

# DYFED INVERTEBRATE GROUP



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## A CHECKLIST OF BEES AND WASPS IN CARMARTHENSHIRE - I K Morgan

Carmarthenshire (vc44) has been moderately well-recorded for its bee and wasp (Hymenoptera: Aculeata) fauna, with some 186 species recorded. This recording work was mostly undertaken in the years 1985-1994, with rather intensive collecting in the first few years of that decade and with a pronounced resurgence again in 1994. Hardly any recording work has been done in the 1995-98 period. Most of the field work was carried out by the author, aided by Mark Pavett. This effort was concurrent with recording being carried out in Pembrokeshire (S J Coker *et al*) and particularly in Glamorgan by Mark Pavett. All records are included in the annually-updated *Recent Collecting of Aculeates in South and South-west Wales* - a draft *reference list* (Morgan & Pavett, unpublished, Countryside Council for Wales, February 1998), which includes approximately 1600 records of aculeate hymenoptera from the afore-mentioned parts of Wales. As stated, in Carmarthenshire about 186 species have been recorded but there is still clear scope for additions to be made to the county's fauna. Fowles, in the introduction to his 'Provisional checklist' (1996), correctly emphasizes the dynamic nature of invertebrate faunas, and doubtless there has been an ebb and flow with regard to the status of invertebrate species, aculeates included. All of us are aware of 'good years' for individual species where the numbers of records rise, independent of recording effort or techniques. Perhaps in aculeate terms, the most remarkable recent example has been the extraordinary spread of the so-called 'bee wolf' *Philanthus triangulum* which, hitherto, was classified as RDB2 ('vulnerable'). It was recorded at Pennard (on Gower, vc41) by Mark Pavett in late August 1996 and is likely to have already colonized coastal Carmarthenshire.

The recent range expansion of two *Dolichovespula* wasp species (*media* and *saxonica*) also makes these contenders for the county list. Even within the recent period when records were collected in Carmarthenshire, the writer has noted changes in status. The very distinctive wool-carder bee *Anthidium manicatum* was not recorded in the county until 1995, since when - in spite of greatly diminished recording effort - there have been several sightings. Indeed, others elsewhere in the country have noted an increase in this species (Else & Roberts In Edwards. 1997).

Reference to the Glamorgan and Pembrokeshire records listed in *Recent Collecting of Aculeates in South and South-west Wales* will suggest other possible candidate species for Carmarthenshire. A curious anomaly is the apparent absence of *Colletes cunicularius* from the

Carmarthenshire dune systems, for it occurs on Whiteford Burrows, Gower and at Kenfig. It is an early flier - coinciding with the flush of *Salix repens* flowers - and perhaps this has contributed to it being missed. Another species perhaps worth targeting would be the rare *Stelis ornatula* at the Llansteffan *Hoplites claviventris* site in late June/July. Also, the recently published *Provisional atlas of the aculeate Hymenoptera of Britain and Ireland: Part 1 & 2* (Edwards, 1997, 1998) shows some older records for species which have not been encountered in the current recording phase - *Oxybelus mandibularis* (in SN30), for example. Additionally, one or two more recent examples are given.

All species of the bees and wasps known to the author to be recorded in Carmarthenshire are listed. For Red Data Book (RDB), Notable (N) and Local (L) species, an explanation of these status category definitions and criteria is given in Fowles (1996). An asterisk after a site name —merely denotes that it is a sand-dune based locality. Underlined species names in the listings refer to those included, with accounts, in the *Provisional Atlas* (parts 1, 2 and 3). The ant fauna of Carmarthenshire is not reviewed in this summary.

## References

Edwards, R. ed (1997) - *Provisional atlas of the aculeate Hymenoptera of Britain and Ireland: Part 1*. Bees, Wasps and Ants Recording Society. Huntingdon: Biological Records Centre.

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Fowles, A. P. (1996) - *A provisional checklist of the invertebrates recorded from Wales: 2. Aculeate wasps, bees and ants (Hymenoptera: Aculeata)*. Countryside Council for Wales.

Morgan, I. K. & Pavett, P. M. (1998) - *Recent collecting of aculeates in south and south-west Wales - a draft reference list*. Countryside Council for Wales. Unpublished report\*

Pavett, P. M. (1993) - The aculeate Hymenoptera of Pembrey-Tywyn Burrows, Carms. vc44. *Dyfed Invertebrate Group Newsletter* **27**: 1-4.

Pavett, P. M. & Morgan, I. K. (1994) - Apologies & Erratum 3: The aculeate Hymenoptera of Pembrey-Tywyn Burrows, Carms. vc44. *Dyfed Invertebrate Group Newsletter* **28**: 1-2.

\* NB: This is updated annually, hence variation in date of cited appearance.

