



# AV Reviews

Rachel Hays

Department Editor



**Who lives here? Part I: Animals in the backyard, Animals in and around ponds; Part II: Animals of the sea, Animals in the desert.** 1990. National Geographic (17th & M Sts., Washington, DC 20036). 4 sound-filmstrips, 14 min. each. Purchase: \$67 per set.

The four filmstrips demonstrate National Geographic's competence in producing a slick array of photographs joined with well enunciated narration. This is part of a participatory series designed for pre-K to second grade. Each filmstrip is divided into five sections. Each section presents four animals with a description of their structure and habitat. A riddle, which incorporates information given in the segment, is used by the students to identify one of the organisms. The correct answer is given after the students have had time to make their choice.

Many basic concepts in biology are subtly introduced. Adding depth to the program are descriptions of adaptations for specific habitats, such as that of the ghost crab, who escapes detection because of its color, and the fennec fox, whose long ears release body heat in the desert. Prey-predator relationships are presented a number of times. The characteristics of animal groups are woven in when students are told that walruses are mammals with human-like characteristics. Reproductive patterns and parental interactions with offspring are presented.

One of the series' biggest assets is its objective that students observe and listen for a specific purpose, and answer questions posed in rhymes at the end of each segment. The skill of listening must be practiced at an early age if it is to be mastered. However, too much of a good thing sometimes causes it to lose its effectiveness. Far more information is presented than most students of the target age can handle at one showing. The notes included in the guides are very thorough and point out that the filmstrips can be shown in segments. Although the riddles are simple, the filmstrips can easily be used in all elementary grades as enrichment.

One item—safety—should not be ignored. In the filmstrip on ponds several scenes show children standing around water with nets or just observing. An adult is never shown with the group. A child might be left with the impression that it is perfectly safe to explore a pond without adult supervision.

As an introduction to animals in different areas the programs are good. They can provide background information encouraging students to be better observers and listeners in their own neighborhoods.

Mary Finley

*Pittsburgh Science Institute  
Pittsburgh, PA*



**Protein synthesis.** 1985. TV Ontario (143 W. Franklin St., Suite 206, Chapel Hill, NC 27516). VHS. 57 min. Purchase: \$199. Rental: \$30/mo.

This is an excellent set of six programs on protein structure and synthesis accompanied by a very useful teacher's guide. While the video is aimed at a high school audience, it could also be used in a college-level introductory course.

Each nine-and-a-half minute program is meant for separate viewing, beginning with a brief review of previous topics that ties the series together. The topics are treated simply while including all the necessary con-

cepts and vocabulary. Scientific terminology is emphasized and defined with word derivations. Visual analogies with excellent animation are used throughout the series. The cell becomes a factory and a DNA molecule a zipper coiled into a corkscrew. The illustrations are bright and eye-catching.

In the first program the structure of insulin is discussed in detail, but the role of enzymes is only briefly mentioned. A giant soup pot is used to introduce protein synthesis. The pot is over a fire but no specific mention is made of the need for energy input in the process. The description of translation is superb in its simplicity. There is only one major error in the video, that of the structure of t-RNA. The 3-inch end of each t-RNA has the same final 3 nucleotides, not a different one for each amino acid as mentioned (and even emphasized) in the video. This error is cursorily mentioned in the guide.

The guide contains excellent background information for each program along with suggestions for discussion questions. Several class activities are included. The laboratory experiments are kept simple and all necessary chemicals and equipment are listed at the beginning.

I heartily recommend this program to all teachers of high school or introductory college biology.

Patricia Pagni  
*Knoxville College  
Knoxville, TN 37921*



**The greenhouse effect.** 1990. Scott Resources, Inc. (P.O. Box 2121, Fort Collins, CO 80521). VHS. 17 min. Purchase: \$64.95.

This video clearly explains the causes and consequences of the greenhouse effect. It begins and ends with scenes from a simulated newscast set in the future. The realistic scenario of worldwide coastal flooding, drought and high temperatures provides the headlines of October 23, 2044. These scenes seem all too familiar already.

**Rachel Hays** is the editor of the Audio Visual Reviews section of *ABT*. She holds a Ph.D. in botany from the University of California, Davis, and has taught courses at the college level. With a B.S. from San Diego State University, Hays went on to the University of California, Davis, for her M.S. degree. For several years, Hays has done research for the Natural Resources Ecology Laboratory at Fort Collins, CO, studying nutrient cycling and soil organisms. She has published articles in several popular and scientific periodicals. Her address is: **6921 Buckhorn Ct., Loveland, CO 80537.**