

# Centers of Learning

Southern Illinois University  
at Carbondale

by William G. George

Readers of James Thurber stories may recall the lady who feared the new O'Shaughnessy storage dam because it was not made of cement, she believed, but of Cream-of-Wheat. A similar order of misapprehension beset the imagination and scruples of various scholars who noted the sudden construction of new universities all across the United States in the 1950s and 60s. Are these sound structures, destined to last, it was asked? Or are they without foundation, designed to disappear after spoon-feeding pablum to the masses?

Ivy has climbed many laboratory walls that shot up in that period, and despite some statements claiming the vines are plastic, a degree of authentic stability and academic promise has taken shape on many of the new campuses. At S.I.U. in Carbondale an investigation of Bobwhite biology has achieved a mature 25 years; an investigation of the life history of the Laysan Albatross is in its 14th year; food competition between cats and raptors has been studied continuously for over six years; and a series of  $D_2O^{18}$  experiments on avian flight metabolism has progressed steadily since 1967.

Masters and doctoral programs involving bird research are conducted primarily in the Zoology Department, from which the student receives a degree in zoology regardless of his specialization in ornithology.

Housed in a spacious air-conditioned building, the zoology department is well equipped to facilitate both faculty and graduate studies. There is a modern vivarium, an electron microscope complex, a variety of computer centers, a zoological library, shops to aid in the design and construction of research tools, a photographic unit boasting a professional staff, and a growing bird collection of specimens carefully selected for the study of molts and plumages of local populations. In addition the department commands the use of various outdoor laboratories and a ten-acre wildlife enclosure.

The young field biologist who feels misplaced in an urban setting is likely to rejoice in the deserted expanses of southern Illinois. Wildlife areas are the rule rather than the exception. The campus lies within the Mississippi flyway and close to Crab

Orchard Lake Wildlife Refuge (44,000 acres), Shawnee National Forest (225,000 acres), the Illinois Ozarks, and the floodplains and confluence of the Mississippi and Ohio Rivers. In between these areas, small towns, farms, woodlands and ponds dot the landscape. There is a notable scarcity of industrial plants and a notable abundance of both wintering and breeding birds. As one example, a bit of sycamore floodplain near Pomona annually accommodates 16 to 17 species of breeding wood warblers.

The faculty of the Zoology Department numbers 25 professors, of whom six are engaged in ornithological work:

HARVEY I. FISHER, Professor and Assistant Dean of the Medical School, has written numerous papers and books covering aspects of avian anatomy and the natural history of the Laysan Albatross.

WILLARD E. KLIMSTRA, Professor and Director of the Cooperative Wildlife Unit, is a specialist on the population ecology of waterfowl and gallinaceous birds.

WILLIAM G. GEORGE, Associate Professor and Curator of Birds, is interested in the evolution of wing adaptations; and in interspecific food competition.

EUGENE LEFEBVRE, Associate Professor, is a physiological ecologist, studying the flight physiology of both marine and land forms.

GEORGE WARING, Associate Professor, specializes in the vocalizations, behavior and control of pest species.

TERENCE ANTHONY, Assistant Professor, is an ethologist studying primitive motor patterns in vertebrates.

This segment of the faculty and its students are richly abetted by the experience, skills and knowledge of not only their departmental colleagues but of some 61 professors who staff separate departments in botany, physiology and allied fields.

Current bird studies by students include: Movement and Dispersal of Introduced Turkeys (Richard Lancia); Function of the Subalar Apterium in Yellow-billed Cuckoos (George Spiegel); Movement and Mortality of Bobwhite in Summer (David Urban); Preening Motor Patterns in Muscovy Ducks (Bruce Campbell); Influence of Age and Experience of the Mate on the Age of Initiation of Breeding in the Laysan Albatross (Margaret Van Ryzin); Electronic Analysis of the Sounds of the Laysan Albatross (Donald Sparling); Wood Duck and Mallard Utilization of Oakwood Bottoms (Michael Sweet); Air-sacs in Ciconiiformes (Clark Casler); and Nest Site Selection in White-eyed Vireos (Paul Biggers).