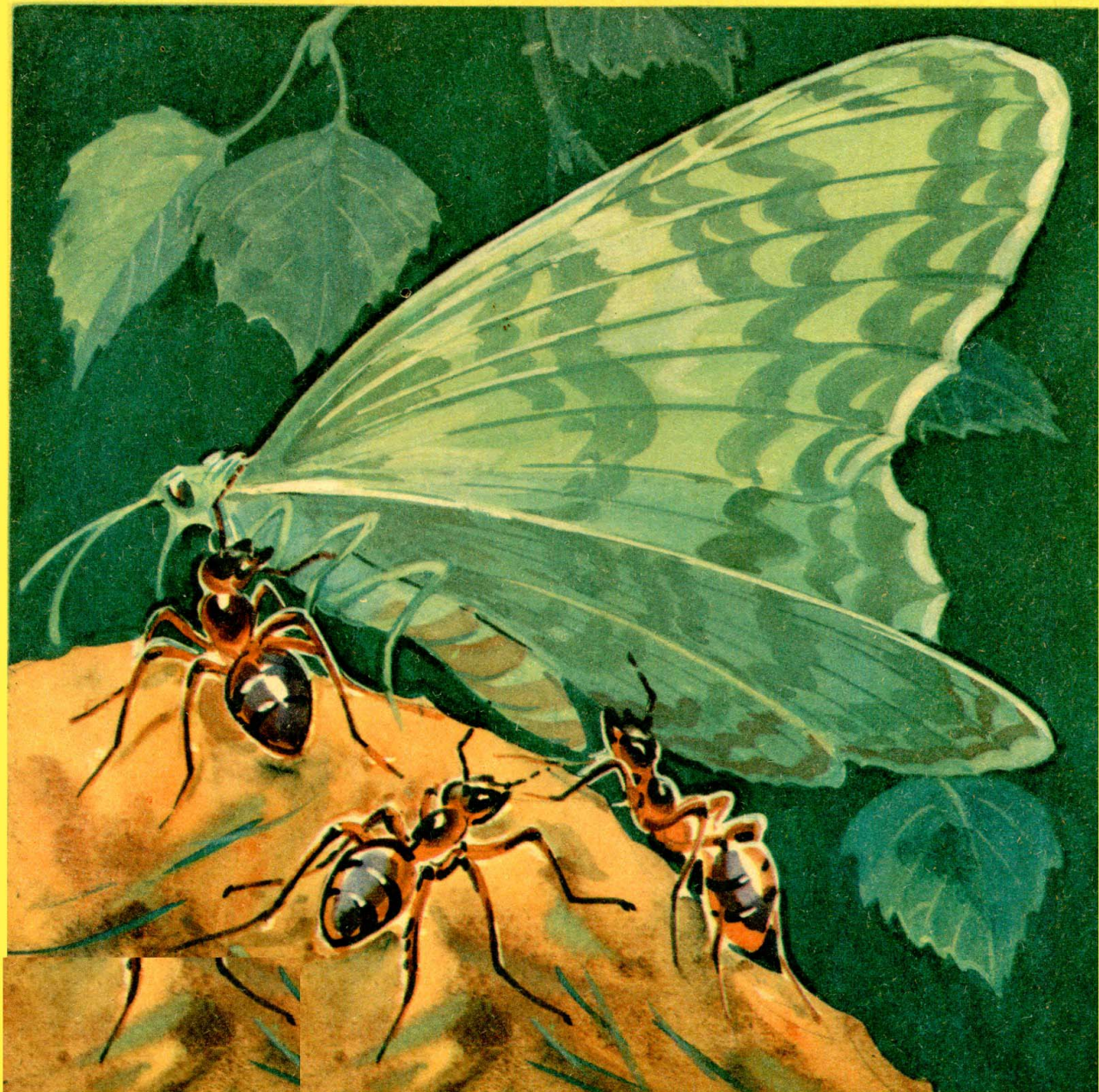


Alexander Tambiyev

# ***WHO LIVES IN THE ANTHILL?***











## THE ANTS' HOME

Deep in the forest, or on its edges; in a field, on a meadow, or in a copse; on the bank of a river or a brook, at the foot of a big or small tree—everywhere can you find anthills. They are also found in a garden or a school-yard, and even on a lawn of a big city, with cars and buses roaring by.

