

Annotated List of the Ants of the Great Smoky Mountains National Park: Report #2010-01

Joe A. MacGown and JoVonn G. Hill
Department of Entomology and Plant Pathology, Mississippi State University,
Mississippi State, MS 39762

Family Formicidae

Subfamily Dolichoderinae

Tribe Dolichoderini

Dolichoderus mariae **Forel** (TN): Uncommon. Cole (1940) found it on Cove Mt. nesting in clumps of grass in a grassy opening of a second growth pine forest at 1900 ft.

Dolichoderus plagiatus **(Mayr)** (NC, TN): Uncommon. Cole (1940) found it nesting in soil of oak-pine forest on Brushy Mt. at 3200 ft.

Dolichoderus taschenbergi **(Mayr)** (TN): Uncommon. Cole (1940) found it nesting in clumps of grass in between stones in a grassy opening of a second growth pine forest on Cove Mt. at 2000 ft.

Dorymyrmex bureni **(Trager)** (TN): Uncommon. Cole (1940) found several colonies in a sandy field along Wears Cove Rd.

Forelius mccooki **(McCook)** (TN): Uncommon overall, but may be common in dry open areas. Cole (1940) found it at several lower elevational sites.

Tapinoma sessile **(Say)** (NC, TN) (pest): Common. This species nests in a variety of substrates, including man-made ones, and often enters structures. Cole (1940) found it in rather open situations and in moist woods up to 5000 ft. MacGown and Hill found it in an open field at 4500 ft near the Ferguson Cabin, in open oak-pine forest on the Hyatt Lane cut off road in Cades Cove, in moist woods near the Sugarlands Visitor Center, and nesting in soil at Andrew's Bald.

Subfamily Formicinae

Tribe Lasiini

Lasius alienus **(Foerster)** (NC, TN) (introduced?): Common. This species inhabits a wide variety of habitats from dry open fields and forests to bottomland forests in a wide range of elevations. Reported as one of the most common species of ants in the park by Cole (1940) and Lessard et al. (2007). MacGown and Hill also found it to be common.

Lasius claviger **(Roger)** (NC, TN): Relatively common. Cole (1940) found it nesting in soil in a variety of habitats, but most frequently in grassy areas or at the edge of the forest. MacGown and Hill found a large colony of this species nesting in a rotting log in bottomland forest beside a creek near the Oconoluftee Visitor Center.

Lasius flavus **(Fabricius)** (NC, TN) (introduced?): Uncommon. Cole (1940) found it nesting in shady cove of hardwoods in the soil beneath stones

at Greenbriar Cove. MacGown and Hill found a colony of this species nesting in the soil beneath a clump of grass along a trail in an open field at an elevation of approximately 4500 ft near the Ferguson Cabin in North Carolina.

***Lasius interjectus* (Mayr)** (TN): Relatively common: Cole (1940) found it near Gatlinburg and at Greenbriar Cove nesting in soil beneath stones.

***Lasius latipes* (Walsh)** (?): Uncommon. Lessard et al. (2007) reports this species from two malaise traps.

***Lasius nearcticus* Wheeler** (TN): Uncommon? Cole (1940) found a few small colonies of this species nesting in the ground beneath stones and logs in a moist shady hardwood stand at Greenbriar Cove. Lessard et al. (2007) collected this species in pitfall traps at one site.

***Lasius neoniger* Emery** (NC, TN): Uncommon? Cole (1940) found this species in soil beneath stones and in logs in rather open forests or grassy areas. Hill found this species nesting in the cracks of a driveway of ranger station.

***Lasius speculiventris* Emery** (TN): Uncommon. Cole (1940) found colonies under stones or in logs and stumps in damp shady woods.

***Lasius subglaber* (Emery)** (TN): Uncommon. Reported by Cole (1953).

***Lasius umbratus* (Nylander)** (NC, TN): Uncommon. Cole (1940) found this ant nesting in soil beneath stones at lower elevations in cove hardwood forests.

Tribe Plagiolepidini

***Brachymyrmex depilis* Emery** (NC, TN): Relatively uncommon. Cole (1940) found this species nesting in the soil under stones in heath balds. MacGown and Hill found it nesting in rotting logs in bottomland forest habitat.

*Note: According to revision by LaPolla et al. (2010) most of the *Paratrechina* from North America are now considered to be *Nylanderia*, formerly a subgenus of *Paratrechina*.

***Nylanderia faisonensis* (Forel)** (NC, TN): Common, particularly at lower elevations. MacGown and Hill found this ant in oak and oak-pine forests.

