# An annotated list of the Aculeate Hymenoptera of Worcestershire

Geoff Trevis

This list is based on my own database from 1990. It is probable that additional recent records have been submitted to the Worcestershire Biological Records Centre so that the list is not absolutely complete. Nonetheless, it gives a good summary of the state of aculeate hymenoptera recording in the county. I have not listed the sites at which the various species have been found as this would increase the length of the list by an unacceptable amount. However, I hope the notes on habitat preferences will be helpful by indicating where to look.

Notes on the status have departed slightly from the national standards with regard to the term "widespread" which indicates the species to be at least fairly common and not considered to be at risk. In national atlases the term refers to the total distribution of the species concerned. However, I thought it would be more useful to indicate the status in the southern half of England so that some of the species suggested as widespread may be far from so in northern England, Scotland, Northern Ireland etc.

Species	Number of	Date of last	Location/habitat	Flight period	Status
CHRYSIDIDAE	records	record			
Chrysis angustula	6	2011	Widogwood	May August	Wideemaad
Chrysis angustuta Chrysis ignita <sup>1</sup>	6	2011	Widespread	May – August May - October	Widespread
	6		Walls, cliffs, dead wood		Widespread
Chrysis impressa	1	2003	Walls, cliffs, dead wood	May – September	Widespread
Chrysis viridula	2	2011	Vertical banks of hard earth, walls	May/June – August	Widespread
Chrysura radians	2	2007	Dead wood, stumps, posts	May – July/August	Scarce (Na)
Elampus panzeri	1	2004	Dry, sandy sites	June – August	Widespread
Hedychridium ardens	2	1995	Dry, sandy sites	May – August	Widespread
Hedychridium cupreum	2	1995	Dry, sandy sites	June – August	Scarce (Nb)
Omalus aeneus <sup>2</sup>	1	2003	Mill Meadow	Possibly June/July	Widespread
Pseudomalus auratus	4	2008	Open sites with hollow stems	May – September	Widespread
Trichrysis cyanea	16	2015	Holes in dead wood, fences, posts	May – September	Widespread
TIPHIIDAE					
Tiphia femorata	9	2016	Inland heaths, land slips etc.	June – September	Widespread
Tiphia minuta	1	2003	Heaths, grasslands, open woodlands.	May – August	Scarce (Nb)
MUTILLIDAE					
Myrmosa atra	2	2008	Dry, sandy places	Mainly mid-summer	Widespread
SAPYGIDAE		ļ			
Sapyga quinquepunctata	3	2007	Wide variety including gardens.	May – July	Widespread
FORMICIDAE					
Formica fusca	86	2017	Open woodland, heaths, moorland	Queens/males July – August	Widespread
Formica rufa	105	2017	Wyre Forest, Ankerdine Common, Shrawley & Trench Woods.	January – mid-October	Common in suitable habitats.
Formica sanguinea	30	2017	Sandy soil in open woodland/heathland.	Queens/males July – August	Scarce (Nb)
Formicoxenus nitidulus			Commensal with wood ants	Warm weather when host is active	Locally common
Lasius alienus	17	2017	Heaths & open pastures	Queens/males August	Widespread
Lasius brunneus	101	2016	Mature jiving trees, hedgerows, timber framed buildings.	Queens/males June – July	Widespread
Lasius flavus	102	2017	Old pastures	July	
Lasius fuliginosus	43	2017	Old trees, hedgerows, dead timber	Uncertain. Nests active	Widespread
			_	late March - September	widespread
Lasius mixtus	3	2013	Under ground, under boulders.	Queens/males July – September	
Lasius niger $(s.s. \& s.l)^3$	179	2017	Grassland, underground, under slabs etc.	Queens/males July/August	Widespread
Lasius platythorax <sup>4</sup>	12	2016	May overlap with <i>L. niger</i> but prefers cooler, damper conditions. Avoids human habitation.	Queens/males July/August	
Lasius psammophilus	3	2007	Dry, sandy soils	Queens/males July/August	Widespread
Lasius umbratus	4	2015	Around nests of L. niger	Queens/males July - September	
Leptothorax acervorum	15	2016	Wide variety in undisturbed, mature sites	Males/queens mid- summer	Widespread
Temnothorax nylanderi	18	2016	Sticks, rotting branches, tree stumps, under bark.	Queens/males – July August	Widespread
Myrmica lobicornis	2	2015	Lowland heaths, rough grassland, open woodlands	Queens and males – September	Widespread
Myrmica rubra	116	2017	Under ground, under stones	Queens/males – August	Widespread
Myrmica ruginodis	122	2017	Open places in woodland, under stones, in tree stumps	Queens/males – August	Widespread
Myrmica sabuleti	7	2015	Under stones in heathland	Queens/males - ? July	Widespread
Myrmica scabrinodis	10	2015	Dry banks, tree stumps	Queens/males - Y July Queens/males - August	Widespread
Myrmecina graminicola	10	2010	Grassland, open woodland rides, fallen	Queens/males – August –	Widespread
		2001	wood, old tree stumps.	October	idespread

