

and detailed lab directions, there are blank pages for notes and sketches.

Numerous clear and distinctive drawings depicting external and internal morphological structure are included. There are also several transmission and scanning electron micrographs.

Besides the usual information on animal structure there is additional material on the physiology and behavior of animals, and several suggestions for experiments dealing with physiology and behavior. This is a well prepared laboratory guide that could be used to supplement almost any zoology textbook.

George H. Ratzlaff
Central Junior High
Hutchinson, Kansas

GENERAL ZOOLOGY, LABORATORY GUIDE, COMPLETE VERSION

by J. E. Wodsedalek and Charles F. Lytle. 7th ed., 1977. William C. Brown Company, Publishers (2460 Kerper Boulevard, Dubuque, Iowa 52001). 271 p. Price not given.

Zoology is a dynamic field. New discoveries about animal structure and function are made each year. In view of this, Lytle presents the seventh edition

of this standard laboratory manual. He attempts to reflect recent advances in zoology with the addition of new material on physiology and behavior, new information on cell structure, and increased emphasis on studies of living animals. He has added a chapter on ecology, and elevated the topic of development to chapter status.

This revised edition of the laboratory guide boasts several improvements over its predecessor. Many new illustrations were added, including electron micrographs that reflect the latest knowledge of animal structure and function. Material has been reorganized to present the information in a comprehensible manner. The addition of perforated pages, and clearer titling of chapter sub-units facilitate the use of this manual. As in the previous edition, note and sketch space is provided, and dissection directions are clear and easy-to-follow.

In summary, this seventh edition of Wodsedalek and Lytle's laboratory guide retains the quality established in the earlier editions. In it the author provides teachers and students with a thorough, accurate guide to the study of animals.

Nancy A. Andersen
Erie, Pennsylvania

Audiovisuals from p. 53

try. Teachers in junior and senior high schools should find the film effective in emphasizing the concept that mathematics (specifically geometry) is of utmost importance in total understanding of science.

Virginia Laube
St. Wendelin High School
Fostoria, Ohio

THE PEOPLE PROBLEM.

1977. Current Affairs (24 Danbury Road, Wilton, Connecticut 06897). Two color-sound filmstrips with cassettes. 30 minutes. Purchase \$44.

Part 1 of the program attempts to deal with the population explosion in Latin America. Although the well-narrated audio portion discusses the seriousness of this problem, the visuals leave the viewer unconvinced. Since the program would seem to be aimed at older elementary school and beginning secondary school students in geography, the visions of riding on burros in lush green pastures and zooming about freeways in cities hardly seem distasteful. A recent *60 Minutes* special on Latin American problems was much more convincing.



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POLLUTION

Edited by Paul Klinge and Clarence Lange

This publication was prepared for high school and college use. It is divided into three sections: the realities of pollution, teaching about pollution, and laboratory investigations.

Twenty-four authors have contributed to this publication. They include Hugh Iltis, A. M. Winchester, E. J. Kirsch, Bernard Sohn, William Mayer, Alexander Cohen, David Dilcher, Karl Zobel and Alan H. McGowan.

This useful and practical publication is available from NABT for \$2 per copy.

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In another section of the first part, the narrator suggests abortion as a possible means of population control. But the disjointed visuals show a woman having her blood pressure taken. Especially for the younger viewer, the connection of the possibly sensitive topic of abortion with a routine medical procedure is counter-productive.

Part 2 of the program focuses on urban population explosion in Latin America. Although here the visuals are better matched with the narration, there are again unconvincing pieces of information. For example, one section discusses efforts to improve farming practices, but the impact of the program on slowing migration to the cities is not emphasized. And the final portion, where a supposedly successful urban situation is surveyed, leaves me glad that I'm not living there.

The succinct teacher's guide sets forth useful key vocabulary and after-viewing projects. The tapes have both audible and silent pulses, to allow for varied use.

