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EC04-1570 Identification of Structure-Invading Ants in Nebraska

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Identification of

Structure-Invading Ants

in Nebraska

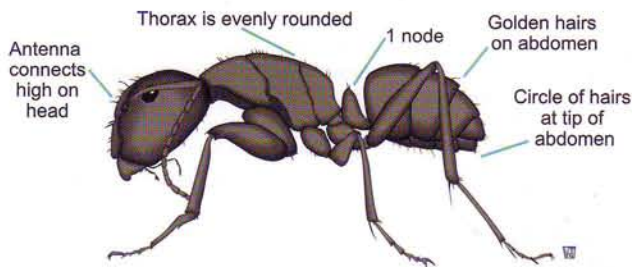
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One-Node Ants

Black Carpenter Ant

Camponotus pennsylvanicus

Many sizes of workers.



Actual size

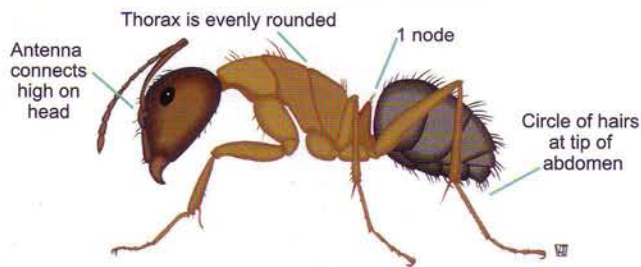


Major workers: about 7/16" Minor workers: about 1/4"

"Red" Carpenter Ant

Camponotus sayi

Many sizes of workers. Two-toned red and black.



Actual size

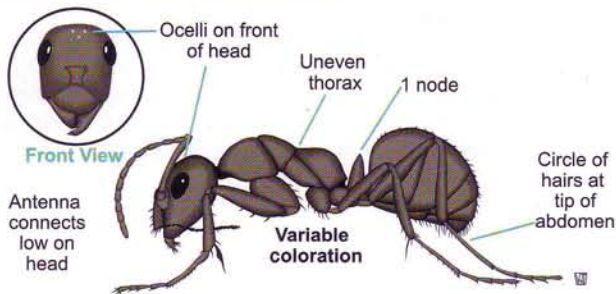


Major workers: about 1/4" Minor workers: about 3/16"

Field Ant

Formica spp.

Field ants may be black, brown, tan, reddish, or red and black. Often confused with carpenter ants.



Actual size

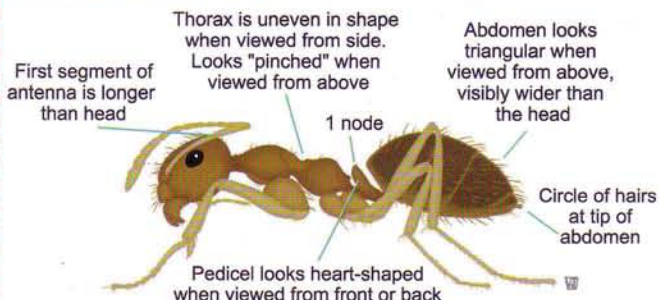


about 3/8"

Small (False) Honey Ant

Prenolepis imparis

When these ants are swollen (full of food), the gasters (abdomen) are greatly enlarged and shiny.



Actual size

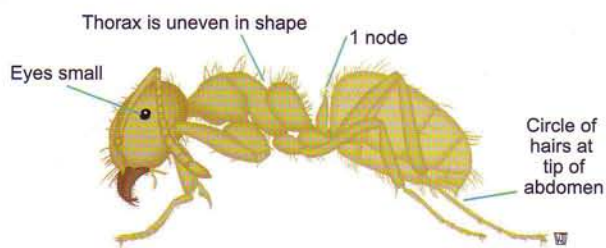


about 1/8"

Large Yellow Ant

Acanthomyops interjectus

Also called citronella ant or foundation ant. Gives off "lemony" odor when crushed.



Actual size

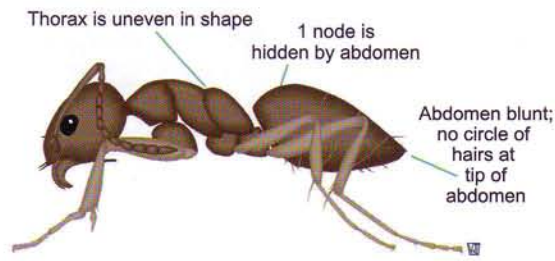


about 1/4"

Odorous House Ant

Tapinoma sessile

Has rotten coconut-like odor when crushed.



