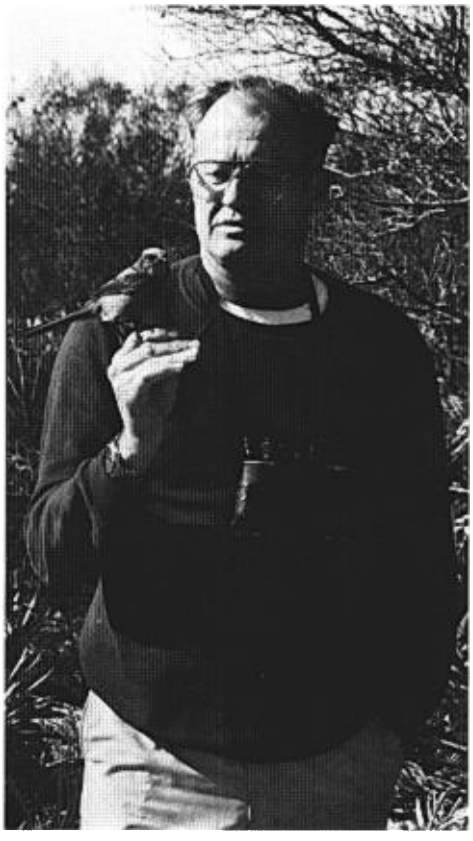
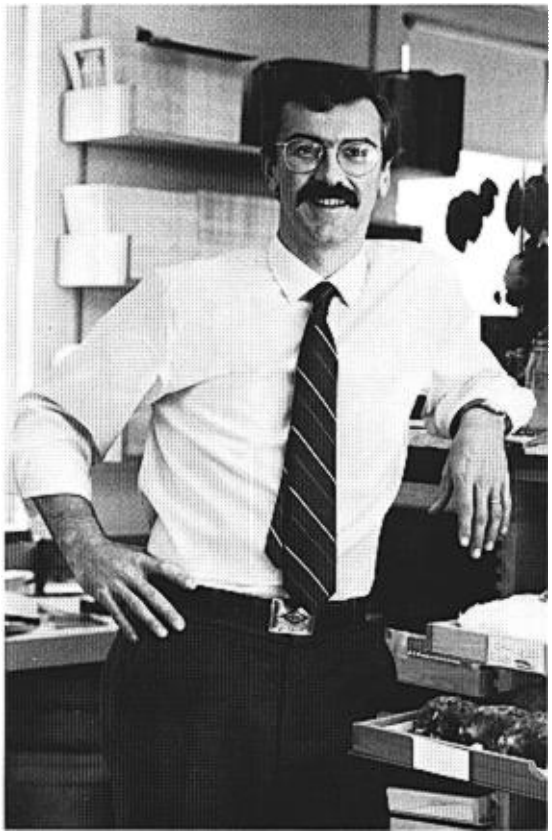




William Brewster Memorial Award, 1985

Glen E. Woolfenden and John W. Fitzpatrick

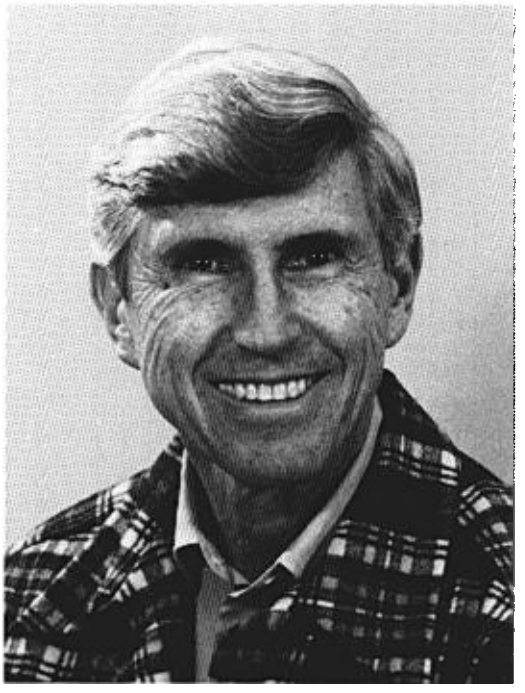
The Brewster Award for 1985 honors studies that have enriched biology for nearly two decades and that promise to provide remarkable information for years to come.

