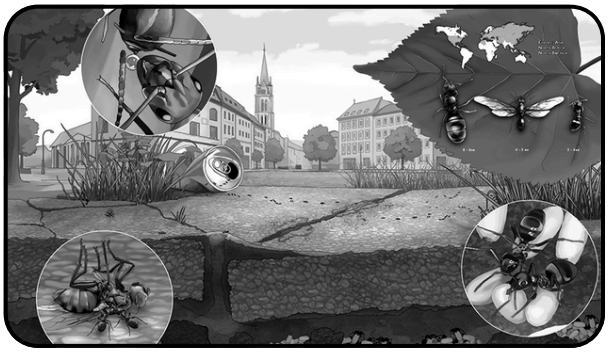
BLACK GARDEN ANTS
LASIUS NIGER

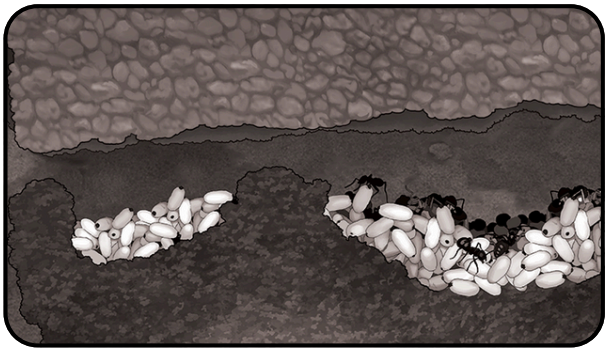


The black garden ant (Lasius niger) is one of the most common ant species in Europe. It lives in large colonies with a clear division of labor: one queen produces the offspring, while thousands of workers gather food, care for the brood, and expand and defend the nest. Lasius niger shows extraordinary adaptability and finds ideal conditions in urban environments. Whether in cracks in pavement, between paving stones, or even in discarded beverage cans – these ants make use of almost any opportunity to establish themselves successfully.

Workers deliberately seek out plants inhabited by aphids. Using their antennae, they stimulate the aphids, which then excrete sweet honeydew – one of the most important carbohydrate sources for the colony. This process resembles “milking” and illustrates a form of symbiosis: the ants receive food, while the aphids gain protection from predators such as ladybirds. Honeydew is not only consumed directly but also stored in the ants’ social stomach and shared with nestmates. In this way, the entire colony remains supplied with energy, which is particularly advantageous in urban habitats where natural resources are limited.

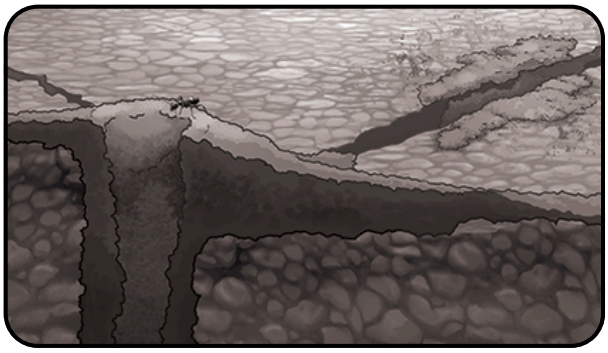
In addition to sugars, ants require protein to provide nutrients for the brood. When a worker discovers a dead insect such as a fly, she lays down pheromone trails that guide other workers to the find. Together, they may dismember the prey if necessary and transport it back to the nest. This cooperative foraging strategy demonstrates how effectively Lasius niger works in teams. For the larvae, animal-based food is indispensable, as it provides the protein needed for their development. In urban environments, ants benefit from the fact that many insects die on streets or inside buildings – a rich resource efficiently exploited by the colonies.

Inside the nest, workers devote themselves to the care of eggs, larvae, and pupae. Each developmental stage requires different forms of attention: eggs are kept clean, larvae are regularly fed, and pupae are carried to suitable chambers. The workers also regulate temperature and humidity by repeatedly relocating the brood. This behavior reflects the social organization of the ant colony, in which every task is carried out by specialized individuals. Without such intensive care, the brood could not develop properly, and the survival of the colony would be at risk.

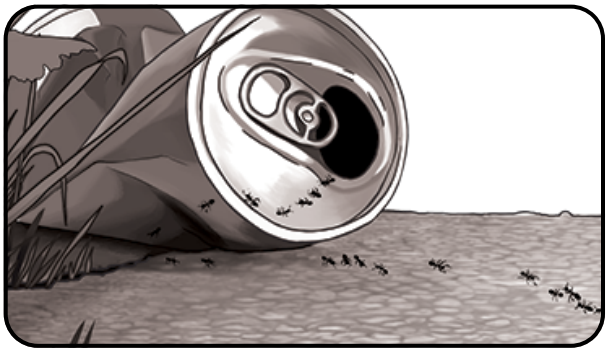


The underground structures of a Lasius niger colony consist of branched tunnels and chambers. With their strong mandibles, workers excavate soil and sand, gradually forming a complex system of galleries and chambers. This architecture provides protection from weather, predators, and temperature fluctuations. In cities, the ants also take advantage of human structures: cracks in asphalt or cavities beneath paving stones offer ideal conditions for entrances and for establishing nests. In this way, Lasius niger succeeds in creating stable colonies even in seemingly hostile, sealed surfaces.