Actual size



about 1/8"

Two-Node Structure-Invading Ants

| Species | Workers | Habits/Management |
|--|---|---|
| Thief Ant <i>Solenopsis molesta</i> | Tiny, about 1/32 to 1/16 inch (1.0-1.5 mm); yellowish; often confused with Pharaoh ant, but has two segments in the club-like structure at the end of the antenna. Small eyes. | Often lives in association with other ants as a predator of brood; omnivorous but prefers grease or high protein foods over sweets; frequent house invader, may nest indoors in cracks and cupboards. In Nebraska it is more common than the pharaoh ant. Management: Treat colonies in wall voids with dusts. Baits are not effective. |
| Pharaoh Ant <i>Monomorium pharaonis</i> | Tiny, about 1/16 to 3/32 inch (1.5 to 2 mm); yellowish to red; often confused with thief ant, but has three segments in the club-like structure at the end of the antenna. | Nests in secluded spots and prefers temperatures of 80 - 86° F. Pharaoh ants often are found around kitchen and bathroom faucets where they obtain water. This ant feeds on sweets but also eats fatty foods. It is predacious on other insects and will even eat dead insects. More common in warmer climates than in Nebraska. Management: Residual insecticides are not useful because colonies tend to split. Baiting is the preferred management strategy. |
| Little Black Ant <i>Monomorium minimum</i> | Tiny, about 1/32 to 1/16 inch (1.0 to 1.5 mm); jet black. | Small craters of fine soil mark nest openings in the ground; will also nest in woodwork or masonry of buildings; omnivorous, not a common invading ant in Nebraska. Management: Drench or dust outdoor colonies. Treat colonies in wall voids with dusts. Baits also may be effective. |
| Acrobat Ant <i>Creumatogaster spp.</i> | Small, about 1/8 inch long (3 mm); brown to blackish. The pedicel attaches to the upper part of the abdomen. When viewed from front or back, the abdomen is heart-shaped. | Acrobat ants often tunnel and nest in wood. They have similar habits to carpenter ants and can live in decaying tree stumps. Inside they live in wall voids and door or window frames or foam insulation under siding. They may nest in wood already damaged by carpenter ants or termites. Nest locations often are associated with moisture problems and water leaks. Acrobat ants feed on honeydew and tend aphids. Management: Eliminate conducive moisture conditions before treating colonies. Baits are not effective. |
| Pavement Ant <i>Tetramorium caespitum</i> | Small workers, about 1/8 inch (2.5 to 3 mm); light to dark brown or blackish; head and thorax furrowed by parallel lines. One pair of spines on thorax and a sting on the tip of the abdomen. | This ant gets its name because it often nests under sidewalks, driveways and building foundations. A mound of displaced soil along a paved area is a sign of pavement ant activity. During the winter, pavement ants may nest inside structures near a heat source. Trailing ants feed on a wide variety of foods, including dead insects, greasy foods, seeds and sweets, as well as aphid honeydew. Management: Locate and treat colonies with an appropriate insecticide. Commercial baits may be effective. |
| Big-Headed Ant <i>Pheidole spp.</i> | Small workers, about 1/16 to 1/8 inch (1.5 to 3 mm); yellowish or light to dark brown. Two sizes of workers. Major workers have a very large head in proportion to their body. | Most common in warmer areas of the United States, but found in Nebraska. This ant primarily lives outdoors and only occasionally invades structures. Colonies have multiple queens and can be very large. Nesting is usually in the soil in protected locations, such as under rocks, logs, firewood, patio blocks, and landscape timbers, but they also will nest in open areas. Big-headed ants will construct mud tubes on foundations, similar to termite tunnels. Management: Treat colonies, depending on location. Using outdoor granular baits may be effective unless colonies are large. |

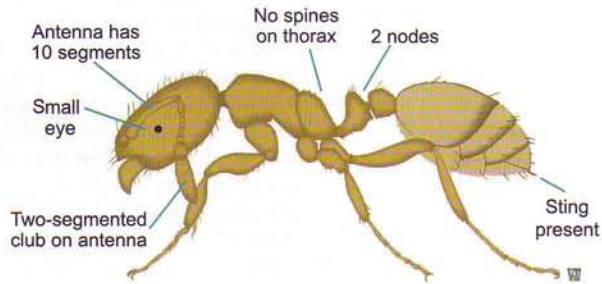
Identifying Winged Ants: Mature ant colonies produce winged ants that swarm periodically. These winged ants, called swarmers, emerge from the nest and fly off to start new colonies. When colonies are found outdoors, swarming occurs outside. Indoor swarming usually indicates the ant nest is in or under the structure. Swarming ants include females (queens) and males (kings) that look quite different from the worker ants. Compared with workers, queens are much larger and more robust; kings are skinny and much smaller than workers. Queens and kings also may be colored differently than workers, so color is not a good feature when identifying winged ants. Swarming ants have some of the key features of workers, but ant identification is most accurate with worker specimens.