***Nylanderia parvula* (Mayr)** (TN): Common at lower elevations. Cole (1940) found it common in fields and open forests.

***Nylanderia terricola* (Buckley)** (TN) (pest): **(New Park Record?)**
Uncommon: MacGown and Hill collected this ant in a mesic forest near the Sugarlands visitor center.

***Nylanderia vividula* (Nylander)** (NC): Park distribution not known, but typically prefers open habitats.

***Prenolepis imparis* (Say)** (NC, TN) (pest?): Common. A cool season species that is likely found throughout most of the park.

Tribe Camponotini

- Camponotus americanus* Mayr** (NC, TN) (pest): Common at lower elevations in hardwood forests. This species typically nests in soil. MacGown and Hill found this species in woods near the Sugarlands Visitor Center in TN.
- Camponotus caryae* (Fitch)** (TN) (pest): Uncommon. Cole (1940) found it nesting in logs and dead trees. MacGown and Hill collected this species in a mesic forest near the Sugarlands visitor center.
- Camponotus castaneus* (Latreille)** (TN) (pest): Uncommon. MacGown and Hill collected this ant in an open mixed pine-hardwood forest along the Hyatt Lane cutoff in Cades Cove.
- Camponotus chromaiodes* Bolton** (NC, TN) (pest): Common at lower elevations. This species occurs in various forest conditions nesting in soil or rotten logs. MacGown and Hill found dealate queens in open hardwood forest at Cades Cove in TN and litter in bottomland hardwood forest near the Oconoluftee Visitor Center in N.C.
- Camponotus mississippiensis* Smith** (?): Park distribution not known. Frequently nests in ash trees, so they may be numerous where ash is found.
- Camponotus nearcticus* Emery** (NC, TN) (pest): Relatively common. Cole (1940) found foragers and nests in standing dead trees throughout the park. MacGown and Hill collected this ant in an open mixed pine-hardwood forest along the Hyatt Lane cutoff in Cades Cove.
- Camponotus pennsylvanicus* (DeGeer)** (NC, TN) (pest): Relatively common. Cole (1940) did not find this ant to be common, but found it in isolated spots throughout the park. MacGown and Hill collected this ant in an open mixed pine-hardwood forest along the Hyatt Lane cutoff in Cades Cove and in old-growth forest above Laurel Falls.
- Camponotus snellingi* Bolton** (?) Park distribution not known. Typically nests in standing dead trees and vines and in rotting logs.
- Camponotus subbarbatus* Emery** (NC, TN) (pest): Typically nests in standing dead trees and vines and rotting logs. MacGown and Hill collected a dealate queen in rotting wood near the Sugarlands Visitor Center in Tennessee in early June. The queen was in a small gallery, but no workers were present.

Tribe Formicini

- Formica aserva* Forel** (TN): Uncommon. Cole (1940) found this slave making species nesting in the soil beneath a stone in a spruce-fir forest
- Formica biophilica* Trager** (TN): Park info not known. Trager et al. (2007) lists this ant from Sevier Co. It typically nests in open areas and open forests.
- Formica difficilis* Emery** (TN): Relatively uncommon. Cole (1940) found it nesting in soil beneath rocks in bright grassy places.
- Formica dolosa* Buren** (TN): Common at lower elevations. Cole (1940) found it nesting in soil beneath rocks in warm grassy areas.

- Formica exsectoides* **Forel** (TN): Uncommon. Cole (1940) found this species making domed shaped mounds in open areas of oak-pine and pine-heath forests.
- Formica fusca* **Linnaeus** (TN): Relatively common at high elevations. Cole (1940) found this species in deeply shaded spruce-fir forests.
- Formica incerta* **Buren** (NC, TN): Relatively common. Cole (1940) found this species commonly at lower elevations. Found in an ATBI sample from Brushy Mountain.
- Formica integra* **Nylander** (NC, TN): Park distribution not known.
- Formica neogagates* **Emery** (TN): Park distribution not known.
- Formica obscuriventris* **Mayr** (NC): Park distribution not known.
- Formica pallidefulva* **Latreille** (TN): Common. Cole (1940) found this species commonly at lower elevations, specifically a piney area in Cades Cove. MacGown and Hill collected this ant in an open mixed pine-hardwood forest along the Hyatt Lane cutoff in Cades Cove and in old-growth forest above Laurel Falls.
- Formica querquetulana* **Kennedy and Dennis**: Park distribution not known.
- Formica rubicunda* **Emery** (TN): Uncommon. Cole (1940) found this slave-making ant in a cleared area of a spruce-fir forest.
- Formica subintegra* **Wheeler** (TN): Park distribution not well known. Uncommon? Cole (1940) reported them from a cove hardwood forest.
- Formica subsericea* **Latreille** (NC, TN): Common. Found in a variety of habitats from, fields and balds to a variety of forests. MacGown and Hill found this to be one of the most commonly encountered ants in the park.

