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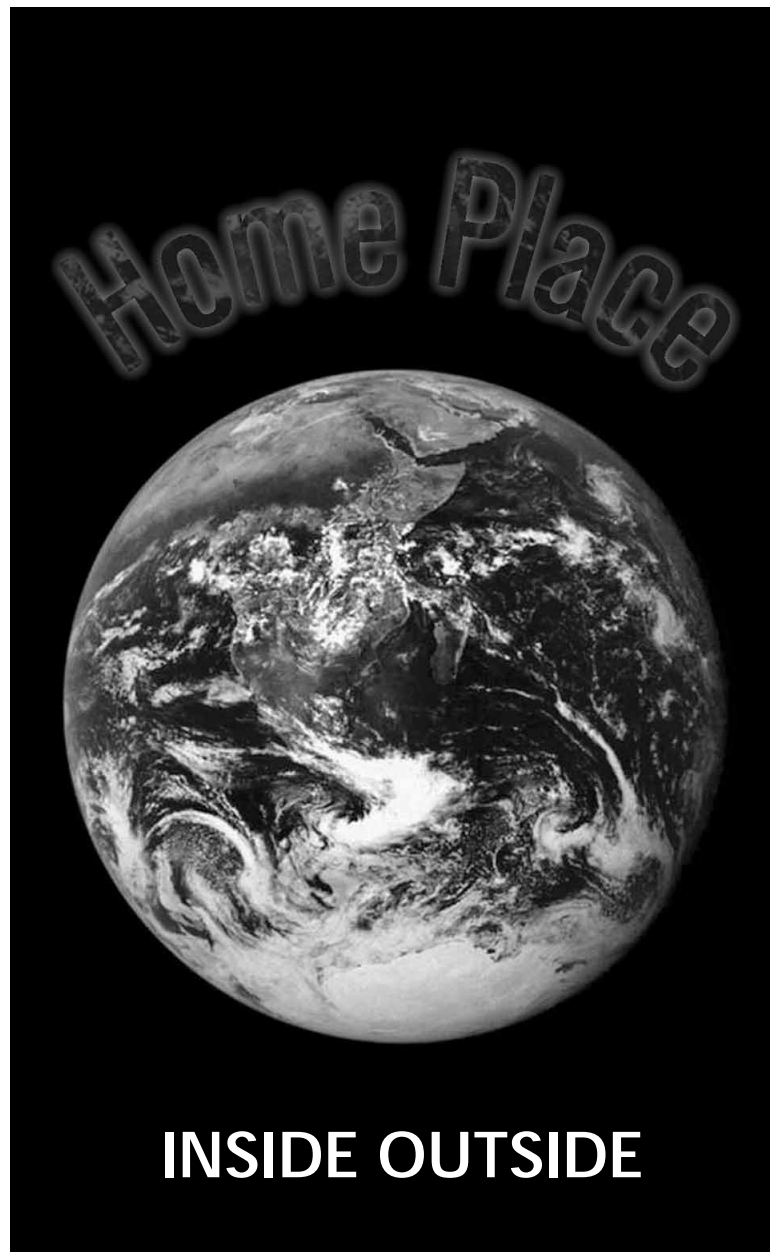
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INSIDE OUTSIDE

Study Guide by Leslie Karasin
Bullfrog Films

Inside - Outside is one of the four videos in the Home Place series, which are based on Canadian ecologist J. Stan Rowe's book Home Place: Essays on Ecology. The series attempts to redefine the role of human beings as one of Earth's species and look anew at the systems which sustain and constitute life on the planet. Hosted by J. Stan Rowe and narrated by Liona Boyd, the series consists of **Inside - Outside, Life Cycles, Partnership, and Going Home**. Each film is 26 minutes.

Other films in the series:

Life Cycles

Explores the problem of trying to distinguish between living and non-living parts of the Earth. Everything on earth is linked by the cycling of matter and flows of energy. Life is a property of Earth.

Partnership

Explores the challenges faces by industrial societies as they shift from their present exploitative relationship with earth ecosystems towards a more sustainable partnership. Shows what happened to ancient societies that lived beyond their ecological means, and points to models of partnership that are possible.

Going Home

Explores the ways in which cocoons of cultural myth affect the way we see and understand the world, and cocoons of technology insulate our senses from nature. Personal remedies are found in activities which overcome our alienation from our Home Place, and help us to reconnect with the earth.

