

Oviparous Encyclopedia Article

Oviparous

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

Oviparous Encyclopedia Article.....	1
Contents.....	2
Oviparous.....	3

Oviparous

The word oviparous refers to animals that lay eggs which hatch externally. In other words the female retains the fertilized eggs in her body until they hatch, so that "live" young are born.

Depending on the species, the eggs of oviparous animals may be fertilized inside the body of the female, or externally. External fertilization is the more "primitive" condition (meaning it was the first to occur during the evolutionary history of animals). It involves the passage of the sperm to the ova through an ambient medium, which is almost always the water in which the unfertilized eggs are laid. Frogs, for example, achieve external fertilization of their eggs during amplexus (the male deposits sperm over the eggs as they are laid by the female). In many animals, external fertilization is a much-less controlled process, for example, in the case of corals, sea urchins and numerous other kinds of marine invertebrates, in which the sexes shed huge numbers of gametes to the water at about the same time, so that the ova and sperm meet somewhat by chance. Many species of fish also have external fertilization. For instance, the sexes of salmonid fishes such as trout and salmon mix their unfertilized eggs (spawn) and milt (sperm) over a gravelly riverbed. The eggs become externally fertilized, fall into spaces within the gravel, and develop and hatch into young fish fry. All animals that fertilize their eggs externally are oviparous.

In species that have internal fertilization of their eggs, the males must somehow pass their sperm into the female. Male salamanders, for example, deposit a sperm packet (or spermatophore) onto the bottom of their breeding pond, and then induce an egg-bearing female to walk over it. She picks up the spermatophore with the somewhat prehensile lips of her cloaca, and retains it inside her body where the eggs become fertilized. The internally fertilized eggs are later laid in the water and develop externally, representing oviparity.

Many species of fish, all species of reptiles and birds, and even a few primitive mammals (the platypus and echidnas) achieve internal fertilization of their eggs through copulation. If the eggs are then laid to develop externally, the process represents oviparity.