. Hon. Viscount Alanbrooke, K.G., G.C.B., O.M., D.S.O. (who will be among the standard-bearers at the forthcoming coronation of Her Most Gracious Majesty, Queen Elizabeth II) delivered a lecture upon the Golden Eagle and other birds, illustrated by colour films made from his own photographs and others kindly furnished by the R.S.P.B.

In the Society's own Hall, Dr. Seth-Smith, "Zoo man" of the B.B.C., and Major Maxwell-Knight, O.B.E., M.R.I., F.Z.S., also a well-known broadcaster, spoke upon water birds and reptilia.

The Gilbert White Exhibition, held from September 19th to 22nd, 1951, was a noteworthy event, in the capable hands of Mrs. Boyd Watt as Exhibition Director. It illustrated the life of the father of field natural history, Gilbert White of Selborne (1720-93), and the Exhibition was opened by his great great grand-nephew, the Earl of Stamford. In addition to an exceptional array of relics, ranging from period furniture to household receipts, a series of lectures was delivered having associations with Selborne; A. W. Legat, M.Inst.C.E., described the village and its environs with the assistance of colour slides specially taken for the occasion. Roland Green the well-known ornithological artist depicted the birds mentioned in White's Natural History, by brilliant half-minute sketches.

Space precludes the mention of many others who have given of their time and energy to make the Zoological Section a telling factor in the work of the Society. The importance of their help cannot be sufficiently expressed here.

Physics and Chemistry

By H. E. CLARKE, M.A., B.Sc., F.R.I.C.

At its inception the "Physical" Section was designed to receive contributions from all non-biological sources except Archaeology and Geography. At later dates the Sections devoted to Astronomy and Mathematics (1921) and Geology (1923) were separated from it. Chemistry was always the dominant science of the Section, a fact signalled by the present writer, who in 1946 added Chemistry to its official name.

Six Past Presidents have been associated with the Section, three of them as its Chairmen. Continuously for 22 years, from 1904 to 1926, Mr. Hubert Painter, B.Sc., F.C.S. (President 1924-1926) served the Section with great distinction, and first as a teacher of Science and later as Principal of the Municipal College (1921-1926), was well known in Bournemouth. Many of his lectures, notably those forming part of symposia on products of general technical importance, such as lime, silica, carbon, sugar and oil, were printed in the *Proceedings*. These, with his two Presidential Addresses: "Science and Human Welfare" (1924) and "Speculations and Reflections on the Origin and Present Position of Natural Science" (1925), are models of clear exposition, deep human interest and exemplary scientific grasp and receptivity.

Dr. G. E. J. Crallan, M.A., M.B., M.R.C.S. (President 1904-1906) was Chairman of the Section in 1928, and his three lectures on Glass technology are to be found in our *Proceedings*.

Mr. W. J. Woodhouse, A.C.P., M.I.H. (President 1947-48) was Chairman during the difficult years from 1943 to 1947.

Sir Harold Carpenter, M.A., D.Sc., F.R.S. (President 1936) on "The Structure of Metals", and Sir Rudolph A. Peters, M.C., M.A., M.D., F.R.S. (President 1950) on "Modern Trends in Biochemistry," devoted their Presidential Addresses to the Section's sciences. Prof. Peters' is one of the most outstanding contributions ever published by the Society.

Miss Marcia Penrose, B.Sc., led the Section in 1929 and again in 1940. Mr. W. H. Marsh, B.Sc., who became Chairman in 1933, also rendered valuable services until his death in 1944. Miss Penrose's work was of a high order and it is a matter for regret that none of her many lectures in Chemistry appears to have been published by the Society. She, with Mr. B. Gorton, M.R.C.V.S., who has contributed to the programmes of this Section since 1935, is happily still with us.