8Man and the Natural World: A History of the Modern Sensibility. Keith Thomas. Pantheon Books, USA: 1983.

Not Man Apart. Friends of the Earth, 530 Seventh St. SE, Washington, DC, 20003.

Simple in Means, Rich in Ends: Practicing Deep Ecology. Bill Devall. Peregrine Smith, Salt Lake City: 1988.

The Arrogance of Humanism. David Ehrenfeld. Oxford University Press, New York: 1978.

The Control of Nature. John McPhee. Farrar Strauss Giroux, New York: 1989.

The Trumpeter Journal of Ecosophy. P.O. Box 5883 Stn. B, Victoria B.C. Canada, V8R 6S8.

Western Man and Environmental Ethics. Ian Barbour, ed. Addison-Wesley, Reading, MA: 1973.

What Are People For? Wendell Berry. North Point Press, Berkeley: 1990.

Wildlands for Wildlife. National Geographic Publishers, Washington, DC: 1988.

Organizations and Websites

Earth Island Institute 300 Broadway, Suite 28;
San Francisco, CA 94133

National Centre for Sustainable Society 1896 Watson
Street Victoria, BC Canada V8R 6N6 [http://
www.islandnet.com/~ncfs/ncfs](http://www.islandnet.com/~ncfs/ncfs)

National Parks and Conservation Association 1015 31st
St., NW, 4th Floor, Washington, DC, 20007.

Resources

Books, Articles and Journals

A Sand County Almanac. Aldo Leopold. Oxford University Press, NY: 1949.

Deep Ecology. Michael Tobias, ed. Avant Books, San Diego: 1985.

Gaia: A New Look at Life on Earth. James Lovelock. Oxford University Press, New York, 1979.

Gaia: The Growth of an Idea. Joseph E. Lawrence. St. Martin's Press, New York: 1990.

Earth. Anne H. and Paul R. Ehrlich. Franklin Watts, New York: 1987.

Ecology, Community, and Lifestyle. Arne Naess. Cambridge University Press, New York: 1989.

Environmental Science: The Way the World Works. Nebel and Wright. Prentice Hall, NJ: 1993.

Fundamentals of Ecology. EP Odum. W.B. Saunders, Philadelphia: 1953.

Home Place: Essays on Ecology. J. Stan Rowe.

“Human Ecology: The Subversive, Conservative Science.” Garrett Hardin. In *American Zoologist*, Vol 25, 1985, pp. 469-476.

Human Ecosystems. WB Clapham, Jr. Macmillan, NY: 1981.

Living in the Environment. G. Tyler Miller, Jr. Wadsworth Company, CA:1992.

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Synopsis

From the inside of the stream, a salmon cannot comprehend the relationship between the stream and other elements of the watershed. From within a layer underneath the bark of a tree, a beetle larva cannot understand the nature of the tree, let alone the forest. From the floor of a meadow, a ground squirrel cannot fathom the mountain system around it. And, likewise, from our local environments, we humans cannot grasp the full complexity of our planet.

For thousands of years humans have assessed the world in much the same way that an animal would: by seeing those things nearest and most important to us, and by considering only those things within eyesight at a given moment. And at the same time, science has been attempting to understand the world by gaining a complete comprehension of tiny units: atoms, molecules, and cells. Both of these tendencies have resulted, often, in the failure to see the big picture.

With space travel, we gained a new means of envisioning the earth. The image of the earth viewed from space allows us to understand the concept of the planet as a cohesive unit of interrelated parts. It is now easier to think of life as a property of the planet, rather

than something that resides in individual organisms. And this vision helps us to understand the concept of the *ecosphere*: that the many ecosystems of the earth interdependently form the living planet.

Just as Copernicus fundamentally changed our perspective of the solar system when he discovered that the earth revolves around the sun, it is time for us to question the paradigm that humans are the central organisms on the planet. We must learn to see ourselves as part of local ecosystems and the global ecosphere, rather than as the rulers of our environment, and we must make behavioral changes based on our new understanding of the world. And as a species which is causing fundamental changes to our planet, it is imperative that we avoid making the narrow-minded mistakes which are caused by failing to recognize the complex relationships at work in the world around us.