Subfamily Ecitoninae

Tribe Ecitonini

- Neivamyrmex carolinensis* (**Emery**) (TN): Park distribution not known. Cole (1940) found this species in grassy areas inhabiting the nest of other ant species, which it probably preyed upon then, dispelled the previous tenants. Members of the genus *Neivamyrmex* are not commonly collected in the eastern United States.
- Neivamyrmex nigrescens* (**Cresson**) (TN): Park distribution not known. Cole (1940) found this species in grassy areas nesting beneath loose stones.

Subfamily Amblyoponinae

Tribe Amblyoponini

- Amblyopone pallipes* (**Haldeman**) (NC, TN): Common. Frequently found in and under rotting logs, in the leaf litter around them, or at the base of large trees. Cole (1940) found this ant to be common in second growth pinewoods. MacGown and Hill found this ant at numerous forested habitats and elevations. MacGown and Hill found a colony nesting in a rotting log in the floodplain forest beside a creek near the Oconoluftee Visitor Center. The colony had approximately 30-50 workers present, various stages of larvae, and pupae encased in cocoons. Workers were

larger in overall size than specimens collected in Mississippi and Alabama by MacGown and Hill, and they were more aggressive than specimens collected by the authors from other states. While collecting specimens, MacGown was stung and bitten by several workers.

Subfamily Ponerinae

Tribe Ponerini

***Cryptopone gilva* (Roger)** (TN): Uncommon. Cole (1940) found this ant at one locality underneath the bark of rotting pine log.

***Hypoponera opacior* (Forel)** (TN): Common. Cole (1940) found this ant nesting in open habitats with moist soil. MacGown and Hill collected this ant in an open mixed pine-hardwood forest along the Hyatt Lane cutoff in Cades Cove

***Pachycondyla chinensis* (Emery)** (NC): Uncommon. Recent introduction. According to the park biologist, this species was discovered near the Oconoluftee Visitor Center in Swain County, NC. MacGown and Hill searched for it at that locality, but did not find it. This exotic species, which is native to Asia, has become a pest species along the east coast and appears to be spreading westward. Although it is not an aggressive species, both workers and queens may sting when disturbed, with reactions in humans ranging from mild to severe.

***Ponera pennsylvanica* Buckley** (NC, TN): Common. This is a soil/litter dwelling species that is likely found throughout most of the park. Cole (1940) found this ant to be uncommon in the Park only occupying moist woods. However, MacGown and Hill found it in the leaf litter of a variety of forested habitats.

Subfamily Proceratiinae

Tribe Proceratiini

Proceratium crassicornis* Emery** (NC, TN): ***New Park Record

Uncommon. MacGown and Hill found this ant in an old growth forest above Laurel Falls and in a mixed forest near the Cataloochie campground area in N.C. MacGown also found a colony of this species nesting in a rotting log in bottomland forest beside a creek near the Oconoluftee Visitor Center.

***Proceratium croceum* (Roger)** (TN): Uncommon. Cole (1940) found one colony of this ant in moist woods at 1800 ft.

***Proceratium pergandei* (Emery)** (TN): Uncommon. Cole found a single worker of this ant under a stone on a hemlock ridge at 3000 ft. Frequently found in rotting logs, in the leaf litter around them, or at the base of large trees.

***Proceratium silaceum* Roger** (NC, TN): Common. MacGown and Hill found this ant in leaf litter around rotting logs or in the litter at the base of large trees in upland forests on the West Foothills Parkway, in an old-growth forest above Laurel Falls, and in and pine-hardwood forest in Cades Cove.

Tribe Dacetini *

*Note: All members of this genus found in the park inhabit soil and leaf litter and prey upon small arthropods, such as Collembola

Pyramica clypeata (**Roger**) (NC, TN): Common: MacGown and Hill found this species in mixed pine-hardwood forests

Pyramica creightoni (**Smith**) (TN): Uncommon. Cole (1940) indicates this ant was found in an oak-pine area in Cades Cove.

Pyramica laevinasis (**Smith**) (TN) ***New Park Record*** MacGown and Hill found this ant in a mixed hardwood forest on the Western Foothills Parkway, and in an old-growth forest above Laurel Falls.

