The Courtship of Birds.

PROF. JULIAN HUXLEY and his co-workers have recently made some further contributions to the subject of the courtship of birds, dealing with three species of waders which were kept under close observation during two visits to the Texel.

The extent to which special courtship performances are developed in the order differs widely as between one species and another. Thus, the avocet (J. S. Huxley, British Birds, 1925, 19, 88) has no courtship at all. There is an invitatory attitude adopted by the female immediately before coition, responsive excitement on the part of the male, and a post-nuptial ceremony in which the pair run forwards together with the cock's half-spread wing over the hen's back-but of true courtship nothing.

On the other hand, the black-tailed godwit (J. S. Huxley and F. A. Montague, Ibis, 1926, 1) exhibits an elaborate courtship behaviour. There is a ceremonial flight accompanied by a special call, which is performed by the male and is probably associated with the territorial instinct. Then there is a tail display by the male, performed on the ground before the female, which is a true courtship activity. is also a scrape ceremony, mainly performed by the male, which is obviously derived from the nesting Both birds, further, take part in a joint flight, and there is pursuit of the female by the male, hostility between rival males, and a coition ritual. The whole makes up a complex series of events.

The oyster-catcher (J. S. Huxley, assisted by F. A. Montague, *Ibis*, 1925, 868) seems to occupy an intermediate position in regard to the development of courtship activities. Special interest attaches to the piping performance, which consists of continuous piping while the neck is thrust forward and the head and the open beak are directed downwards: this may be accompanied by bobbing of the body or, more often, by dancing movements. It is shown that this is not of purely courtship significance, and that it is performed by both sexes and in varying circumstances. "It may be merely an expression of general sexual excitement, performed by a single bird without special relation with other birds. Or it may be a display definitely directed at another bird, which may or may not be the mate, and may or may not join in; or it may be a definite sign of hostility, either by one bird of a pair to a single intruder of the same sex, or by one pair to another. Or, finally, it appears that sometimes, where hostility might be expected, extra birds may be allowed to join a performance, in which case social excitement also seems to come into play."

The League of Nations Cancer Inquiry.

THE death rate from cancers of the breast and uterus in England is much higher than it is in Holland or Italy. The Health Organisation of the League of Nations appointed an international committee, with Sir George Buchanan as chairman, and also a committee of statisticians, presided over by Dr. M. Greenwood, to look into the matter, and the first results have now been published.1 The greater part of the reports is occupied by elaborate statistical surveys of the available data for England by Dr. Greenwood, for Holland by Dr. H. W. Methorst, and

¹ Société des Nations: Organisation d'hygiène; sous-comité du Cancer. Rapport sur les résultats des enquêtes démographiques dans certains pays. (C.H. 333, Vol. 1.) Pp. 168. Rapport sur les résultats de certaines enquêtes, clinique se rapportant aux différences de mortalité cancéreuse dans certains pays choisis spécialement. (C.H. 333, Vol. 2.) Pp. 392. (London: Constable and Co., Ltd., 1925.)

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for Italy by Prof. A. Niceforo, and their analysis is directed particularly to the relation of marriage age and place to the incidence of these forms of cancer. The non-technical reader will find the introductory summary easier to follow, and there is room for a still simpler abstract which, with a few diagrams, would deserve wide circulation among medical men.

The Committee finds that the three countries differ in their mortalities as stated, and significant differences of rate occur in the different divisions of each country: in England, cancer of the breast is most prevalent in the east and south, in Holland on the western coast, in Italy north of Rome. The Committee agrees in providing very full confirmation of the belief that cancer of the breast falls most heavily on unmarried women, cancer of the uterus on those who have been married. It is also shown definitely that women who develop cancer in either site are less fertile than those who do not.

These results are something more than confirmations of what was already known or suspected, for they are based on such comprehensive considerations that they reach an order of validity, exceptional in medical literature, which makes it necessary that any hypothesis on the cause of cancer should not be incompatible with, and should ultimately explain, them. Having securely established the facts, the Committee proceeded to look for an explanation of them. So far the results of this inquiry have been uniformly negative: the circumstances investigated have been those personal factors which are dealt with in hospital records; more may be obtained when the domestic and social sides of life are considered. The whole report is an excellent example of what the League can do in such matters, and we hope for much more of the same kind of solid work.

University and Educational Intelligence.

St. Andrews.—The Senatus Academicus has resolved to confer the Honorary Degree of LL.D. on Dr. E. F. Armstrong, Director of the British Dyestuffs Corporation; Dr. George Forbes, distinguished by his pioneer work in electrical engineering and popular writings on astronomy; Mr. E. S. Harkness, of New York, founder of the Commonwealth Fund; and Prof. E. T. Whittaker, professor of mathematics and Dean of the Faculty of Arts in the University of Edinburgh. The degrees will be conferred at the Graduation Ceremonial to be held on June 29.

THE Air Ministry announces that Sir Charles Wakefield, Bart., has generously offered to continue the 'Sir Charles Wakefield' Scholarships, founded by him in 1920. These scholarships are each of 75l., tenable for one year at the R.A.F. Cadet College, Cranwell, and are intended to give financial assistance to successful candidates for entry into the College. Two scholarships are awarded at each halfyearly entry. One of these is awarded on the result of the open competitive examination for admission to the Cadet College held in June and November, and the other to one of the aircraft apprentices who at the conclusion of their training at the R.A.F. training establishment at Halton are selected twice a year for flight cadetships at Cranwell.

