

The Hymenoptera Aculeata of Derbyshire (Gnts, Bees and Wasps).

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NO T much has been heretofore recorded of these interesting insects, but it is hoped that the publication of an accessible preliminary list will stimulate interest in this branch of the Hymenoptera and enable us to add largely to our somewhat scanty stock of information on the subject. By far the larger proportion of records are from the southern half of the county, for the northern part remains almost unworked. The Heterogyna, too, need more study than they have received up to the present.

The only local list of any importance is Mr. Edwin Brown's account of the Aculeata in the *Natural History of Tutbury*, pp. 180-185. Here about eighty-one species are mentioned as occurring within a few miles of Burton, but, as the exact localities are seldom recorded, there always remains a certain amount of doubt as to whether we can make good our claim to the records until they have been confirmed from other sources. Unfortunately, too, Mr. Brown's collections have been dispersed, so that any critical analysis is impossible, for the original specimens are no longer available for examination.

Of late years Mr. G. Pullen has collected chiefly in the neighbourhood of Breadsall Moor and Derby, and Messrs. F. Greenwood and J. Hill have contributed a few records from Chesterfield and Little Eaton. In particular I must acknowledge with thanks the great assistance rendered by Mr. Edward

Saunders in determining the species of many specimens from different sources, sent to him for identification, and which are marked with an asterisk (*) in the list.

Abbreviations used :—

E.B.—Edwin Brown, "Fauna of Burton-on-Trent" in
"Natural History of Tutbury, etc. (1863).

E.S.—Edward Saunders, *The Hymenoptera Aculeata of
the British Isles* (1893-6).

J.H.—John Hill. (Little Eaton, etc.)

F.G.—F. Greenwood. (Chesterfield.)

G.P.—G. Pullen. (Breadsall Moors, Derby, etc.)

F.J.—F. C. R. Jourdain. (Ashburne district.)

HETEROGYNA.

FORMICIDÆ :

Formica rufa, L. In woods, rather local: Little Eaton (G.P.).

F. fusca, Latr. Common in dry banks (E.B.); very common and general.

Lasius fuliginosus, Latr. Scarce, but occasionally found in old stumps (F.J.).

L. flavus, De G. Common on light soils: near Derby (G.P.).

L. niger, L. Common in gardens and dry banks.

MYRMICIDÆ :

Myrmica rubra, L. Common and general.

FOSSORES.

SAPYGINIDÆ :

Sapyga quinquepunctata, Fb. On rails and palings, Burton (E.B.).

S. clavicornis, L. Burton, but not common (E.B.); taken several times by P. B. Mason in the Burton district (A. H. Martineau); * one, Breadsall Moor, 1903 (G.P.). This appears to be exclusively a Midland species. It has been recently recorded from Warwick, Worcester, and Hereford.

POMPILIDÆ :

- Pompilus viaticus*, L. (*fuscus*, Sm.). Burton (E.B.).
P. gibbus, Fb. [The Oaks marlpit, Burton (E.B.)]; Little Eaton (J.H.).
Salius exaltatus, Fb. Burton (E.B.).

SPHEGIDÆ :

Trypoxylon figulus, L. In banks and rotten wood, Burton (E.B.).

Pemphredon lugubris, Fb. Seal wood, etc. Nests in rotten stumps (E.B.); Willington (G.P.); Little Eaton (J.H.).

P. shuckardi, Moraw (*Cemonus unicolor*, Sm. pars.). Burton (E.B.); Little Eaton (J.H.).

P. lethifer, Shuck.* One, Sept. 26, 1903, Chesterfield (F.G.).

Diodontus minutus, Fb. Burrows in banks, Burton (E.B.); Little Eaton (J.H.).

D. tristis, V. d. L. Burrows in dead twigs, Burton (E.B.).

Passalœcus gracilis, Curt. *Breadsall, 1903 (G.P.).

Psen pallipes, Pz. Makes its nest in the straws of thatch, Burton (E.B.).

Gorytes mystaceus, L. Little Eaton (J.H.).

Mellinus arvensis, L. [Shobnall, etc. (E.B.)]; *Breadsall, 1903 (G.P.).

Cerceris arenaria, L. Burrows in sandy ground, Repton Shrubs (E.B.).

Crabro clavipes, L. *Breadsall Moor, 1886 (G.P.).

C. podagricus, V. d. L. Little Eaton (J.H.).

C. cephalotes, Pz. Little Eaton (J.H.); *Chesterfield (F.G.). Two specimens from Chesterfield belong to the ordinary form, *cavifrons*, Thr.

C. chrysostoma, St. F. (*xylurgus*, Shuck.). Burrows in decayed wood, Burton (E.B.); Little Eaton (J.H.); *Breadsall Moor, 1903 (G.P.).