In such a brief sketch as the present it is impossible to do full justice to the services rendered by a host of able helpers. To Mr. Claude Lyon (President 1928) we are indebted for many visits made by members to works and public utility undertakings over a period of years. Between 1930 and 1940 excellent contributions were made by Mr. T. H. Littlewood, M.A., B.Sc., Miss S. J. Ingram, B.Sc., Mr. R. M. Clark, B.Sc. (who furnished a sound explanation of the formation of the regularly-shaped piles of pebbles near Alum Chine and Milford-on-Sea), and especially by Dr. J. J. Manley, M.A., D.Sc., a brilliant experimenter, known universally for his work on the chemical balance and on high vacua.

Earlier volumes of our *Proceedings* testify to the good work rendered by Mr. T. Templeton Smith, B.Sc., Mr. P. Jarett, B.Sc., Mr. A. Spencer White and Miss H. V. Davies. Mention must also be made of the descriptions and analyses of Bournemouth Waters by Mr. W. T. Gardner and Mr. A. J. Tyrell, and the studies by Dr. W. T. Ord, F.G.S. and Mr. G. Brownen, F.C.S., of the Chalybeate Earth (so-called spa) Waters of the Bournemouth Cliffs. In 1948 this analytical work was extended by a report on the Blue Pool water made by Mr. A. S. Carlos, B.Sc., F.R.I.C., and the present writer. A masterly paper was also contributed (Vol. IX) on the "Chemistry and Origin of Oils," by Dr. A. Teichfield, the more modern confirmatory evidence of which was published in Vol. XL of *Proceedings* by the present writer.

In 1948, Mr. W. J. Read, M.Sc., F.R.I.C., collected the known data regarding "Ground Ice in the River Avon" in a notable contribution to Vol. XXXIX, while in 1950 Mr. S. Weintroub, M.A., F.Inst.P., of the University of Southampton, gave a series of four lectures on phases of modern Physics. The opportunity is now taken to express to Prof. Taylor and Mr. Weintroub sincere thanks for the loan of physical apparatus from the Southampton University laboratories for the Section's stand on the occasion of our Exhibition in October 1950.

Archaeology and History

By F. WILLIAMSON, F.R.Hist.S.

From the earliest days of the Society local archaeology and history occupied the attention of the members to a considerable extent, and many of the Field Meetings, throughout the whole of the past fifty years, have been to places of historical and antiquarian interest. It would not be too much to say that there are few places within sixty or seventy miles of Bournemouth having a historical house, a prehistoric camp or stone circle, a Roman site, or ancient church, that have not at some time been visited by the Society. Indeed a mere list of places visited would fill several pages of this brochure.

From the first volume of *Proceedings* issued by the Society, papers dealing with local archaeology have appeared in print, many of them of considerable importance for the proper appreciation of the early history of our town and district. Fifty years ago parts of Bournemouth now completely built over yielded considerable numbers of prehistoric flint implements, mainly of the palaeolithic (or old stone) age, and owing to the interest of past members, the Society's museum was enriched by many fine specimens.

Mr. George Brownen, one of the earliest Chairmen of this section, collected in the Christchurch neighbourhood, specimens of implements, old coins, etc., which he presented to the Society. Among members who forty years ago were especially interested in archaeology was Mr. Henry Le Jeune. He was for a time Secretary of the Section, and in 1908 a paper of his in our *Proceedings* told of the excavations of a Roman villa at Hemsworth in Dorset, in which work he had taken part. On this site a mosaic pavement was unearthed of which another member, Mr. George Brumell, made a water-colour drawing, for reproduction, and the original drawing is still in the Museum. Mr. Le Jeune also wrote the article on the archaeology of East Dorset for the handbook of the Natural History of the Bournemouth district which the Society published in 1914.

Perhaps the longest holder of the Chairmanship of this Section was the Rev. H. Shaen Solly, who was Chairman from 1914 until his death in 1924. He took an active part in the work of the Society, and contributed to the *Proceedings* a paper on the old Norman Church of Studland; he also published several papers in the *Proceedings* of the Dorset Field Club.