POMPILIDAE	2	2011	Development time with hellow stores	Mary Cantanahan	Course (NIb)
Anoplius caviventris Anoplius concinnus	2 2	2011 2011	Rough vegetation with hollow stems Banks of streams, and ponds in sand &	May – September June – September	Scarce (Nb) Widespread
Anopiius concinnus	2	2011	gravel pits	June – September	widespread
Anoplius infuscatus	3	2011	Moist sand	June – September	Widespread
Anoplius migerrimus	8	2016	Widespread	May – September	Widespread
Arachnospila anceps	4	2003	Wide range of habitats	May – September	Widespread
Arachnospila spissa	2	2014	Wide range of habitats	May – August	Widespread
Arachnospila trivialis	1	1997	Sandy soils on heaths and the coast	May – August	Widespread
Arachnospila wesmaeli	1	1997	Sand dunes and heaths	May – September	Scarce (Na)
Dipogon subintermedius	6	2015	Woodland and hedgerows with dead wood.	June – September	Widespread
Dipogon variegatus	2	2013	Wide range of open habitats.	May – October	Widepread
Episyron rufipes	3	2013	Sandy sites – inland heaths & grassland	May – September	Widespread
Evagetes crassicornis	6	2015	Areas of open ground	May – September	Widespread
Evagetes dubius	1	2004	Heathland (record from Hartlebury	May – September	Scarce (Nb)
			Common)		
Pompilus cinereus	2	2005	Sandy heaths	May – September	Widespread
Priocnemis agilis	1	2003	Dry grasslands	June – September	Scarce (Nb)
Priocnemis coriacea	1	2003	Light soils, downlands and heaths	April – August	Scarce (Na)
Priocnemis exaltata Priocnemis fennica	10	2013 2003	Wide range particularly dry grasslands Wide variety	May – September June – September	Widespread
Priocnemis gracilis	1	2003	Clay soils in woodland and open ground	June – September	Widespread Scarce (Nb)
Priocnemis gracitis Priocnemis hyalinata	2	1996	Sites with well drained soils.	June – September	Scarce (Nb)
Priocnemis nyainaia Priocnemis parvula	5	2008	Areas with sandy soils	June – September	Widespread
Priocnemis perturbatos	14	2008	Wide variety, specially open woodland	April – July	Widespread
Priocnemis pusilla	1	2005	Wide variety with light soils	June – September	Widespread
Priocnemis susteri	3	2009	Open woodlands on drier soils	April – August	Widespread
VESPIDAE					•
Eumeninae					
Ancistrocerus gazella	9	2016	Open sites on sandy soil	May – September	Widespread
Ancistrocerus	17	2016	Wide variety	February – October	Widespread
nigricornis				(females_	1
				June – September	1
Amaintus a sure sure i di	6	2010	Wide vesiety	(males)	W. d
Ancistrocerus parietinus	6	2010	Wide variety	April - September	Widespread
Ancistrocerus parietum Ancistrocerus	2 6	2012 2010	Wide variety Wide variety often on marshy places	May – October May – September	Widespread Widespread
Ancistrocerus trifasciatus	U	2010	while variety often on marsny places	way – September	widespread
Odynerus	1	2006	Grassland, heaths, disturbed ground on	May – August	Scarce (Na)
melanocephalus			clayey soils.	, ,	
Odynerus spinipes	6	2010	Wide variety with vertical banks for	May – August	Widespread
a 1 1.4	-	0011	nesting.		<b>TTT</b> '1 -
Symmorphus bifasciatus	7	2011	Vegetation in damp places. Full sun.	June – August	Widespread
Symmorphus connexus	5	2008	Vegetation in damp places. Full sun	May – August	Rare (RDB3)
Symmorphus gracilis Vespinae	10	2016	Vegetation in damp places. Full sun.	May – August	Widespread
Vespinae Dolichovespula media	33	2015	Almost anywhere	April _ Santambor	Widespread
Dolichovespula media Dolichivespula	33 7	2015	Almost anywhere Almost anywhere	April – September April – October	Widespread
norwegica	,	2010	1 million any where	April = Octobel	muespieau
Dolichovespula saxonica	26	2014	Almost anywhere	April – August	Widespread
Dolichovespula	15	2013	Almost anywhere	May – September	Widespread
sylvestris					*
Vespa crabro	121	2016	Widely distributed	April – October	Widespread
Vespula germanica	32	2014	Almost anywhere	March – November	Widespread
Vespula rufa	8	2010	Open spaces for underground nesting	March – September	Widespread
Vespula vulgaris	76	2016	Almost anywhere	March – November	Widespread
SPHECIDAE	11	2016	Due hasthland	True A (	
Ammophila pubescens	11	2016	Dry heathland	June – August	Scarce
Ammophila sabulosa	25	2013	Heathland and dunes	May – September	Widespread
CRABRONIDAE					
Astatinae Astata boops	3	2008	Sandy heaths & dry clay banks in	June – August	Widespread
isiana voops	5	2000	woodland	June August	macspread
Dtyudella1 pinguis	1	1993	Dunes and inland heaths	May – August	Widespread
Larrinae					
Tachysphex	6	2009	Sandy localities	May – September	Widespread
pompiliformis					1
Trypoxylon attenuatum	6	2015	Open sites with dead wood and hollow	May – September	Widespread
		-	stems		
Trypoxylon clavicerum	3	2015	Sites with beetle holes and hollow stems	May -1 September	Widespread
Trypoxylon figulus	5	2010	Sites with beetle holes and hollow stems	May – October	Widespread
Crabroninae	10				
Crabro cribrarius	10	2015	Dry heaths, land slips etc.	June – September	Widespread
Crabro peltarius	6	2011	Sites with light sandy soils	May – August	Widespread
	ļ	2007	Wide variety	May – September	Widespread
Crossocerus annulipes	8				