## Family - Andrenidae

## Andrena

"	ovatula	44	22-216080	16.6.85	IKM	Gilman Pt. Pendine
"	"	44	22-221072	13.7.87	IKM	Ragwen Point
"	"	44	21-537993	8.5.90	IKM	Llwynhendy
"	bicolor	44	21-512981	20.4.86	IKM	Machynys Ponds
"	"	44	22-438065	8.7.85	IKM	Parc-y-llong
"	"	44	21-537993	11.7.90	IKM	Llwynhendy
"	"	44	22-511145	17.8.85	IKM	Garn Farm, Drefach
"	"	44	22-577160	5.4.88	IKM	SW of Carmel
"	"	44	22-495013	16.4.84	IKM	Stradey Woods
"	"	44	21-542985	12.4.87	IKM	N of Penybryn
"	"	44	22-601165	12.5.91	IKM	Carmel Woods
"	"	44	22-397007	26.3.89	PMP	Pembrey Forest*
"	"	44	22-554203	7.6.93	IKM	Dryslwyn
"	flavipes L	44	21-539998	27.4.91	IKM	Soar Chapel, Llwynhendy.
"	praecox	44	22-715307	16.4.87	IKM	Llanwrda
"	lapponica L	44	22-675503	5.6.93	IKM	Craig Twrch
"	synadelpha L	44	22-808428	21.5.94	IKM	SW of Fwng-uchaf
"	"	44	22-362183	19.5.94	IKM	Cors Goch, Llanllwch
"	coitana L	44	22-115247	27.7.85	IKM	N of Alltypistyll
"	angustior L	44	22-516145	9.5.87	IKM	Llawr Cwrt
"	"	44	21-511979	1.7.85	IKM	nr Llanelli
"	"	44	22-614218	5.83	JC	Dinefwr Castle Woods
"	"	44	22-554203	7.6.93	IKM	Dryslwyn
"	fucata L	44	22-488017	24.5.90	IKM	Stradey Woods
"	"	44	22-674123	29.6.87	IKM	Hendy Farm
"	"	44	22-518086	1.7.85	IKM	Bryn Banal-fach, nr Pontyberem
"	scotica	44	22-427003	8.6.85	IKM	Pembrey Burrows*
"	"	44	22-628339	17.5.90	IKM	nr Talley
"	"	44	22-501056	1.7.85	IKM	E of Horeb
"	"	44	22-495012	24.5.84	IKM	Stradey Woods
"	"	44	22-226076	22.4.88	IKM	Gilman Point
"	"	44	22-783353	25.4.86	IKM	Poor Man's Wood Llandovery
"	"	44	22-675503	5.6.93	IKM	Craig Twrch
"	"	44	22-614218	5.83	JC	Dinefwr Castle Woods
"	"	44	22-551079	2.5.94	IKM	S. of Llwyn-teg, Llannon
"	"	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
"	trimmerana Nb	44	21-513981	12.4.87	IKM	Machynys
"	"	44	22-371114	11.4.88	IKM	N of Ferryside*
"	bucephala Na	44	22-426004	26.4.87	IKM	Pembrey Burrows*
"	barbilabris L	44	21-41-99-	1.7.87	IKM	Pembrey Burrows*
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	"	44	22-357109	11.7.94	IKM	Llansteffan*
"	"	44	22-36-05-	16.7.94	IKM	Tywyn Burrows*
"	"	44	22-427003	30.4.94	IKM	Pembrey Burrows*
"	"	44	22-370122	29.4.97	IKM	Morfa Uchaf, Ferryside*
"	nigroaenea	44	22-173073	23.4.90	IKM	E of Amroth



"	"	44	22-233078	20.5.91	IKM	Dolwen Pt. Pendine
"	"	44	22-226076	1.5.87	IKM	Gilman Point
"	"	44	21-518974	31.3.88	IKM	Machynys
"	"	44	22-281074	14.6.97	ME	Pendine Burrows *
"	"	44	22-413050	11.6.97	ME	Banc y Lord, Cydweli
"	thoracica	44	22-35-05-	28.4.91	IKM	Tywyn Burrows*
"	"	44	22-427008	30.7.85	IKM	N of Pembrey
"	"	44	21-513980	5.4.86	IKM	Machynys
"	"	44	22-713306	21.5.87	IKM	Llanwrda
"	"	44	22-585157	9.4.97	IKM	Garn-bîg, Carmel
"	clarkella	44	22-421042	14.4.87	IKM	Pinged
"	"	44	22-36-04-	7.4.91	IKM	Tywyn Burrows*
"	"	44	22-608223	4.4.88	IKM	Dinefwr Park
"	"	44	22-693283	12.4.88	IKM	Derwen Fach
"	"	44	22-420024	17.5.86	IKM	Ffrwd Fen
"	"	44	21-513980	23.3.86	IKM	Machynys Ponds
"	"	44	22-36-05-	7.5.94	IKM	Tywyn Burrows*
"	"	44	22-228159	11.5.94	IKM	S. of Fforest Farm, Whitland
"	haemorrhoea	44	22-443082	10.6.88	IKM	SW of Parc Matho
"	"	44	22-433116	12.6.90	IKM	Coed Gwempa
"	"	44	22-516145	18.6.85	IKM	Cwrt, Drefach
"	"	44	22-518086	1.7.85	IKM	ESE of Bryn Banal- fach
"	"	44	22-503028	23.4.87	IKM	Cwm Trebeddrod
"	"	44	22-613217	23.5.86	IKM	Dinefwr Castle Woods
"	"	44	22-408259	22.4.91	IKM	S of Bettws
"	"	44	22-437033	30.3.90	IKM	Cencoed-uchaf
"	"	44	22-494016	20.4.87	IKM	Stradey Woods
"	"	44	22-419029	14.4.89	IKM	Ffrwd Fen
"	"	44	22-516145	9.5.87	IKM	Llawr Cwrt
"	"	44	22-596163	13.5.86	IKM	E. of Carmel
"	"	44	22-495013	16.4.87	IKM	Stradey Woods
"	"	44	22-485007	16.4.87	IKM	Pwll
"	"	44	22-419028	15.6.85	IKM	Ffrwd Fen
"	"	44	22-311407	19.4.88	IKM	Newcastle Emlyn
"	"	44	22-614218	5.83	JC	Dinefwr Castle Woods
"	"	44	22-554203	7.6.93	IKM	Dryslwyn
"	"	44	21-537093	11.4.93	IKM	Erw-las, Llwynhendy
"	"	44	22-506013	22.4.93	IKM	Parc Howard, Llanelli
"	"	44	22-420028	6.4.94	IKM	Ffrwd Fen
"	"	44	21-537093	6.4.94	IKM	Erw-las, Llwynhendy
"	"	44	22-551082	2.5.94	IKM	N. of Llwyn-têg
"	"	44	22-228159	11.5.94	IKM	S. of Fforest Farm Whitland
"	"	44	22-831397	21.5.94	IKM	Crychan Forest
"	cineraria L	44	22-408049	8.4.90	IKM	Banc-y-Lord, Kidwelly
"	"	44	22-437033	30.3.90	IKM	Cencoed-uchaf
"	"	44	22-516145	18.6.85	IKM	Cwrt, Drefach