From his joining the Society in 1918, Mr. Heywood Sumner was probably the most active archaeologist in the Society. Not only did he contribute many papers on local antiquities, but he also conducted many excavations in the field, the accounts of which he has left on permanent record in book form. It was his diggings on Roman pottery kilns in the New Forest, which disclosed types of pottery that have since been found in other parts of the country and recognised as "New Forest" ware. Mr. Sumner's papers were always illustrated by his own pen drawings, which were not only informative, but were charming pictures in their own right. He also made a set of coloured drawings of New Forest ware as a frieze for our archaeological room.

Besides the many excavations he carried out on his own account, Mr. Sumner also in 1921 supervised excavations by members of the Society on St. Catherine's Hill near Christchurch, of which an account was published in the *Proceedings*. Amongst other papers of his printed in the *Proceedings*, two in particular may be mentioned, as they are the only sources of information on the subjects with which they deal, namely "Ancient Earthworks in the Bournemouth District" (Vol. XI), and "Excavations of Barrows on Ibsley Common" (Vol. XIV).

Mr. Sumner was an artist by profession and a member of the Art Workers Guild and the Arts and Crafts Society. He came to live in Bournemouth in 1897, but preferring the country to the seaside he, six years later, built a house at Cuckoo Hill, South Gorley, near Fordingbridge, where he lived until his death on December 10th 1941, at the advanced age of 87. He became a member of our Society in 1918, and retained his membership until his death. In 1925 he received the Morris Gold Medal from the hands of Sir Daniel Morris for his conspicuous work on behalf of the Bournemouth Natural Science Society.

An active member of the Archaeological Section was Mr. W. G. Wallace, the son of Alfred Russell Wallace, the celebrated naturalist, and associate of Charles Darwin. He joined the Society in 1913 and remained a member until his death in 1951. He worked with Mr. Sumner on many occasions, and together, about 1920, they recorded particulars of discoveries on 6in. Ordnance Survey maps; these were kept up-to-date by Mr. Wallace, and later by Mr. J. B. Calkin, so that today the maps provide a record of local antiquarian finds which is not available elsewhere.

Another member to whom the Society is indebted for much valuable archaeological material was Mr. J. H. Scott, an original member from 1903. He was local surveyor at a

time when Bournemouth was rapidly expanding, and he got together a fine series of prehistoric implements, many of which he presented to our Museum, and to the Russell Cotes Museum. The value of these specimens is greatly enhanced by the exact data he recorded on each specimen, such as the site of the find, the depth below the surface and the date. Mr. Scott was made an Honorary Member in 1936, but unfortunately he did not live long to enjoy the dignity, as he died the following year.

After the death of the Rev. M. Solly in 1924, several changes took place in the chairmanship of this Section and the longest term of office seems to have been that of Mr. R. K. Cardew, who is well-remembered by many present members. He was Chairman of this Section from 1926 until 1933, afterwards serving as Chairman of other Sections.

Mr. Henry Bury, who joined the Society in 1924, is still an active member, and although his main interest is Geology he takes a keen interest in prehistoric archaeology and other branches of natural science, and contributed many excellent papers to our *Proceedings*. His paper on "The Bournemouth Plateau and its Palaeoliths" in 1924 was an important contribution to our knowledge of local prehistory. Among Mr. Bury's many other papers was one in 1946 on "Man as a Fossil Animal," in which he summarized in a lucid manner most of the recent discoveries on fossil man and the great extinct apes of Africa. It is a great privilege to acknowledge the debt we owe to Mr. Bury for the way he freely continues to give to the Society lectures out of his vast store of learning and his long experience.

In recent years field work and the writing up of discoveries has been mainly carried out by Mr. J. B. Calkin, who has been a Life Member since 1928. He has contributed to our *Proceedings* papers on "Prehistoric Pokesdown" (Vol. XL), and on "Agriculture and Population in Prehistoric Bournemouth" (Vol. XLI), besides publishing several papers on local archaeology in the Dorset Society's *Proceedings*. A large collection of prehistoric flint implements which he collected locally is deposited in the British Museum as the "Calkin Collection."

