An indoor colony of *Lasius brunneus* Brown Ant and an unusually large colony of *Lasius fuliginosus* Jet Ant at Carpentar's Farm in southwest Worcestershire

Martin Skirrow and Geoff Trevis

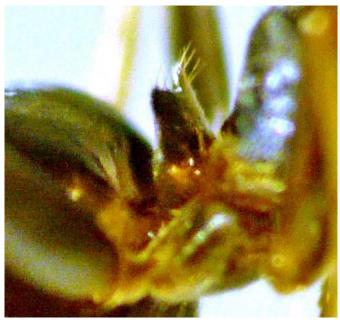
Lasius brunneus (Latreille, 1798) Brown Ant. On the morning of 3rd June 2015, at about 07:30hr, MS was confronted by a huge swarm of the Brown Ant Lasius brunneus (determined by GT) trying to escape through the glazed front wall of a lobby just inside his front door. They were emerging from a narrow gap between the timber footing and tiles at the bottom of the glazed panel to the right of the door (01). Winged males predominated but there were also numerous females (02, 03); some workers were running on the floor. After transferring the ants outside, no more were seen that day, but on the succeeding two mornings similar swarms were present, albeit in lessening numbers. The building is an old timber-framed cowshed that was converted to a dwelling in 2009. Most of the old timbers are intact, so there are many crevices and cavities present, although the timbers at the foot of the lobby are new oak. The building is part of Carpenter's Farm near Berrow just inside VC37 (SO777339) in the far southwest of Worcestershire.



01. Front lobby of building hosting colony of *Lasius brunneus*; emergence slit indicated. Martin Skirrow



02. Queen of Lasius brunneus from indoor colony. Martin Skirrow

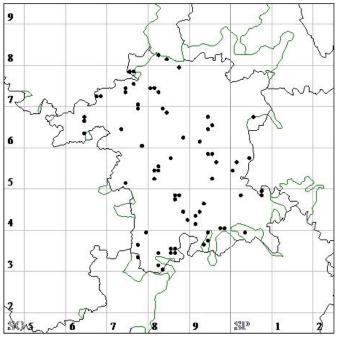


03. Queen of Lasius brunneus showing characteristic notched scale

The usual habitat of *L. brunneus* is under, or in crevices within, the bark of living trees. The ants tend large tree aphids and feed on the honeydew, though small insects found under bark may also be taken (Hoy 1998). *L. brunneus* is regularly found on the farm which has many mature trees and relict orchards with hollow apple trees suitable for the ant. An interesting feature of this nesting aggregation is the presence of numerous queens. Edwards notes that "queens of this species are rarely found and indications are that there is only one or very few per colony" (Edwards, 1998).

L. brunneus is designated nationally Notable A, although a Notable B rating is more consistent with its currently recorded distribution (Alexander 1998), which is restricted largely to the catchments of the rivers Severn and Thames with a few scattered records elsewhere. The reasons for this restriction remain uncertain. It is widespread in Worcestershire with records from 98 sites (04); one of these was from a timber building, near Heightington (reported by Rosemary Winnall). In May 2015 Gary Farmer found this species for the second year running in a building in Evesham (personal communication). There are several other reports of the presence of *L. brunneus* in buildings. Some were major colonisations in rotting

timbers, e.g. Kane and Taylor (1958), whereas others were infestations without obvious colonisation. The subject is briefly reviewed by Attewell (2004). In most instances of indoor infestation, ants have been found in trees or other vegetation in the vicinity of the building.



04. Lasius brunneus distribution in Worcestershire (VC37)

Lasius fuliginosus (Latreille, 1798). While beating the lower branches of a White Willow tree (*Salix alba*) for invertebrates on 17th August 2015, MS was surprised to find many examples of the Jet Ant *Lasius fuliginosus* (05). Each branch struck brought down about 30 to 50 ants on the beating tray, so there must have been many thousands in the whole tree. Ants were also active on the ground beneath the tree. Aphids were present though not numerous.