"	"	44	22-609223	4.4.88	PMP	Dinefwr Park
"	"	44	22-237075	24.5.86	IKM	Dolwen Point, Pendine
"	"	44	22-825325	1.5.86	IKM	near Halfway
"	"	44	22-602165	6.86	IKM	Carmel Woods
"	"	44	22-419028	6.86	IKM	Ffrwd
"	"	44	22-608223	4.4.88	IKM	Dinefwr Park
"	"	44	22-809408	7.6.88	IKM	Cynghordy Hall
"	"	44	22-369123	30.5.88	IKM	Morfa-uchaf, Ferryside*
"	"	44	22-554203	14.4.92	IKM	Dryslwyn Castle Hill
"	"	44	22-426003	30.4.94	IKM	Pembrey Burrows (N)*
"	"	44	22-610222	12.4.95	IKM	Dinefwr Deer Park
"	"	44	22-188074	10.4.95	IKM	nr. Telpyn Point
"	pubescens	44	22-489016	26.4.86	IKM	Stradey Woods
"	"	44	22-715307	16.4.87	IKM	Llanwrda
"	"	44	22-516145	20.6.85	IKM	S of Llawr Cwrt
"	"	44	22-228159	11.5.94	IKM	S. of Fforest Farm, Whitland
"	"	44	22-489016	8.5.94	IKM	Stradey Woods
"	"	44	22-762137	2.6.95	IKM	Cwm Twrch
"	fulva	44	22-495012	4.84	IKM	Stradey Woods
"	chrysosceles L	44	22-479003	1.8.85	IKM	Cencoed-uchaf
"	"	44	22-49-01-	3.8.85	IKM	Stradey Woods
"	"	44	22-462012	16.8.85	IKM	Ashpits Pond, Burry Port
"	"	44	22-115247	27.7.85	IKM	N of Alltypistyll
"	"	44	22-590203	13.6.94	IKM	"Cottage Garden", Gelli Aur
"	denticulata L	44	22-479003	1.8.85	IKM	Cencoed-uchaf
"	"	44	22-49-01-	3.8.85	IKM	Stradey Woods
"	"	44	22-462012	16.8.85	IKM	Ashpits Pond, Burry Port
"	"	44	22-115247	27.7.85	IKM	N of Alltypistyll
"	congruens Na	44	22-485032	25.8.85	IKM	Cencoed-uchaf
"	"	44	22-617219	19.4.94	IKM	Dinefwr Castle Woods
"	"	44	22-507070	30.7.94	IKM	W. of Penbryn, Cynheidre
"	ocreata Nb	44	22-839405	21.5.94	IKM	Crychan Forest
"	wilkella	44	22-554203	7.6.93	IKM	Dryslwyn
"	"	44	22-365075	14.7.94	IKM	St Ishmael*
"	minutula	44	21-542985	12.7.87	IKM	N of Penybryn
"	"	44	21-518974	31.3.88	IKM	Machynys
"	"	44	22-507070	30.7.94	IKM	W. of Penbryn, Cynheidre
"	"	44	21-537993	6.4.94	IKM	Erw-las, Llwynhendy
"	"	44	22-617219	19.4.94	IKM	Dinefwr Castle Woods
"	"	44	22-504020	6.4.97	IKM	nr. Up. Trebeddrod Res.
"	subopacea	44	22-601165	12.5.91	IKM	Carmel Woods



"	"	44	22-516145	14.5.85	IKM	Llawr Cwrt, Drefach
"	"	44	22-535131	12.6.85	IKM	NE of Garn Fawr, Drefach
"	"	44	22-228159	11.5.94	IKM	S. of Fforest Farm, Whitland
"	"	44	22-545315	7.5.93	IKM	nr. Bwrgwm-bach
"	"	44	22-598203	13.6.94	IKM	"Garden Cottage" Gelli Aur
"	saundersella	44	22-516145	20.6.85	IKM	Llawr Cwrt, Drefach
"	"	44	22-226080	16.6.85	IKM	Gilman Point, Pendine
"	"	44	22-227074	28.5.87	IKM	Gilman Point, Pendine
<i>Panurgus</i>	<i>banksianus</i> L	44	22-352102	23.6.88	IKM	Llansteffan Castle
"	"	44	22-221072	13.7.87	IKM	Ragwen Point

Family - Megachilidae

<i>Chelostoma</i>	<i>florisomne</i> L	44	22-489013	8.6.92	IKM	Stradey Woods
"	"	44	22-49-01	15.6.85	IKM	Stradey Woods
"	"	44	22-618219	8.7.94	IKM	Dinefwr Castle Woods
<i>Osmia</i>	<i>rufa</i>	44	22-495013	6.5.91	IKM	Stradey
"	"	44	22-611112	19.5.88	IKM	Pont-y-Clerc
"	"	44	22-49-01-	15.6.85	IKM	Stradey Woods
"	"	44	22-495013	1.5.94	IKM	Stradey
"	"	44	21-537993	6.5.94	IKM	Erw-las, Llwynhendy
"	"	44	22-228159	11.5.94	IKM	S. of Fforest Farm, Whitland
"	"	44	21-514999	28.4.96	IKM	Coronation Road, Llanelli
"	"	44	22-632227	25.5.96	IKM	Llandeilo
"	"	44	22-632227	2.5.97	IKM	Llandeilo
"	"	44	22-493017	30.3.97	IKM	Heol-y-Dryw bach
"	<i>leaiana</i>	44	21-541986	27.5.90	IKM	SE of Llwynhendy
"	"	44	22-503013	1.8.94	IKM	Furnace, Llanelli
"	<i>aurulenta</i> L	44	22-373039	21.7.91	PMP	Pembrey*
"	"	44	22-227074	28.5.87	IKM	Gilman Point, Pendine
"	"	44	22-394028	6.8.85	IKM	Pembrey Forest*
"	"	44	22-222073	16.6.94	IKM	Ragwen Pt.
"	"	44	21-414995	28.5.94	IKM	Pembrey Burrows*
"	"	44	22-357109	11.7.94	IKM	Llansteffan*
"	"	44	21-41-99-	23.4.95	IKM	Pembrey Burrows
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
<i>Megachile</i>	<i>maritima</i> U/K	44	22-404015	30.7.85	IKM	Pembrey Forest*
"	"	44	22-365075	14.7.94	IKM	St Ishmael*
"	"	44	22-36-05-	16.7.94	IKM	Tywyn Burrows*
"	"	44	21-498988	30.7.94	IKM	North Dock, Llanelli
"	<i>willughbiella</i>	44	22-404016	23.6.90	IKM	Pembrey Forest*
"	"	44	22-479003	1.8.85	IKM	Cencoed-uchaf

