

parts of the biological manipulations whose implications are being discussed, the majority of the tape is minilectures by Jonathan Glover of New College, Oxford, England, interviews between Mr. Glover and a few biologists involved in the work, and sequences during which the opinions of two insufferably cute little boys—one with quite indistinct speech—are elicited. This is only the slightest attempt to explain the biology behind the manipulations, and the teacher who wishes to use the tape would be well advised to teach the rationale of the procedures first.

It is not easy to single out the most disturbing feature of the tape. Is it Mr. Glover's disregard of the cautions stated by the scientists in the tape as to the limits of and long delays in the application of the techniques considered? Is it the questionable biology, such as the unequivocal statement that mice have been cloned, when, unfortunately, the work by Illmensee and Hoppe is in dispute (see also McGrath & Solter, *Science* 226: 1317-1319, 1984), or that *Homo sapiens* and some rodents are the only vertebrates who destroy members of their own species? It is the hard statements easily mistaken by students as fact which occur in a bit of fiction set in the future, e.g. that a person, about to be developed from a zygote in the freezer, can be given her grandfather's red hair by making three genes homozygous? Or is it, near the end, a section in which Mr. Glover seems to indicate that, in his view, war can only be abolished by genetically changing the supposedly inherited tendency of our species toward intraspecific aggression?

The tape does have some strong features. There is a clear differentiation between positive and negative uses of genetic engineering with an appropriate warning that the distinction may blur in practice. The technical difficulties of genetic manipulations in human beings, particularly with respect to intellectual abilities and character traits, are well brought out by one of the biologists, Dr. Chris Graham. And the distinction between interspecific hybrids and chimeras is well made in one of the most visually interesting sequences.

Most of the language, accents and examples are obviously and thoroughly British. I would judge the vocabulary suitable to the twelfth grade or above.

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Book Reviews

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ECOLOGY

THE BACKGROUND OF ECOLOGY: CONCEPT AND THEORY

by Robert P. McIntosh. 1985. Cambridge University Press (32 East 57th Street, New York, NY 10022). 383 p. \$39.50 hardback.

This book is a well-documented historical review of many aspects of the study of ecology. The author concisely and thoroughly addresses many areas involved in the development and progression of the study of ecology. The book addresses broad conceptual aspects of topics relating to ecology; however, it does not address scientific details or any scientific aspect of the topics. The focal point of the text is a panoramic approach to ecology focusing on the historical development process. In this overview, the author demonstrates many contrasts and comparisons that have occurred throughout the years and have influenced ecological theories and trends.

The book is a good reference source for the undergraduate and beyond. The author has excelled in his accumulation of bibliographical references. The well-written book serves as a concise and effective reference for the historical aspects of ecology, offering a collection of many references without going into detail on any aspect. As an historical reference, the book does an effective job, but it is not a book for seeking scientific knowledge on ecology and it is not a textbook for pre-college students.

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GLOBAL ECOLOGY

edited by Charles H. Southwick. 1985. Sinauer Associates, Inc. (Sunderland, MA). 323 p. \$14.95 softback.

This collection of essays, lectures

and addresses on the various facets of ecology on a worldwide scale would be an asset for any reference portion of the high school biology or environmental science class. Divergent views are presented, in some instances, that should challenge serious students to do further research on their own. Viewpoints of the various writers are carefully documented and cover areas of concern from world health to desertification and acid rain.

Although some of the chapters on human population growth and economics seem not to fit in at first, we have to be aware of the tremendous impact and environmental pressure placed on our world as a result of this increase in population. We are no longer "isolated" countries, each involved in feeding only our specific country. We are now world backyard neighbors, whose natural resources must be carefully used in order to obtain the fullest potential. The charts in the book are most valuable and could be utilized by classroom instructors to enforce their lectures. There are a few typographical errors but this does not detract from the usefulness of the book.

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