

Oak–hickory forest

From Wikipedia, the free encyclopedia

Oak-hickory forest is a type of [North American](#) forest ecosystem, and an [ecoregion](#) of the [Temperate broadleaf and mixed forests Biome](#).

Geography

It has a range extending from [Rhode Island](#) and southern [New York](#), west to [Iowa](#), and south to Northern [Georgia](#).

Smaller, isolated Oak-Hickory communities can also be found as far west as [North Dakota](#), south in [Florida](#) and in northeast [Texas](#), and north to southern [Maine](#) and [Ontario](#).

Dominated by nut-bearing [oak](#) and [hickory](#) species of trees, the Oak-hickory forest has the largest range of any deciduous forest ecosystem in eastern and central North America.

Natural history

The current oak-hickory forest includes the former range of the **Oak-Chestnut Forest** region, which encompassed the northeast portion of the current oak-hickory range. When the [American Chestnut](#) population succumbed to invasive fungal blight in the early 20th century, those forests shifted to an oak and hickory dominated ecosystem.

Biota

Key indicator tree and shrub species of the oak-hickory forest include [red oak](#), [black oak](#), [scarlet oak](#), [white oak](#), [Chestnut oak](#) (*Quercus prinus*), [Pignut hickory](#) (*Carya glabra*), [Bitternut hickory](#) (*Carya cordiformis*), [Shagbark hickory](#) (*Carya ovata*), [flowering dogwood](#) (*Cornus florida*), [blueberry](#), [Mountain laurel](#) (*Kalmia latifolia*), and [hawthorn](#).^[1]

Bird and animal species include the [gray squirrel](#), [flying squirrel](#), [chipmunk](#), [blue jay](#), and [wild turkey](#).^[1]

Source: https://en.wikipedia.org/wiki/Oak%E2%80%93hickory_forest

Background

Today about one-third of the nation is forested.^[*citation needed*] While total forest area has been relatively stable for the last 100 years (currently about 747 million acres (3,020,000 km²)), there have been significant regional shifts in the area and composition of the nation's forests. Reversion of marginal farmland in the east, large scale planting in the South, and [fire suppression](#) have contributed to increases in forest area. [Urbanization](#), conversion to [agriculture](#), [reservoir](#) construction, and natural disasters have been major factors contributing to loss of forests.^[2] As of 2005, the United States ranked seventh in the rate of loss of its [old growth forests](#).^[3]

Eastern forests cover about 384 million acres (1,550,000 km²) and are predominantly [broadleaf](#) (74%), with the exception of extensive [coniferous forests](#) and plantations in the southern coastal region. These are largely in private ownership (83%). By contrast, about 363 million acres (1,470,000 km²) of western forests are predominantly coniferous (78%) and in public ownership (57%). Nearly ten million private individuals own about 422 million acres (1,710,000 km²) of forest and other wooded land. Most public forest land is held by four Federal agencies ([United States Forest Service](#), [Bureau of Land Management](#), [National Park Service](#), [Fish and Wildlife Service](#)) as well as numerous state, county, and municipal government organizations.^[2]

Major uses of forests include [timber production](#), recreation, [hunting](#), [fishing](#), [watershed and fisheries protection](#), [wildlife habitat and biodiversity protection](#), and gathering nontimber products such as [berries](#), [mushrooms](#), and [medicinal plants](#).^[2]

Source: https://en.wikipedia.org/wiki/Forests_of_the_United_States

Micrathena

From Wikipedia, the free encyclopedia

The spider genus ***Micrathena*** contains more than a hundred species, most of them **Neotropical** woodland orb-weavers.

The species are found in the Americas. Only three species occur in the eastern **United States**: females of *M. gracilis* (the Spined *Micrathena*) have five pairs of conical **tubercles** / spines on the abdomen, female *M. mitrata* have two short posterior pairs, and female *M. sagittata* (the Arrow-shaped *Micrathena*) have three pairs.

