

## Marine Biological Association of the United Kingdom.

### Report of the Council, 1894-95.

#### The Council.

The Council has met on ten occasions during the past year for the transaction of the business of the Association. The average attendance at the meetings has been 7.5. Meetings of Special Committees have also been held as occasion required.

For various reasons, it is proposed in the future to hold only four Council Meetings in each year, unless special occasion should arise for increasing their number.

Dr. A. Günther, F.R.S., who had been a member of the Council since its formation in 1884, resigned his seat in the course of the Session, owing to pressure of other occupations, and was elected a Vice-President of the Association. Mr. G. C. Bourne, of New College, Oxford, was elected to fill his place.

The Council has again to acknowledge the courtesy displayed by the Royal Society and the Linnæan Society, in permitting the meetings of the Association to be held in their rooms.

#### The Plymouth Laboratory.

The defects in the large reservoirs, referred to in the last Report, have been made good by draining and cementing on the south side.

Some considerable trouble was given last year by a fracture in the large pipe which leads seawards from the ejector; this had been presumably caused by a vessel having dragged her anchor over it; the repairs, which necessitated the employment of a diver, have been carried out satisfactorily.

The Council is now able to give a satisfactory report of the condition of the buildings, fittings, and machinery of the Laboratory.

#### The Boats.

During the past year the greater part of the work of collection of specimens at sea has been carried out by hired steam-tugs, supple-

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*Halecium tenellum.*

*Plumularia halecioides.*

mented whenever possible by the Association's sailing-boat, the *Anton Dohrn*. The small steam-launch *Firefly*, which was most serviceable for this purpose for many years, has been at last sold for breaking up.

The Council greatly regrets that there is no immediate likelihood of the Association procuring a suitable boat for deep-sea work.

### The Library.

All the most important annual publications relating to Sea Fisheries are now in the Library, both official publications of most Governments, and publications of fishery societies and local authorities. Several memoirs, containing the results of marine explorations, have been added during the past year, notably the two concluding volumes of the *Challenger* Reports; there have also been added memoirs from the German Plankton Expedition, the cruises of H.M.S. *Investigator*, in the Bay of Bengal, the Commission for Investigation of the German Seas, and the Bahama Expedition of the Iowa State University. The Association has also received, by gift and exchange, the publications of the Royal Societies of London and Edinburgh, the Zoological Society, the Royal Microscopical Society, the Society of Arts, and numerous other scientific societies, academies, and museums at home and abroad. To these, and to the many donors of books and papers, the Council take occasion to render the thanks of the Association.

### The Museum and Exhibition Series.

Although a good deal has been done in the Museum during the past year, much remains still to be done; and the Director has been fortunate in obtaining promises of assistance from various naturalists in this important work during the coming summer.

The series of specimens mounted for exhibition, to which reference has been made in the last two Reports of the Council, was shown at the meeting of the British Association at Oxford, in 1894, and is at present at the Scarborough Fishery Exhibition, together with a set of dredges, trawls, and tow-nets.

### The Staff.

Several changes have occurred lately in the Staff. Mr. E. J. Bles resigned the post of Director on October 11th, 1894; and Mr. E. J. Allen, B.Sc., University College, London, who had long been a worker at the Laboratory, succeeded him on January 12th, of this year.

Mr. Cunningham is at present stationed at Grimsby.

Mr. E. W. L. Holt was unfortunately compelled, by ill-health, to leave the Association's service in March last, and Mr. Stead has been

appointed for the term of one year, to carry out, for the Plymouth district, statistical and other inquiries similar to those upon which Mr. Holt has been engaged at Grimsby.

Mr. J. P. Thomasson, to whose generosity the Association has been so largely indebted in previous years, has renewed his donation of £250, for fishery investigations on the North Sea for another year, commencing in March last.

### General Report.

Mr. Holt concluded his work at Grimsby in the winter, and has since then prepared an account of his observations on the North Sea Fisheries during the past three years, in a more popular form than the technical papers which he has contributed to the Journal. This summary, which gives a most valuable and unique picture of the present state of the Fisheries, and should prove of great value in the event of protective legislation, has been printed as a special number of the Journal, and reprinted for sale and distribution.

Mr. Cunningham has prepared for press a natural history of marketable sea fish, to appeal to a wider public than the Journal can attract, which will also be issued as a special number of the Journal, and reprinted for distribution and sale. This memoir is especially designed for the use of the Sea Fisheries' Committees controlling the fisheries of the English coast.

In addition to the preparation of this memoir, Mr. Cunningham has continued his investigations into the rate of the growth of fishes, and the minute structure of the eggs and ovary; he has also carried out further experiments in the relations between light and colouration of fishes.

The water in circulation at the Laboratory has lately improved very greatly in quality under a new system of working introduced by the present Director. Whether as a consequence of this or not, the soles in the aquarium have bred this spring for the first time; no previous record is known of soles having bred naturally in confinement.

After June 30th, the arrangement will terminate, by which the Association has made an annual contribution to the Marine Fisheries Society (Grimsby) in return for the use and control of the Cleethorpes Aquarium by Mr. Holt.