"The Florida Scrub Jay: Demography of a Cooperative-breeding Bird," by Glen E. Woolfenden and John W. Fitzpatrick, summarizes a decade of intensive work initiated in 1969. Earlier papers in this long-term study of marked birds established that many nests of Florida Scrub Jays are attended both by the territorial breeding pair and by one or more of their offspring from earlier broods. A further and outstanding result of this research is the accumulation of abundant evidence that the extra birds improve the productivity of the breeders—earlier controversy aside—regardless of the previous experience of the pair or the position or size of the territory, and that the assistance consists primarily of nest defense.

The authors demonstrate elegantly that an understanding of the Florida Scrub Jay's social system requires appreciation of the interplay of behavior and ecology. A dominant factor is the bird's limitation to a specific habitat, which usually is saturated with breeders. Hence, young birds have little chance of establishing a new territory and profit by helping their parents until the demise of a territorial bird provides space. Moreover, by helping their parents, young birds contribute to the formation of family groups, which in turn enjoy an advantage in territorial disputes. A large family may expand its territory sufficiently for a helper male to develop a segment as his own. Such events provide additional direct benefits to the helper males.

This work by Woolfenden and Fitzpatrick has significance beyond contemporary ornithology. Sociobiology owes a debt to the early elucidation of interactions of individuals in a complex avian social system. A clearer interpretation of apparent "altruism," alternative "selfish" strategies, and cooperation has developed from these studies of the Florida Scrub Jay, and those of other species to which they have lent impetus. Behavioral ecology has been enriched accordingly.

For this now 17-year study uniquely presenting almost the total demography of a significant population, the American Ornithologists' Union is proud to present the William Brewster Memorial Award for 1985 to Glen E. Woolfenden and John W. Fitzpatrick.



ELLIOTT COUES AWARD, 1985

THOMAS R. HOWELL

Thomas R. Howell is an ornithologist who has made major contributions in such diverse areas as behavioral and physiological ecology, geographic distribution, and taxonomy. His interests have taken him to tropical and subtropical regions all over the world.

After early classic research with colleagues on torpidity in birds and on temperature regulation of nesting birds, Howell became interested in birds breeding in extreme environments. His field research has greatly enhanced our perspective on the evolution of avian adaptations. He showed how and why the Gray Gull (*Larus modestus*) nests in the driest desert of the world in Chile. Another outstanding example is his monograph on the ecology and behavior, and particularly on the regulation of nest temperature and humidity, in the egg-burying Egyptian Plover (*Pluvianus aegyptius*) studied in the extreme heat of southwestern Ethiopia.

Howell has made many fine studies on the breeding behavior of tropical seabirds. These have dealt primarily with behavioral and thermoregulatory adaptations, but have also explored anatomical modifications such as the reduced pelvis and hind limbs in the Red-tailed Tropicbird (*Phaethon rubricauda*), possibly as a consequence of specialization for aerial courtship. His color motion picture films documenting highlights of the seabird studies have been widely distributed.

In zoogeography, he has thoroughly analyzed the junction of nearctic and neotropical avifaunas with reference to the ecological, paleontological, climatic, and historical factors, drawing on his extensive field experience in Nicaragua. He was the first ornithologist to study the systematics and ecology of the Nicaraguan lowland pine savanna. It proved to have a number of undescribed endemic forms.

Among other contributions to taxonomy, he prepared the section on the subfamily Carduelinae (New World forms) for the Peters' "Check-list of Birds of the World" (vol. XIV). As a member of the A.O.U. Committee on Classification and Nomenclature, he was one of the authors of the 6th edition of the "Check-list of North American Birds." His familiarity with the Nicaraguan avifauna was put to good use here, as the geographic coverage in this edition included, for the first time, all of Middle America.

Tom Howell's meticulous and many-faceted approach to significant research problems, combined with his ability for logical synthesis and clear exposition of information from diverse disciplines, has given many new insights into the nature of avian adaptation, distribution, and taxonomy. For these important research contributions to ornithological science we express our appreciation by presenting him with the Elliott Coues Award for 1985.