05. Lasius fuliginosus female. Martin Skirrow

The tree in question (06), grid ref. SO772342 (VC37), was growing on the same farm where the indoor colony of *Lasius brunneus* was found (see above). It was an old tree consisting of two angled main trunks, one partly hollow, arising from the edge of a hedged ditch that divided two fields grazed by cattle and sheep. Two dead elm trunks were adjacent. Significantly, the ditch was double-fenced, so leaf litter, dead wood, and the base of the tree were undisturbed by livestock (07). Two months later, on 11th October, ants were still plentiful in the tree, though less abundant. Aphids were not seen, but there were other insects such as psyllid, cicadellid and mirid bugs.



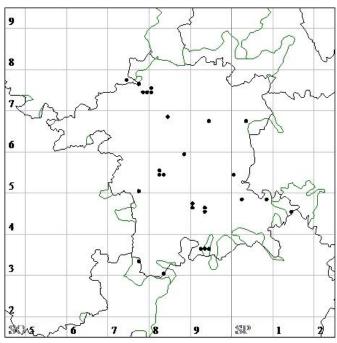
06. White Willow Salix alba host to Lasius fuliginosus colony. Martin Skirrow



07. Base of main trunk of *Salix alba* tree growing in hedged ditch protected from livestock. Martin Skirrow

L. fuliginosus has a complex life history (Hoy, 1997). It establishes its nest by taking over the nest of a *L. umbratus* colony which itself has been established in a nest of *L. niger/flavus*. The nests are made of carton and are usually situated in partly rotting trees, logs or stumps or in hedge banks or walls. The presence of *L. fuliginosus* implies the presence of *L. umbratus*, which we intend to look for. The ants appear to feed mainly on honeydew but aphids and other small insects may also be taken.

Nationally, the distribution mainly occupies the Severn catchment and the area to the south-east of a line from the Severn estuary to the Wash. There are a few scattered records from Wales. The distribution in Worcestershire is shown in 08.



08. Lasius fuliginosus distribution in Worcestershire (VC37)

Acknowledgements

We wish to thank Harry Green for drawing our attention to earlier reports of indoor colonisation by *L. brunneus*.

References

Alexander, K.N.A. and Taylor, A. 1998 (1997). The Severn Vale, a national stronghold for *Lasius brunneus* (Latreille) (Hymenoptera: Formicidae). *British Journal of Entomology and Natural History* 10:217-219.

Attewell, P.J. (2004). *Lasius brunneus* (Latr.) (Hymenoptera: Formicidae): house ant, hero and coward. *British Journal of Entomology and Natural History* 17:24.

Edwards, R. ed. 1998. Provisional atlas of the aculeate Hymenoptera of Britain and Ireland. Part 2. Bees, Wasps and Ants Recording Society.

Hoy, S. 1997. Bees, Wasps and Ants Recording Society website. Hoy, S. 1998. Bees, Wasps and Ants Recording Society website. Kane, J. and Taylor, P.S. 1958. Domestic infestations by *Lasius brunneus* (Latr.) (Hym., Formicidae). *Entomologist's monthly magazine* 44:286.

Images

01. Front lobby of building hosting colony of *Lasius brunneus*; emergence slit indicated. Martin Skirrow

02. Queen of *Lasius brunneus* from indoor colony. Martin Skirrow 03. Queen of *Lasius brunneus* showing characteristic notched scale of the petiole. Martin Skirrow.

04. Lasius brunneus distribution in Worcestershire (VC37)

05. Lasius fuliginosus female. Martin Skirrow

06. White Willow Salix alba host to Lasius fuliginosus colony. Martin Skirrow

07. Base of main trunk of *Salix alba* tree growing in hedged ditch protected from livestock. Martin Skirrow

08. Lasius fuliginosus distribution in Worcestershire (VC37)