C. cribrarius, L. Repton Shrubs, more abundant than following species (E.B.); Little Eaton (J.H.).

C. peltarius, Schr. (*patellatus*, Pz.). Burrows in banks, Burton (E.B.).

DIPLOPTERA.

VESPIDÆ :

- Vespa crabro*, L. The hornet is very rare in the Burton district according to E. B., who, however, once took a very populous nest from a hollow willow at Stapenhill; four killed and nest subsequently found in 1867 at Hanging Bridge (G. M. Bond); has occurred at Calke (Hugo Harpur Crewe); a nest at Osmaston-by-Ashburne about 1880 (F.J.); and in Egginton Fox Covert, 1902 (G.P.). [A nest on the Staffordshire side of the River Dove at Hanging Bridge, September, 1902 (F.J.).]
- V. vulgaris*, L. Generally distributed and very common in dry autumns.
- V. germanica*, Fb. Also abundant (E.B.); * Dove valley (F.J.); Little Eaton, etc. (J.H., G.P.); Chesterfield (F.G.).
- V. rufa*, L. At Dovedale, not uncommon (E.B.); * Bread-sall, not uncommon (G.P.); Chesterfield, frequent (F.G.).
- V. sylvestris*, Scop. At Burton, but rare (E.B.); * occasionally, Dove valley (F.J.); near Derby (G.P.); Chesterfield, frequent (F.G.); Derwent (F.J.).
- V. norvegica*, Fb. Not uncommon (E.B.); Dove valley (F.J.); near Derby (G.P.).

EUMENIDÆ :

- Odynerus spinipes*, L. Burton (E.B.); Willington (G.P.).
- O. parietum*, L. Burton, common (E.B.); Willington, common (G.P.); * Little Eaton, fairly common (G.P., J.H.); Ashburne district (F.J.).
- O. pictus*, Curt. * Little Eaton (G.P., J.H.).
- O. trimarginatus*, Zett. * Little Eaton (G.P., J.H.); * Clifton, Sept., 1902 (F.J.).
- O. trifasciatus*, Oliv. * Little Eaton (G.P., J.H.).
- O. antilope*, Pz. Little Eaton (J.H.).

ANTHOPHILA.

OBTUSILINGUES.

COLLETIDÆ :

- Colletes daviesanus*, Sm. Burton, builds in walls and sandy banks (E.B.); * *Breadsall Moors*, 1903 (G.P.).
Prosopis communis, Nyl. (*annulata*, Kirb.). Burton (E.B.); Little Eaton (J.H.).
P. hyalinata, Sm. * *Breadsall Moors*, 1903 (G.P.).

ACUTILINGUES.

ANDRENIDÆ :

- Sphecodes gibbus*, L. [Shobnall marlpit, Burton (E.B.)].
S. subquadratus, Sm. * One ♀ Shirley, May, 1903 (F.J.).
S. pilifrons, Thoms. (Porb. *S. rufescens*, Sm.) ? Burton (E.B.); Little Eaton (J.H.).
Halictus rubicundus, Chr. Burton (E.B.); * Clifton (F.J.); * *Breadsall* (G.P.).
H. quadrimaculatus, Kirb. Burton (E.B.).
H. cylindricus, Fb. Burton (E.B.); * Willington, 1882 (G.P.).
H. albipes, Kirb. Burton (E.B.).
H. longulus, Sm. Burton (E.B.). (?) Confirmation required.
H. subfasciatus, Nyl. * Little Eaton, 1882 (G.P.).
H. nitidiusculus, Kirb. * *Breadsall Moors*, 1903 (G.P.).
H. morio, Fb. Burton (E.B.).
Andrena albicans, Kirb. Burton (E.B.); Little Eaton, common (G.P., J.H.); Buxton (E.S.); Chesterfield (F.G.).
A. rosæ, Pz. var. *trimmerana*, Kirb. * Little Eaton (G.P.).
A. nitida, Fourc. Burton (E.B.); Little Eaton, common G.P.; Chesterfield (F.G.).
A. cineraria, L. Burton (E.B.); * Shirley, fairly common, May, 1903 (F.J.); Chesterfield (F.G.).
A. fulva, Schr. Burton (E.B.); common *Breadsall Moor* (G.P.); Chesterfield, common (F.G.).