Two-Node Ants

Thief Ant

Solenopsis molesta

Also called grease ant. The thief ant is most often confused with the pharaoh ant.

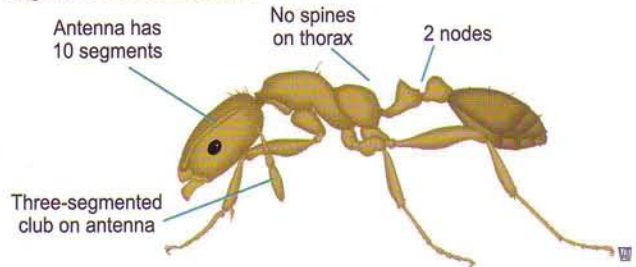


Actual size  1/32" to 1/20"

Pharaoh Ant

Monomorium pharaonis

The pharaoh ant is most often confused with the thief ant. The primary difference between the two species is the pharaoh ant has a three-segmented antennal club while the thief ant has a two-segmented antennal club.

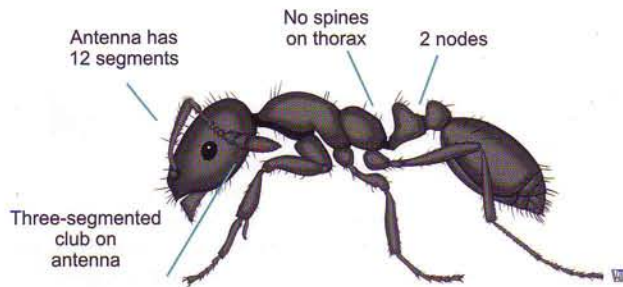


Actual size  about 1/16"

Little Black Ant

Monomorium minimum

Similar in appearance to pharaoh ant except black in color.

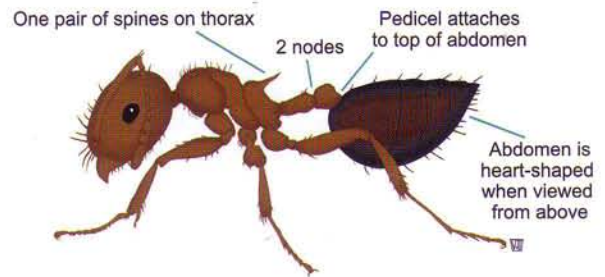


Actual size  about 1/16"

Acrobat Ant

Crematogaster spp.

Acrobat ants get their name from the habit of holding their abdomen above their thorax when the workers are disturbed.

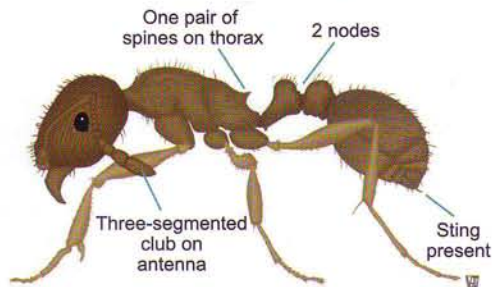


Actual size  slightly longer than 1/8"

Pavement Ant

Tetramorium caespitum

Head and thorax are covered with visible grooves.

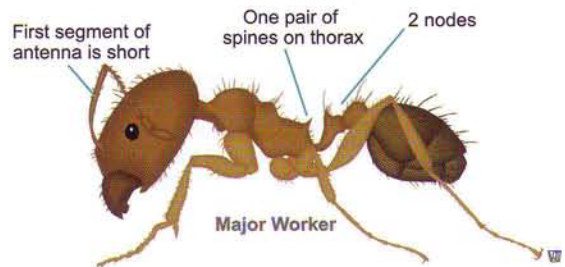




Actual size  about 1/8"

Big-Headed Ant

Pheidole spp.

Two sizes of workers. Major workers have a very large head. Minor workers have heads more proportional to their bodies.