Glossary

Ecology Study of the interactions of living organisms with one another and with their nonliving environment of matter and energy*

Ecosystem Community of different species interacting with one another and with the chemical and physical factors making up its nonliving environment*

Ecosphere The collection of all of Earth's ecosystems; Earth's collection of living organisms interacting with one another and their non-living environment (energy and matter) throughout the world*

Anthropocentric Considering human beings as the most significant entity of the universe; regarding the world in terms of human values and experiences~

*Definitions from Living in the Environment, G. Tyler Miller, Wadsworth Publishing.

~Definition from Merriam Webster's Collegiate Dictionary, Merriam-Webster, Inc.

stand our role as earthlings.” What ideas in the film suggest changes to this role? What changes are needed? Think about both broad categories of changes, such as changes in perspective and changes in behavior, and also specific physical examples.

- Think once more about the image of the earth from space. After watching the film, does looking at our home *from the outside* have any new significance? What new meaning does the term *ecosphere* have, and how does it affect your view of the planet?

Key Concepts

The film presents some revolutionary and highly philosophical ideas, many of which are a challenge to conventional modern thought. To help both students and teachers work through the material in the film, some of its key concepts are enumerated below.

- The issue of perspective. Assessing the world from different perspectives can yield different scientific and ethical conclusions. We should, therefore, think about traditional human perspectives, and question whether our outlook is the most appropriate.
- Looking at the big picture. Thinking about the planet as a cohesive network of interrelated systems will give us more complete insight into how the world works than just looking at our own surroundings. Likewise, we will miss a great deal if we study only very small units.
- Ecosystem vs. environment. These two terms are sometimes used interchangeably, but the film emphasizes the subtly anthropocentric implications of the term *environment*.
- The living earth. With the term *ecosphere* and the emphasis on a new view of the planet, the film introduces the concept that the earth is more than a crust which happens to be home to some living organisms. Rather, the earth is a rich and complex network of ecosystems, which together form the basis for life.
- The role of humans. Once we have shifted towards a new view of the world, which embraces the complexity of ecosystems and exchanges the narrow view for the big picture, we will see ourselves as part of our local ecosystems and we will rethink our function on the planet.

Before Viewing

The following activities are meant to enhance understanding and enjoyment of the film, and can be effectively performed in a variety of ways.

- Define ecosystem (see glossary, below). Have students think about what “ecosphere” might mean.
- Have students pick a word from a page of a book. Try to guess what the book is about based on that one word. Use the activity as an example of perspective; is it appropriate to analyze small excerpts (words and letters), or should the book be read as a whole?
- Discuss Nicolaus Copernicus’ sixteenth-century discovery that the earth is part of a solar system which revolves around the sun. Consider further the reactions to his advances, and particularly the church’s response to Galileo’s adoption of Copernicus’ theory. Why did Copernicus’ theory threaten the church?
- Look at an image of the earth, viewed from space. What responses does the image trigger? For thousands of years humans could not envision the earth in this way. What difference does this image make to our emotional and scientific thoughts about our Home Place?
- Discuss the role of human beings on the planet. What is our function here? Are we part of, or separate from, our local environments? How do our actions impact the rest of the planet?

After Viewing

- The film is titled Inside - Outside. Why? What is the difference between looking at things from the inside or the outside? What is the difference for the salmon, for the beetle larva, or for humans?
- Why does the film make a distinction between the idea of “environment” and the term “ecosystem”? If a person’s assessment of her environment is “the important things that surround her,” what is her relationship to her local ecosystem(s)?
- The host says that our environment is “made up of things that we can sense and measure.” What kinds of things will we forget to include in this kind of analysis? He also says that when we consider our environment, we tend to assess the value of our surroundings on human terms. What’s wrong with this approach? Consider the ways in which humans use natural resources, compared to the ways in which other species do. Is it appropriate for us to think of natural resources as being a “storehouse for our use”?
- The glass pyramid in the film represents an ecosystem, but it is not self-sufficient. What would happen if it were completely sealed off? Even if air, water and temperature continued to be regulated, how long would the plants survive without, for example, pollinators? For a research project, investigate the Biosphere II project in Arizona.
- Why are the discoveries of Copernicus relevant to the film’s subject matter? In what way are the ideas in the film comparable to the notion that the sun and planets do not revolve around the earth?
- The film’s host says that we must come to “under-