"	"	44	22-348103	30.7.93	IKM	"Y Plas", Llansteffan
"	"	44	21-535982	30.5.97	ME	Penclacwydd, Llanelli
"	<i>centuncularis</i> L	44	22-611113	19.6.88	IKM	Ammannford
"	"	44	22-494016	16.7.85	IKM	Stradey Woods
"	"	44	21-537993	3.7.87	IKM	Erw-las Llwynhendy
"	"	44	22-489015	6.7.87	IKM	Stradey
"	"	44	21-537993	23.7.94	IKM	Erw-las, Llwynhendy
"	<i>ligniseca</i>	44	22-392012	6.8.90	PMP	Pembrey*
"	"	44	22-612207	9.8.90	PMP	Dinefwr Castle Woods
"	"	44	21-514980	14.7.89	PMP	Machynys
"	"	44	22-489014	31.7.94	IKM	Stradey Woods
"	<i>versicolor</i> L	44	22-183074	20.6.91	IKM	Telpyn Point
"	"	44	22-479033	1.7.85	IKM	Cencoed-uchaf
"	"	44	22-392025	6.8.88	SJC	Pembrey Forest*
"	"	44	22-392012	6.8.90	PMP	Pembrey Forest
"	"	44	22-493085	5.8.94	IKM	Cynheidre
"	"	44	22-507070	30.7.94	IKM	W. of Penbryn, Cynheidre
"	<i>circumcincta</i>	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	<u><i>Perithidium manicatum</i></u>	44	21-537993	22.8.95	BS	Erw-las, Llwynhendy
"	"	44	22-495014	28.8.95	IKM	Stradey Woods
"	"	44	21-514999	23.7.96	IKM	Coronation Road Llanelli
"	"	44	22-436034	4.9.96	IKM	Bryndias, Pinged
"	"	44	21-514999	20.7.97	IKM	Coronation Road, Llanelli
"	<u><i>Qualicrus vectis</i></u> L	44	22-392012	6.8.90	PMP	Pembrey*
"	"	44	22-391024	5.8.85	IKM	Pembrey Forest*
"	"	44	22-36-04-	16.7.94	IKM	Tywyn Burrows*
"	<i>elongata</i> L	44	22-391010	17.7.90	IKM/ PMP	Pembrey*
"	"	44	21-541977	28.7.90	IKM	Morfa-Bacas
"	<i>mandibularis</i>					
"	RDB3	44	22-391024	5.8.85	IKM	Pembrey Forest*
"	<u><i>Bohlitis spinulosa</i></u> L	44	22-373039	21.7.90	IKM/PMP	Pembrey*
"	"	44	22-280071	7.7.86	IKM	Laugharne Burrows*
"	"	44	21-41-99-	6.7.87	IKM	Pembrey Burrows*
"	"	44	22-397007	19.7.87	IKM	Pembrey Burrows*
"	"	44	22-393027	14.6.87	IKM	Pembrey Forest*
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	"	44	22-365075	14.7.94	IKM	St Ishmael*
"	"	44	21-498988	30.7.94	IKM	North Dock, Llanelli*
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	<i>claviventris</i>	44	22-357109	11.7.94	IKM	Llansteffan*



Family - Anthophoridae

Nomada	fucata	Na	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
"	goodeniana		44	22-408259	22.4.91	IKM	S of Betws
"	"		44	22-408049	8.4.90	IKM	Banc-y-Lord, Kidwelly
"	"		44	22-614221	25.4.90	IKM	Dinefwr Park
"	"		44	22-437033	30.3.90	IKM	Cencoed-uchaf
"	"		44	22-224075	6.5.86	IKM	NE of Gilman Point
"	"		44	22-343094	24.6.93	IKM	nr Wharley Pt.
"	"		44	22-554203	7.6.93	IKM	Dryslwyn
"	"		44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
"	lathburiana	RDB3	44	22-789279	9.5.91	IKM	N of Gwydre
"	marshamella		44	22-612217	27.4.87	IKM	Dinefwr
"	"		44	22-714307	28.4.87	IKM	Llanwrda
"	"		44	22-516145	14.6.85	IKM	Llawr Cwrt, Drefach
"	"		44	22-612217	27.4.87	IKM	Dinefwr Castle Woods
"	"		44	22-216080	16.6.85	IKM	Gilman Point, Pendine
"	"		44	22-545315	7.5.93	IKM	Nr Bwrgwm Bach
"	"		44	22-362183	19.5.94	IKM	Cors Goch Llanllwch
"	ruficornis	L	44	22-387040	20.5.90	PMP	Pembrey*
"	"		44	22-714307	28.4.87	IKM	Llanwrda
"	"		44	22-660237	24.4.90	IKM	Coed Penrhiwiau
"	"		44	22-503028	23.4.87	IKM	Cwm Trebeddrod
"	"		44	22-535131	2.5.88	IKM	NE of Garn-fawr, Drefach
"	"		44	22-602166	1.5.86	IKM	NW of Pentregwenlais
"	"		44	22-596163	13.5.86	IKM	E of Carmel
"	"		44	22-614221	26.4.90	IKM	Dinefwr Park
"	"		44	22-47-02-	25.4.84	IKM	Cencoed-uchaf
"	"		44	22-753328	8.5.87	APF	Llandovery (Afon Tywi)
"	"		44	22-580205	5.5.93	IKM	SW of Cilsan Bridge
"	"		44	22-228159	11.5.94	IKM	S. of Fforest Farm, Whitland
"	"		44	21-554989	15.5.94	IKM	Glynea, Bynea
"	"		44	22-551079	2.5.94	IKM	S. of Llwyn-têg, Llannon
"	"		44	22-265384	13.5.93	IKM	E. of Pont-cych
"	flava		44	22-515145	18.4.85	IKM	Llawr Cwrt, Drefach
"	"		44	22-216080	16.6.85	IKM	Gilman Point, Pendine
"	"		44	22-613217	23.8.86	IKM	Dinefwr Park
"	"		44	22-498015	18.5.86	IKM	Stradey Woods
"	"		44	22-598065	28.5.91	IKM	Afon Llwchwr
"	"		44	22-321103	28.5.85	IKM	Craig Ddu, Llansteffan