Crossocerus cetratus	3	2008	Sites with dead wood & hollow plant stems	May – August	Widespread
Crossocerus dimidiatus	2	2002	Sites		Widespread
Crossocerus elongatulus	3	2013	Open sunny situations in scrub & woodland edge	May – September	Widespread
Crossocerus megacephalus	11	2011	Wide variety	May – September	Widespread
Crossocerus nigritus	1	2008	Wide variety	May – July	Widespread
0				May – July	
Crossocerus ovalis	3	2013	Sites with sandy soils		Widespread
Crossocerus podagricus	6	2011	Wide variety	May – September	Widespread
Crossocerus pusillus	3	2005	Wide variety	June – August	Widespread
Crossocerus quadrimaculatus	19	2013	Sites with sandy soils	May – September	Widespread
Crossocerus styrius	3	2009	Damp woodland, dappled shade along river corridors	Uncertain	Widespread
Crossocerus wesmaeli	5	2013	Sites with sandy soils	May – September	Widespread
Ectemnius cavifrons	11	2015	Sites with dead wood in sunny situations	June – October	Widespread
2	22	2016	· · · · · · · · · · · · · · · · · · ·		
Ectemnius cephalotes			Sites with dead wood	June – September	Widespread
Ectemnius continuus	37	2014	Wide variety	May – September	Widespread
Ectemnius dives	3	2013	Open situations with dead wood & umbellifers	May – September	Scarce
Ectemnius lapidarius	8	2007	Wide variety	May – September	Widespread
Ectemnius lituratus	17	2009	Wide variety with dead wood & umbellifers	June – September	Widespread
Ectemnius rubicola	1	2002	Wide variety of open areas	Moy Sontomb-	Widosmaad
	1	2003	2 I	May – September	Widespread
Ectemnius ruficornis	1	2006	Woodland with dead wood & umbellifers	May – September	Scarce (Nb)
Ectemnius sexinctus	2	2001	Wide variety with dead wood & umbellifers	May – September	Scarce (Nb)
Limdenius albilabris	21	2016	Wide variety	May – August	Widespread
Rhopalum clavipes	1	1997	Wide variety where hollow stems are available	May – August	Widespread
Rhopalum coarctatum	1	2015	Sites with dead wood & hollow stems	May – September	Widespread
				· ·	
Oxybelus argentatus	7	2017	Sandy heaths	June – August	Scarce (Na)
Oxybelus mandibularis	1	2008	Dry heaths	June – August	Scarce (Na)
Oxybelus uniglumis	12	2013	Open sandy situations	June - September	Widespread
Mimumesa dahlbomi	3	2008	Wide variety with dead wood	May – September	Widespread
Mimesa equestris	4	2008	Wide variety	July – October	Widespread
Mimesa lutaria	2	1995	Open habitats with light soils	June – September	Widespread
	2	2006		· · · · · · · · · · · · · · · · · · ·	
Psenulus concolor		-	Wide variety. Requires hollow stems.	May – August	Widespread
Psenulus pallipes	3	2006	Wide variety. Requires hollow stems or holes in dead wood.	July – October	Widespread
Pemphredoninae					
Passaloecus corniger	1	1992	Wide variety with old trees and posts	May – September	Widespread
Passaloecus gracilis	2	2007	Wide variety with old timber	May – September	Widespread
Passaloecus insignis	2	2016	Open habitats	May – September	Widespread
Passaloecus singularis	4	2004	Wide variety	May – September	Widespread
Pemphredon inornata	4	2014	Wide variety with dead wood or bramble	May – September	Widespread
Pemphredon lethifer	2	2006	stems Wide variety with dead wood or hollow	May – October	Widespread
Pemphredon lugbris	11	2012	stems. Wide variety with dead wood or hollow	May – September	Widespread
Pemphredon morio	1	1991	stems Widespread with dead wood or hollow	June – August	Scarce (Nb)
Nyssoninae			stems		
Argogorytes fargei	2	2006	Open habitats on light soils	May Angust	Scarce (No)
			Open habitats on light soils	May – August	Scarce (Na)
Argogorytes mystaceus	23	2015	Sunny places on many soil types. Associated with woodland glades and	April – June	Widespread
Didineis lunicornis	1	2004	edges. Wide range with cracks in clay or clay	July – October	Scarce (Na)
a 1			rich soils	+ - · · · · · · · · · · · · · · · · · ·	DDD(
Gorytes laticinctus	1	2014	Sites with light soils	June – August	RDB3
Gorytes quadrifasciatus Philanthinae	1	2015	Sandy areas	June – September	Widespread
Cerceris arenaria	25	2016	Sites with sandy soils	June – August	Widespread
Cerceris rybyensis	30	2016	Mainly sites with sandy soils	June – September	Widespread
Philanthus triangulum	19	2010	Sandy heaths and sites with light friable soils	July – September	Widespread
APIDAE Colletinae					
		+			
Colletes	<u> </u>			4 11 0 7 7	DDDC
Colletes cunicularius	1	2011	Sand dune systems	April & May	RDB3
Colletes daviesanus	10	2016	Wide variety including gardens	June – September	Widespread
	5	2011	Hedges & edge habitats on sandy sites	June – September	Widespread
Colletes fodiens			Short grassland with ivy nearby	September – November	Widespread
v	74	2017			
Colletes hederae	74	2017			
Colletes fodiens Colletes hederae Colletes similis Colletes succunctus	74 3 9	2017 2013 2013	Wide variety       Dr heaths & moorlands	June – September July – September	Widespread Widespread

