

### 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. There is also a scrape ceremony, mainly performed by the male, which is obviously derived from the nesting instinct. 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.<sup>1</sup> 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

<sup>1</sup> 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.)

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 75*l.*, 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 half-yearly 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