obituary

Alexander Wetmore

ALEXANDER WETMORE, who died in Maryland on 7 December 1978 at the age of 92, was for over 50 years one of the leading figures in world ornithology. Born in Wisconsin on 18 June 1886, he lived all his life in the United States, devoting his professional life to two organisations, first the Biological Survey of the Department of Agriculture (1910–1924) and from 1924 the Smithsonian Institution. From 1945 to 1952 he served as Secretary of the Smithsonian Institution, and he continued to work there after his retirement until a short time before his death.

A good many living and recent ornithologists have had new subspecies, and even the occasional new species of bird named after them; but few have had the distinction of giving their name to a new genus, such as *Wetmore-thraupis*, a new tanager of uncertain affinities discovered in northern Peru in 1963 and named by Lowery & O'Neill in Wetmore's honour 'in recognition of his many outstanding contributions to ornithology, ranging from the classification and systematics of both recent and fossil birds to such diverse facets of the subject as bird migration and pterylosis.' Indeed Wetmore's name has become a household word among ornithologists, for his classification of the birds of the world, forming the basis for the well known 'Wetmore order', has, with modifications necessitated by new knowledge, become the generally accepted arrangement, as adopted in Peters' *Checklist of Birds of the World* and other authoritative compilations.

Dr Wetmore's eminence as a research ornithologist was based on an extraordinary capacity for work, meticulous accuracy, and a very wide range of interests. When he was Secretary of the Smithsonian he customarily arrived at his laboratory at about 6 a.m. and worked steadily on his scientific projects for three or four hours before devoting a full day's work to his duties as Secretary. Up to his late 80s he continued to make regular field trips to Panama, collecting specimens and gathering information for his 4-volume *Birds of the Republic of Panama*, the last volume of which was left unfinished at his death. These qualities, applied to avian palaeontology at a time when the subject was in a state of comparative neglect, quickly made him a leading authority, his con-

tributions providing almost all that was known of the birds from the extensive Oligocene deposits of western North America. Since 1914 he described as new 189 species and subspecies of birds, a record that must be unequalled in the 20th century.

Dr Wetmore was, in a sense, an old-fashioned ornithologist, museum-based, his field work centred round collecting—one who provides the facts that others use. He did not originate new theories, seeming distrustful of the sweeping generalisation, as is often the case with those who are very familiar with the facts and see, more clearly than most, the exceptions and difficulties that need to be taken into account. Advanced though it is in the accumulation of basic facts, ornithology still needs workers of his type; they provide the infrastructure that supports the more exciting new developments.

Alexander Wetmore was a tall man of quietly distinguished presence and great natural modesty, who treated the youngest aspiring ornithologist and the older established with equal courtesy. I never heard any of his American colleagues or friends speak of him other than with respect and affection. He will be remembered by the many British ornithologists who met him at the International Ornithological Congress at Oxford in 1966, still in full vigour and only regretting that he was becoming less efficient in the field as his hearing was beginning to fail.

D. W. Snow

Sidnie Manton

DR SIDNIE MANTON, FLS, FRS (Mrs J. P. Harding), died peacefully in hospital on 2 January 1979 aged 76. To students of zoology at the end of the last war she was already a legend.

In her first 20 years of professional life she had jointly opened the era of functional morphology with Graham Cannon in their paper on the feeding mechanism of *Hemimysis*; journeyed to Tasmania to study the endemic *Anaspides*; joined the expedition to the Great Barrier Reef and published on black corals; published on the embryology of *Nebalia*; sought-out *Peripatus* in Africa, and published on their feeding, digestion, excretion, sperm trans-

fer, embryology and life-history. A graduate and fellow of Girton, she became college director of studies in natural science, university demonstrator in comparative anatomy and later joined the staff at King's College, London. Her *Manual of Practical Vertebrate Morphology* (1930, with J. T. Saunders) was, and still is (4th edition, 1969, with M. E. Varley) the most respected and reliable guide to vertebrate dissection.

Her election to the Royal Society in 1948 crowned a distinguished career and came as no surprise. No one could have guessed that she was poised to make an even more important contribution to scholarship in the next 25 years. A gap in publication from 1938 to 1945 represents the period her young family and a heavy teaching load at Kings, Birkbeck, Queen Mary and University Colleges were making big demands on her time, but it was then she conceived and began one of the most exciting and ambitious research projects in the history of zoology. The first part of this already classic series on the evolution of arthropod locomotory mechanisms was published in the *Journal of the Linnean Society* (Zoology) in 1950 and the final part (11) appeared in 1973. The series covered 1,000 pages and included almost as many superbly executed drawings gathered into 250 compound text-figures. Functional explanations were given of many arthropod characters previously regarded as curious indications of ancestry.

She was continually in demand here and abroad, to talk about her work. At one Linnean meeting she brought along working models of arthropod legs she had made to help her own understanding; that of the spider was as tall as she, and incorporated the arcuate sclerite, a marvellous engineering device to provide the acute flexure of the femur-patella joint. The nicest device she discovered was surely the rock of the arthropod coxae, lining-up the dorsal hinge joints to translate the depression of proximal podomeres into effective extension of the legs. She was awarded the Linnean Gold Medal in 1963 before half the series was completed.

The locomotion work was certainly conceived and executed in the grand manner, but it was merely a part of