** 1	1	1	1		
Hylaeus Hylaeus annularis	5	2012	Calcareous grassland	June – August	Widespread
Hyldeus annularis Hylaeus brevicornis	14	2012 2015	Wide variety	May – September	Widespread
Hylaeus communis	22	2013	Sites with dead wood including gardens	May – September	Widespread
Hylaeus confuses	2	2010	Woodland. Nests in dead wood, masonry	May – September	Widespread
Hyueus conjuses	2	2012	& in the ground.	May – September	widespiead
Hylaeus hyalinatus	2	2010	Sandy areas	May – September	Widespread
Hylaeus pictipes	3	2012	Open woodland. Occasionally gardens	June – August	Scarce (Na)
Hylaeus signatus	5	2012	Areas with sandy or light soils	June – September	Widespread
Andreninae	5	2011		Cane September	
Andrena angustior	15	2014	Heathy woodland	April – June	Widespread
Andrena apicata	5	2016	Open deciduous woodland	March – May	Scarce (Nb)
Andrena argentata	1	2013	Ericaceous heaths	July – September	Scarce (Na)
Andrena barbilabris	10	2013	Areas of sandy soils	April – June	Widespread
Andrena bicolour	46	2015	Very wide range	March – August	Widespread
Andrena bicolour	40	2010	very while range	(bivoltine)	Widespread
Andrena bimaculata	7	2016	Areas with light soils	Bivoltine. March – May: July - August	Scarce (Nb)
Andrena bucephala	9	2016	Scrub edge	April – May	Scarce (Nb)
Andrena chrysosceles	75	2017	Woodland clearings	April – June	Widespread
Andrena cineraria	114	2017	Open areas on sandy soils	March – June	Widespread
Andrena clatkella	6	2016	Open woodland, heaths, sand & gravel	February – May	Widespread
	-		pits		-
Andrena congruens	5	2010	Scrub edge, bare ground	Bivoltine – March – May: July – August	Scarce (Na)
Andrena denriculata	3	2008	Open grassland with sandy soils	July – September	Widespread
Andrena dorsata	32	2016	Scrub edge	Bivoltine. April – May: July – September	Widespread
Andrena falsifica	1	2009	Heaths and heathy woodland on light soils	April – July	Scarce (Na)
Andrena flavipes	57	2017	Open situations on clay-based or sandy	Bivoltine. March – July:	Widespread
<i>J I I</i>			soil	July – August	
Andrena fucata	10	2015	Heaths and woodland	May – July	Widespread
Andrena fulva	60	2015	Open grasslands including parks and lawns	March – June	Widespread
Andrena fulvago	4	2016	Open grasslands	May – July	Scarce (Na)
Andrena fuscipes	6	2010	Ericaceous heaths	July – September	Widespread
Andrena haemorrhoa	91	2013	Scrub and meadows	March – June	Widespread
Andrena helvola	91 14	2017		March – June	Widespread
	9	2016	Woodland edge & meadows		
Andrena humilis	-		Grasslands with legumes	April – June	Widespread
Andrena labialis	19	2015	Grasslands with legumes	May – July	Widespread
Andrena labiata	6	2015	Open grassland, scrub & woodland edge	May – June	Scarce (Na)
Andrena lapponica	3	2008	Woodlands & moors with bilberry	April – June	Widespread
Andrena marginata		2010	Calcareous grassland, heaths, moors, woodland	July – September	Scarce (Na)
Andrena minutula	41	2016	Very wide range	Bivoltine. March – April: May – August	Widespread
Andrena nigriceps	1	1995	Tall grassland with Asteracae	June - August	Scarce (Na)
Andrena nigroaenea	30	2016	Very wide range	Bivoltine. March – June: July – August	Widespread
Andrena nigrospina	38	2016	Various	May – June	Uncertain
Andrena ovatula	15	2016	Heaths and grasslands	Bivoltine, April – May:	Widespread
Androna pracoor	16	2016	Heaths & open woodland with willow	June – September March – May	Widespread
Andrena praecox Andrena scotica <sup>5</sup>	16 89				
		2017	Wide range on light, sandy soils	March – July	Widespread
Andrena semilaevis	10	2016	Wide range on light, sandy soils	May – August	Widespread
Andrena similis	5	2016	Grassland and scrub edge	April – June	Scarce (Nb)
Andrena subopaca	46	2017	Woodland	April – June	Widespread
Andrena synadelpha	11	2016	Woodland scrub	April – June	Widespread
Andrena tarsata Andrena thoracica	2 1	2016 2003	Heaths and moorland Open sandy heaths with vertical banks	July – August Bivoltine. March – May:	Widespread Widespread
		2007		July – August	XX7'1 1
