

# THE SEVERN VALE, A NATIONAL STRONGHOLD FOR *LASIUS BRUNNEUS* (LATREILLE) (HYMENOPTERA: FORMICIDAE)

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Jones (1996), in reporting this elusive ant in Kent, included the old provisional 10 km square distribution map (Barrett, 1979). Subsequent recording activity has, however, had a profound effect on our knowledge of its British distribution. In particular we are aware of a large number of additional 10 km square records which alter the perspective of the species as having the Thames Valley as its stronghold in Britain, since we now know of a similarly large stronghold in the Severn Valley, including a new county record for Shropshire. An up-dated distribution map is now provided (Fig.1).

Barrett (1979) includes a small concentration of records along the Severn Vale in Worcestershire, largely based on the work of C.A. Collingwood in the 1960s and 1970s. Most of our records come from Gloucestershire and KNAA has additionally found a site in Shropshire, a new county record. KNAA is also aware of a scattering of new sites between the two stronghold areas and even single sites in N. Essex, W. Sussex and the Isle of Wight. Other Essex records have recently been described by Harvey & Plant (1996).

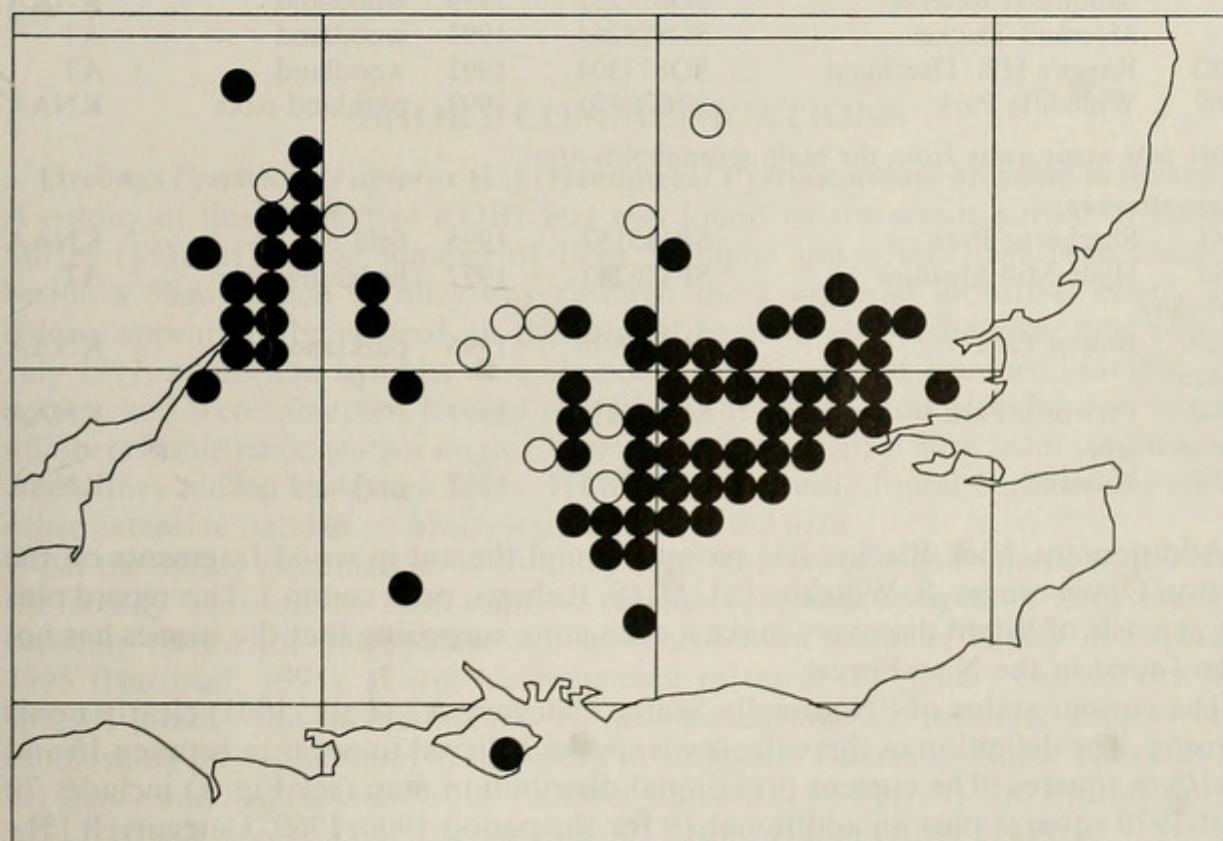


Fig 1. 10 km square distribution map for *Lasius brunneus*. Open circles represent squares with records from the period 1900–69 and where no more recent records have been forthcoming; solid circles are squares where the species has been recorded between 1970 and 1997.



The recognition of the Severn Vale as a major stronghold for the species has developed over the past fourteen years. The rate at which additional records are being made suggests that only a small proportion of the existing sites have been discovered. A distinct preference for old orchards has become apparent (sometimes in almost all the trees therein), as well as widespread use of old hawthorns, in addition to the more usual large open-grown oak trees. The records are as follows:

*Shropshire:*

SO78	Dudmaston Park	SO746887	1996	parkland oaks	KNAA
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*Worcestershire:*

SO96	Hanbury Park	SO943637	1984	parkland oak	KNAA
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SO84	Croome Park	SO880443	1996	parkland oaks	KNAA
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*Gloucestershire:*

