

well be in order as you follow your original outline for the trip. On the other hand you may have decided in advance to include some of those items in your plan and will proceed to demonstrate the connection between certain biological principles and related aspects of conservation. It is apparent, is it not, that field trips provide excellent opportunities to develop conservation education in a biology program?

If and when conservation education is included in your school program it will no doubt follow the present trend toward correlation and integration of the subject matter. The drive of the sponsoring groups will be aimed at getting conservation taught in every possible subject at every grade level. As an initial compromise they might agree to a concentration of effort in the primary grades for the first year or so. Later there would be a continuous development through the elementary and secondary schools. This plan has already been invoked in several states and some cities.

Under this procedure certain courses lend themselves to the plan far more readily than do others. Biology, in my opinion, will be expected to carry an unusual load since it presents a rich, scientific background that quite readily aids a student in recognizing many basic conservation principles. I believe that an activities program is essential in conservation education and again biology presents a well diversified field in this respect.

Someone has said that the nation that best conserves its natural resources will be the ultimate survivor in this seemingly chaotic era. I know that I am not alone in hoping that this country of ours will continue to exist for some time to come. As a conservationist I hope to play my small part in this game of exceedingly high stakes. I know that you teachers of biology will do likewise.

BIOLOGY LABORATORIES

By "The Old Fossil"

At Lane Technical, Chicago

INQUIRIES. Occasionally "The Old Fossil" receives a letter in a roundabout way or with an incorrect address. His correct address is always given at the end of every *Biology Laboratories*. In case of doubt, Lane Technical High School, Chicago 18, will do the trick. All letters and post cards are answered.

THE OLD FOSSIL wishes to thank President Lockwood for the invitation to be present at the banquet of the NABT December 28, last. Although he received the invitation in early fall, he was committed to the duress of an examination at that time. "The Old Fossil," dean of the Past Presidents of the NABT, is glad to welcome Miss Lockwood into this group. Congratulations.

A FILE FOR B-L. Mrs. Muriel Beuschlein of Parker Elementary School, Chicago, writes us the following suggestion. She removes the B-L items from *The American Biology Teacher* and pastes them on 4×6 cards. She can make better use of the material in this manner.

ELEMENTARY SCIENCE CLUB BULLETIN. Mrs. Beuschlein also mailed us some back copies and current issue of the "Parker Science Clubs." These were devoted to student articles on subjects of their own choice in the fields of science and conservation. The diversity of clubs in this elementary school is exemplified in "The Mariners," "Blue Jays," "Gardeners," "Cottontails" and others. Over nine hundred guests, including pupils, teachers, parents, and visitors from other schools came to the science exhibit which climaxed last year's club activities.

POINSETTIAS. During the first weeks in September we purchased 150 poinsettia plants in two-inch pots. To insure delivery our order was placed with the florist in June. We immediately shifted them to five-inch pots with three plants to a pot. The potting mixture was eight parts loam, one part peat-moss or leaf mold, and one part fine gravel. Keep away from drafts, place in full sun, and water frequently. A teaspoon of ferti-

lizer every three weeks helps. Mix it into the top soil of each pot. Temperature in the high sixties is satisfactory. Loss, less than five per cent; costs, twelve cents per plant, ten cents for the five-inch pot. The front office, and all of Lane Tech, was just "dripping" with poinsettias for a very merry Christmas all thru December.

EXCHANGE INQUIRY. Mr. Lieberman of Los Angeles would like to exchange specimens. He collects living reptiles, mammals, and amphibians, local flora (including the ocean aquatics), together with archeological and paleontological specimens. Write to "The Old Fossil" for information and the address.

A **FRICION GAS LIGHTER** hangs suspended from the ceiling over the Bunsen burner. It is attached to a coil of alloy wire taken from a spool in the physics laboratory. There is sufficient expansion to the helix to stretch to the burner for use and to lift it above the head until used again.

DURING THE WAR we prepared a twenty-page *Lane Tech Handbook of Victory Gar-*

dens. These were for use by our students. "The Old Fossil" has a few dozen copies left. He will be glad to mail you a copy if you request it. It includes: Pamphlets and Texts on Gardening; Location of Garden; Typical Design for Small and Family Gardens; Cold Frame; Soil Preparation; Planting Guide; Specific Information on Various Vegetables; Herbs; Harvesting, Canning, Storage; Window Boxes and Lawns; and related topics.

BELATED RECOGNITION. The plaster-of-Paris card support mentioned in November, 1950, pages 167-168, was submitted by Sister M. Florentine, Charleston Catholic High School, Charleston, West Virginia.

MICROTOMES. Are you interested in micro-technique? If you are, a technician here in Chicago has for sale two good-as-new microtomes. He will sell either or both reasonably. By interpolation any thickness may be secured with the Hand Microtome. This is a Spencer. The other is a hand-operated Clinical Microtome with a high degree of accuracy. It is a B. & L. If you are interested he might be persuaded to throw in a few blocks of tissue with the deal. It may be handled as a cash sale or thru your school purchasing agent.