Andrena tibialis	2	2007	Grassland and scrub edge	March – May	Widespread
Andrena trimmerana	12	2016	Grassland and scrub	Bivoltine. March – April: July – August	Widespread
				Manala Tana	Scarce (Nb)
Andrena varians	2	2008	Scrub, particularly blackthorn	March – June	
Andrena wilkella	2 43	2008 2015	Scrub, particularly blackthorn Grasslands	May – July	Widespread
Andrena wilkella		2015 2007	Grasslands Sandy heaths		Widespread RDB3
Andrena wilkella Halictinae	43 2 9	2015	Grasslands	May – July	Widespread
Andrena wilkella Halictinae Halictus confuses	43 2	2015 2007	Grasslands Sandy heaths	May – July May – September	Widespread RDB3
Andrena wilkella Halictinae Halictus confuses Halictus rubicundus Halictus tumulorum	43 2 9	2015 2007 2016 2016	Grasslands Sandy heaths Wide variety with vertical banks	May – July May – September April – October	Widespread RDB3 Widespread Widespread
Andrena wilkella Halictinae Halictus confuses Halictus rubicundus Halictus tumulorum Lasioglossum albipes	43 2 9 24 45	2015 2007 2016 2016 2016	Grasslands Sandy heaths Wide variety with vertical banks Open habitats on sandy or calcareous soils Wide variety	May – July May – September April – October March – October April – October	Widespread RDB3 Widespread Widespread Widespread
Andrena wilkella Halictinae Halictus confuses Halictus rubicundus Halictus tumulorum Lasioglossum albipes Lasioglossum brevicorne	43 2 9 24 45 4	2015 2007 2016 2016 2016 2016 2004	Grasslands Sandy heaths Wide variety with vertical banks Open habitats on sandy or calcareous soils Wide variety Various on clay based or sandy soils	May – July May – September April – October March – October April – October May – August	Widespread RDB3 Widespread Widespread Widespread RDB3
Andrena wilkella Halictinae Halictus confuses Halictus rubicundus Halictus tumulorum Lasioglossum albipes Lasioglossum brevicorne Lasioglossum calceatum	43 2 9 24 45 4 81	2015 2007 2016 2016 2016 2016 2004 2004	Grasslands Sandy heaths Wide variety with vertical banks Open habitats on sandy or calcareous soils Wide variety Various on clay based or sandy soils Various	May – July May – September April – October March – October April – October May – August April – October	Widespread RDB3 Widespread Widespread Widespread RDB3 Widespread
Andrena wilkella Halictinae Halictus confuses Halictus rubicundus Halictus tumulorum Lasioglossum albipes Lasioglossum brevicorne Lasioglossum calceatum Lasioglossum	43 2 9 24 45 4	2015 2007 2016 2016 2016 2016 2004	Grasslands Sandy heaths Wide variety with vertical banks Open habitats on sandy or calcareous soils Wide variety Various on clay based or sandy soils	May – July May – September April – October March – October April – October May – August	Widespread RDB3 Widespread Widespread Widespread RDB3
Andrena wilkella Halictinae Halictus confuses Halictus rubicundus Halictus tumulorum Lasioglossum albipes Lasioglossum brevicorne Lasioglossum calceatum Lasioglossum cupromicans	43 2 9 24 45 4 81	2015 2007 2016 2016 2016 2016 2004 2004	Grasslands Sandy heaths Wide variety with vertical banks Open habitats on sandy or calcareous soils Wide variety Various on clay based or sandy soils Various	May – July May – September April – October March – October April – October May – August April – October April – October	Widespread RDB3 Widespread Widespread RDB3 Widespread Widespread
Andrena wilkella Halictinae Halictus confuses Halictus rubicundus Halictus tumulorum Lasioglossum albipes Lasioglossum brevicorne Lasioglossum calceatum Lasioglossum	43 2 9 24 45 4 81 5	2015 2007 2016 2016 2016 2004 2017 2015	Grasslands Sandy heaths Wide variety with vertical banks Open habitats on sandy or calcareous soils Wide variety Various on clay based or sandy soils Various Woodland and moors	May – July May – September April – October March – October April – October May – August April – October	Widespread RDB3 Widespread Widespread Widespread RDB3 Widespread