You'll see it from afar, a large and beautiful ant-house, quite a skyscraper from an ant's point of view. It is over 1.5 metres high, and at the foot of it there are



numerous ants that scurry along the many paths going out in all directions.

The ants have built their home round an old, crumbly stump. They have fetched small twigs, bits of bark, fir-needles; then put them all together and fixed them with soil moistened with their saliva. Now the whole construction has become a high rounded cone. The ants have covered it with small smooth fir-needles laid very carefully together so that it can withstand any rain, even the heaviest downpour, for water will slide down the needles as it will down a tiled roof. It will slide down all right because the anthill is round all over, streamlined. Rain even strengthens it, fixes the twigs and needles with earth that serves like cement.

All round the anthill the ants have made channels to keep the rainwater away from their dwelling.

Neither can the wind affect the anthill, for the fir-needles are laid very tightly. To air the needles and prevent them from rotting, the ants have made up a trick. Every four days they take the upper layer of the needles and put it inside their house. Thus the second layer becomes the first. In the next four days it is also taken away and put in the roof from beneath. That is how the ants change their roof to save it from moulding.

There is a maze of passages, forked corridors and chambers in the anthill, which is all porous and multi-storeyed. The anthill has basements, too: roads, passages and chambers go down several more storeys. Outside the anthill there are special entrances.

In the forest and, more often, on its edges you can find ant-nests made in old stumps. The ants gnaw a stump out so that only thin walls are left, while inside there are passages and chambers all over. Such a stump





might seem quite ordinary, but if you poke it with a stick, the frail walls will start to break so a whole town is exposed, with its storeys, streets, lanes and blind alleys.

Sometimes ants take out earth from under stones, making their passages and chambers. If you turn over a stone in the forest, you'll most certainly see ants, which will immediately start to disappear into the ground and hide themselves in dark passages, away from the bright light and hot rays of the sun.



## THE ANT FAMILY

Ants live in a united family. Any anthill is started by a female, the queen of the ants. A young female leaves her native anthill to make the only flight in her life—to the place of a new anthill. After that she drops her wings, for she won't need them any more. She is to spend the rest of her life in one of the snug chambers deep underground. She lives a long life, up to twenty years, and gives birth to thousands of ants.

Care for the young is one of the most serious concerns of the family. The ants look after their female, feed her, and keep her clean. As soon as she lays an egg, they pick it up and carry it away. They sort the eggs out time and again, lick them, and thus feed them. Funny enough, the eggs do need feeding. Otherwise they won't grow. Don't get surprised again: ant-eggs really do grow until larvae come out. The ants take special care about feeding the larvae that have very hearty appetites and grow fast.

As soon as the larvae have grown, they begin to wrap themselves up into close silk covers, cocoons. Then the ant-nurses who have once fussed over the larvae take the cocoons to separate chambers.

What happens next? Nurses and helpers are still in great want, for when an ant is being born, it is very weak and fragile. It can't release from its silky jail so grown-up ants tear the cocoon open and free the ant.

The newly-born ant then finds itself with its numerous kin. The young ant's life fully depends on their constant guarding and care. As soon as it grows up, it is its turn to look after larvae, provide for food, defend the anthill from enemies, repair and guard it, watch the







hunting grounds, and clean up—that is, to perform the many duties of an adult worker. An inborn instinct will tell it how to do this or that job.

Ants are very diligent, no matter what they do, and they never shirk work. So it is not without reason that people say someone is “as industrious as an ant.”





## THE HERD-ANTS

It is, in fact, true that ants possess herds of the so called "ant cows", or greenflies—small insects.

Greenflies often spend the winter in anthills. When spring comes, new, fresh leaves open, and every branch and rib of the trees is filled with juices, the ants are right there. They hurry to examine the trees which serve as pastures for the greenflies. If the pastures are ready, the ants take the greenflies out from under the ground and accompany them as they climb the young leaves and fresh branches.

The greenflies sink their proboscises in leaves and branches and begin sucking the juices. There is nothing they are interested in except sucking, and they suck ceaselessly. Greenflies propagate very fast giving birth to ten or even fifteen generations during one summer.

On the face of it, a greenfly is an unimportant mite weighing just a thousandth part of a gramme. But should all the greenflies get a chance to bring up their whole brood, find enough food, and protect themselves from enemies, the brood of one greenfly would very soon cover the entire dry land of Earth with a live, moving coat!