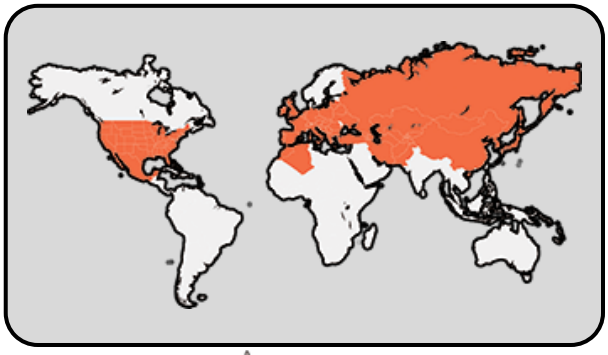
BLACK GARDEN ANTS
LASIUS NIGER



Between paving stones and cracks in asphalt, ants find ideal conditions for their nest entrances. The narrow gaps offer protection from larger predators and provide direct access to the surface. From here, foraging trails extend into the surroundings in search of food. Underground, the actual nest stretches out with many chambers housing brood, food reserves, and workers. Especially in urban areas, these locations are highly successful, as the ants are protected from burrowing predators and have regular access to new food sources.



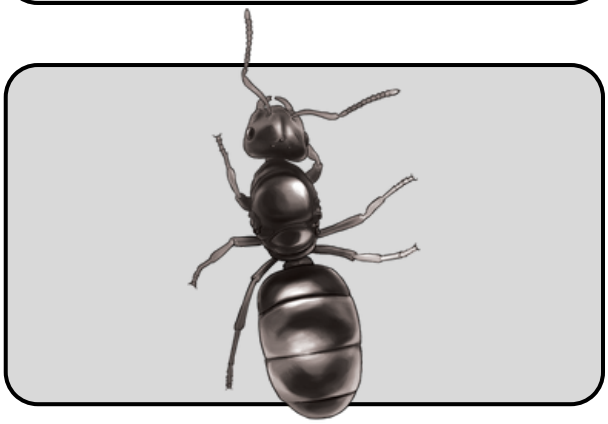
An ant trail leads into an empty beverage can containing sugary residues. This scene highlights the ants' adaptability to human environments: even waste becomes a valuable resource. The workers transport the sugar in liquid form inside their social stomachs back to the nest and share it with the queen, brood, and other workers. Exploiting such artificial food sources is another reason why Lasius niger thrives in cities – human leftovers significantly expand its dietary options.



The distribution area of the black garden ant (Lasius niger) covers large parts of Europe and neighboring regions. These include:

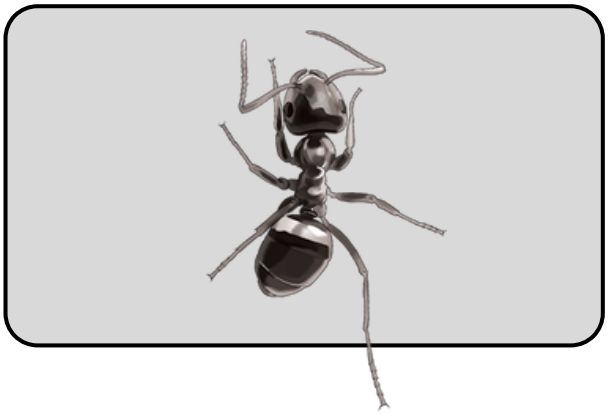
- Almost all of Europe, from southern Europe to Scandinavia
- Western and Central Asia to the Caucasus region
- Introduced populations in North America and other parts of the world

They prefer moderately moist to dry habitats with loose soil, but also thrive in urban environments. Typical locations are gardens, meadows, forest edges, cracks in pavement, paving slabs, and other man-made structures.



Queens

- Size: approx. 7–9 mm
- Color: mostly uniform dark brown to black, strong build, no noticeable pattern
- After mating, the queen sheds her wings and establishes a new nest.



Workers

- Size: approx. 3–5 mm
- Color: dark brown to black, shiny
- Typical tasks: foraging, brood care, nest building, and defense.

BLACK GARDEN ANTS
LASIUS NIGER

Males

- Size: approx. 3.5–4.5 mm
- Color: black to dark brown, with a slender build and clearly visible wings.
- Lifestyle: short-lived, intended exclusively for reproduction (participation in swarm flight).