During the last war the Chairmanship of this Section was held from 1938 to 1944 by Mr. F. L. Lowther, and from 1944 to 1948 by Mr. A. S. Hemmy. Both unfortunately have passed away and have been much missed. Mr. Lowther in particular regularly attended our Field Meetings, and his general knowledge of natural history in several branches was always at the disposal of members, while his cheerful presence and sense of humour was always welcome.

A CORNER OF THE MUSEUM

THE LECTURE HALL: MR. H. BURY LECTURING ON JAN. 17TH, 1953

Mr. Hemmy's chief interest was in the history and archaeology of India, where he had spent many years as a University Principal. He was able to make good use of the wonderful collection of Indian slides in the Society's slide collections, which had been made and presented by the late Mr. Claude Lyon. Mr. Hemmy died in 1948 and was succeeded by the present Chairman.

Since the end of the war interest in archaeological subjects has been well maintained, and a succession of interesting lectures has been provided for the instruction of members. Some especially interesting field meetings have been held and particular mention should be made to the visits made to inspect the stone circles of Dorset, and to study the remains of Saxon architecture in eleven Hampshire churches.

It is confidently expected that the high standard of lectures and excursions which has been kept up during the past fifty years of the Society's life will at least be fully maintained in the future.

Geography

By H. de CASTRO.

The Geographical Section was not formed till late 1907. During the early years of the Society Botany and Geography rambles were conjointly run under the guidance of Miss Roper, a very active member for some years. The Section has always been a popular one, covering a wide range of interests both in lectures and field meetings. In the early 1920's on a motor excursion to Lord Radnor's at Longford Castle, 130 members attended. The first lecture given in the Section was by Mr. J. E. Liddiard, F.R.G.S., who was its first Chairman (1908-1911), on "Japanese as I have known them." The first motor excursion was undertaken in 1913 to Hodd Hill and Shaftesbury, led by the Rev. G. Bownen, during May of that year. The second Chairman was Dr. G. de Castro (1911-1915), who took over on the resignation of his predecessor through ill-health. The next member in office was Mr. Claude Lyon, who carried on till his death in 1936. Both these members, whom I knew through many years, were by their world-wide travels since the 1870's, able to give an expansion of interests to the Section. The two following Chairmen, Mr. W. J. Woodhouse (1936-1943) and Mr. F. L. Lowther (1943-1948), both having been Headmasters, were able to keep up the high standards of their predecessors. One of the older members Professor J. Cameron, M.D., D.Sc., has been of great help to the Section with his lectures, which have covered much of the Old Roman Empire. The Field Meetings cover a range of country of about 80 miles radius from Bournemouth, mainly by motor coach, and are generally well attended.

Geology

By D. A. WRAY, M.Sc., Ph.D., F.G.S.

The Society has maintained from its foundation an active Geological Section, and several members have made important contributions to the knowledge of local geology, some of which have been recorded in the *Proceedings* of the Society. The fact that Bournemouth is situated in the centre of one of the classical districts for the study of Tertiary and Secondary strata, has proved a great incentive to many workers. To the east at Barton-on-Sea are highly fossiliferous beds, which have given their name to corresponding strata all over the world, while on the west lie the Purbeck and Portland Beds which similarly have given their names to important strata of the Secondary Periods.

In the early days of the Society, Dr. W. T. Ord was Chairman for several years, and he led the members on many geological excursions. His name is particularly associated with studies of the cliffs of Bournemouth Bay, on which he contributed a paper to the fifth volume of the *Proceedings*. He was responsible for the fine collection of fossil leaves from the "leaf-beds" of Bournemouth Cliffs, which have since been completely denuded. This collection of fossil leaves forms a valuable part of the Society's Museum. Dr. Ord was also the author of the section on the geology of the district in the "Natural History of Bournemouth and District" published by the Society in 1914.

