

more than a fraction of the beauty, wildness and wildlife of the earth unless the explosion of population can be curbed. As Sir Charles Darwin says (p. 969), "the menace of world over-population . . . must be regarded as the central problem of mankind—as I think for all time, but certainly for the coming century."—M. M. Nice.

65. The Quest of the Divine. Alexander F. Skutch. 1956. Meador, Boston. 440 pp. \$3.50.—This philosophical work of a distinguished naturalist gives us a very different ideal from the popular worship of an ever higher scale of living. Dr. Skutch points out that "civilization and culture, including art, letters, science, philosophy, ethics, and religion" depend on "a flourishing state of the natural world," (p. 245). It is our duty wholeheartedly to support conservation, and individually to avoid wasting natural resources. "Everything we eat, all our narcotics and alcoholic stimulants, practically everything we wear, a large share of the materials of which our dwellings are constructed, are torn from the living world. Not only do countless organisms surrender their lives to fill our needs and support our extravagances, the land on which these products are grown is in most instances made unavailable to the animal and vegetable life that originally occupied it. . . . One who clearly understands the interrelations of all living things will lead a frugal life, avoiding all extravagances and waste; for nothing so well expresses our feeling of brotherhood with all that lives and breathes."—M. M. Nice.

66. Pasture and Range Plants. Sections 1 and 2: Native Grasses, Legumes and Forbs; Section 3: Undesirable Grasses and Forbs; Section 4: Poisonous Grassland Plants. Anonymous. 1955-57. Phillips Petroleum Company, 466 Adams Bldg., Bartlesville, Oklahoma. These excellent brochures, beautifully illustrated in color, are designed to provide "a practical, educational guide to further the knowledge of grasses, legumes and forbs on which our country, our people and our organizations depend for life today and for growth in the future." "All of us depend far more than we realize on range vegetation as the *basic* source of our own and of our nation's strength, vigor and vitality."

Fifty-three desirable native grasses and forbs are illustrated and described, as well as 38 undesirable plants and 31 poisonous plants. The high nutritive value is emphasized of many of the flowering plants of the prairies. The most important indicators of healthy and over-grazed ranges are listed. If a range has not been too badly abused, a system of resting the land will give the valuable native plants a chance to recover and the undesirable ones will be crowded out. A long list of references is given in each booklet. The Phillips Petroleum Company is doing a distinct service to conservation in the preparation of these attractive and authoritative publications which may be had for the asking.—M. M. Nice.

LETTER TO THE EDITOR

19 December, 1957

Sir:

I am indebted to Mrs. M. M. Nice for drawing my attention to the review in *Bird-Banding* (28: 44, January, 1957) of my paper on the "Mortality and Egg Production of the Meadow Pipit with Special Reference to Altitude."

I am afraid the reviewer, Dr. O. L. Austin, Jr., has made an error in his calculations, a mistake which I almost made when preparing the paper for publication, and which, on realizing the error, caused me to omit any attempt to balance mortality against the productivity of the species. The error is this; the Meadow Pipit is double brooded *only* if both broods are reared successfully and the pairs which are unsuccessful replace the destroyed eggs or nestlings and also attempt a true second brood. Thus, while the breeding success was 43 per 100 nests, the success per 100 pairs is somewhat higher and this is the main reason why the calculation made by Dr. Austin does not balance.

If the first brood of the Meadow Pipit is considered, then 57% of the nests are destroyed but these are replaced within 10 days as has been shown by E. P. Chance in connection with his study of the parasitism of the Cuckoo (*Cuculus canorus*) and published in his book "The truth about the Cuckoo." These replacements presumably receive a similar 57% mortality and those which succeed still

have time to attempt the "second brood." The success of "first broods" per 100 pairs is more likely to be 67.5% than 43% because of these replacement clutches (of 100 pairs, 57 will lay replacements and 43% of these will be successful). "Second broods" will probably be less successful because some replacements will be prevented by the factors which control the end of the breeding season and further a minority of the pairs do not appear to even attempt it.

Bearing these facts in mind, the figures presented in my paper are probably accurate and certainly are not open to the error of 12% as suggested by the reviewer.

In connection with the suggestion that observers unwittingly increased the nest mortality, I did analyze the data according to the number of visits paid by the observers over an arbitrary period of time and found that there was no relationship between the number of visits and nest predation.

Yours faithfully,
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