



**BREWSTER AWARD, 1983**

PETER R. GRANT

Peter R. Grant has made truly outstanding contributions to the study of competition and other factors that contribute to the structure of ecological communities. His early work involved the ecology of birds of the Tres Marias Islands, a reformulation of the concept of character displacement, and an intensive reanalysis of the classic example of this phenomenon, the rock nuthatches of the Middle East. He then conducted the first comprehensive studies involving manipulative field experiments on competition in mammals. His work in the last 10 years has concentrated on ecological interactions among the species of Darwin's Finches. This group, already made famous especially by the work of Darwin, Swarth, Lack, and Bowman, has been Grant's target for a spectrum of ecological and evolutionary questions examined with modern approaches. These studies have been carried out with an extraordinary degree of intellectual sophistication and serve as models for ornithology, ecology, and evolution in general.

While these studies provide the most convincing evidence yet available for the importance of competition in determining diversity and abundance in birds, they have also shown that other factors, such

as adaptation to the local environment, are also critical. Although his questions have been primarily ecological, Grant has never lost sight of the fact that his subjects are products of evolution, and his meticulous attention to natural selection, speciation, and other evolutionary processes has added greatly to his work. Despite his theoretical orientation, he has been keenly aware of the value of describing all important aspects of a species' overall biology, as evinced by his papers on the nesting biology of Darwin's Finches.

Grant has involved a number of outstanding young investigators in his work on Darwin's Finches and has in this way also made major contributions to the development of ornithology and ecology. In addition, he has been ably assisted by professional collaboration with his wife, Rosemary Grant.

David Lack received the Brewster Award in 1948 for the first truly modern study of the ecology and evolution of Darwin's Finches and it is fitting that, 35 years later, Peter R. Grant receive this award for his significant expansion of our knowledge of these remarkable birds and for the general importance of this landmark work.



COUES AWARD, 1983

MASAKAZU KONISHI

Masakazu Konishi is a student of avian hearing and sound production whose work has spanned ornithology, ethology, and neurophysiology. His early work stressed the sensitivity of hearing in songbirds and the mechanisms of song development, and indicated the importance of both inherited and learned components of this behavior. His elegant studies of prey location in the Barn Owl demonstrated the mechanisms by which owls can track the sound of prey, even in flight, to capture prey in total darkness. His recent work with owl hearing has addressed fundamental questions of auditory physiology concerning sound localization. He has used techniques developed in the study of bat echolocation to begin to examine this phenomenon in such birds as the Oil-

bird, to determine how the birds use echolocation to navigate in the dark. Konishi uses neurophysiological techniques foreign to most ornithologists to address questions of interest to ornithologists. Although most of his work is published outside the primary ornithological literature, his contributions to avian biology are well known. Konishi's contributions are not confined to his own research, for he has been responsible for the graduate and/or post-graduate education of a significant portion of the young investigators in avian neurophysiology. Not only has he been a leader in his area, but he has also been a major factor in its growth and development. It is therefore quite appropriate that Masakazu Konishi receive the Coues Award for 1983.