Among distinguished geologists who were associated with the Society in early days were Sir A. Smith Woodward, Dr. D. H. Scott, the eminent palaeobotanist, Mr. W. Munn Rankin and Mr. Clement Reid. The three last-named had papers printed in volume three of the *Proceedings*. The one by Mr. Clement Reid on the "Ancient Rivers of Bournemouth" had an important bearing on our knowledge of the physical geology of our area. He pointed out that in past ages the Frome, Stour, Avon, Test and Itchen had all been originally tributaries of a large river flowing from West to East which he called the River Solent at a time when the Isle of Wight was still part of the mainland, and before the encroachment of the sea in Tertiary Times had cut it off. Dr. Scott was President of the Society in 1931-32.

Mr. W. Munn Rankin came to Bournemouth in 1911 as the first principal of the Municipal College, and soon became an active member of the Society. He lectured and wrote on botanical subjects as well as geology, but unfortunately his stay in the town did not last many years as in 1917

he left to become the first principal of a new technical college at Burnley, but he retained his connection with the Society as an honorary member. He came back to Dorset on his retirement in 1940, and lectured to us as recently as March 1950, only nine months before his death.

In 1922 Mr. Henry Bury joined the Society, and the following year became Chairman of this Section, a position he held for many years. During the succeeding thirty years he has probably given more lectures, and had more papers published in the *Proceedings* than any other member. Besides keeping members informed of the various advances in geological science, he has also lectured on other branches of natural science, to the great benefit of his listeners.

This is not the place or time to assess the work done by Mr. Bury for our Society, not only as Chairman of this Section, but as President and Chairman of Council, but reference must be made here to some of his papers on geology, of which, by the way, many were printed in other publications besides our own. In 1924 appeared his paper on "The Bournemouth Plateau and its Palaeoliths," which was just as important to archaeologists as to geologists, and dealt with the evolution of the present-day land forms of the district, the plateau gravels and their origin, and also the peculiar distribution of the palaeolithic implements found in them.

His paper on the River Solent and its tributaries (1928) added much to the work of Mr. Clement Reid already mentioned. In his presidential address for 1930-31, Mr. Bury took as his subject the geographical distribution of land animals with special reference to the geological factors that have governed their distribution. In 1934 in his paper on Creech Barrow, which forms such a striking feature on the northern flank of the Purbeck Hills to the west of Corfe, he drew attention to the fact that it was capped by a bed of limestone of unusual nature and with a peculiar fauna.

In recent years Mr. J. F. N. Green has contributed several papers embodying original research. In his presidential address for 1945 he took as his subject "The History of the Bourne and its Valley." He showed how its original source probably lay in the Corfe Hills, near Corfe Mullen, and how its headwaters had been beheaded by southerly flowing streams with a steeper gradient. Its relationship to the various plateau gravels is indicated and some interesting cases of rejuvenation are recorded.

In Volume thirty-nine Mr. Green followed up with a paper entitled "A Tour of the Terraces of the Avon and Stour," in which he gave a full account of several gravel terraces in the

Bournemouth district. He had previously made extensive researches into the correlation of various gravel terraces in Southern England, and in this paper their relationship, age and content are fully discussed.

Mr. Henry Bury held the Chairmanship of the Geological Section from 1923 until he resigned in 1949, and during this long period his wide and detailed knowledge of the geology of the district was freely at the disposal of members through lectures and by personal leadership in field meetings. In 1949 he was succeeded by the present chairman.

Photography

By A. W. LEGAT, M.Inst.C.E.

The Bournemouth Society of Natural Science—forerunner of the present Society—was formed in 1883 and evidently the early members took considerable interest in photography, for in 1894 they formed a separate Photographic Society, affiliated to the parent body. One of the founder members was Mr. W. Harding, and it is good to know that his son, Mr. Ralph Harding, is still a member of our Society and an amateur photographer who has had pictures accepted by the London Salon. Between 1883 and 1903 a total of 103 papers were read but only one was on photography, the chief function of the section being the recording of work for other sections.

