areas, for fisheries purposes will be beneficial in its effect upon many forms of our birds. As a result of the acquisition and developmental program of the Dingell-Johnson Act, ornithologists may expect to have at their disposal many additional outdoor laboratories, with sympathetic and cooperative fellow workers in charge of these areas.

The passage of the Dingell-Johnson Act, notwithstanding the fact that it has been presented annually to the Congress for many years, poses one rather serious problem, namely, that of immediately securing adequately trained personnel. Where will the trained personnel come from, as of July 1, 1951, to carry out the provisions of this legislation in each of the 48 States? This problem has given the State fisheries people much concern as they know only too well that they require personnel trained to secure biological facts, work with sportsmen, and get practical results on the ground or in the water. Perhaps the best type of training for state conservation work is that of serving an apprenticeship in the field, working on a typical project, while taking academic training. It is obvious that adequately prepared personnel, with both academic and "practical" experience, cannot be trained in a hurry. Most states will have their projects up for consideration well in advance of July 1, 1951. Where will the personnel be secured to make the best use of the funds then available? Will the fisheries people repeat some of the mistakes made by certain early Pittman-Robertson project-leaders in undertaking general life history studies with inexperienced personnel and thus throw the stigma of "impractical" on all fisheries research under the Dingell-Johnson Act? Will they, in the rush tosecure the needed men, settle for individuals whose qualifications do not justify their assuming leadership responsibilities in the States fisheries field but who will assume such leadership merely because they were the first employed and thus have greater seniority? The inroads which will be made upon conservation personnel by the present military preparedness program may further complicate fisheries personnel problems.

There is little question that the Dingell-Johnson Act will go down in history as one of the most important steps forward in the entire field of conservation. We all have cause to rejoice in its passage.—H. S. Mosby and W. W. H. Gunn.

GRADUATE RESEARCH IN ORNITHOLOGY

Several readers of *The Wilson Bulletin* have expressed interest in learning the extent to which graduate students in American universities were conducting ornithological research in fulfillment of their thesis requirements for advanced degrees. It would be even more interesting to learn of *all* current bird research in the country, but a compilation of that scope we do not have the temerity to tackle, and the present preliminary summary is limited strictly to research being conducted by graduate students. Editor Sutton requested us to assemble what information we could, and as a start we wrote each of the institutions known by us to encourage theses on ornithological topics.

Some workers object to having current research mentioned in print until it has been completed and published in full and final form. They may feel that publishing the titles below will be interpreted as "staking out claims," a procedure which could, possibly, in some cases, hinder research. Outweighing such hazards, we think, are several benefits. Readers of *The Bulletin* undoubtedly have a lively interest in current ornithological research throughout the country. Some graduate investigations might be of such nature that Wilson Club members, once informed of them, could offer cooperation. In some instances unnecessary duplication of effort might be forestalled. Members planning future graduate work might be aided in their choice of a school. At any rate, your reaction as readers may determine whether the compilation will be attempted in future years.

It is recognized that such an initial effort as this cannot but be incomplete for a variety of

reasons. In several cases the response indicated that some students would be selecting thesis topics later. Some reported no ornithological theses in progress just now, but made clear that this type of work was encouraged when possible. Many institutions doing such work we doubtless overlooked, for which we apologize, but we hope that the publication of this preliminary list will stimulate communication from them. Finally, several institutions have not yet responded, probably for perfectly legitimate reasons. Ornithologists are well known to be farflung travelers, and some of the persons to whom our inquiries were directed have likely been engaged in field work of their own at points not easily accessible to the U. S. mails. One response we received was from Saudi Arabia: for this one we were especially grateful. We hope that those institutions whose ornithological graduate work is not adequately represented in this preliminary list will send us additional information promptly, so that a further report may be more complete.

The degree toward which a student is working is stated in some cases, not in others: we are giving here only such information as has been passed on to us. Theses in the general field of game management, even if concerned with avian species, we have not included. A classified list of graduate theses submitted in American universities between 1934 and 1949 on "subjects related to the ecology and management of wildlife" appeared in *The Wildlife Review* for February, 1950, and its editor, Neil Hotchkiss, of the U. S. Fish and Wildlife Service, has indicated his desire to continue issuing this occasionally to keep it up to date. He has another list in preparation now.

The list which follows is limited to theses which were in progress at the time of writing (July to December, 1950). Some of these may have been completed since that time:

California, University of

Bailey, Robert E.—The incubation patch of birds.

Childs, Henry E.—Population studies of the Brown Towhee (Pipilo fuscus).

Cogswell, Howard L.—Size of territory in chaparral birds in relation to vegetation.

Dixon, Keith L.—Comparative ecology and behavior of sympatric and hybridizing species of titmice.