- A. clarkella, Kirb. * Little Eaton, not uncommon (G.P.).
 A. nigroænea, Kirb. Little Eaton (J.H.).
 A. angustior, Kirb. * Little Eaton (G.P.).
 A. fucata, Sm. Buxton (E.S.).
 A. fulvicrus, Kirb. Burton (E.B.).
 A. albicrus, Kirb. Burton (E.B.); * Little Eaton (G.P.).
 A. coitana, Kirb. * Breadsall Moor, 1903 (G.P.).
 A. humilis, Imh. * Breadsall Moor, 1903 (G.P.).
 A. minutula, Kirb. Buxton (E.S.).
 A. nana, Kirb. * Breadsall Moor, 1903 (G.P.).
 Nomada sexfasciata, Pz. Breadsall Moor, 1886 (G.P.).
 N. succincta, Pz. [Shobnall and elsewhere (E.B.)]; Little
 Eaton (J.H.); not uncommon (G.P.).
 N. alternata, Kirb. Repton Shrubs, etc. (E.B.); * Little
 Eaton (G.P., J.H.).
 N. lathburiana, Kirb. * One ♀, Shirley, May, 1903
 (F.J.).
 N. ruficornis, L. Buxton (E.S.); * Breadsall Moor, 1903
 (G.P.).
 N. bifida, Thoms. * Little Eaton (G.P.).
 N. ochrostoma, Kirb. Burton (E.B.); * Shirley, May,
 1903 (F.J.).
 N. ferruginata, Kirb. (germanica, Sm.). Burton (E.B.).
 N. fabriciana, L. Burton (E.B.); Little Eaton (J.H.).
 N. flavoguttata, Kirb. Burton (E.B.); Buxton (E.S.).

APIDÆ.

- Chelostoma florisomne, L. Burton (E.B.); * Breadsall
 Moors, 5 taken 1903 (G.P.).
 Coelioxys elongata, St. F. (simplex, Nyl.) Burton (E.B.).
 Megachile willughbiella, Kirb. Burton (E.B.); * Clifton
 (F.J.); Little Eaton, in old posts (G.P.).
 M. centuncularis, L. Burton (E.B.); * Little Eaton (G.P.,
 J.H.); Ashburne (F.J.).
 Osmia rufa, L. Burrows into mortar of old walls and old
 posts, Burton (E.B.); Little Eaton (G.P.).

- O. fulviventris, Pz. Breadsall Moor, 1903 (G.P.).
- O. bicolor, Schk. Mines commonly into banks, occasionally appropriates an empty snail shell, Burton (E.B.); once near Ashburne (F.J.).
- Anthidium manicatum, L. Burton (E.B.).
- Eucera longicornis, L. Mines into exposed clay banks. Scalp cliff Hill, Burton (E.B.).
- Melecta armata, Pz. Burton (E.B.).
- Anthophora pilipes, Fb. (acervorum, Sm.). Usually nests in joints of garden walls (E.B.); Little Eaton (J.H.).
- Psithyrus rupestris, Fb. Breadsall Moor (G.P.).
- P. vestalis, Fourc. Burton (E.B.); Breadsall Moor (G.P.).
- P. barbutellus, Kirb. (nec Sm.). * Breadsall Moor, 1903 (G.P.).
- P. campestris, Pz. Burton (E.B.); * Breadsall Moor (G.P.).
- P. quadricolor, St. F. (barbutellus, Sm.). Burton (E.B.).
- Bombus venustus, Sm. (cognatus Steph., var. senilis, Sm.). Burton (E.B.); Breadsall Moor (G.P.).
- B. agrorum, Fb. (muscorum L.). Burton (E.B.); * Breadsall Moor, common (G.P.); Clifton (F.J.); and Chesterfield (F.G.), common.
- B. hortorum, L. Nest in banks. Burton (E.B.); * Breadsall Moor (G.P.).
- B. latreillellus, Kirb. Nest in banks, Burton (E.B.); * Breadsall Moor (G.P.). Var.* distinguendus, Mor. ibid (G.P.).
- B. sylvarum, L. Burton (E.B.); * Breadsall Moor, 1903 (G.P.).
- B. derhamellus, Kirb. Nest in fields and on banks, Burton (E.B.); * near Derby, 1882, and occasionally Breadsall Moor (G.P.)
- B. lapidarius, L. Common and general. Burton (E.B.); * Dove valley (F.J.); Derby district (G.P.); Chesterfield (F.G.).

- B. pratorum, L. Burton, nest once found in manure heap (E.B.); * Willington and Breadsall Moor occasionally (G.P.); * Clifton and Dove Valley occasional (F.J.).
- B. terrestris, L. Very common and generally distributed.
Var. * virginalis, Kirb. ♀ Breadsall Moor (G.P.).
- Apis mellifica, L. Occasionally reverts to a wild state.
Var. ligustica, Spin. "Lately . . . introduced at Netherseal" (E.B., 1863).

The above list contains altogether 105 species, but confirmatory evidence is very desirable in several cases, especially in view of the fact that 19 species noted by Mr. Brown have not been recorded in Derbyshire since 1863. Of these, however, fourteen, at least, have been met with in adjacent counties, and will most probably, sooner or later, be found within our limits, while the rest remain doubtful pending further evidence.