After the founding of the present Society in 1903, the first Photographic Section Chairman was appointed in 1905, and in the fifty years of the Society, eight men have filled the position for periods ranging from one to fifteen years. For three years the Section had the honour of being led by a Past President of the Royal Photographic Society, Mr. E. A. Robins, F.R.P.S., F.L.S., F.R.M.S.

Through the years the general trend has been towards photographic results, i.e. prints and lantern slides rather than the method by which those results are produced. Technique has, in general, been left to camera clubs, and particularly to the Bournemouth Camera Club which, for some time, has used our premises for its activities.

In recent years the Photographic Section, alone, or in collaboration with other Sections, has sponsored about twelve talks each session, which compares favourably with one in the twenty early years already referred to.

We have a well equipped dark room on the premises used jointly by our members and those of the Bournemouth Camera Club.

Through the years a collection of 10,000 lantern slides has been gathered, covering a wide range of subjects. In 1952 the Misses Penrose presented to the Society a unique collection of early colour plates made by the late Dr. Penrose about forty years ago, together with special apparatus for their projection. The slide collection contains many examples of the work of members, and special mention may perhaps be made of those by the late Mr. S. R. Wycherley, Director of Colour Photography in the 1939-45 War, and by Mr. S. Whitaker. Our projection equipment is perhaps the finest in Bournemouth, consisting of a large Epidiascope presented by Mr. Henry Bury in 1948 with fittings for $3\frac{1}{4} \times 3\frac{1}{4}$ slides, 2×2 slides and film strips. Recently a high-power lantern outfit has been added which projects, from the lantern box, all the above items to full screen size. An adapter permits excellent projection of microscopic objects. The wall screen has been supplemented recently by the latest beaded screen, with superb results.

Since the early days of the Society, photography has made enormous strides—cinematograph, colour transparencies, miniature slides, and film strips were all primitive or unknown fifty years ago. As they have developed, this Section has brought them into service for the benefit of the Society.

Entomology

By W. S. I. COX, F.R.E.S.

The Entomological Section was formed in 1914 about a month after the outbreak of war. The first Chairman was Mr. Richard Beck, F.E.S., but he had to retire the following year and his place was taken by Dr. F. G. Penrose, M.D., F.Z.S.

The first lecture in this Section was concerned with Lepidoptera and was given in 1915 by Mr. Joseph Neale, B.A.; it related to the vagaries of the Puss Moth Caterpillar.

The year 1916 was a quiet one, but in 1917 there was greater activity owing to the unusual abundance of insect life throughout the year.

When Dr. F. G. Penrose was elected President after the war, his place as Chairman of the Entomological Section was

taken by Mr. Joseph Neale, B.A., a position he occupied for a number of years.

During this period one of the most valuable gifts made to the Entomological Section of the Society during the whole of its existence, was made by Dr. G. E. J. Crallan, M.A., M.R.C.S., who presented two large cabinets of Lepidoptera which are known as the Crallan Collection.

Half of one cabinet is devoted to Butterflies and among these are to be found a very good selection of varieties from standard types. The second cabinet contains most of the Moths (*Macro Lepidoptera*), and many of the uncommon species are included in this Collection. There are so many varieties of certain moths that it is certain Dr. Crallan must have collected or acquired some thousands of a single species to make it possible to show so many specimens that depart from the standard type.

The only original member of the Entomological Section still with us, is Miss K. M. Chilver who gave some interesting lectures on the habits of Indian Butterflies in 1931 and 1932. She has refreshed our memory of these insects as recently as April 1952.

Dr. Crallan gave us a number of lectures between the two wars and in the absence of an Episcopo he usually illustrated these with specimens from the collection he gave our Society.