DR. SANDGROUND of Indianapolis has several microscopic slides he wishes to sell. They are smears of four species of Trypanosomes. He will sell a single slide, one of each, or the entire lot at a reasonable figure. If you are interested "The Old Fossil" will get you the details. The slides are of *T. rhodesiense*, sleeping sickness, human blood; African sleeping sickness, *T. gambiense*; *T. brucei*, from cattle and horses; *T. lewisi*, from rats.

A BIOLOGY STUDY. Margarete J. McKibben, University of Pittsburgh, sent out a *Check List of Principles of Biology for General Educational Use in High Schools*. It is excellent, comprehensive, constructive, and worthwhile. However, "The Old Fossil" would take issue with certain items designated on the list as being principles. He feels there is a difference between simple statements of facts; biological, and primary concepts; generalities; and principles. Per-

A complete biology program . . .

Biology for You

Revised

Vance and Miller

The revised, 1950 edition of **BIOLOGY FOR YOU** brings this widely-popular text completely up to date.

Biology Activities

Vance-Barker-Miller

A complete activity program for the high school biology course, **BIOLOGY ACTIVITIES** contains page references to **BIOLOGY FOR YOU** as well as to all leading biology textbooks.

Examination copies upon request

J. B. Lippincott Co.

Chicago Philadelphia New York

haps this is slicing our manna too thin; but a cursory examination by him reveals that some of the principles belong in these other categories. However, this does not interfere in any way with her study. The responses to be made are the same. "It is excellent, etc." as stated.

NOW IF YOU WILL PERMIT "The Old Fossil" to get down off his soap box he will give you the opportunity to step up on it by writing to him your ideas to 5061 North Saint Louis Avenue, Chicago, 25. One evening in October 1950 he was honored on his advent into the "now-I-am-fifty-club" by being selected to take over a graduate class in "Evaluation" at Northwestern University for the session. One wag from the group said, "'The Old Fossil' looks too old to stop the girls with a whistle any more, but I bet he can still trip 'em with his cane." Bye now.

BOOK REVIEWS

MENABONI, ATHOS and SARA. *Menaboni's Birds*. Rinehart & Co., Inc., New York. xi+132 pp. illus. 1950. \$10.00.

Don't tell me there is no Santa Claus. When advance literature on this magnificent volume of superb reproductions of exquisite paintings, with the accompanying delightful running account of the Menabonis, their bird family, and all the "doings," arrived I longed to possess the same and fixed some of the brilliance of the cardinal on the wing and the delicacy of coloring of the pair of little blue herons to my drab office wall where I could see them as I worked at my desk. They are still there but what is such a greater delight is the volume itself with its thirty-two natural-color plates, thirteen full-page black and whites and ever so many more small illustrations of such great accuracy and lifelikeness as to be a constant joy and inspiration.

The use of the personal pronoun "who," etc., is pardonable on the part of those to whom the birds are sharers of the home and delightful little companions and guests over the years. There may even be good precedent for the use of "piliated" in place of "pileated" though I cannot find one. A few typographical errors have crept into an al-

most flawless volume—such as "achitect," VIII; "scheech," p. 24; "omniverous," rear of Eastern Crow plate; "opague," p. 106; "carrillon," p. 108; "oppossums," p. 114. And shouldn't it be *were lichens*, p. 86, also *mile distant*, p. 89? But who would stoop to be that picayunish in the face of so much beauty of style and accuracy of observation and faithful reproduction? Every nature lover will send out a freighted hope for this beautiful book. May each one of you be granted the wish!

CHARLES E. PACKARD,
Randolph-Macon College,
Ashland, Virginia

MOMENT, GAIRDNER B. *General Biology* 2nd ed. Appleton-Century-Crofts, New York. xviii+680 pp. illus. 1950. \$5.00.

This is a general textbook for colleges in its second edition. The first edition appeared in 1942. It is one of the Century Biological Series, edited by Dwight E. Minnich.

Considerable success has been attained in combining the conventional with the more modern features. Sufficiently abundant evidence has been included in support of principles and central concepts. There is up-to-date material on the Rh blood groups, the origin of life, photosynthesis, muscle mechanisms, enzymes, vitamins, respiration, plant hormones, viruses and animal behavior among other things. The methods of population genetics are applied to evolution and eugenics. The modern concept of levels of organization, that is, atoms, molecules, cells, multicellular organisms and populations is introduced. Stress is placed on the human import of biological facts and principles throughout the entire text.

It is likely that a thoughtful and conscientious student, with the aid of this book and under the guidance of an inspiring teacher, would arrive at a good understanding of the fundamental principles and the modern philosophy of biology as generally accepted at the present time.

PHILIP E. FOSS,
Hartford Public High School,
Hartford, Connecticut