

denser on dorsal surface of gaster than elsewhere. Body shiny or subopaque depending upon the nature of light and position from which viewed. Body color variable, commonly light brown or brown. Worker easily recognized by number and relative proportions of segments composing maxillary palpus, the very thin or narrow petiolar node (in profile), the usual absence of suberect or erect hairs on scapes and tibiae, and the presence of numerous, well-distributed, short, suberect hairs on the dorsal surface of the gaster.

Biology and Economic Importance

This species occurs in varied habitats such as woodlands, meadows, swamps, and prairies. It has very diverse nesting habits, nesting in the exposed soil, or under the cover of objects, and in and around rotting stumps and logs. The exposed nests are often large earthen mounds in woodlands and prairies, with grass growing from the mounds. In much of eastern North America the ant is regarded as a woodland species with a preference for moist nesting sites such as under stones or in rotten wood. Van Pelt has found colonies of this species common in the Blue Ridge Mountains at 3,500 to 4,000 feet, and occasionally at 4,000 to 5,500 feet. Colonies are very populous and are thought to contain only a single reproductive female. The ants are highly subterranean and light-avoiding, seldom appearing above the surface of their nest. Workers forage mostly at night and are noted for their love of honeydew, not only tending but fostering subterranean plant lice, mealybugs, and coccids on the roots of plants. The ants no doubt supplement this food with small insects which they kill, and also find dead. No detailed life history studies have been made on *umbratus* in North America; most of our knowledge of the species is based on numerous but scattered observations. It appears that nuptial flights may take place from July to October, and that males and winged females may remain in some of the parental nests during the winter. Limited experiments and observations in Europe indicate that *umbratus* is a temporary parasite in the nests of *Lasius niger* (Linnaeus) and *L. alienus*. The fertilized female of *umbratus* may be adopted in colonies of *niger* and *alienus* by entering a queenless colony of the host, by killing the host queen, or by workers of the host species killing their own queen. There may be other methods of founding colonies not yet known. In North America we do not know how *umbratus* establishes new colonies, but assume it to be by the same methods as in Europe.

Wheeler stated that he had often found wingless females under stones as if in the act of founding colonies independently (but never with brood), so he inferred that these females must establish colonies by temporary parasitism. Wilson stated that *umbratus* does not seem to form the aerial swarms or clouds that are common to some species of *Lasius*, such as *alienus* and *niger*. I have received workers, males and winged females, singly or together, from houses from late June to October with indications that they were nesting in or around the basement walls, like our various species of *Acanthomyops*. No records have been received of workers infesting household foods, but the ants are objectionable to housekeepers, and the winged forms are often mistaken for termites. The ants are of economic importance because