



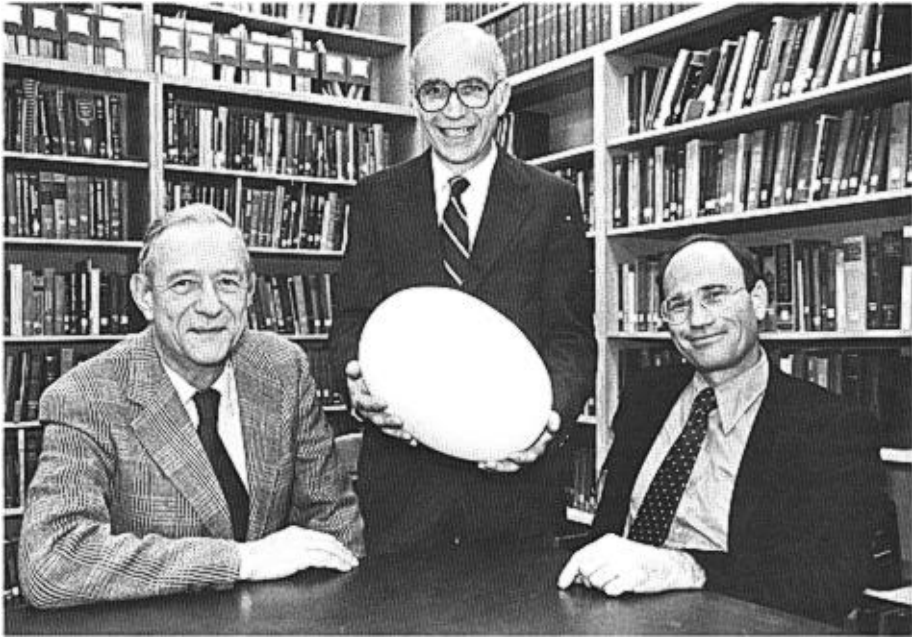
BREWSTER AWARD, 1981

WILLIAM T. KEETON

Bird orientation has long held the fascination of professional and amateur ornithologists alike. How does a bird know its geographical location, and how does it navigate from one point to another? For William T. Keeton, these questions became the focus of an intensive and highly productive career. He played a pivotal role in leading the field from an elementary concept of a single-cue system to a demonstration of a multi-cue system. His experiments on the homing behavior of pigeons were incredibly detailed in de-

sign, yet clear in conceptual reasoning. His research led to major advances in our fundamental understanding of avian sensory capabilities, information processing in the central nervous system, and evolutionary implications of redundant navigational systems. Although his career as an ornithologist was brief, his contributions reshaped our knowledge of animal navigation.

The A.O.U. posthumously honors William T. Keeton with its 1981 Brewster Award.



Left to right: H. Rahn, C. V. Paganelli (holding the egg of *Aepyornis*), and A. Ar.

COUES AWARD, 1981

AMOS AR, CHARLES PAGANELLI,
AND HERMANN RAHN

The Coues Award for 1981 is presented to Amos Ar, Tel-Aviv University, and to Charles Paganelli and Hermann Rahn, State University of New York, Buffalo. In 1970, when essentially nothing was known about the physiology of the eggs of wild birds, Drs. Ar, Paganelli, and Rahn began intensive research on avian embryonic respiration. The fundamental data that resulted quickly led to the identification of many previously unsuspected relationships among respiratory physiology and eggshell

structure, egg mass, incubation period, substrate utilization during development, metabolic rate, and water loss. In turn, this new body of information permitted the formulation of a series of allometric equations that objectively define the relationships of the characteristics of eggs and their physiology and allow diverse predictions from knowledge of egg mass and incubation period. It is for these pathbreaking insights that the A.O.U. proudly bestows its Coues Award on these three scientists.