THE Ministry of Agriculture and Fisheries is prepared to receive by, at latest, May 15, applications for grants in aid of scientific investigations bearing on agriculture to be carried out in England and Wales during the academic year beginning October 1, 1926. A prescribed form of application (A. 53/TG) giving particulars of the conditions under which the grants

are offered, may be obtained from the Secretary, Ministry of Agriculture and Fisheries, 10 Whitehall Place, S.W.1 The Ministry also invites applications for a number of research scholarships in agricultural and veterinary science which will be tenable for three years and be of the annual value of 2001., plus, possibly, allowances for travelling and subsistence abroad. Copies of application form 900/TG are obtainable from the Secretary, and must be returned not later than June 30.

WE have recently received the report for the year 1924-25 of University College, London, which shows a total student enrolment (3033) exceeding by 198 the total for the preceding year. The enrolment for the current session is likely to be still larger. The total includes 388 evening students and 214 attending vacation courses. Excluding these there were 1911 undergraduate and 520 post-graduate and research students. More than one-fifth came from homes beyond the British Isles, including 230 (83 postgraduate and research) from various parts of the Empire. India and Cevlon contributed to (1) Empire. India and Ceylon contributed 124 (43), Australia 24 (14), Canada 10 (5), New Zealand 12 (7), South Africa 27 (7), the figure in brackets indicating the number of research students. Among foreign countries, the United States of America were represented by 52 (24), Japan by 41 (11), Germany by 51 (3), Switzerland by 39 (1), France by 32, Holland 21 (2). The large number (148) of post-graduation and research students from beyond the British Isles is noteworthy. Free public lectures have for many years been a conspicuous feature of the work of the College. In 1924-25 they were attended by more than 6,000 persons. The list of appointments in other countries obtained by members of the College, staff and students, during the year includes professorships at McGill, Dalhousie (Halifax), Mysore, Cape Town, and Vassar.

In a pamphlet entitled "The New University of Reading: some ideas for which it stands," Principal W. M. Childs gives prominence to the idea that the collegiate or residential principle, so characteristic of Oxford and Cambridge, is indispensable to the fulfilment of the highest functions of a university. Among these functions is training in character and living as well as opportunity for acquiring knowledge, and the corporate life of the students is the most favourable medium for such training. An instructive parallel is drawn between the academic and the economic worlds: "The whole world is sick because in getting rich and progressive something essential to human contentment has been lost or greatly mutilated; namely, personal relations. . . . Is it proposed to transfer this sickness from the sphere of economics to the sphere of education?" If not, it is essential that conditions should be favourable for the development of individual personal contact of teacher with student, and student with student. The residential halls of Reading, accommodating no less than 70 per cent. of the full-time students, represent the greatest achievement of the movement for establishing such conditions in the modern provincial universities and university colleges. Another subject dealt with in the pamphlet is "Universities and Research," in connexion with which attention is directed to the recent constitution of a Research Board with a general responsibility and mission for promoting and stimulating research in fields other than that covered by the work of the National Institute for Research in Dairying (which is a part of the University of Reading) and of administering to that end funds entrusted to it by the Council (for 1925–26, 500l.).

Contemporary Birthdays.

April 17, 1863. Dr. George Grant MacCurdy.
April 21, 1871. Sir Sydney John Chapman, K.C.B.
April 22, 1840. Mr. Richard Inwards.
April 23, 1869. Prof. Percy Edward Newberry.
April 24, 1841. Prof. Charles Sprague Sargent.

Dr. MacCurdy, the distinguished American anthropologist, was born at Warrensburg, U.S.A. Graduating at Harvard, he studied afterwards at the Universities of Vienna, Paris, and Berlin. His connexion with Yale University dates back some thirty years. Since 1923 he has been accorded the status of professor and curator of the anthropological collections in Yale. Dr. MacCurdy was the first director (1921) of the American school in France for prehistoric studies. He is the author of "The Eolithic Problem" (1905), and "Human Origins" (1924, 2 vols.).

Sir Sydney Chapman, permanent secretary of the Board of Trade since 1919, was born at Wells, Norfolk. He was educated at Manchester Grammar School and Owens College, graduating from thence at Trinity College, Cambridge. Lecturer in economic and political science in the University of Cardiff from 1899 until 1901, he returned to Owens College to take up the post of professor of political economy, retaining this for sixteen years. Sir Sydney was president of Section F (Economic Science and Statistics) at the British Association's Winnipeg meeting in 1909. The general topic of his address related to the value of leisure, the bearing of industrial development upon it, and its effectiveness in shaping economic arrangements. He has been a recipient of the Guy medal of the Royal Statistical Society.

Mr. Inwards was born at Houghton Regis. For many years engaged in mining engineering and kindred enterprises in Bolivia, Mexico, and other parts of the world, he finally settled in England. Joint editor for two decades of the Quarterly Journal of the Royal Meteorological Society, he was the Society's president in 1894–95.

Prof. Percy Newberry, honorary reader in Egyptian art at the University of Liverpool, was educated at King's College School, London, and King's College. Beginning the study of Egyptology in 1884, his acquirements and exactitude in procedure qualified him to be officer in charge (1890) of the archæological survey of Egypt, conducted under the auspices of the Egypt Exploration Fund. Brunner professor of Egyptology in the University of Liverpool from 1906 until 1919, Prof. Newberry was president of Section H (Anthropology) at the British Association's meeting in that city in 1923. He gave an address on "Egypt as a Field for Anthropological Research."

Prof. Sargent, the veteran American botanist, who is a foreign member of the Linnean Society of London, was born at Boston, U.S.A., and graduated at Harvard University. Sometime director of the Boston Botanic Gardens, it was Sargent who organised the Jesup collection of North American woods for the American Museum of Natural History, New York. He was one of the commissioners (1896) detailed to report upon a forest policy for the forestry lands of the United States. He is the author of "A Manual of the Trees of North America," and "The Forest Flora of Japan."