

OBITUARY.

JOHN MICHAEL DEWAR.

(1883-1941).

IT is with much regret that we have to record the death of Dr. John Michael Dewar, which took place on May 24th, 1941, at the comparatively early age of fifty-eight. Dewar was a meticulously careful and markedly original observer and is best known to ornithologists for his work on diving birds and for his very full and exact field-studies of the feeding habits of several waders. His book *The Bird as a Diver*, published in 1924, is the standard work on the subject and was the product of prolonged and intensive field observation, as may be gathered from the fact that his conclusions were based on the timing of nearly six thousand dives of twenty-three species in known depths of water. His studies led him to the conclusion that depth is the principal factor determining length of dive, the time-depth relation being expressed by his "20-10 second rule" (20 seconds for the first fathom and 10 for every fathom after), and he showed that the application of a technical formula, that of an autocatalytic chemical reaction, gave an even closer approximation to the average times actually observed at known depths. In his later writings, however, he referred only to the 20-10 seconds rule, probably because of its greater simplicity and intelligibility to laymen and because he considered it adequate for all practical purposes. Exceptions to and deviations from the rule are possibly more widespread than Dewar believed, but no other student has contributed so much to our better understanding of the activities of diving birds and his work remains a contribution of outstanding merit to the sciences of ornithology and biology. His studies of the feeding behaviour of the Oyster-catcher (*Zool.*, 1908, 1910, 1913) and Dunlin (*t.c.*, 1909) are excellent illustrations of the effect with which his powers of observation were brought to bear on things which less enquiring minds would have passed over as commonplace. He had paid a great deal of attention to the Oyster-catcher and was the author of a long and detailed paper on the relation of the species to its environment in the *Zoologist* for 1915 and of an instructive study in the present journal (*antea*, Vol. xiii) of the progress of the individual towards maturity, dealing with the development of the various reactions of the young bird. Readers of *British Birds* will also recall his recent interesting communication on the

identity of the specialized feeding habits of Turnstone and Oyster-catcher. He was also the author of discussions in the *Zoologist* of the evolutions of waders (1912) and the sense of direction in birds (1915) and of various shorter papers and notes in the ornithological and natural history journals. Nearly all of them bore witness to the activity and originality of his mind, an excellent example amongst his shorter communications being his ingenious and almost certainly correct demonstration of how the Dipper progresses under water (*antea*, Vol. xxxii). His intense desire for absolute accuracy and fear of publishing anything which might prove in after years to be wrong led him to conserve his output of published work, but in private he was a voluminous writer as well as a great reader. He devoted much time and care to the abstracting of ornithological notes and papers in both English and foreign languages, and his sister informs us that he was able to cope even with Russian. We learn that at the time of his death he had ready for publication a large work of reference entitled a *Dictionary of the Habits and Behaviour of Birds*.

Dewar was educated at George Watson's College and Edinburgh University and graduated M.B., Ch.B. in 1904. He obtained the degree of M.D. with high commendation in 1914. He was a Fellow of the Royal College of Physicians, as well as a Fellow of the Royal Society of Edinburgh, to which he was elected in recognition of the merits of his book, *The Bird as a Diver*. He was Civilian Medical Officer to the Royal Air Force and since the outbreak of war a temporary Assistant Physician at the Edinburgh Royal Infirmary. He may be said literally to have died in harness, as though not in robust health he refused to give in until it was too late to save his life, and both the medical profession and the science of ornithology are the poorer for the loss of a devoted servant.

B.W.T.