Lasioglossum	9	2017	Grassland and open woodland on	April – September	Widespread
laevigatum	,	2017	calcareous soils	April – September	widespiead
Lasioglossum lativentre	19	2012	Grassland and heathland	March – October	Widespread
Lasioglossum leucopus	35	2017	Wide variety	May – October	Widespread
Lasioglossum leucozonium	23	20-15	Open areas on sandy or calcareous soils	March – November	Widespread
Lasioglossum malachurum	46	2017	Quarries, commons, gardens, chalk grassland	April – October	Widespread
Lasioglossum minutissimum	16	2015	Wide variety	May – August	Widespread
Lasioglossum morio	36	2015	Wide variety	March – October	Widespread
Lasioglossum	1	2001	Sandy areas	March – September	Widespread
nitidiusclum Lasioglossum parvulum	3	2011	Wide variety	March – September	Widespread
Lasioglossum parvulum Lasioglossum pauxillum	30	2011 2017	Wide variety Wide variety. Prefers chalk grassland & woodland	April – October	Widespread
Lasioglossum punctatissimum	9	2016	Sandy soils	April – October	Widespread
Lasioglossum	4	2008	Various	April – September	Scarce (Na)
quadrinotatum Lasioglossum rufitarse	5	2016	Various	April – October	Widespread
Lasioglossum	6	2016	Various	March – September	Widespread
smeathmanellum Lasioglossum villosulum	21	2017	Various	March – October	Widespread
Lasioglossum villosulum Lasioglossum xanthopus	8	2017	Mainly calcareous grassland	April – August	Scarce (Nb)
Lasioglossum zonulum	5	2012	Woodland rides	April – August April – October	Widespread
Sphecodes crassus	2	2010	Various	May – September	Scarce (Nb)
Sphecodes ephippius	19	2016	Where Lasioglossum species occur	April – September	Widespread
Sphecodes ferruginatus	3	2013	Grasslands	May - September	Scarce (Nb)
Sphecodes geoffrellus	4	2016	Where Lasioglossum species occur	April – September	Widespread
Sphecodes gibbus	7	2005	Bare banks where Lasioglossum occur	April – September	Widespread
Sphecodes hyalinatus	1	991	Grasslands	May – September	Widespread but local
Sphecodes monilicornis	34	2016	Various where Halictinae occur	April – October	Widespread
Sphecodes niger Sphecvodes pellucidus	3 16	2013 2013	Calcareous grasslands, heaths, land slips Sandy soils	April – October April – August	RDB3 Widespread
Sphecodes puncticeps	7	2013	Various	May – September	Widespread but local
Sphecodes reticulatus	2	2013	Various on light soils	May – October	Scarce (Na)
Sphecodes rubicundus	3	2002	Old herb rich grasslands & land slips	May – July	Scarce (Na)
Melittinae					~~~~~~~
Dasypoda hirtipes	19	2016	Heaths	June – August	Scarce
Melitta haemorrhoidalis	2	1991	Calcareous grasslands & woodland rides on chalk	July – August	Scarce
<i>Melitta leporina</i> <b>Megachilinae</b>	8	2017	Open grasslands, occasionally gardens	June – August	Widespread
Anthidium manicatum	18	2015	Various including rural & urban gardens	May – August	Widespread
Chelostoma campanularum	14	2015	Anywhere with campanula species	June – August	Widespread
Chelostoma florisomne	14	2016	Associated with buttercups along woodland edge adjoining meadows	May – August	Widespread
Coelioxys conoidea	3	2011	Heaths, landslips	June – August	Widespread
Coelioxys elongate	3	2010	Heaths, gardens, brown field sites	June – August	Widespread
Coelioxys inermis	3	2016	Dunes, sandy heaths, gardens	July – August	Widespread
Coelioxys ruficens	3	2016	Wide range	June – August	Widespread
Hoplitis claviventris	2	2002 2007	Wide range           Neutral & calcareous grassland	May – August May – September	Scarce (Nb) Widespread
Hoplitis spinulosa Megachile centuncularis	1 10	2007	Neutral & calcareous grassland Wide range	June – August	Widespread
Megachile ligniseca	31	2016	Wide range	June – August	Widespread
Megachile maritime	6	2010	Dunes and sandy heaths	June – August	Widespread
Megachile versicolor	13	2015	Wide range	May – September	Widespread
Megachile willughbiella	32	2016	Wide range	June – August	Widespread
Osmia aurulenta	3	2007	Calcareous grassland, land slips	April – June	Scarce (Na)
Osmia bicolour	10	2013	Calcareous grassland, Open woodland on chalk or limestone	April – July	Scarce (Nb)
Osmia bicornis	67	2017	Wide variety including gardens	April – July	Widespread
Osmia caerulescens	6	2016	Wide variety including gardens	April – August	Widespread
Osmia leaiana	16	2016	Wide variety with holes in dead wood or walls.	May – August	Widespread
Anthophorinae	0	2015	Wide vosiety	Morr A	Widogram
Anthophora furcata Anthophora plumipes	9	2015	Wide variety Wide variety	May – August	Widespread
	90	2017 2010	Wide variety           Mainly gardens with labiates	March – May June – August	Widespread Scarce (Nb)
Anthophora	-				
	42	2016	Wide variety	March – August	Widespread
Anthophora quadrimaculata	42	2016	Wide variety Open woodland	March – August (bivoltine) April – May	Widespread RDB1