"	"	44	22-265384	13.5.93	IKM	E of Pont Cych
"	"	44	22-580205	5.5.93	IKM	SW of Cilsan Bridge
"	"	44	22-551082	2.5.94	IKM	N. of Llwyn-têg, Llannon
"	panzeri	44	22-216080	16.6.85	IKM	Gilman Point, Pendine.
"	"	44	21-536993	19.5.86	IKM	Erw-las, Llwynhendy
"	"	44	22-233078	23.4.90	IKM	Dolwen Point, Pendine
"	fabriciana	44	22-391010	17.7.90	IKM	Pembrey Forest*
"	"	44	22-438065	8.7.85	IKM	Parc-y-llong
"	"	44	22-612218	8.6.95	IKM	Dinefwr Park
"	flavoguttata	44	22-443082	10.6.88	IKM	SW of Parc Matho
"	"	44	21-512980	13.4.91	IKM	Machynys
"	"	44	22-554203	7.6.93	IKM	Dryswlyn
"	flavopicta Nb	44	22-409049	13.7.94	IKM	Banc-y-Lord, Kidwelly
"	striata	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
"	leucopthalma L	44	22-583335	11.4.95	IKM	Abergorlech
<i>Speolus cruciger</i> L		44	22-392012	6.8.90	PMP	Pembrey*
"	"	44	22-395027	23.7.85	IKM	Pembrey Forest*
"	"	44	22-394028	6.8.85	IKM	Pembrey Forest*
"	"	44	21-41-99-	1.8.87	IKM	Pembrey Burrows*
"	"	44	22-393028	26.8.86	PMP/ IKM	Pembrey*
"	"	44	22-36-05-	16.7.94	IKM	Tywyn Burrows*
"	"	44	21-49&988	27.7.94	IKM	North Dock, Llanelli*
<i>Eucera longicornis</i> Na		44	22-410049	17.6.92	IKM	Banc-y-Lord, nr. Kidwelly
"	"	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
<i>Anthophora plumipes</i>		44	22-227077	6.5.86	IKM	Gilman Point
"	"	44	22-233078	6.5.86	IKM	Dolwen Point
"	"	44	22-495013	11.4.87	IKM	Stradey
"	"	44	22-495013	20.3.94	IKM	Stradey
"	"	44	22-183074	6.4.94	IKM	nr. Telpyn Pt.
"	"	44	22-486030	1.5.94	IKM	SE of Cencoed-uchaf
"	"	44	22-188074	10.4.97	IKM	nr. Telpyn Point
"	furcata U	44	22-397007	25.7.91	PMP	Pembrey
"	"	44	22-457010	21.7.93	IKM	Dyfatty, Burry Port
"	"	44	22-848369	25.6.94	IKM	Crychan Forest

Family - Colletidae & Melittidae

<i>Colletes fodiens</i>	44	22-394028	6.8.85	IKM	Pembrey*
"	"	44	22-275073	18.7.88	SJF Laugharne Burrows*
"	"	44	22-37-04-	17.7.88	SJF Tywyn Burrows*
"	"	44	22-36-04-	17.7.88	MEA Tywyn Burrows*

"	"	44	21-498988	30.7.94	IKM	North Dock, Llanelli*
"	"	44	22-462007	14.8.94	IKM	Cefn Padrig, Burry Port*
"	<u>marginatus</u> Na	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
<u>Hylaenus communis</u> L		44	22-418002	16.8.85	IKM	Pembrey Burrows*
"	"	44	22-489014	31.7.94	IKM	Stradey Woods
"	<u>hyalinatus</u> L	44	22-606164	26.7.90	IKM	Pentregwenlais
"	"	44	22-371035	29.7.91	IKM	Pembrey Forest*
"	"	44	22-352102	23.6.88	IKM	Llansteffan Castle
"	"	44	21-542983	23.7.94	IKM	Penybryn, Bynea
"	"	44	22-713307	28.7.94	IKM	Llanwrda
"	<u>confusus</u> L	44	22-479033	1.7.85	IKM	Cencoed-uchaf
"	<u>brevicornis</u> L	44	22-553203	28.6.88	IKM	Dryslwyn Castle
<u>Dasypoda altercator</u> Nb		44	22-391010	17.7.90	PMP/IKM	Pembrey Forest*
"	"	44	22-397007	19.7.87	IKM	Pembrey Burrows*
<u>Melitta leporina</u> L		44	22-465007	17.7.91	IKM	E of Burry Port