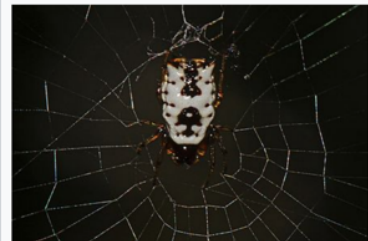
Species with extremely long spines evolved at least eight times in the *Micrathena* genus and likely function as anti-predator defenses.^[1]

Source: <https://en.wikipedia.org/wiki/Micrathena>

Micrathena



Micrathena sagittata and web from
Gadsden Co. Florida



Micrathena mitrata and web from Little
River Canyon National Preserve, Fort
Payne, Alabama

Passalidae

From Wikipedia, the free encyclopedia

Passalidae is a **family** of **beetles** known variously as "bessbugs",^[1] "bess beetles",^[1] "betsy beetles"^[1] or "horned passalus beetles". Nearly all of the 500-odd species are tropical; species found in **North America** are notable for their size, ranging from 20–43 mm, for having a single "horn" on the head, and for a form of **social behavior** unusual among beetles.

Bodies elongate-cylindrical and black overall; ventral surfaces may be covered with yellow **setae**. The head is narrower than the thorax, with **antennae** consisting of 10 **antennomeres** with a three-segment club. The **elytra** are elongate with parallel sides, and heavily striated.

They are **subsocial** (brood caring) beetles that live in groups within rotting logs or stumps.^[2] The beetles will excavate tunnel systems within rotting wood where the females then lay their eggs.^[3] They care for their young by preparing food for them and helping the **larvae** construct the **pupal case**. Both adults and larvae must consume adult feces which have been further digested by **microflora** for a time; an arrangement that might be described as a sort of external **rumen**.

In addition, they are also able to produce fourteen **acoustical signals**, more than many **vertebrates**. Adults produce the sounds by rubbing the upper surface of the **abdomen** against the **hind wings**. The larvae produce the sounds by rubbing the third leg against a striated area on the **coxa** of the second leg.

Source: <https://en.wikipedia.org/wiki/Passalidae>

Passalidae



Adult *Odontotaenius disjunctus*



Larva of *Odontotaenius disjunctus*

Aphaenogaster

From Wikipedia, the free encyclopedia

Aphaenogaster is a [genus](#) of [myrmicine ants](#). About 200 species have been described, including 18 fossil species.^[1] They occur worldwide except from [South America](#) south of [Colombia](#), [Sub-Saharan Africa](#), and Antarctica.^[2]

They are often confused with [Pheidole](#) or [Pheidologeton](#). These two have major and minor workers, while *Aphaenogaster* has only a single worker caste.


Pheidole has three-segmented clubs on its antennae, while *Aphaenogaster* has four segments and a larger body size. *Pheidologeton* has 11-segmented antennae, while the antennae in *Aphaenogaster* are 12-segmented.^[3]

In Australia, they often build dense, conspicuous nests.^[4] Nest entrances are generally funnel-shaped with diameters up to 4 cm, which resulted in the common name **funnel ants**. These nests can be a serious problem for [golfers](#) or on pastures and unsealed airstrips, because the fragile surface easily collapses under pressure.^[3] Where it occurs, *Aphaenogaster* [bioturbation](#) is an important soil and landscape process.^[4]

Aphaenogaster probably gets most of its food from tended [aphids](#) on the roots of plants, which explains that they are rarely seen on the surface. The funnel-shaped openings could play a role in trapping arthropods, which are also eaten.^[3]

Aphaenogaster
Temporal range: **Lutetian - Recent**

PreЄЄЄSDCPTJJKPgN



A. swammerdami worker

Scientific classification
Kingdom: [Animalia](#)
Phylum: [Arthropoda](#)
Class: [Insecta](#)
Order: [Hymenoptera](#)
Family: [Formicidae](#)
Subfamily: [Myrmicinae](#)
Tribe: [Stenammini](#)
Genus: ***Aphaenogaster***

Source: <https://en.wikipedia.org/wiki/Aphaenogaster>