Pyramica ohioensis (**Kennedy & Schramm**) (NC, TN): Common. Hill found this ant in a mixed hardwood forest on the Western Foothills Parkway, and in a mesic hardwood forest in Cades Cove.

Pyramica ornata (**Mayr**) (NC, TN): found this species in a mixed hardwood forest on the Western Foothills Parkway,

Pyramica pergandei (**Emery**) (NC, TN) ***New Park Record*** MacGown and Hill collected this ant in an open mixed pine-hardwood forest along the Hyatt Lane cutoff in Cades Cove.

Pyramica pulchella (**Emery**) (TN): Park distribution not well established. This species is typically found in upland forests in Mississippi.

Pyramica reflexa (**Wesson & Wesson**) (TN): Park distribution not well established.

Pyramica rostrata (**Emery**) (NC, TN): MacGown and Hill found this ant in pine-hardwood forest and mesic hardwood forests.

Pyramica talpa (**Weber**) (TN): Park distribution not well established. MacGown and Hill found this ant in pine-hardwood forest in Cades Cove.

Tribe Attini

Trachymyrmex septentrionalis (**McCook**): (TN): Uncommon. Cole (1940) found this ant in grassy sandy areas of a valley. This species grows a fungus in their colonies and can often be found collecting organic materials for use as a growing medium for the fungus.

Tribe Stenammini

Stenamma brevicorne (**Mayr**) (NC): Park distribution not well established.

Stenamma diecki **Emery** (NC, TN): Common at higher elevations? Cole (1940) found this ant in high elevation spruce-fir forests. MacGown and Hill found this ant at Andrew's Bald and in mixed forest near the top of Purchase Knob.

Stenamma impar **Forel** (NC, TN): Park distribution not well established.

Stenamma meridionale **Smith** (NC): Park distribution not well established.

Stenamma schmittii **Wheeler** (NC, TN): Common. MacGown and Hill found this ant in a variety of forested conditions.

Tribe Solenopsidini

***Monomorium minimum* (Buckley)** (NC, TN) (pest): Cole (1940) found this ant to be uncommon ant in the park, only occupying open grassy areas and open forests. MacGown and Hill found this ant to be common along roadsides and in open pine-hardwood forests at lower elevations.

***Solenopsis carolinensis* Forel** (?): Common. This species group is in need of revision before a more reliable name can be placed on this species. However, specimens appearing to be this species are common in leaf litter in the park.

Solenopsis invicta x richteri (NC, TN): (introduced, pest). An exotic species that has been found at lower elevations in the park, namely the Eastern Foothills Parkway, Twin Creeks, and Cades Cove. Will most likely be restricted to disturbed habitats.

***Solenopsis molesta* (Say)** (NC, TN) (pest): Park distribution not well known. This species group is in need of revision before a more reliable name can be placed on this species.

Tribe Myrmicini

***Myrmica fracticornis* Forel** (TN): Park distribution not well known.

***Myrmica latifrons* Starcke** (NC, TN): Common. MacGown and Hill found this ant in several forest types in the park.

***Myrmica pinetorum* Wheeler** (NC): Park distribution not well known.

***Myrmica punctiventris* Roger** (NC, TN): MacGown and Hill collected this ant in a bottomland hardwood forest behind the Oconoluftee Visitor Center.

***Myrmica scabrinodis* Nylander** (?): (Smoky Mountains, state unknown). (Introduced). Park distribution not well known.

***Myrmica sculptilis* Francoeur** (Smoky Mountains, state unknown): Park distribution not well known.

***Myrmica spatulata* Smith** (NC, TN): Park distribution not well known. MacGown and Hill found this ant in a pine-hardwood forest in Cades Cove.

Tribe Tetramoriini

***Tetramorium caespitum* (Linnaeus)** (TN): (introduced? pest). Park distribution not well known. MacGown and Hill have found this ant on sidewalks near roadway pull-offs in the park.

Tribe Pheidolini

***Aphaenogaster ashmeadi* Emery** (TN): Park distribution not well known.

***Aphaenogaster carolinensis* Wheeler** (NC, TN): Relatively common. Cole (1940) found this ant nesting in rotting logs.

***Aphaenogaster fulva* Roger** (NC, TN): Common. Cole (1940) found this ant nesting in rotting logs and stumps. MacGown and Hill found this species in an open pine-hardwood forest in Cades Cove.