A skilled teacher might choose to purchase the program, cut the filmstrips into individual frames (for slide projection) and rearrange the shots to suit the tapes, as well as add some more appropriate slides (such as in the abortion section). Or he or she just might find a better program.

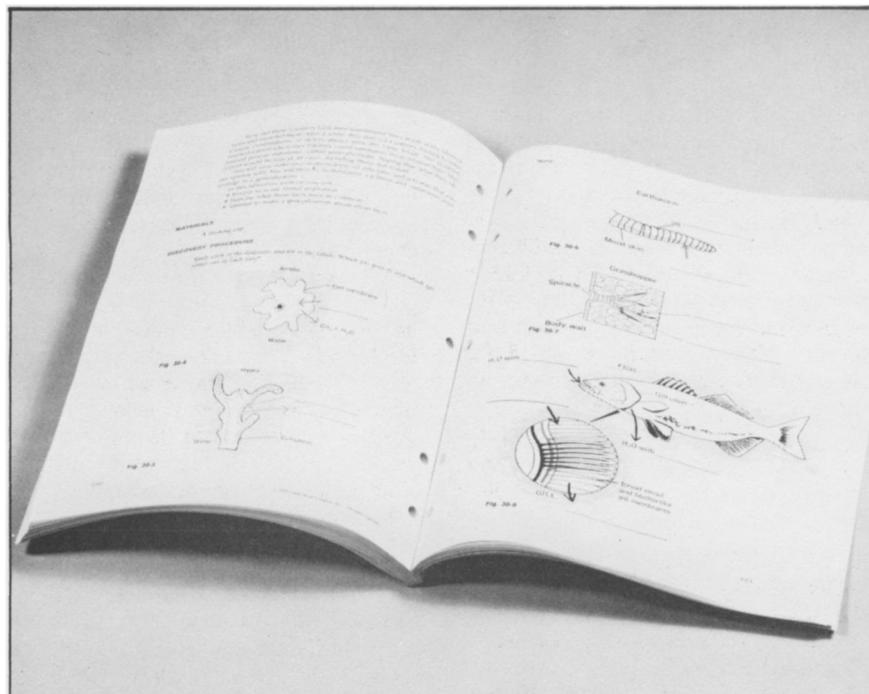
Paula J. Thompson
University of Virginia
Charlottesville

THE NATURE OF LIFE: CELLS, TISSUES AND ORGANS.

1977. Coronet Instructional Media (65 East South Water Street, Chicago, Illinois 60601). 16 mm color-sound film. 10½ minutes. Price to be announced.

Coronet's film *Cells, Tissues and Organs*, one of six in "The Nature of Life" series, moves almost immediately to the consideration of two representative multicellular organisms, the Shepherd's Purse and the frog. The systems of the mature organisms are given and their functions noted. Special emphasis is given to embryonic development of both the seed and the frog. The natural cinematography is of high quality, and the use of superimposed colored lines and labels is effective in drawing the attention of the viewer to specific details.

The teacher's guide consists of the label information and the description pasted to the inside of the film case. The latter includes suggested preparatory activities and follow-up work as well. I recommend that you read it, and that you view the film critically before attempting to use it.



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Appropriate use of the film demands thorough preliminary work. Especially overwhelming to the motivated, but unprepared, student would be the large amount of information about plant and animal systems that is given in technical terms. Examples include stages of embryonic development, dermal layers and the systems into which they develop, names of plant tissues and flower parts, and listing of six or seven animal systems with their major organs and functions.

If the film is designed to show the relationship among cells, tissues, and organs,

the purpose is lost in a complexity of terms. Although I do not underestimate the abilities of junior high school students, for whom this presentation was intended, I do feel that this much new material at one time might be too much. But for those who wish to use a film to review plant and animal tissues, organs, systems, their development and their functions, this presentation may have some value.

Sister Pamela Moehring
Mount Mary College
Milwaukee, Wisconsin