

# Brood Parasitism

Brood parasitism involves the raising of young. Bird species that practice brood parasitism, including cowbirds and cuckoos, lay their eggs in another species' nest instead of building their own nests. This is a form of parasitism because the species who lay their eggs in other nests gain benefits (they don't have to spend energy raising young) while the other species are harmed (they do have to use energy to raise young, and it is not their genetic material). Sometimes, the parasite species will even kick the other species' eggs out of the nest, forcing the host to raise only the parasite's young. Brood parasitism can also occur in fish. It is a type of kleptoparasitism, which involves directly or indirectly taking food from the host; in this case, food that could have gone toward the host species goes to the parasite species instead.

Another form of parasitism, such as that practiced by some **ants** on ants of other species, is known as social parasitism.

(Social parasitism is a condition where a parasitizing **ant** species depends upon the labour provided by a host ant species within the context of a mixed-species colony.)

Parasites may also become parasitized; such a relationship, known as **hyperparasitism**, may be exemplified by a protozoan (the hyperparasite) living in the **digestive tract** of a **flea** living on a **dog**.

Sexual parasitism, which is actually a type of specialized **reproduction**, is most commonly associated with deep-sea **anglerfish**, where it occurs in more than 20 species. In these fish, males are much smaller than females. (In the case of the northern seadevil, or deep-sea angler, *Ceratias holboelli*, females may be more than 60 times the size of males.) Females possess a luring apparatus to entice **prey**, but males do not. However, males possess the visual and olfactory **acuity** to locate females so that they might obtain food. Males attach themselves to females with their **jaws**, and in some cases the tissues and **circulatory systems** between the sexes are joined. Thereafter, the male serves as a **sperm**-producing organ on the female, since transformation makes him completely dependent upon her.