

Audiovisual Reviews

LICHENS: PLANT PARTNERS.

1980. Photocom Productions (P.O. Box 3135, Pismo Beach, CA 93449). Three sound filmstrips. Purchase \$90.00.

Part One of this series introduces the viewer to the algae-fungi relationship and provides a simple classification scheme for lichens. Information regarding the unique lichen acids and their roles in soil formation, protection from sunlight, and as antibiotics is also presented.

Part Two describes the environment needed for normal lichen growth and reproduction. Attention is focused on terminology associated with reproductive methods. Time is also spent on the symbiotic relationship of algae and fungi and the contributions made by each to the union. Of special note in this section is the mention that the traditionally held view of the algae-fungi relationship as an example of mutualism is now in question.

Part Three is the highlight of the series. It is designed to be used in conjunction with the laboratory situation. The narration provides stopping places for class discussion and laboratory observation. It also tells students how to prepare lichen specimens for microscopic examination. Procedures for extraction and observation of lichen acids are also described. Finally, information related to testing and antibiotic activity of lichen acids is presented.

A teacher's guide comes with the series. Included in the guide is the script for each filmstrip, a laboratory worksheet that can be duplicated, and an article from *ABT* concerning lichens. The article describes in greater detail much of the descriptive and laboratory information presented in the filmstrips.

The factual information and laboratory investigations suggested in this series would enable the secondary biology or botany instructor to use it as a cornerstone for the development of a mini-unit on lichen biology. The films are a valuable starting resource for the teacher who wishes to expand instruction on lichens to several class periods.

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Faith Hickman, Audiovisuals Editor, selects materials and coordinates the review process for this feature. Cathrine Monson is her assistant. Their continuing contribution to the journal is deeply appreciated.

Readers interested in becoming audiovisual reviewers are invited to write to Ms. Hickman. General inquiries on this feature should also be addressed directly to her at:

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CHOICES.

1980. The Conservation Foundation (1717 Massachusetts Avenue, N.W., Washington, DC 20036). 16 mm, color-sound film. 29 minutes. Purchase \$300.00; rental \$10.00. (Available on loan, at no charge, from Regional Offices of the Forest Service, Experiment Stations, and State and Private Forestry Area Offices.)

There are 1.7 billion acres of forest and rangeland in the USA, about 46% in federal ownership. In order to focus on choices the nation has for management of these lands, Senator Hubert H. Humphrey in 1973 introduced legislation that was to become the Forest and Rangeland Renewable Resources Planning Act (RPA) passed by Congress in 1974.

To describe the comprehensive and long-range RPA process, the Conservation Foundation produced the *Choices* film which, as their promotional literature indicates, uses

... case examples from Michigan, Colorado, Montana, and New Hampshire to illustrate the purposes of the RPA process; how National Forest planning is conducted and its relationship to this process; how RPA affects state and private forestry, and Forest Service research; and how the public can participate in this process. In the film's interviews, private citizens, state and local officials, and Forest Service staff offer their

perspectives on forests, forest resources, and how RPA could help contribute to the accommodation of many—often competing—demands.

Researchers recognize that private landowners have neither the incentive nor the means to invest heavily in trees that take decades to mature. Therefore, efforts have been directed toward practices that produce income now and, at the same time, improve the value of the forests. For example, equipment that rapidly and efficiently harvests large, but less desirable trees, and chips the wood for pulp mill on the spot, also provides room for the growth of more desirable types of trees. This technology helps private owners recognize the available markets for wood products and for wood fuel. Also, this harvesting provides the financial incentive for owners to improve their forests; and improving forests on private lands reduces pressure on national forest lands. Improving all forests helps meet demands for water, lumber, outdoor recreation, wildlife habitats, livestock forage, minerals, and aesthetics. The 40-year management goals of RPA, which are updated every five years, involve integrated approaches dealing with much more than just the forests themselves, since waterways and various commercial and public interests are involved. All viewers of *Choices* should gain an appreciation for the depth of problems involved with forest management.

The film generally holds the viewer's interest. Music and interviews are interspersed with views of Nature. There are a few striking scenes, perhaps the most notable that of a machine that can clasp and quickly sever tree trunks of perhaps 30 cm in diameter.

With appropriate discussion, this film could be useful from middle school through college. Our college class in economic geography responded favorably to the content and quality of the presentation. The accompanying 17-page guide could be used as a reading supplement to the film.

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(Continued on p. 204)