Nomada flavoguttata	41	2016	Wide variety	March – August	Widespread
Nomada flavopicta	8	2011	Flower rich grassland	June – September	Scarce (Nb)
Nomada fucata	38	2017	Wide variety	April – August	Scarce (Na)
Nomada fulvicornis	14	2016	Wide variety	April – August	RDB3
Nomada goodeniana	51	2016	Wide variety	April - August	Widespread
Nomada guttulata	2	2016	Open woodland and grassland	May – June	RDB1
Nomada hirtipes	5	2017	Wide variety	April – June	RDB3
Nomada integra	4	2009	Open grasslands	May – July	Scarce (Na)
Nomada lathburiana	35	2016	Wide variety	April – July	RDB3 <sup>6</sup>
Nomada leucophthalma	25	2016	Heaths, moors, open woodland	March – May	Widespread
Nomada marshamella	19	2017	Grassland, open areas in woodland	March – September	Widespread
Nomada panzeri	26	2014	Wide variety	April – June	Widespread
Nomada ruficornis	14	2013	Grasslands, open woodlands	April – June	Widespread
Nomada rufipes	17	2017	Wide variety	July – September	Widespread
Nomada signata	2	2014	Grasslands, open woodlands	April – May	RDB2
Nomada striata	9	2014	Grasslands, open woodlands	May – July	Widespread
Apinae					
Bombus barbutellus	9	2017	Wide variety	April – September	Widespread
Bombus bohemicus	13	2016	Wide variety	April – August	Widespread
Bombus campestris	58	2017	Wide variety	April – September	Widespread
Bombus hortorum	176	2017	Wide variety	March – October	Widespread
Bombus humilis	23	2017	Tall, open grassland	May - September	Widespread
Bombus hypnorum	258	2017	Wide variety	March – October	Widespread
Bombus jonellus	3	2015	Wide variety	March – September	Widespread
Bombus lapidarius	469	2017	Wide variety	March – September	Widespread
Bombus lucorum <sup>7</sup>	292	2017	Wide variety	March – October	Widespread
Bombus	237	2017	Wide variety	March – October	Widespread
lucorum/terrestris					-
Bombus pascuorum	597	2017	Wide variety	March – October	Widespread
Bombus pratorum	173	2017	Wide variety	March - August	Widespread
Bombus ruderarius	23	2014	Wide variety	April – September	Widespread
Bombus ruderatus	21	2015	River valleys with comfrey, yellow iris, marsh woundwort etc.	April – October	Scarce (Nb)
Bombus rupestris	23	2014	Unimproved grasslands	May – July	Scarce (Nb)
Bombus sylvestris	41	2017	Wide variety	March – September	Widespread
Bombus terrestris	321	2017	Wide variety	February – October8	Widespread
Bombus vestalis9	249	2017	Wide variety	April – September	Widespread