SO63	The Old Grange, Dymock	SO688318	1993	parkland oaks	KNAA
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SO70	Hock Cliff	SO730090	1996	woodland	KNAA
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	Frampton Park	SO753080	1996	woodland	AT
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SO71	Elmore river bank	SO791163	1996	old orchard	AT
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	Minsterworth Ham	SO793155	1996	old orchard	AT
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	Minsterworth Village	SO788172	1996	old orchard	AT
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	Minsterworth	SO789176	1996	pub garden	AT
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	Hartlands Hill, Lower Ley	SO748157	1995	old orchard	AT
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	Bulley Woods	SO769199	1997	woodland	KNAA
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SO72	Collin Park Wood, Glos	SO750276	1992	woodland	KNAA
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SO80	Little Haresfield	SO810089	1995	old orchard	AT
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	Woodland Trust Reserve	SO820097	1995	woodland	AT
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SO81	Brookthorpe	SO834127	1994	old orchard	AT
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SO82	Wainlode Hill, Glos	SO8425	1986	woodland	KNAA
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	Sandhurst Reserve	SO817232	1989	woodland	KNAA
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	Meerend Thicket	SO828264	1993	woodland	AT
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SO83	Rayer's Hill, Deerhurst	SO873304	1992	woodland	AT
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ST69	Whitcliffe Park	ST670970	1993	parkland oaks	KNAA
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Other new areas away from the main strongholds are:

*Gloucestershire:*

SP11	Sherborne Park	SP185157	1996	field oak	KNAA
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SP12	Hyde Mill Meadow	SP176243	1997	hedgerow ash	AT
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*Berkshire:*

SU29	Buscot Park	SU239973	1995	parkland oak	KNAA
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*Sussex:*

SU92	Petworth Park	SU976218	1997		KNAA
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*Isle of Wight*

SZ58	Nunwell	SZ595874	1997	parkland oak	KNAA
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Additionally, Nick Blacker has recently found the ant in wood fragments on the Porton Down ranges, S. Wiltshire (SU23) (S. Roberts, pers. comm.). This record plus the new Isle of Wight discovery make it even more surprising that the species has not been found in the New Forest.

The current status of "Nationally Scarce Category A" (Falk, 1991) clearly needs revision. The definition of this category is species believed to occur in between 16 and 30 10km squares. The current provisional distribution map (see Fig. 1) includes 70 post-1970 squares plus an additional 10 for the period 1900–1969. Category B (31–100 squares) would appear more appropriate on current knowledge.

In none of the newly recorded areas is there any real evidence for expansion of the range of the species, rather we suspect that the species is doing very well where it



occurs and that previously it had either not been sought in these areas or else was at lower population densities and eluded detection. It is conceivable that it has become more widespread in the Severn Vale area, but the area has previously been very poorly recorded for ants. *Leptothorax nylanderi* (Forster) is also proving widespread here and some form of association is suggested, but this requires more study. The distribution of the two species nationally overlaps considerably.

#### ACKNOWLEDGEMENTS

We would like to thank Mike Edwards, Andy Foster and John Owen for making their records available, Colin Plant and Peter Harvey for information on the Essex colonies, and Stuart Roberts for providing the up-to-date distribution map from the records held by the Bees Wasps & Ants Recording Society. The map was drawn using the DMAP mapping package developed by Dr Alan Morton.

#### REFERENCES

- Barratt, K. E. J. 1979. *Provisional Atlas of the Insects of the British Isles. Part 5. Hymenoptera: Formicidae. Ants*. Biological Records Centre, Huntingdon.
- Falk, S. 1991. *A review of the scarce and threatened bees, wasps and ants of Great Britain*. Research and Survey in Nature Conservation No. 35, Nature Conservancy Council, Peterborough.
- Harvey, P. R. & Plant, C. W. 1996. A provisional list of the bees wasps and ants (Hymenoptera: Aculeata) of Essex. *Essex Naturalist* 13 (new series): 43–115.
- Jones, R. A. 1996. *Lasius brunneus* (Latreille) (Hymenoptera: Formicidae) new to Kent? *Br. J. Ent. Nat. Hist.*, 9: 135–136.

#### SHORT COMMUNICATIONS

##### **Firebugs *Pyrrhocoris apterus* (L.) (Hemiptera: Pyrrhocoridae) breeding in Surrey.—**

A colony of this distinctive RDB1 bug was found by the senior author in Epsom, Surrey (TQ2161) in the summer of 1996. Nymphs and adults have been recorded beside a 50m stretch of alley-way through the Longmead industrial estate. The colony appears to be centred on the ground beneath an overhanging lime tree. In July 1997, adults and nymphs were abundant on the ground amongst brambles and nettles, and were observed feeding on fallen grass seeds, and blackberries. Smaller numbers occurred beneath a single Common Mallow plant c. 30 m from the lime tree, where they fed on the fallen fruits. However, none were found beneath any of the other extensive patches of Mallow examined in the area.

All the adults examined, c. 30 to date, were short-winged and unable to fly. How the colony came to be here remains enigmatic, constituting as it does the first breeding record for Surrey although specimens were found at Ripley in February 1995 (Halstead, 1995). It will be interesting to see if the colony can survive and spread, joining the increasing list of new immigrants or formerly coastal bugs establishing inland colonies in the south of England. Thanks to Roger Hawkins for his advice and helpful comments.—DIANA ASHWELL, 94 Farriers Rd, Epsom, Surrey KT17 1LR & JONTY DENTON, 26 Bow St, Alton, Hants GU34 1NY.

#### REFERENCE

- Halstead, A. 1995. *Br. J. Ent. Nat. Hist.* 8: 142.



Alexander, Keith N. A. and Taylor, Anthony. 1998. "The Severn Vale, a national stronghold for *Lasius brunneus* (Latreille) (Hymenoptera: Formicidae)." *British journal of entomology and natural history* 10, 217–219.

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