Actual size  Major workers: about 1/8"  Minor workers: about 1/16"

One-Node Structure-Invading Ants

| Species | Workers | Habits/Management |
|--|--|---|
| Carpenter Ant <i>Camponotus spp.</i> | Medium to large workers, 1/4 inch to 1/2 inch (7-15mm). Thorax evenly rounded. Workers are not all the same size. Black carpenter ants are most common, but workers of a second species, <i>C. sayi</i> , have a reddish-brown head and thorax and black abdomen. <i>C. sayi</i> is a slightly smaller species than the black carpenter ant. It is unofficially called the "red" carpenter ant to distinguish it from the black species. | Carpenter ants do not eat wood, but nest in water-soaked wood. Outdoor locations include dead tree stumps and limbs, railroad ties and firewood. Indoors, colonies are found around leaky plumbing, under windows, and in soffits, where the roof has leaked. They produce sawdust that looks like fine wood shavings, but is not powdery. It may contain foam insulation. Workers of <i>C. pennsylvanicus</i> will travel 300 feet from a colony, so finding ants inside may not mean there is a colony within the structure. Colonies consist of a primary colony that may be outdoors or where moisture is abundant. When the primary colony becomes large, workers often move part of the colony to another location. These are called <i>satellite colonies</i> and may be found in homes. Carpenter ants are most active at night, emerging after dusk and returning to their colony before dawn. Following ants may be helpful in finding the colony location. Carpenter ants make a noise that sounds like crinkling cellophane and may be heard inside walls. A stethoscope may be helpful in locating colonies in wall voids. Management: Eliminate moisture problems associated with interior colonies to correct conducive conditions. Treatment involves locating and treating both primary and satellite colonies. |
| Field Ant <i>Formica spp.</i> | Medium ants, 3/8 inch (11mm), often confused with carpenter ants. Wide variation in color: black, brown, tan, reddish, or red and black. Thorax is bumpy in appearance. Key distinguishing feature: three ocelli on head. | These ants are common around structures, but often are not found inside. Field ants are soil nesters and often construct sizeable mounds in open fields. In lawns nests have a low profile, rarely reaching above the top of the grass. They also nest under objects like rocks, landscape timbers and firewood piles. Displaced soil is often evident. Items such as stones, logs, and bricks should be overturned and inspected underneath for colonies. Management: Treatment of colonies includes drenching with a labeled residual liquid using a compressed air sprayer. Outdoor granular baits may be effective. |
| Odorous House Ant <i>Tapinoma sessile</i> | Small, 1/16 to 1/8 inch in length (1.5 to 3 mm); dark brown to black. Pedicel cannot be seen when viewed from above. Smells like rotten coconut when crushed. | Odorous house ant is the most frequent structure-invading ant in Nebraska. It nests in a wide variety of places outdoors and inside. Nests are often underneath objects, such as stones, patio blocks and debris. Inside, it prefers areas with moisture such as around hot water pipes and heaters. Odorous house ants have multiple queens. This ant forages when temperatures are cool, even down to 50° F. A strongly trailing ant, it tends aphids for honeydew and prefers sweets in kitchens. Management: Treatment includes correcting conducive conditions and locating and treating colonies, which may include drench treatments, dusts in wall voids, and baits, depending on colony location. |
| Small Honey Ant <i>Prenolepis imparis</i> | Small, about 1/8 inch long (3 mm); golden yellow to brown. Stiff hairs on the abdomen and thorax. First segment of antenna is longer than the top of the head. Pedicel looks heart-shaped when viewed from front or back. After feeding, abdomen is swollen with food. | Small colonies. Small honey ants build nests in soil in open, well-shaded areas, seldom under items such as logs or stone. May be found in soil under shrubs and landscaping beds. The nest consists of numerous small galleries dug in the soil; excavated soil particles are deposited in a crater-shaped mound. Ants forage in easily detected trails. Active even in early spring or autumn when temperatures are well below 45° F. This ant tends aphids for their honeydew, but may forage on sweets in the kitchen during periods when aphids are not active. Management: Treat colonies by injecting 1-2 ounces of liquid insecticide into nest entrance using a crack and crevice tip. Baits also may be effective. |
| Large Yellow Ant, also called "Citronella Ant" <i>Acanthomyops interjectus</i> | Medium-sized workers, 1/4 inch (7 mm). Easily recognized by yellow-orange color and the fact that it has an odor like citronella or lemon when crushed. | This is a soil-nesting ant. Nests are found under items, such as logs, rocks, patio blocks, porches and concrete patios, but also may be found in open areas. This ant often excavates large amounts of soil as it builds galleries. If the colony is under a concrete slab of a structure, the soil may pile on the slab. These ants swarm nearly any time of the year and may occur inside buildings when colonies are located next to or under the structure. Management: Drench treatments or subslab treatment can be used, depending on colony location. Baits are not effective. Vacuum swarming ants and dispose of them. |