#### Notes:

**1.** *Chrysis ignita*: Currently there is considerable taxonomic revision regarding this species. It is accepted that the term *C. ignita* covers other closely related species and, therefore, in this list it should be regarded as *C. ignita agg.* The final taxonomy for the group seems still to be agreed.

Omalus aeneus: There is a single record for this species hence confirmation of its presence in the county would be valuable.
 Lasius niger: Taxonomic revision has recognised that the name L. niger covers two closely related species, L. niger s.s. and L. platythorax. Prior to this revision all records were given as L. niger which means that L. platythorax is almost certainly under recorded.
 L. alienus: Two closely related species are now recognised, L. alienus and L. psammophilus. Morphologically they are very similar and it is probable that some L. psammophilus have been misidentified as L. alienus.

5. Andrena scotica: A taxonomic revision changed the name to A. carantonica which may be found in some literature. However, a misidentification was found and the name reverted to A. scotica.
6. Nomada lathburiana: This species was accorded RDB3 status. However, it appears to have increased in numbers and to have extended its range and its status should be revised.

**7.** *Bombus lucorum*: There has been extensive taxonomic revision along with studies of its morphology. It is now recognised that workers of this species cannot be reliably separated from those of *B. terrestris* and hence workers should only be recorded as *L. lucorum/terrestris*. Positive identification to species should only be made using males or queens. Furthermore, *B. lucorum* itself has been split into three species *B. lucorum* s.s., *B. cryptarum* and *B. magnus*. Since these may be difficult to identify in the field records should be made as *L. lucorum* s.l.

**8.** *Bombus terrestris*: The flight period for this species is generally as noted above. However, workers may seen foraging during winter months in milder parts of the country.

**9.** *Bombus vestalis*: This species is morphologically very similar to *B. bohemicus* and care should be taken when making identification

in the field. It is likely that some *B. vestalis* are misidentified *B. bohemicus*.

#### References

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