

Ecologist Encyclopedia Article

Ecologist

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Ecologist Encyclopedia Article.....	1
Contents.....	2
Ecologist.....	3

Ecologist

If a butterfly flaps its wings in the Amazon, it causes a typhoon in Asia. This half-joke by ecologists illustrates their belief that all life on Earth is connected in a delicate and barely understood balance. Ecologists study the web of relationships between the plants, animals, microorganisms, climate, and geography of a given habitat.

The term "ecology" was devised by German zoologist Ernst Haeckel in the mid-1800s to mean the study of home. In his time, most scientists studied species in isolation. Haeckel realized the importance of looking at the links between animals and the places in which they live.

Biologist Rachel Carson enlarged on the ecological principle of the interconnectedness of life with her books in the 1950s about the sea. She described how living creatures interact to form communities of mutual dependency and how the vast currents of air and water connect the activities of one habitat with all others on Earth.

Once considered by science to be hostile and competitive with one another, species are now known to cooperate in elaborate ways, suggesting to some ecologists that the entire planet behaves as a single living organism, with the health of any one part mirrored in the whole.

The necessary coursework for a college degree in ecology includes chemistry, calculus, physics, genetics, biostatistics, and geology or biogeography. Ecologists also study neurobiology; cellular, developmental and molecular biology; physiology; and behavior. Their training consists of laboratory work and at least one semester of fieldwork.

Virtually any question concerning how life operates is open to an ecologist. Some of the fascinating puzzles investigated by ecologists include how pesticides cause bird species to decline, why pollution from fossil fuels could affect the atmosphere, and even how the flight of a butterfly might cause a typhoon.

Bibliography

Burnie, David. Dictionary of Nature. New York: Dorling Kindersley Inc., 1994.

Quinlan, Susan E. The Case of the Mummified Pigs and Other Mysteries in Nature. Honesdale, PA: Boyds Mill Press, 1995.