Family - Halictidae

<i>Halictus rubicundus</i>	44	22-274365	17.8.90	IKM	S of Llwynbedw	
"	"	44	22-233078	14.8.86	IKM	Dolwen Point
"	"	44	22-513144	1.10.87	IKM	Garn Farm
"	"	44	22-535131	2.5.85	IKM	NE of Garn Fawr
"	"	44	21-513981	20.4.86	IKM	Machynys Ponds
"	"	44	22-713306	21.5.87	IKM	Llanwrda
"	"	44	22-751460	20.7.91	IKM	Gwenffrwd
"	"	44	22-612217	27.4.87	IKM	Dinefwr Castle Woods
"	"	44	22-468128	4.5.90	IKM	Capel Dyddgen
"	"	44	22-839405	21.5.94	IKM	Crychan Forest
"	"	44	22-669189	24.5.94	IKM	Carreg Cennen
"	"	44	22-361363	3.5.96	IKM	Penbôyr
"	<i>tumulorum</i>	44	22-614221	25.4.90	IKM	Dinefwr Park
"	"	44	22-611163	10.7.90	IKM	Pentregwenlais
"	"	44	22-555203	27.9.90	IKM	Dryslwyn Castle Hill
"	"	44	22-468128	4.5.90	IKM	Capel Dyddgen
"	"	44	22-789279	9.5.91	IKM	N of Gwydre
"	"	44	22-385265	16.8.90	IKM	Cynwyl Elfed
"	"	44	22-397007	17.4.87	IKM	Pembrey Forest
"	"	44	22-554203	7.6.93	IKM	Dryslwyn
"	"	44	22-517035	29.3.94	IKM	W. of Lower Lliedi Res.
"	"	44	22-668191	28.7.94	IKM	Carreg Cennen
"	"	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
<i>Lasioglossum calceatum</i>	44	22-216080	16.6.85	IKM	Gilman Point	
"	"	44	22-49-01-	3.8.85	IKM	Stradey Woods
"	"	44	22-221072	13.7.87	IKM	Ragwen Point
"	"	44	21-542985	12.4.87	IKM	N of Penybryn
"	"	44	22-598065	28.5.91	IKM	Afon Llwhwr
"	"	44	22-612217	27.4.87	IKM	Dinefwr Castle Woods



"	"	44	22-503028	23.4.87	IKM	Cwm Trebeddrod
"	"	44	22-401008	29.8.85	IKM	Pembrey Forest*
"	"	44	22-763483	25.9.85	IKM	Allt Rhyd-y-Groes
"	"	44	22-534150	13.4.86	IKM	NE of Garn Fawr
"	"	44	22-713306	21.5.87	IKM	Llanwrda
"	"	44	22-671191	4.8.87	IKM	Carreg Cennen
"	"	44	22-275073	18.7.88	SJF	Laugharne Burrows*
"	"	44	22-554203	7.6.93	IKM	Dryslwyn
"	"	44	22-495013	8.5.94	IKM	Stradey
"	"	44	22-222072	15.6.94	IKM	Ragwen Point
"	"	44	22-408049	15.8.94	IKM	Banc-y-Lord, Kidwelly
"	"	44	22-410050	29.5.97	ME	Banc-y-Lord, Cydweli
"	zonulus U	44	22-406012	14.8.90	IKM/PMP	Pembrey Forest*
"	"	44	22-368049	28.9.85	IKM	Tywyn Burrows*
"	"	44	22-36-05-	2.6.85	IKM	Tywyn Burrows*
"	"	44	22-501056	1.7.85	IKM	E of Horeb, Llanelli
"	"	44	22-418027	15.9.85	IKM	Ffrwd
"	"	44	22-36-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-27-08-	26.9.91	IKM	Laugharne Burrows*
"	"	44	22-281074	14.6.97	ME	Pendine Burrows*
"	"	44	22-31-08-	14.6.97	ME	Ginst Point*
"	albipes	44	22-494016	6.7.85	IKM	Stradey Woods
"	"	44	22-274365	17.8.90	IKM	S of Llwynbedw
"	"	44	21-516974	8.9.90	IKM	Penrhyngwyn
"	"	44	22-408049	15.8.94	IKM	Banc-y-Lord, Kidwelly
"	"	44	22-495013	1.9.95	IKM	Stradey
"	rufitarse L	44	22-468128	6.8.90	IKM	Capel Dyddgen nr Crwbin
"	"	44	22-375044	29.5.94	IKM	Pembrey Forest
"	nitidiusculum L	44	22-598065	28.5.91	IKM	Afon Llwhchr
"	"	44	21-517973	5.8.94	IKM	Penrhyngwyn
"	fulvicorne L	44	22-467127	29.9.87	IKM	Capel Dyddgen
"	"	44	22-611163	10.7.90	IKM	Pentregwenlais
"	punctatissimum L	44	21-41-99-	3.6.90	IKM	Pembrey Burrows*
"	"	44	22-207075	5.8.87	IKM	Marros Mill
"	"	44	22-425003	30.4.94	IKM	Pembrey Burrows*
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	fratellum	44	22-684241	9.9.87	IKM	Crug-las
"	"	44	22-485032	29.4.90	IKM	Cencoed-uchaf
"	"	44	22-39-01-	31.5.79	JTB	Pembrey Forest*
"	"	44	22-585197	3.8.93	IKM	Nr. Gelli Aur
"	leucopus L	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
"	leucozonium	44	22-393028	22.6.86	IKM	Pembrey Forest*
"	"	44	21-511979	24.8.85	IKM	Machynys Ponds
"	"	44	22-49-01-	15.6.85	IKM	Stradey Woods
"	"	44	22-533150	8.7.85	IKM	NE of Garn Fawr, Drefach
"	"	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-408049	15.8.94	IKM	Banc-y-Lord, Kidwelly



