

In all the above species fresh colonies are formed by single fertilized queens alone. Occasionally two or more queens are found in the same nest having probably started the colony together but single queens are the rule. At the end of the season any remaining unfertilized queens or those that have strayed back after a marriage flight are destroyed by the workers even in queenless colonies.

*L. umbratus* is widely distributed in England, Wales, Scotland and S. Ireland but, although taken as far north as Inverness-shire, is not common in N. Britain and nowhere abundant in this country. Nests frequently occur within the base of hollow trees or under deep stones. Occasionally earth mounds are thrown up but there is no consistency in this feature and because of its subterranean habits the species tends to escape observation. The queens have relatively massive heads and slender bodies compared with *flavus* and the *niger* group of species and there is some evidence from a few scattered observations and somewhat artificial experiments that they are unable to found fresh colonies unaided but do so by securing adoption with either *niger* or *alienus*. The writer has found freshly dead queens of *umbratus* in and about the nests of both *alienus* and *niger* on several occasions. It must be admitted, however, that the evidence for the colony founding behaviour of this group of species is scanty and further observation is desirable. In this connection it is perhaps worth mentioning that Wilson failed to secure the experimental adoption of American *umbratus* queens by various of the *niger* group of species and the writer has come across colonies of the similar hairless *mixtus* form in N. Britain in *flavus* territory where *niger* appeared to be absent. Both forms of *umbratus* have the same range in Britain.

*L. rabaudi* probably has similar habits to *umbratus* but little is known concerning this species as yet. As mentioned above the only known British specimens are from Surrey, Berkshire and Hampshire.

*L. fuliginosus* is the most conspicuous species of the genus, immediately recognizable by its large size and shining black colour. It is local but widely distributed in England from N. Lancashire, SW. Yorkshire and N. Lincolnshire southward. It also occurs in the Isle of Man, S. Wales, S. Ireland but not Scotland. It nests in trees but also occasionally in hedgerows, walls and in the ground, making large carton nests. Colonies tend to remain in possession of a site for a large number of years and frequently consist of intercommunicating nests covering a small area of woodland, each nest linked by workers moving in slow files over the ground. Such a colony has been observed by the writer intermittently for over twenty years in a Surrey woodland. The species sometimes starts fresh colonies through the adoption of fertilized queens by *umbratus* workers and mixed colonies of the two species have been reported on several occasions both in Britain and elsewhere. Once established a colony will perpetuate itself by branch nests.

Donisthorpe (1927), although somewhat anecdotal and fragmentary, gives much interesting and reliable information on the habits of the ants of this genus and his work should still be consulted for detailed observations on the British species.