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In [biology/ecology](#), **parasitism** is a non-[mutual](#) relationship between [species](#), where one species, the **parasite**, benefits at the expense of the other, the [host](#). Traditionally *parasite* (in biological usage) referred primarily to organisms visible to the naked eye, or [macroparasites](#) (such as [helminths](#)). Parasites can be [microparasites](#), which are typically smaller, such as [protozoa](#),^{[1][2]} [viruses](#), and [bacteria](#).^[3] Examples of parasites include the plants [mistletoe](#) and [cuscuta](#), and animals such as [hookworms](#).

Unlike [predators](#), parasites typically do not kill their host, are generally much smaller than their host, and will often live in or on their host for an extended period. Both are special cases of [consumer-resource interactions](#).^[4] Parasites show a high degree of [specialization](#), and [reproduce](#) at a faster rate than their hosts. Classic examples of parasitism include interactions between [vertebrate](#) hosts and [tapeworms](#), [flukes](#), the *Plasmodium* species, and [fleas](#). [Parasitoidy](#) is an evolutionary strategy within parasitism in which the parasite generally kills its host.^[5]

Parasites reduce host [biological fitness](#) by general or specialized [pathology](#), such as [parasitic castration](#) and impairment of [secondary sex characteristics](#), to the modification of host behavior. Parasites increase their own fitness by exploiting hosts for resources necessary for their survival, such as food, water, heat, habitat, and [transmission](#). Although parasitism applies unambiguously to many cases, it is part of a continuum of types of [interactions](#) between [species](#), rather than an exclusive category. In many cases, it is difficult to demonstrate harm to the host. In others, there may be no apparent specialization on the part of the parasite, or the interaction between the organisms may remain short-lived.

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please note

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