"	"	44	22-281074	14.6.97	ME	Laugharne Burrows*
"	"	44	22-31-08-	14.6.97	ME	Ginst Point*
"	"	44	22-413050	29.5.97	ME	Banc y Lord, Cydweli
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	smeathmanellum U	44	21-553991	28.8.90	IKM	Glynea, Bynea
"	"	44	22-221072	13.7.87	IKM	Ragwen Point
"	"	44	22-489017	16.4.87	IKM	Stradey Woods
"	"	44	22-352102	23.6.88	IKM	Llansteffan Castle
"	"	44	22-623223	10.9.90	IKM	Dinefwr Park
"	"	44	21-542983	23.7.94	IKM	Penybryn, Bynea
"	"	44	22-222072	15.6.94	IKM	Ragwen Point
"	"	44	22-343094	24.6.93	IKM	Nr. Wharley Point
"	morio	44	22-227074	28.5.87	IKM	Gilman Point
"	"	44	22-351101	23.8.90	IKM	Llansteffan Castle
"	"	44	22-233078	17.3.86	IKM	Dolwen Point, Pendine
"	"	44	22-468128	11.5.90	IKM	Capel Dyddgen Quarry
"	"	44	22-321100	12.7.90	IKM	Craig Ddu
"	"	44	22-555203	27.9.90	IKM	Dryslwyn Castle
"	"	44	21-512980	13.4.91	IKM	Machynys
"	"	44	22-554203	7.6.94	IKM	Dryslwyn
"	villosulum	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-31-08-	14.6.97	ME	Ginst Point*
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
Sphaecodes gibbus		44	22-227074	28.5.87	IKM	Gilman Point
"	"	44	22-385257	20.5.91	IKM	Cynwyl-Elfed
"	"	44	22-173073	23.4.90	IKM	E of Amroth
"	"	44	22-495062	20.8.90	IKM	N of Horeb
"	pellucidus L	44	22-393028	22.6.86	IKM	Pembrey Forest*
"	"	44	21-517973	5.8.94	IKM	Penrhyngwyn
"	"	44	21-517973	5.8.94	IKM	Penrhyngwyn
"	ephippius	44	22-393028	19.5.86	IKM	Pembrey Forest*
"	"	44	22-614221	25.4.90	IKM	Dinefwr Park
"	"	44	22-516145	11.6.87	IKM	Llawr Cwrt, Drefach
"	"	44	22-545315	7.5.93	IKM	nr. Bwrgwm-bach
"	"	44	22-413050	11.6.97	ME	Banc y Lord, Cydweli
"	geoffrellus	44	22-227074	28.5.87	IKM	Gilman Point
"	"	44	22-36-05-	19.5.91	IKM	Tywyn Burrows*
"	"	44	22-408011	1.9.90	IKM	Pembrey Forest*
"	"	44	21-41-99-	2.5.90	IKM	Pembrey Forest*
"	"	44	21-517973	5.8.94	IKM	Penrhyngwyn
"	"	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
"	monilicornis L	44	22-606166	13.7.85	IKM	Pant-y-llyn
"	"	44	22-533150	8.7.85	IKM	NE of Garn Fawr
"	"	44	22-554203	7.6.93	IKM	Dryslwyn
"	"	44	22-555203	27.9.90	IKM	Dryslwyn Castle Hill
"	"	44	22-233078	27.4.90	IKM	Dolwen Point, Pendine
"	"	44	22-185077	16.7.90	IKM	Telpyn Point

"	"	44	22-467128	28.7.90	IKM	Capel Dyddgen nr Crwbin
"	"	44	22-426003	30.4.94	IKM	Pembrey Burrows (N)*
"	"	44	22-554203	7.6.93	IKM	Dryslwyn
"	"	44	22-839405	21.5.94	IKM	Crychan Forest
"	"	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
"	hyalinatus	44	22-227074	28.5.87	IKM	Gilman Point
"	"	44	22-671191	4.8.87	IKM	Carreg Cennen
"	"	44	22-222072	15.6.94	IKM	Ragwen Point
"	rubicundus Na	44	22-413050	14.6.97	ME	Banc y Lord, Cydweli
"	crassus Nb	44	22-410050	29.5.97	ME	Banc y Lord, Cydweli
"	scabricollis	44	21-500928	28.5.97	ME	Llanrhidian Marshes

Family - Apidae

Bombus hortorum	44	22-670189	14.5.94	IKM	Carreg Cennen
" pascuorum	44	22-406336	16.8.90	IKM	Blaenduad Wood
"	44	22-494013	19.6.87	IKM	Stradey Woods
"	44	22-674123	29.6.87	IKM	Hendy Farm
"	44	22-216080	16.6.85	IKM	Gilman Point, Pendine
"	44	22-37-03-	23.5.84	IKM	Pembrey Forest*
"	44	22-415994	17.4.87	PMP	Pembrey
"	44	22-485033	13.4.91	IKM	Cencoed-uchaf
"	44	21-537993	13.4.91	IKM	Llwynhendy
"	44	22-291295	16.4.91	IKM	Rhos Pwll-y- Gawnen
"	44	22-38-26-	1.5.91	IKM	nr.Cynwyl Elfed
"	44	22-361183	16.5.92	IKM	Cors Goch, Llanllwch
"	44	22-595202	20.5.92	IKM	Gelli Aur
"	44	22-597227	15.6.93	IKM	Rhiw'r Adar
"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	44	22-456010	27.8.93	IKM	Burry Port
"	44	22-426003	30.4.94	IKM	Pembrey Burrows (N)*
"	44	22-552077	2.5.94	IKM	S. of Llwyn-têg
"	44	21-543987	6.5.94	IKM	NW of Dyffryn, Bynea
"	44	22-228159	11.5.94	IKM	S. of Fforest Farm, Whitland
"	44	22-670189	14.5.94	IKM	Carreg Cennen
"	44	22-831397	21.5.94	IKM	Crychan Forest
"	44	21-517974	30.5.94	IKM	Penrhyngwyn
"	44	22-490017	14.4.95	IKM	Stradey Woods
"	44	22-563011	13.6.95	IKM	Llangennech
"	44	22-707139	23.6.95	IKM	Ynystawela Brynaman
"	44	22-188074	10.4.97	IKM	nr.Telpyn Point
"	44	22-383313	16.5.97	IKM	Cwm Duad



