(pp. 248-49) and not a true cliff. Neil Ferguson of St. Kilda in a letter to me apropos of this writes: "I am sure the sheep on St. Kilda are now disturbing a lot of fulmars. At the time of their laying we used, as long as we lived on the island, to fence the sheep off the easiest places where they would 'spoil the fulmars' as we used to say, and used to repair the fence each season before the laying time."

On p. 249 some unusual nesting sites of the fulmar are recorded. On North Ronaldshay the species was nesting on ruined buildings in 1934, and on inhabited dwellings in 1937; on Sanda, an isle of the Orkney group, it nests on the ground among Arctic terns.

Several instances are on record of a fulmar attacking a herring gull, but the species as a rule seems to be harmlessly disposed towards its neighbours. Yet there are a number of reports to the authors of the paper that it causes other sea birds to leave the sites which it occupies.

OBITUARIES

Prof. L. Roule

PROF. LOUIS ROULE, whose death has recently been reported, was the fifth occupant of the Chaire de Zoologie (Reptiles et Poissons) at the Muséum National d'Histoire Naturelle of Paris, a chair which, as its present occupier, Prof. Pellegrin, has remarked, seems to confer the gift of longevity on its holder. Louis Roule was born in Marseilles in 1861 and studied in the school of medicine in his native town.

Prof. Roule's early zoological work was on worms and tunicates, and his doctorate, gained in 1884, was awarded for a thesis on the Ascidians of the coast of Provence. He became professor at the University of Toulouse in 1892 at the age of thirty, his duties including the direction of the station of pisciculture and hydrobiology associated with the University. It is here that the origin of Roule's interest in fishes is to be found; that he never lost interest in the economic aspect of ichthyology is evidenced by the publication in 1914 of his "*Traité de pisciculture et de pêche*", and the devotion of one of the ten volumes of his "*Les Poissons et le Monde vivant des Eaux*" to the same subject.

Nevertheless, during his tenure of the Museum chair, to which Roule succeeded in 1910, it was largely with those fishes most remote from man's practical interests that his original works were concerned. He produced important reports on the fishes collected by the French Antarctic Expedition led by Commandant Charcot, on oceanic fishes and their larvæ collected by Prince Albert I of Monaco, and on larval and adult deep-sea eels collected by the Danish oceanographical expeditions led by Johannes Schmidt. The handsome volumes published at Monaco were enhanced by the artistic collaboration of Fernand Angel, who also illustrated the work on deep-sea eels (done in collaboration with Leon Pertin) and many of Roule's smaller publications.

The strange forms and peculiar conditions of life of the fishes that dwell poised far below the broad surface of the ocean and as far above its deep floor never fail to grip the imagination of any zoologist fortunate enough to handle them. Roule was fond of generalizations, and his conception of some of the most aberrant of the bathypelagic fishes as "*monstres normalisés*" was characteristic. One of the ten volumes of the popular work referred to above was

devoted to abyssal fishes, and another (which was translated into English) to the migrations of fishes, a subject in which he was particularly interested. The philosophical vein in all ten volumes, and particularly in the last, allows one to suppose that he offered this book, not merely as a by-product of his scientific life, but also as a summing up of his experiences, the rounding off of a satisfying career.

E. TREWAVAS.

Prof. J. H. Salter

WE regret to record the death of Prof. J. H. Salter on August 5 at the age of eighty-one. John Henry Salter was born in Westleton, Suffolk, on June 5, 1862. In 1869 his father died, and the family moved first to Woodbridge, and then to Scarborough. Dr. Salter attended Ackworth School and afterwards became an apprentice master at the school and studied at Flounders College. He graduated B.Sc. London, and taught at various schools during 1881-88. He then proceeded to Dalton Hall, Manchester, to read botany under Prof. Williamson and Mr. Hick at Owens College. In 1891 he demonstrated at University College, London, for a short time and was later appointed as the first professor of botany at Aberystwyth, under Principal T. F. Roberts. Obtaining a year's leave of absence in 1896, he went to Bonn and worked under Strasburger. He was replaced at Aberystwyth during this time by Keeble (later, Sir Frederick Keeble).

In later years Dr. Salter often spoke with pleasure of his time at Bonn, where he formed one of a group which included Harper, Swingle, Fairchild and Osterhout, as well as Schimper and V. H. Blackman. Harper, Swingle and Fairchild were studying the dividing nucleus and the spindle, Schimper was already interested in plant geography, and Dr. Salter was investigating the connexion between pyrenoids and starch grains. His drawings were beautifully executed in water colours, and were presented by him to the Botany Department of the University College of Wales, Aberystwyth, a week before his death. During the time that Dr. Salter worked under Strasburger, he learned from him the method of preparing herbarium sheets which he used and developed for the rest of his life. The plants were pressed between layers of cotton wool, each overlapping leaf was separated by a slip of drying paper, and the finished specimens showed all the care of the master hand. He specialized in *Salix* and *Mentha*, as well as collecting a large general herbarium, which he gave to the National Museum of Wales, Cardiff, a few months ago.

In 1897 he returned to Germany to work with Meyer at Marburg on the interrelationship between the algal and fungal components of lichens. He was convinced that the fungus obtained food from the alga, and his drawings, executed with meticulous care, form part of his recent gift to the University of Wales, Aberystwyth.

He married Adah S. Freeman of Birmingham in 1899. In 1908, he resigned from the chair at Aberystwyth, on account of a breakdown in his wife's health, and the family moved first to the Canary Islands, and then to the south of France. These countries gave wide scope for his interests and he added the record of several new species to the flora of the Canary Islands, as well as continuing his studies in conchology, ornithology and entomology.

The family returned to England in 1916 and, after