Shortly after Dr. Crallan retired from the Chairmanship of the Section his place was taken by our esteemed member, Mr. B. Gorton, M.R.C.V.S. He was in turn succeeded by Mr. S. C. S. Brown, L.D.S., R.C.S., who retained this position until 1948.

In addition to the Crallan Collection the Society possesses the Beeching-Hall Cabinet of Coleoptera and the Ewbank Collection of Foreign Butterflies.

There is also a small display of Dragonflies and a drawer containing all the Butterflies, two-thirds of all the British species, collected in the Bournemouth area during the fifty years of the Society's existence.

At the present time the collections of Lepidoptera are being re-labelled with English as well as Latin names and it is hoped to complete this work by the end of the year.

Astronomy

By W. P. WINTER, B.Sc.

From the records of the Society's early days not much can be gleaned of the activities of this Section. During the chairmanship of Mr. Peck (1924-26) a group of members met occasionally to discuss questions of Spherical and Dynamical Astronomy and to compare observations of meteors, planetary surfaces and variable stars.

Popular lectures were given by members and visitors from the British Astronomical Association on Solar Physics, Current Occultations and Eclipses, Planetary Astronomy and the contemporary work of Jeans and Eddington on Astrophysics.

During the chairmanship of Mr. Benny (1927-29) a visit was made to the Norman Lockyer Solar Physics Observatory at Sidmouth. The theories then current regarding stellar evolution were explained by the Chairman and others in their lectures.

In 1934 the Society was honoured by having as its President Sir Frank Dyson, F.R.S., then Astronomer Royal, who took as the subject of his Inaugural Address "The Discovery of the Solar System," and delivered an admirable summary of the development of planetary theory from Eratosthenes to Einstein, in which the works of Copernicus, Kepler, Galileo and Newton were admirably linked in the best manner of historical exposition. The perusal of this address in Vol. XXVII of the *Proceedings* is an intellectual pleasure.

During the middle thirties the Section had as chairman Mr. H. Goodacre, whose work as celestial photographer and illustrator is well known. A paper on the Athens eclipse in 1936 was outstanding, as was one on Cosmic Rays, then in the earlier stages of investigation. Mr. Goodacre died in 1938 and his successor, Capt. Ainslie, R.N., held office for a decade. Like his predecessor he was a diligent observer, as his contributions to the Monthly Notices testify. His own Address on becoming President dealt with the problem of "Life in Other Worlds," the evidence *pro* and *con* being subjected to a judicial scrutiny which must have led his hearers to a verdict of "Not Proven." The current controversies were well dealt with in the programmes, and Prof. O'B. Ellison, whose photographic work has been so much admired, contributed a paper on Saturn.

Captain Ainslie's death, occurring during the period of reconstruction following the war, left the Section without a Chairman for some time, during which the Physics and Chemistry section adopted the Astronomical orphan *pro tem*. It, however, resumed its independent career in 1951 and in each of the last two sessions five lectures have been given, including two on the post-war work in Radio Astronomy.

This Section has at all times interested itself in subjects which lie partly in the domain of other branches of science, e.g., optics, geophysics and radiation physics, as far as they are relevant to astronomical study; in this way we invite and receive both help and criticism from other sections.

The Society is the fortunate possessor of excellent sets of lantern slides, formerly the property of Mr. Goodacre and of Mr. Wycherley, two members whose memories we hold in high regard.

Microscopy

By J. H. MURGATROYD, F.L.S., F.Z.S., F.R.E.S.

This Section, founded by the late Mr. S. R. Wycherley some ten years ago, has made steady progress. Thanks to the generosity of members, the Section now possesses four microscopes and a collection of several thousand slides. A microprojector attachment for the Society's new lantern enables micro-slides requiring moderate magnification to be thrown direct on to the screen for lecture purposes.

A regular series of lectures in pure microscopy, and in the uses of the microscope in the sciences and in industry, has been steadily continued; some courses in practical micro-technique have been taken, and the Section has made a popular contribution to the various exhibitions organised by the Society.