



ELLIOTT COUES AWARD, 1987

JOHN C. WINGFIELD

For decades, students of avian behavior and physiology have sought to understand the role of hormones in the regulation of migration, reproductive season, aggression, and other aspects of avian life history. Studies of captive birds produced limited answers, and histological or other destructive assays of endocrine status of free-living birds were plagued by artifacts.

Beginning in 1974 John C. Wingfield, initially in collaboration with Donald S. Farner, began to develop an integrated system of "field endocrinology" for use with free-living birds. These methods, explained in "Avian endocrinology—field investigations and methods" (1976, *Condor* 78: 570), have changed the study of endocrinology of free-living birds. The methods are nonlethal, allow repeated sampling, and do not affect the activities of wild birds. These techniques have supplied the first profiles of hormone concentrations and their seasonal changes in free-living birds.

Wingfield is a perceptive field biologist, which has assured that his investigations have addressed questions in natural settings. His list of publications provides only a partial documentation of the extent to which his methods have ramified into investigations of endocrine involvement in the regulations of the annual cycle. Many other investigators are now publishing in avian "field endocrinology," often as a result of Wingfield's influence.

Wingfield's innovations eliminated the impediments to progress in analyzing the endocrinology of free-living birds. The sources, pace, and quality of publication on this subject indicate that his work is influencing a second generation of investigators. This amply fulfills the concept of the Coues Award, and the American Ornithologists' Union is pleased to make this award to John C. Wingfield.