The following interesting additions have been made to our knowledge of the Plymouth Fauna during the past year:

*Tiaropsis diademata.*

*Halecium tenellum.*

*Plumularia halecioides.*

*Syncoryne mirabilis.*

*Aplidium zostericola.*

*Amarœcium punctum.*

*Distaplia rosea.*

*Circinalium concrecens.*

*Corymorpha nutans*, of which no specimens have been taken since 1887, has lately been captured on two occasions.

### Occupation of Tables.

The following naturalists have occupied tables in the Plymouth Laboratory during the past twelve months :

E. J. ALLEN, B.Sc., University College, London (Nervous System of Crustacea).

R. ASSHETON, M.A., Cambridge (Elasmobranch Development).

G. P. BIDDER, B.A., Naples (Porifera).

E. T. BROWNE, B.A., University College, London (Variation of Aurelia).

G. W. BUTLER, B.A., Chertsey (Teleostean Development).

G. P. DARNELL-SMITH, B.Sc., Bristol (Physiology of Algae).

W. GARSTANG, M.A., Oxford (Tunicata).

E. S. GOODRICH, Oxford (General Zoology).

M. D. HILL, B.A., Oxford (Molluscan Ova).

J. J. LISTER, M.A., Cambridge (Development of Foraminifera).

Prof. C. C. NUTTING, State University, Iowa (Hydroids).

T. H. RICHES, B.A., Plymouth (Development of Nemertines).

J. C. SUMNER, Royal College of Science, London (Echinodermata).

T. H. TAYLOR, Yorkshire College, Leeds (Polyzoa).

Surgeon P. W. BASSETT-SMITH, R.N., Plymouth, and Mr. L. J. PICTON, Oxford, have also made use of the Laboratory, without formal occupation of a table.

The following papers, either wholly or in part the outcome of work done at the Plymouth Laboratory, or by members of the Staff stationed elsewhere, have appeared during the past year, in addition to those published in the Journal :

BROWNE, E. T.—*On the Variation of the Tentaculocysts of Aurelia aurita*, Quart. Journ. Micr. Sci. xxxvii, 245.

GARSTANG, W.—*On the Gastropod Colpodaspis pusilla of Michael Sars*, Proc. Zool. Soc. November 20th, 1894.

SUMNER, J. C.—*Description of a New Species of Nemertine*, Ann. and Mag. of Nat. Hist. ser. 6, vol. xiv.

WELDON, W. F. R.—*An Attempt to Measure the Death-rate due to Selective Destruction of Carcinus mænas, with Respect to a Particular Dimension*, Proc. Roy. Soc. lvii. p. 360.

### Donations and Receipts.

The Receipts for the past year include the annual grants from H.M. Treasury (£1000) and the Worshipful Company of Fishmongers (£400); and a special donation of £250 from Mr. J. P. Thomasson for the prosecution of fishery investigation. Other sources of income have been—the annual subscriptions (£135), composition fees (£25), rent of tables in the Laboratory (£39), sale of specimens (£205), and admission to the Aquarium (£66); the total amounting, with lesser sums, to £2178.

### Vice-Presidents, Officers, and Council.

The following is the list of gentlemen proposed by the Council for election for the year 1895-96:—

#### *President.*

Prof. E. RAY LANKESTER, LL.D., F.R.S.

#### *Vice-Presidents.*

The Duke of ARGYLL, K.G. K.T.,  
F.R.S.

The Duke of ABERCORN, K.G., C.B.

The Earl of ST. GERMANS.

The Earl of MORLEY.

The Earl of DUCIE, F.R.S.

Lord REVELSTOKE.

The Right Hon. Lord TWEEDMOUTH.

Lord WALSINGHAM, F.R.S.

The Right Hon. A. J. BALFOUR, M.P.,  
F.R.S.

The Right Hon. JOSEPH CHAMBER-  
LAIN, M.P.

The Right Hon. Sir JOHN LUBBOCK,  
Bart, M.P., F.R.S.

Prof. G. J. ALLMAN, F.R.S.

Sir EDWARD BIRKBECK, Bart., M.P.

Sir WM. FLOWER, K.C.B., F.R.S.

A. C. L. G. GÜNTHER, Esq., F.R.S.

Prof. ALFRED NEWTON, F.R.S.

Rev. Canon NORMAN, D.C.L., F.R.S.

Sir HENRY THOMPSON.

Admiral WHARTON, R.N., F.R.S.

#### **Elected Members.**

F. E. BEDDARD, Esq., F.R.S.

Prof. F. JEFFERY BELL, F.Z.S.

G. C. BOURNE, Esq., F.L.S.

Sir JOHN EVANS, K.C.B., Treas. R.S.

G. HERBERT FOWLER, Esq.

S. F. HARMER, Esq.

Prof. W. A. HERDMAN, F.R.S.

Prof. S. J. HICKSON, F.R.S.

J. J. LISTER, Esq.

Prof. W. C. MCINTOSH, F.R.S.

P. L. SCLATER, Esq., F.R.S., Sec. Z.S.

D. H. SCOTT, Esq., F.R.S.

Prof. CHARLES STEWART, V.P.L.S.

Prof. W. F. R. WELDON, F.R.S.

#### *Hon. Treasurer:*

E. L. BECKWITH, Esq.

#### *Hon. Secretary:*

E. J. ALLEN, Esq., The Laboratory, Plymouth.

