

be able to differentiate one class from the other without consulting the original sources.

The catalogue is a work which deserves the highest praise. It is compiled by the foremost double star observer of all time, and will be invaluable to every one interested in this branch of astronomy for the indefinite future. The printing is clear and the size of the type good. The two volumes in which it is contained are of equal size and will be most convenient to handle. The Carnegie Institution is to be congratulated on their wisdom in assuming the financial burden of its publication.

CHAS. P. OLIVIER

FLOWER OBSERVATORY,
UNIVERSITY OF PENNSYLVANIA

Life-Histories of the Frogs of Okefinokee Swamp, Georgia. North American Salientia (Anura) No. 2. BY ALBERT HAZEN WRIGHT. The Macmillan Company, New York. xv-497 pp., 45 plates, \$8.00. 1931.

DR. WRIGHT, in his well-known first book (1914) on the North American frogs, gave us detailed life histories of the eight forms common at Ithaca, N. Y. In this second and larger work, he adds the life histories of sixteen Southeastern species and one Northern one. The headings for each species indicate the scope of the treatment: scientific name, common name, range, general appearance, measurements, habitat, first appearance, general habits, voice, mating, ovulation, eggs, hatching period, mature tadpole, larval period, transformation growth, food, autumnal disappearance, affinities, bibliography.

The treatment, for the species studied, is all that can be desired. In especial, commendation is due for the method of quoting all the previous statements about each form, so that this book contains all the scattered information (sometimes somewhat contradictory) about each form. Naturally, more recent observations have more weight, yet it is not necessary to go beyond the pages of Dr. Wright's book to see what the older naturalists said, since he has included their remarks. To some this may seem a defect, as early observations are given the same apparent weight as later ones, yet to the reviewer it seems the only proper way of reporting habits.

Dr. Wright has laid himself open to criticism from

certain quarters on account of his extreme conservatism in regard to matters strictly taxonomic. He undoubtedly knows more about these frogs than any one else. Why, then, has he not made more definite pronouncements as to affinities, synonyms, etc.? The reviewer thinks that the answer is clear, and also thinks Dr. Wright should be complimented rather than blamed for this apparent omission. The title of the work is "Life-Histories." Dr. Wright has chosen to do life-history work, and he has done it extraordinarily well. To criticize his work because he did not do a quite different piece of work, is, to the reviewer's mind, uncalled for and unjust. There are more good systematists in this country than there are good workers on life histories, and while the present work is not a systematic treatise, it doesn't pretend to be, and that is one of its chief virtues.

The title is slightly misleading. While most of the species are from the Okefinokee, *Rana sphenocephala* is not, yet no one will quarrel with its inclusion. *Hyla versicolor* and *Rana clamitans* were treated in his work on Ithacan species, yet they are definite Okefinokee forms.

The life-histories of *Pseudacris nigrita*, *P. ornata* and *P. occidentalis* are really not given with anything like the completeness of the other species included. Since his Ithacan paper only briefly touched on a northern *Pseudacris*, there is a big gap in eastern frog life-histories to be filled, the only well-known one being *P. ocularis*, which Dr. Wright has treated exhaustively in this paper.

Pseudacris aside, there remain from the eastern region the following frogs whose life-histories are relatively unknown, or at least not described with the wealth of detail and the accuracy given by Dr. Wright: *Scaphiopus holbrookii albus*, *Bufo fowleri*, *Eleutherodactylus ricordii*, *Hyla cinerea evittata*, *Hyla avivoca* and *Acris crepitans*. These with the various *Pseudacris* are mostly rare, local or problematical forms.

One hopes that Dr. Wright will eventually deal with these with the same care and skill with which he and he alone (save for *Hyla andersonii*) has made us acquainted with the life-histories of the other eastern forms.

E. R. DUNN

HAVERFORD COLLEGE

SCIENTIFIC APPARATUS AND LABORATORY METHODS

A DEVICE FOR FOCUSING THE DISSECTING MICROSCOPE WITH THE FOOT

EVERY one who has done much work with a dissecting microscope has doubtless felt the need of a third hand for use in focussing as the object under

dissection sinks down or springs up. A good hold on an elusive object often must be relinquished to enable one to focus on the object, which may be pushed out of focus again when work is begun on it.

For some years I have been urging on various