

## Social Behaviour in insects: An Introduction

Few animals belonging to the **order Isoptera** and **Hymenoptera** of **class Insecta**, display the phenomenon of **social behaviour**. These animals live in complex societies and are referred to as **eusocial**.

**Social insect:** This term generally refers to any of numerous species of insects that live in colonies and exhibit three characteristics namely **group integration, division of labour, and overlap of generations**. All termites, ants and various bees and wasps are the insects which best exhibit social behaviour.

For Example a colony of social bees can number in the tens of thousands, and hundreds of millions of ants can live together in a supercolony of interconnected nests.



**A colony of Honey bees**



**A colony of Ants**



**A colony of Termites.**

**Eusociality** is an extreme form of social behavior found in just a few types of animals and is characterized by the following:

- Occurrence of polymorphic forms each assigned with a different function
- Worker members of the colony which provide food and care for the reproductive classes and the early developmental stages of the colony.
- Division of labour with queens that reproduce a lot of insects.
- The presence of several generations in a single hive/nest at the same time

### **Advantages of Social Behavior in Insects**

Many insects evolved to live in large, cooperative colonies. Their strength also lies in their numbers.

Social insects gain several advantages over their solitary cousins. Social insects work together to find food and other resources and to communicate their findings to others in the community.

They are capable of providing defense to their home and resources when under attack.

Social insects also can outcompete other insects, and even larger animals, for territory and food.

They can quickly construct a shelter, and expand it as needed, and they can divide chores in a manner that ensures the work to be done quite efficiently.

