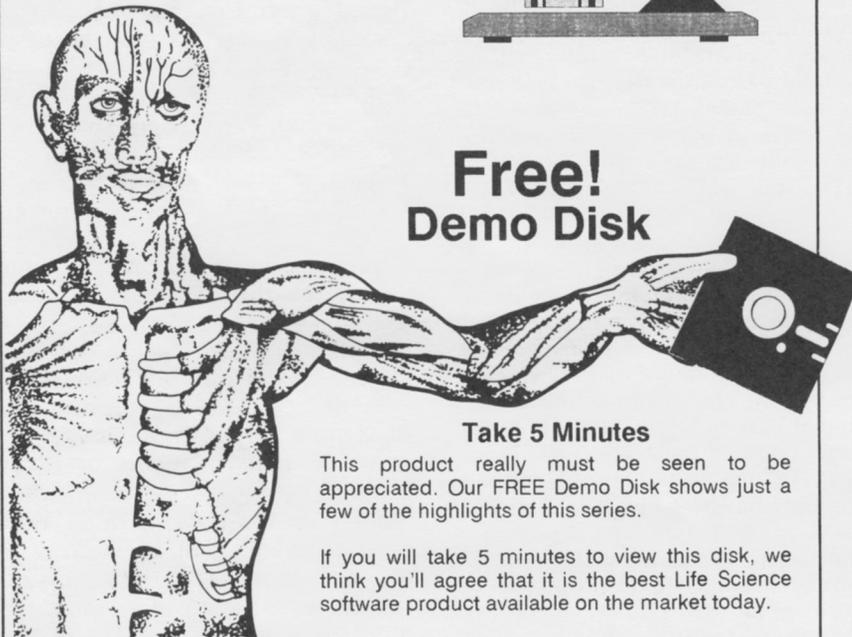
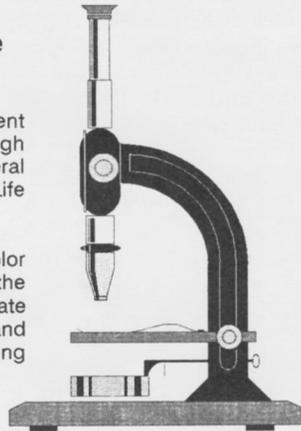


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AV Reviews

Rachel Hays
Department Editor

Biotechnology: serving human needs. 1988. Industrial Biotechnology Association, Washington, D.C. Color videotape. 18 min. Purchase \$25.

The biotechnological revolution needs to be addressed in the sophomore biology class, and the equipment has only recently become available at affordable prices for experimentation. However, the subject is strictly a theoretical one for many classrooms because of time or financial restrictions. In such cases, teachers must rely on AV media to help explain this complex and significant topic.

This videotape stresses the applications of biotechnology in the areas of immunology, pharmacology, cancer research, veterinary medicine, agriculture and the fermentation industry. It is a corporate-sponsored production and is extremely optimistic about biotechnology's potentials while skimming over any issues involving safety or ethics.

A historical introduction moves quickly through the early extractions of chemicals from indigenous plants for medicinal and other purposes and the cross-breeding of plants and an-

Rachel Hays is the editor of the Audio Visual Review section of ABT. She teaches science at Heath Junior High School, in Colorado's Weld County School District #6. 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.**

imals for desired traits to the establishment of Mendelian genetics and discovery of the DNA code. It then concentrates on the theory and applications of recombinant DNA research and the development and uses of monoclonal antibodies. In the case of the latter, the term "magic bullet" unfortunately is used to refer to potential monoclonal cells carrying a lethal drug and targeted for cancer cells. The term "magic bullet" has historical precedence in biology in the work of Paul Ehrlich during the turn of the last century and shouldn't be used here.

It should be mentioned that the videotape is essentially a narrated slide show. The trend in educational media production appears to be toward videotapes with the eventual elimination of filmstrips, slide shows and films as separate entities. The economic savings in production, duplication and shipping are probably responsible.

Warren Marchioni
Montclair High School
Montclair, NJ

Tahoe: moving beyond the conflict. 1986. University of California Extension Media Center, 2176 Shattuck Ave., Berkeley, CA. 16mm color-sound film/video. 19 min. Rental \$40. Purchase \$395 (16mm)/\$270 (video).

This excellent film documents efforts under way to halt the eutrophication of Lake Tahoe which has been caused by the runoff of nutrients and soil. This natural process has been speeded up by increased development of land in the watershed.

The need for and usefulness of scientific monitoring is stressed, as is the need for cooperative action by federal, state and local agencies and private citizens in trying to understand and solve a complex environmental problem.

The usefulness of a land capability study and strong environmental laws in regulating development is illustrated.

The addresses for 2 AV reviewers in the November/December issue should have been: Sue Tate, St. Mary's Academy, Alexandria, VA and Carol Raphael & Rosemary Barber, Paul VI High School, Fairfax, VA.

Data collected by scientific monitoring over 19 years documents the increased growth of algae. This is compared to the human population growth curve in the watershed for the same period and the two curves are parallel, strongly supporting the need for controlled development. The use of algae growth on rock in the lake as an indication of nutrient sources is also shown.

The need for a holistic approach to environmental problems is stressed by showing the cooperative efforts between limnologists, soil scientists, park rangers, private citizens and developers.

The importance of understanding the properties of native plants is stressed in a segment on revegetating a severely eroding ski resort.

Suitable for junior high through college levels, this is a well made and attractively done work. Its greatest strength is its illustration of how various governmental agencies and private citizens can work together to restore the environment.

No teacher or user guide accompanies this program.

Robert G. Futrell, Jr.
Rockingham Community College
Wentworth, NC

Banana, banana, banana slugs. 1988. Bullfrog Films, Oley, PA 19547. Video. 8½ min. Rental \$20. Purchase \$145.

Pre-school and primary school students investigate banana slugs which are found in the cool, wet, redwood forests of California. Students talk about the characteristics they note through sight and touch. They find that the slugs are slimy without a shell and have lots of teeth, holes for breathing, tentacles, eyes and a muscle for moving. The students talk about the banana slugs and express feelings of wonder and awe about creatures and other "neat things" in the world.

During the investigation of the slugs a song is used to emphasize the students' observations and gently add some details that were not mentioned. The students and their observations and feelings are kept as the focal points.

This video is designed for use in early childhood programs. Science is shown as students investigating nature, collecting data, reflecting on ideas, expressing the joy of new found

knowledge and wondering about more of the world. Through this video students would be encouraged to investigate nature, to develop their own understandings and to express their reactions. No teacher's guide is necessary.

Students in the video wondered about other "neat things" in the world. There is another wonder—how "neat" it would be if the view of sciencing in this video were the approach to science in early childhood programs.

Pat Obenauf
West Virginia University
Morgantown, WV

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