As it gets cold, greenflies become fewer. Then the ants take them in for the winter.

As long as the greenflies have not born their brood, the ants watch them with special care. Not a single predator can get the greenflies.

Why do ants make so much fuss over greenflies? Because each greenfly is like a little live pump that never stops working. From time to time it gives out a small sweet drop of honeydew. And there a herd-ant is, licking the drop off. Then another one, and another... It









fills up its craw and hurries to the anthill. It then gives its stock to hungry ants who, in turn, will feed other hungry ants. The drops of food provided by one ant are soon shared among its many comrades. To always share food is a law of the ant family.

It is easy for an ant to make a greenfly give out a drop of honeydew. All it has to do is to stroke a greenfly with its antennae. And so it does when it's hungry.

The ants tend their herds well: they watch, pasture and milk their "cows". The ants pasture their own greenflies only. They even take the same path every day



when they go to see their "cows". That looks very much like country life—any herdsman always tends his own herd, in which he knows every single cow.

When a new ant family is formed, the female often brings along greenfly-eggs because the future "cows" need as much care as the dwelling.

### **ANTS' KITCHEN GARDENS AND STOREHOUSES**

Nothing else than kitchen gardens are quite commonly made underground or at the back of an anthill. It often happens that ants bring round leaf-bits. They don't eat them, though, but grind them up, then chew them, and, finally, use them as a field for sowing a particular fungus which is always handy in any anthill. Such kitchen gardens are made in moist and warm places so the fungi start growing very fast. As they grow over, the fungi are covered with clear hardening droplets, that are eaten up by the ants. These droplets are sometimes called "ant-cabbage".

Ants take good care of their kitchen gardens. When a female flies away to start a new anthill, she takes some fungi with her and plants the first row. These fungi grow nowhere but in old anthills.

Sometimes ants fetch various grass-seeds and ripe grains, take them deep underground, and see to it that they don't get wet or start to sprout. In hot weather ants take the grains out and put them on the sunny side of the anthill to dry. By the evening they take them back



in. It's really bad luck if it starts raining heavily, for all the stores will then need drying all over again.

After drying the grains, ants grind them up with their jaws. They make the finest flour imaginable. The flour soon becomes sweet and somewhat wetter—perfect food for ant larvae.

## THE PARASITES

An anthill can be a dwelling for various ant species. The bigger ones pay no attention to small ants who scurry about here and there, picking up the remains of food. They might steal an egg and quickly disappear into narrow passages that do not admit big ants.

Besides such hangers-on, there are many other





dwellers in the anthill that are also parasites, and even enemies of the ants. Why do the ants stand them? It is known that the defenders of an anthill are spoiling for a fight at the first sight of an intruder. They are as brave as lions and their jaws are very strong. No one can stand up against thousands of furious ants. Even a bear will make off in a hurry!

The point is that parasites and enemies have learnt to play friendly thus deceiving the ants.

Some parasites can as much as ride on ants. A small tick will perch under an ant's head. It sits very still, does not disturb the ant or ask to be fed, as they say. Though sometimes it does just that.

As the tick gets hungry, it starts to stroke the ant's head with its two forelegs. And the ants' law is to always share everything. If a hungry ant meets a fed one, it will stroke its head with its antennae, and the fed ant will promptly give out a sweet drop. It will do so even if it doesn't want to, since such is the law. The hungry ant will eat the drop and run along. When it meets another fed ant, it will get some more food.









This is a very wise law, for it takes care of the weak and the hungry. And the sly tick turns that to its advantage. When it strokes an ant's head with its forelegs, the ant believes them to be some hungry ant's antennae and quickly gives out a sweet drop. That's exactly what the tick wants so it has its dinner and sits very quietly until supper.

If two ticks should climb upon an ant, they see to it that the balance is kept even, or else the ant might stumble. So they take their seats symmetrically, on each side, to disturb the ant as little as possible.

Sometimes an ant can happen to carry as many as six "riders"! They will all sit evenly, taking care of the balance, and the ant will feed this mob of swindlers.

