

AV Reviews

Rachel Hays
Department Editor

Phalarope feeding behavior. 1985. University of California Extension Media Center, Berkeley, CA. 16 mm or video. 10 min. Rental \$28. Purchase \$220 16 mm, \$195 video.

A thorough in-depth photographic essay of a captive Northern phalarope's feeding behavior is the main theme of this well-documented video.

Lateral, ventral and time-lapse shots show the phalarope engaged in its whirlpool swimming style and actively feeding on brine shrimp in an aquarium setting. This gives the student of behavior or ornithology a complete observation into the unique swimming and feeding habits of this shorebird.

The program begins by isolating the phalaropes studied to Mono Lake in the Sierra Nevada mountains of California and restricts observation to two species: Wilson's phalarope and the Northern phalarope, both being shown only in fall plumage. Limiting the discussion to the Mono Lake area gives the viewer the misconception that the phalarope's diet is exclusively brine flies and brine shrimp. In other areas of its natural habitat, mosquitoes, plankton and other microcrustaceans are part of its diet.

No additional aids accompany the video, and white lettering on light-colored backgrounds makes screen titles difficult to read. The excellent photography and detailed observational data redeem this video from its restricted discussion and make it a worthwhile addition to feeding behavior essays.

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Lights breaking. 1986. Bullfrog Films, Oley, PA. Color video. 59 min. Rental \$85, Purchase \$295.

This video deals with the real and potential benefits of genetic engineering and the fears that scientists and laypeople have about this important research tool. The tape revolves around fireside discussions between six individuals on a rafting expedition

down the Green River in Utah. A biotechnologist, social worker, writer, theologian, genetic engineer and academic administrator debate the merits and demerits of gene splicing. During the first half hour, the participants relate to each other the positive side of the technology, including superficial explanations about the manufacture of useful chemicals and the cure of hereditary diseases. This section lacks specificity or significant arguments in favor of genetic engineering.

The second half hour captures the ongoing debate about risks and possible abuses. This section is more interesting, because the participants air their disagreements in sometimes lively exchanges. The fears expressed by certain members of the expedition include possible mistakes made in the laboratory that could unleash "genetic monsters" into the environment or into a person. Others express concern about potential evils if the "wrong people" manipulate the technology for their own purposes and concern about tampering with the human genome—subjecting man to animal husbandry.

Produced by ITEST, the Institute for the Theological Encounter with Science and Technology, the two sides of the debate are well-represented. This videotape could serve as a launching pad for discussion in advanced high school or college humanities and biology classes. However, it is not intended to inform the viewer about genetic engineering or show how it is done. There is little hard scientific information presented, therefore good discussions require viewers that have a biology background or familiarity with biotechnology.

In the film, people are shown speaking about gene manipulation with the Green River in the background. The pace is slow, and attention will wane if viewers are unprepared, immature, or uninterested. It is best suited for a sophisticated audience. There is a good discussion guide that accompanies the video, however, answers to many questions come nei-

ther from the film nor the guide. For instance: "Discuss the Harvard-Cambridge City Council debate on establishing a recombinant DNA lab. Also, review the moratorium on such research that eventuated from the Asilomar conference in California in March 1975. . . ." The discussion guide's bibliography does refer to sources where answers to this and other questions may be found. Overall, while the film touches major points and may be useful in generating discussions in certain advanced classes, I think it lacks the excitement and depth needed to impress general biology students about the importance of such a revolutionary process as genetic engineering.

Gordon E. Uno
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The AIDS movie. 1986. New Day Films, Washington, D.C. 16 mm or VHS. 26 min. Rental \$57, Purchase \$450 film, \$385 video.

The theme of this film is facts about and prevention of the AIDS (Acquired Immune Deficiency Syndrome) disease, and the format is a classroom lecture to young people by an AIDS education expert. Interspersed in the lecture are running testimonials by three victims of the disease: an IV drug user, a gay male and a female who probably contracted the disease from a bisexual partner. The testimonial sequences near the end are emphasized by seemingly requisite, irritating background music, giving emphasis to the relentless spell woven around prevention and protection by the testimonials.

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The first display of the end matter is the fact that all three victims died after the film was completed. There is no information about the biological details of the virus and the involved cells of the immune system. Terminology of the microbiological aspects of the immune system is used and explained in the accompanying discussion guide. The social circumstances and the practical results of AIDS infection (sexual patterns, safe and unsafe sex,

etc.) are emphasized. During the body of the presentation, the victims of the disease take precautions not to sound prescriptive. However, the testimonial sequences at the end are specific in recommendations on behaviors and the summary list of safeguards is: 1. Avoid having sex, 2. Use condoms, and 3. Don't do drugs. The discussion guide is quite specific in its behavioral recommendations.

This film is useful for general educa-

tion programs and school health classes. At the rate that information is being made available about AIDS, the moderator/teacher using this film would need to have other information available (probably from the morning newspaper or equivalent electronic medium service).

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Computer Center

Software Reviews

Richard Duhrkopf
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Heart Health Education: Heart Medley. Written by Ted Ruppel, John deArmond, Jim Harrell, Carl Christensen and James Keeling and Distributed by the American Heart Association (contact your local office). Price—\$10. Systems—Apple II+/IIe/IIc (48K). Color monitor enhances viewing but is said to be optional.

The program is designed as a tutorial for upper elementary children, to provide basic information on heart anatomy and physiology and reducing risk factors. Games help the students practice making healthful choices and review information.

The program runs without any operating problems. The segments are uneven in quality, as might be expected: several short programs have been combined on one disk. I found the first lesson, Heartworks, to be no more helpful than a standard textbook presentation of blood flowing through a labeled heart. More important, the accompanying quiz has some failings—obvious answers, buzzers signaling everyone within earshot when the viewer has made a mistake, lack of feedback to wrong answers.

Heart Attack Risk is a graphic demonstration of how modifying risk

factors can change the risk of heart disease. Unfortunately, part of the chart cannot be interpreted without color. Otherwise, this is an interesting demonstration that utilizes the capabilities of the computer.

Tic-Tac-Heart, Heart Jeopardy and the Healthy Heart Food Game are enjoyable games that reinforce learning about heart disease, risk factors and healthful behavior, and the amounts of cholesterol in various foods.

The games make this software worth purchasing. In a classroom, I would use diagrams or models instead to teach the heart anatomy and physiology.

Heart Health Education: Heart Anatomy and Physiology. Written by Roy Alexander and Josh Goldman and Distributed by the American Heart Association (contact your local office). Price—\$10. Systems—Apple II+/IIe/IIc (48K). Color monitor enhances viewing but is optional.

The stated objectives of this tutorial for secondary students are: graphically develop a model of the heart and show how it works; demonstrate the movement of blood through the circu-

latory system; explain the role of blood and show it interacts with the lungs, kidneys and intestines.

The lessons include general descriptions of the heart, of blood flow and heartbeat, and of the circulatory system.

Unfortunately, the program does not work well: loading each segment was slow and noisy. Some portions broke down during use, leaving the viewer with an i/o error message. Others (including the promising-sounding section on the complete circulatory system) could not be loaded at all. Perhaps the software includes some creative and instructive material, but this reviewer has no way of knowing if that is so.

In the Heartflow lesson, the systole and diastole are described and the shape of the heart during each stage is shown. But the diagram does not actually change shape—one stage is simply replaced by the other. This offers no advantage over a standard textbook diagram and explanation, and may even confuse students.

The quizzes, which provide a little feedback when wrong answers are given, are the most valuable part of the program. Though the software appears worthwhile in the accompanying teacher's guide, the frustrating breakdowns and the limited diagrams make the program of little use.

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