

THE ANT

The ants are closely related to the bees and are similar to them in many respects. They live in colonies consisting of workers, drones, and a queen.

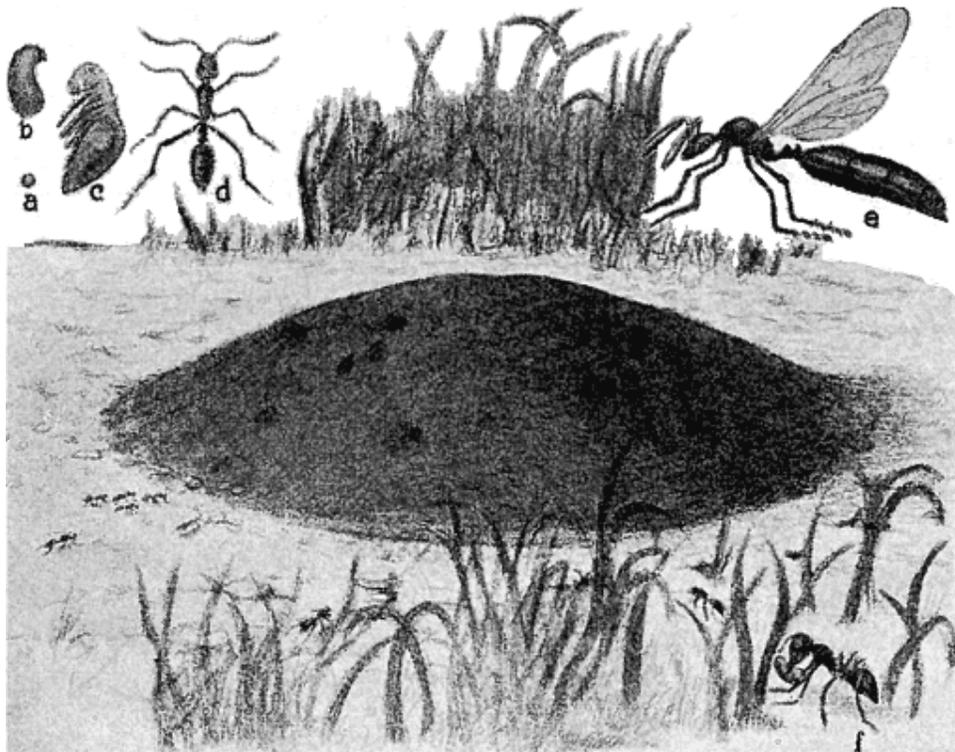
The males or drones appear at swarming time and the workers are divided into various castes—warriors, guards, nurses, etc.

Those families of ants, however, which seem to have what approaches real intelligence, far outstrip the bees in many respects.

In some cases ants seem to be able to plan and carry out lines of work very much the same as man does. The various stages of human intelligence or races of men from the savage to the intelligent man are in a way similar to the various races of ants.

There are ants which live as hunters, others which live as shepherds and still others more highly developed which grow crops either in or near the nest as is the case with the fungus growing ants.

This striking similarity between the development of ants and man offers ground for much speculation.



Ant hill showing activity and stages of development; a, egg; b, young grub; c, pupa; d, worker; e, queen with wings; f, worker carrying young grub; all enlarged. The ant hill and workers at work much reduced.

Some ants may be of considerable value to man while others are the source of great annoyance and injury. The tidy housewife usually places the ant in the same category with

cockroaches and bed-bugs and the corn growers attribute much of the injury to young corn to the work of the small cornfield ant which acts as a shepherd of the corn root-louse.

Ants are usually more destructive by protecting and caring for other pests than by attacking the crop direct.

Every child is familiar with ants. They are met every day during the summer, scampering across paths, tugging at some unfortunate insect, or sticking to one's tongue when he eats berries.

Ants are as numerous as the stars in the skies and vary in size. They are found from the tropics to the frozen north, in deserts, swamps and in fact, almost any place where plants or animals live.

They do not waste time building or manufacturing a complicated nest like wasps and bees, so when food is scarce, or for other reasons they need to move they simply "pack up" and migrate.

This, together with the fact that they feed on almost every imaginable kind of plant and animal material, accounts in part for the fact that they are the rulers of the insect world.

Studies and Observations

It is easy to study the out-door life of ants, but it is most difficult to follow their activities in the nest.

Go into the field or out on the school grounds and watch along paths or bare spots for ants. Soon red or black fellows will be seen hurrying along after food; ants are always in a hurry when they are after food.

Follow them and watch them catch and carry home small insects. If they do not find worms or other small insects, drop a small caterpillar near one of them and see what happens.

Can they drag away a caterpillar as large as themselves?

Some of them may be after honey dew, fruit juice or other material of this nature and they should be observed collecting it.

Ants collect about plants or shrubs which are overrun with green lice, and feed on a sweet liquid which the lice produce.

Watch them collect the honey dew from the lice.

Do they injure the lice?

Can you see the two short tubes on the back of the louse?

Locate an ant nest or hill.

Observe the workers carrying out small pellets of earth or gravels.

Is the earth they bring out the same color as the surface soil?

How deep may they go to get it?

Do they move about as if they were in a hurry?

Who sends them out with the earth?

Why do they bring it out?

Is it dropped as soon as the ant comes out of the hole or is it carried some distance?

The small ant found along paths usually makes a small ridge all the way around the entrance. While some of the ants are making the nest, others are collecting food.

Watch for some of these and see what they bring.

Do they stop to eat before going down into the nest?

Dig into a large ant hill and see what can be found. Describe briefly what is found.

Do you find any small soft grubs and oval cocoons?

These are the young ants and they are perfectly helpless and must be fed, bathed and cared for by the workers or nurses.

The workers pick these up between their pinchers and carry them away when the nest is disturbed.

Do the workers fight to protect the nest?

Collect some of the workers which are carrying away the young and keep them in a jar with bits of bark and see what they do with the young.

Describe briefly what you are able to find out about ant life and behavior; also make drawings of an ant, the young and a nest.