**Food Chain Encyclopedia Article**

**Food Chain**

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**

**Food Chain**

There is no waste produced in a functioning, thriving natural ecosystem. All organisms, dead and alive, are potential sources of energy and nutrition for other members of the environment. For example, a worm digests tiny soil nutrients; a robin eats the worm; a wild cat eats the robin and when the cat dies, it is then consumed by bacterial decomposers. This process of exchanging energy and nutrients among living organisms by feeding on each other is are called food chains.

The word "chain" is probably misleading, however, because it implies an orderly linkage of equal parts. Actual food chains are extraordinarily complex because there is no exact order specifying what creatures eats whom. It would be more accurate to consider each of the links as an energy carrier in a complex network of many interconnected food chains, called a food web. Another way to picture a food chain is in the shape of a pyramid. The bottommost layer of a food pyramid consists of the most abundant elements: plants that trap solar energy through photosynthesis. These plants are then eaten by herbivorous animals, which are considered the primary consumers at the second level of the pyramid. In turn, these primary consumers become food for other animals called secondary consumers at the third level of the pyramid. Each succeeding level consists of fewer, usually larger flesh-eating animals.

The consumers at the top of the pyramid do not represent the uppermost end of the food chain. When they die, they are eaten by tiny, microscopic organisms which serve as decomposers. When devoured by these bacteria, the nutrients are returned to the soil to be recycled into yet another food chain.

It may seem like the food chain consists of predator-like continuous killing and devouring of all living creatures. However, in the ecological sense, predators of the food chain can be herbivores and feed off of plants, or they can be parasitic and continuously feed off live organisms. Predation is a more general term to explain this because it separates live-feeders from scavengers and decomposers. An organism does not necessarily have to kill another organism to be a predator. For example, parasites are organisms that derive nourishment by living in or upon the body of a host organism that remains alive.