- Aphaenogaster lamellidens* Mayr** (TN): Cole (1940) found this ant in rotting logs and stumps. MacGown and Hill found this ant in an open pine-hardwood forest in Cades Cove.
- Aphaenogaster picea* (Wheeler)** (TN): Common. This species and *A. rudis*, represent a difficult species complex to separate. Typically *A. picea* is darker in color and occurs at higher elevations. MacGown and Hill found this species to be very abundant at higher elevations where they found them nesting in rotting wood.
- Aphaenogaster rudis* Enzmann** (NC, TN): Common. This species and *A. rudis*, represent a difficult species complex to separate. Typically *A. picea* is redder in color and occurs at lower elevations.
- Aphaenogaster tennesseensis* (Mayr)** (TN): Relatively common. Cole (1940) found this ant nesting in stumps and a log. MacGown and Hill collected this species in an open pine-hardwood forest in Cades Cove, and in a mesic forest near the Sugarlands Visitor Center.
- Aphaenogaster treatae* Forel** (TN): Relatively common. Cole (1940) found this ant in open grassy areas and in open pine forests. Hill found this ant nesting in the lawn area of the Oconoluftee Visitor Center.
- Pheidole bicarinata* Mayr** (TN) (pest?): Common in open areas. Cole (1940) found this ant to be one of the most common ants in open areas of the park. MacGown and Hill found this species nesting in the hard-packed soil along the roadside in Cades Cove.
- Pheidole* sp. *crassicornis* group** (TN): * **New Park Record*** Park distribution not well known. A potentially undescribed species that is similar to *P. carssicornis* and *P. tetra*. Hill found this ant nesting in soil against the sidewalk of a pull-off on the Eastern Foothills Parkway
- Pheidole dentata* Mayr** (TN): (pest?). Relatively common. Cole (1940) found this species in grassy open areas and open forests. MacGown and Hill found this species nesting in a rotting log in a mesic forest near the Sugarlands Visitor Center.
- Pheidole dentigula* Smith** (TN): Uncommon. Cole (1940) found this ant nesting in the soil beneath a stone at Greenbriar Cove.
- Pheidole morrisii* Forel** (TN): Uncommon? Misidentification/Historical? Cole (1940) reports this ant as being common in open sandy places in the park. This ant is typically found in areas of deep sand (dunes, beaches, and sandhills), a habitat type not typically found in the park.

Tribe Crematogastrini

- Crematogaster ashmeadi* Mayr** (TN): (pest). Park distribution not well known. Cole (1940) found this ant nesting in several pine logs. In other areas of the Southeast, MacGown and Hill have found this species to be a common arboreal species, especially in pine trees.
- Crematogaster cerasi* (Fitch)** (NC, TN): Park distribution not well known.
- Crematogaster lineolata* (Say)** (NC, TN): (pest). Common. Cole (1940) found this species to be very common, inhabiting a variety of habitats from

open fields to forests. MacGown and Hill found it at edge of a field and mixed forest at the Cataloochie Campground area.

Crematogaster minutissima (Mayr) (TN): Park distribution not well known, but typically found in forested areas.

Crematogaster missuriensis Emery (TN): (Uncommon). Cole (1940) found this ant nesting in open pinewoods. MacGown and Hill found it nesting in open habitats in the Southeast such as glades, prairies, and roadsides.

Crematogaster pilosa Emery (TN) (pest): Park distribution not well known. MacGown and Hill have found it in variety of open forested habitats and in a shrubby area where a prescribed fire had burned several years prior.

Tribe Formicoxenini

Temnothorax curvispinosus (Mayr) (NC, TN): Common. Cole (1940) found this species in open pinewoods. MacGown and Hill found this ant in various forest types at lower elevations. This species has been collected nesting in twigs, vines, and various hollow cavities in other parts of the Southeast.

Temnothorax longispinosus (Roger) (NC, TN): Common. This ant appears to be common in various forested habitats throughout the park with the exception of high elevations.

Temnothorax pergandei (Emery) (TN): Uncommon. Cole (1940) found one colony of this ant in a pine heath. In other areas of the Southeast, it is found in natural open habitats and open woods.

Temnothorax schaumii (Roger) (TN): Common. Cole (1940) found this ant nesting in twigs and under peat. This ant is typically arboreal, and can often be collected by placing bait on the trunks of large trees.

Temnothorax smithi (Baroni Urbani) (TN): Park distribution not well known.

Tribe Myrmecini

Myrmecina americana Emery (NC, TN): Common. This species is readily collected in leaf litter samples from a variety of forest types and open habitats throughout the park.

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