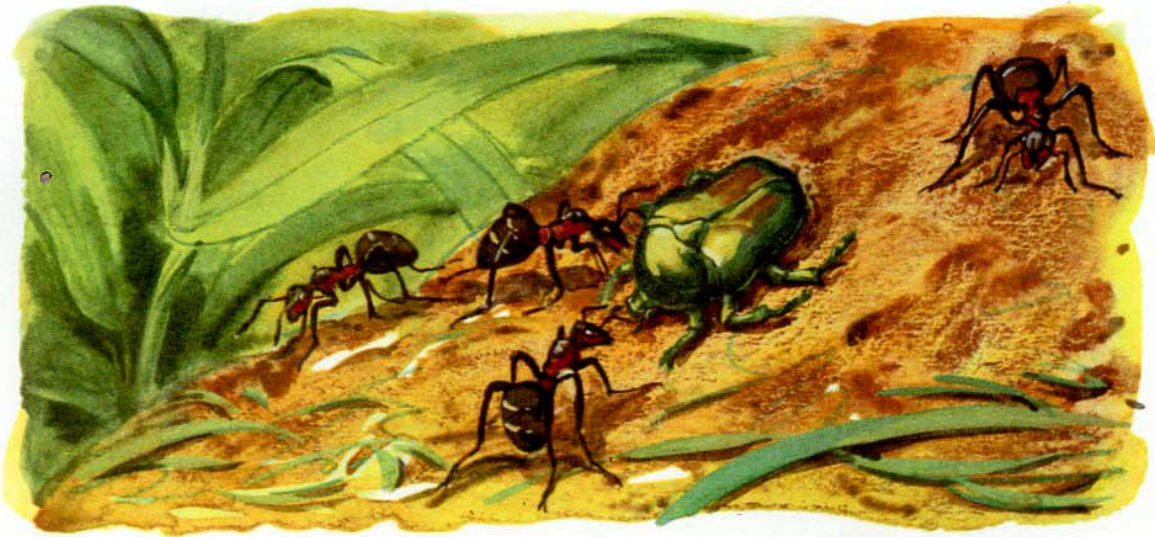
There are small beetles that like ant-eggs and larvae. These use their own tricks to get into the anthill. Such a beetle will perch on a branch or a grass-blade right over an antpath and play dead, legs outstretched and antennae drooping.

A passing ant will touch the antennae, and the beetle will stir a little. The ant will stop in surprise and begin feeling the beetle with its own antennae. Now the beetle is somewhat coming to life: it is stirring its legs. The ants' law says to bring home any prey so the ant will take the beetle and drag it in. And that's just what the beetle wants.

The beetle's back is covered with hairs which contain a liquid ants are very fond of. The beetle is hardly carried in when it is attacked by ants hurrying from everywhere, eager to get their share of the dainty. The whole business is followed by a great crush while the beetle can safely eat the ants' eggs.

However, if the ants become too intrusive or the beetle feels some danger, it can easily get rid of them. It





will simply drop a small "bomb" out of the bottom of its belly. When "the bomb" explodes, it has a sharp smell of iodine that makes the ants scamper off at once.

There are predatory beetles that live in side-passages and abandoned corridors, and engage in sheer brigandage. A strong and healthy ant is able to stand up for itself, but a sick ant or a cripple will surely have a hard time of it. The beetles may attack an ant going alone down a corridor with its prey, and that starts a good fight.

Crickets also live in anthills. They feel quite at home there hunting various parasites. Though they wouldn't mind stealing food from the ants, either.

Red forest ants never notice when a large sap chafer falls on top of their anthill, buzzing loudly, and starts to rake up the needles. The beetle makes its home in the anthill too, and the hosts let it be, maybe, because it is not much trouble.



## ANTS: PROTECTORS OF THE FOREST

Ants protect the forest from different pests: leaf-beetles, bark beetles, and many other insects which cause as much harm as only a forest fire can do.

From spring till autumn ants are busy hunting larvae, caterpillars, beetles, and flies. They bring home 20-25 thousand pests a day! That is, to one anthill alone!

A forest where there are many ants is clean and healthy.

Ants take good care of the forest so one should be good and kind to them.









Alexander Tambiyev  
**WHO LIVES IN THE ANTHILL?**  
*Illustrated by Victor Bastrykin*  
*Translated by Alexei Savin*

Malysh Publishers Moscow  
Printed in the USSR

© Translation into English  
MALYSH PUBLISHERS

© Илл. Издательство «Малыш» 1985