Howell, Thomas R.—Natural history and differentiation in Sphyrapicus varius.

Norris, Robert A.—A comparative study of the biology of the nuthatches Sitta pygmaea and Sitta pusilla.

Richards, Lawrence P.-Morphologic adaptations in the drepaniids of Hawaii.

Salt, G. W.—Metabolic characteristics of three species of finches (Carpodacus) in relation to zonal distribution.

Cornell University

Dilger, William C. (M.S.)—A bibliography of the ornithology of India.

Fischer, Richard B. (Ph.D.)—Life history of the Chimney Swift (Chaetura pelagica).

Hawksley, Oscar (Ph.D.)—Life history of the Arctic Tern (Sterna paradisaea).

Hensley, Marvin M. (Ph.D.)—The ecology of the birdlife in Organ Pipe Cactus National Monument.

Kessel, Brina (Ph.D.)—The life history and management of the Starling (Sturnus vulgaris) in New York State.

Meng, Heinz (Ph.D.)—Life history and management of the Cooper's Hawk (Accipiter cooperii).

Owen, Oliver S. (Ph.D.)—The ecology of birdlife in a black ash swamp.

Parkes, Kenneth C. (Ph.D.)—Speciation in the breeding birds of New York State.

Reilly, Edgar M. (Ph.D.)—The origin of North American birds, based on studies for the new A.O.U. Check-List.

Florida, University of

Adams, Claude T.-Osteology of the Ardeidae.

Baumel, Julian J.—Comparative osteology of the Fish Crow (Corvus ossifragus) and the Common Crow (Corvus brachyrhynchos).

Burns, Bartley J.—Ecology of the birds of Newnans Lake, Florida.

Dennis, John V.—Ecology of Florida woodpeckers.

Dickinson, Joshua C., Jr.—Variation in the Towhee (Pipilo erythrophthalmus).

Fehon, Jack H.—Comparative osteology of rails.

Glatfelter, Alfred E.—Comparative osteology of jays of the genera *Cyanocitta* and *Aphelocoma*.

Hicks, Thomas W.—Geographical variation of the Bluebird (Sialia sialis).

Nelson, Gideon E., Jr.—Ecology of the birds of Welaka, Florida.

Kansas, University of

Baker, M. F.—Natural history of the Prairie Chicken (Tympanuchus cupido) in Kansas. Harder, R. C.—Ecology of the Cardinal (Richmondena cardinalis) in eastern Kansas.

Louisiana State University

Arney, S. A. (Ph.D.)—A telescopic study of day-time migration. (Several other Master's and Ph.D. candidates, with specific topics not yet selected, will be working on problems concerned with geographic variation, speciation, life-history, and the mechanics of day-time and nocturnal migration).

Michigan, University of

Batts, H. Lewis, Jr. (Ph.D.)—An ecological study of a 60-acre portion of the Newcomb Tract, near Ann Arbor, Michigan, with special reference to the nesting birds.

Hofslund, Pershing B. (Ph.D.)—A life-history study of the Yellow-throat (Geothlypis trichas).

Humphrey, Philip S. (Ph.D.)—Analysis of the Mergini.

Lunk, William A. (Ph.D.)—Life history of the Rough-winged Swallow (Stelgidopteryx ruficollis).

Mengel, Robert M. (Ph.D.)—Birds of Kentucky.

Tordoff, Harrison B. (Ph.D.)—Osteology and phylogeny of the Fringillidae.

Texas, University of

Thompson, William L.—Survey of the ecological distribution of the summer birds in the "Canadian Breaks" in Hutchinson County, Texas.

Washington State College

Caskey, Jesse-Melanophores in silky fowl.

Gehrman, Kenneth—Life history of the Lesser Scaup Duck (Aythya affinis).

Mewaldt, Leonard—The reproductive cycle of Clark's Nutcracker (Nucifraga columbiana).

Schottelius, Byron—Blue Grouse (Dendragapus obscurus) populations in Washington.

Trivette, Edward-Leg muscles of charadriiform birds.

Wisconsin, University of

Greeley, Frederick (Ph.D.)—Endocrine factors in adaptation to environmental stress in birds.

Lanyon, Wesley (M.S.)—Evidence of contagious responses in birds.

Nero, Robert (Ph.D.)—Breeding behavior and territory in the Red-wing (Agelaius phoeniceus).

Petersen, Arnold (Ph.D.)—Breeding biology and behavior of the Bank Swallow (*Riparia riparia*).

Yale University

Huntington, Charles E.—A survey of the Icteridae.

Paynter, Raymond A., Jr.—Avifauna and speciation in the Territory of Quintana Roo in México.

-Aaron M. Bagg and Gustav A. Swanson