



AV Reviews

Rachel Hays

Department Editor



The life revolution: Designer plants. 1990. Films for Humanities and Sciences, Inc. (P.O. Box 2053, Princeton, NJ 08543-2053). VHS. 25 min. Purchase \$149, rental \$75.

This interesting video is partially misnamed because about half of it deals with biotechnology as applied to dairy herds rather than to plants. This first section shows the application of transmission genetics, artificial insemination and embryo transplantation to the management and improvement of dairy cattle. Briefly mentioned is the international shipment of bovine embryos for the improvement of cattle in third-world countries. Graphic—perhaps overly graphic—footage shows the insertion of sperm and the removal of embryos through the vaginal canal as well as the making of the skin incision for transabdominal uterine insertion of embryos.

After these animal episodes the scene and sense shift to horticultural uses of biotechnology. First, we are informed of the benefits of spray irrigation and extra dense plant propagation within the sprayed area. This is followed by balanced comments on the increased danger of plant pest and disease outbreaks likely to follow such intense cultivation.

A final section deals with the high cost—in money, energy and environmental damage—of heavy nitrogen fertilization. The alternative of transfecting plants with the nitrogen fixa-

tion gene complex from rhizobial bacteria is then discussed. While some attempt is made to balance the presentation of the anticipated benefits against the practical difficulties, the total effect of this section resembles a commercial for the future product as produced by the company whose spokesman presents much of the material here.

The tape seems suited to classes in general science and biology at the seventh through 10th grade levels. The information content, more technological than scientific, appears generally accurate. Unfortunately, no teacher's guide is included.

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Greenhouse crisis: The American response. 1989. Union of Concerned Scientists, Cambridge, MA (The Video Project, 5332 College Ave., Suite 101, Oakland, CA 94618). VHS. 11 min. Purchase \$20.

This video, based on research conducted by the Union of Concerned Scientists, succinctly explores the link between energy use and global warming. It catches one's attention immediately with an "in the future TV weather report" that predicts that the 90 to 110 degree heat and drought across the U.S. will last through October. Explanations continue: why carbon dioxide emissions from burning fossil fuels are believed to be the principal cause; the greenhouse effect; some potential consequences of global warming; and the production and consumption of various forms of energy. The tape stresses that improved energy efficiency and development of renewable energy sources can prevent global warming. It ends with statements on what each person can do to help.

The tape is designed for general audiences such as civic and community groups. It could also serve as a springboard to class discussion in secondary schools. The accompanying four-page Notes and Discussion Guide

gives topic background and leading questions on: evaluating the environment, the potential impact of global warming, the role of individuals, the role of communities and the role of governments.

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Earth first: The struggle for the Australian rainforest. 1987 (revised 1990). Gaia Films (The Video Project, 5332 College Ave., Suite 101, Oakland, CA 94618). VHS. 58 min. Purchase \$39.95.

This is a 58-minute pep rally designed to incite active involvement in the politics of environment. We are admonished to save the rain forests on a world scale with a visual feast of police atrocities on protesters set to a 60s folk music beat in the Australian bush.

A few powerfully silent scenes such as Queensland lowland rain forest and the tranquil Franklin River meandering through the serene lush valley hillsides are negated by graphic violence in scenes of attack dogs turned loose on protesters and bulldozers bearing down on protesters. The scientific logic in a brief series of cameo appearances by international scientists seems misplaced alongside the implied characterization of an "anti-environment" premier as a "hillbilly dictator." There is no middle ground here.

Closure is weak; there is only the narrator planting a yearling tree in the middle of a road at film's end. Students of ecology and environmental studies will find facts and figures that set the perspective of rain forest significance to global humanity. However, only activists interested in arousing emotions with a rather one-sided tirade against the loggers and the government will wish to endure the disproportionate, roughly 75 percent of the program devoted to sit-ins, dig-ins, and sing-ins.

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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.**