"	"	44	22-281074	14.6.97	ME	Pendine Burrows*
"	"	44	22-380069	18.8.98	IKM	nr.St Ishmael
"	muscorum L	44	22-485032	25.8.88	IKM	E of Cencoed- uchaf
"	"	44	22-527188	11.5.92	IKM	Pont Felin-Gât
"	"	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-275073	18.7.88	SJF	Laugharne Burrows*
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	"	44	21-41-99-	29.7.88	RSK	Pembrey Burrows*
"	humilis L	44	21-41-99-	1.8.87	IKM	Pembrey Burrows*
"	"	44	22-427003	6.8.85	SJF	Pembrey Burrows*
"	"	44	22-430003	21.8.93	PMP	Pembrey Burrows*
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	"	44	21-535982	30.5.97	ME	Penclacwydd, Llanelli
"	pratorum	44	22-719461	19.8.87	IKM	Craig Bran Ddu
"	"	44	22-385257	4.6.91	IKM	Cynwyl Elfed
"	"	44	22-406336	16.8.90	IKM	Blaenduad Wood
"	"	44	22-416019	15.7.87	IKM	Penybedd
"	"	44	22-518340	5.5.92	IKM	Pant-y-rhyg
"	"	44	22-525186	4.9.92	IKM	NW of Middleton Hall
"	"	44	22-632286	14.5.92	IKM	Taliaris Park
"	"	44	22-676181	9.6.93	IKM	Palycwrt
"	"	44	22-612226	15.6.93	IKM	Dinefwr Park
"	"	44	22-183074	6.4.94	IKM	nr. Telpyn Pt.
"	"	44	22-281074	14.6.97	ME	Pendine Burrows*
"	"	44	22-380069	18.8.98	IKM	nr.St Ishmael
"	lucorum	44	22-755351	19.8.87	IKM	SW of Llandovery
"	"	44	22-406336	16.8.90	IKM	Blaenduad Wood
"	"	44	22-392012	6.8.90	PMP	Pembrey*
"	"	44	22-536403	26.6.92	IKM	Banc-du
"	"	44	22-38-26-	1.5.91	IKM	nr.Cynwyl Elfed
"	"	44	22-499362	23.4.92	IKM	nr.Clyniau
"	"	44	22-518340	5.5.92	IKM	Pant-y-rhyg
"	"	44	22-632286	14.5.92	IKM	Taliaris Park
"	"	44	22-361183	16.5.92	IKM	Cors Goch, Llanllwch
"	"	44	22-577160	7.6.93	IKM	nr Carmel
"	"	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-512047	1.7.93	IKM	Upper Lliedi Res.
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	"	44	22-430003	21.8.93	PMP	Pembrey Burrows*
"	"	44	22-388030	10.3.94	IKM	Pembrey Forest*
"	"	44	22-495013	30.3.93	IKM	Stradey
"	"	44	21-553989	29.3.94	IKM	Glynea, Bynea
"	"	44	21-517035	29.3.94	IKM	W. of L. Lliedi Res.
"	"	44	22-474413	11.4.95	IKM	Maesycrugiau
"	"	44	22-260090	29.5.97	ME	Pendine
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	terrestris	44	22-49-01-	20.8.87	IKM	Stradey Woods



"	"	44	22-372012	6.8.90	PMP	Pembrey*
"	"	44	22-493016	13.4.91	IKM	Stradey Woods
"	"	44	21-512980	13.4.91	IKM	Machynys
"	"	44	21-537993	13.4.91	IKM	Llwynhendy
"	"	44	22-271415	16.4.91	IKM	Cenarth
"	"	44	22-226075	22.4.92	IKM	Gilman Point, Pendine
"	"	44	21-41-99-	25.4.92	IKM	Pembrey Burrows*
"	"	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	"	44	22-18-21-	16.9.91	JBS	Henllan Amgoed
"	"	44	22-506013	22.4.93	IKM	Parc Howard, Llanelli
"	"	44	22-495013	24.3.94	IKM	Stradey
"	"	44	21-553989	29.3.94	IKM	Glynea, Bynea
"	"	44	22-517035	29.3.94	IKM	W. of L. Lliedi Res.
"	"	44	22-234077	6.4.94	IKM	Dolwen Point, Pendine
"	"	44	22-426003	30.4.94	IKM	Pembrey Burrows (N)*
"	"	44	22-228159	11.5.94	IKM	S. of Fforest Farm, Whitland
"	"	44	22-595197	23.5.94	IKM	Gelli Aur
"	"	44	21-517974	30.5.94	IKM	Penrhyngwyn
"	"	44	22-585157	9.4.97	IKM	Garn-bîg, Carmel
"	lapidarius	44	22-495062	20.8.90	IKM	N of Horeb
"	"	44	22-755351	19.8.87	IKM	SW of Llandovery
"	"	44	22-357110	8.9.87	IKM	Llansteffan
"	"	44	22-406336	16.8.90	IKM	Blaenduad Wood
"	"	44	22-371122	31.7.87	IKM	Morfa-uchaf*
"	"	44	22-392012	6.8.90	PMP	Pembrey*
"	"	44	22-417002	19.5.86	IKM	Pembrey Burrows*
"	"	44	22-687125	11.6.86	IKM	Garnant
"	"	44	22-493016	13.6.91	IKM	Stradey Woods
"	"	44	21-537993	13.4.91	IKM	Llwynhendy
"	"	44	22-435003	22.4.92	IKM	Pembrey harbour*
"	"	44	21-43-99-	10.8.92	IKM	Pembrey Burrows*
"	"	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	21-517974	30.5.94	IKM	Penrhyngwyn
"	"	44	22-613092	2.6.94	IKM	Plas Mawr
"	"	44	21-517973	14.4.95	IKM	Penrhyngwyn
"	"	44	22-490017	14.4.95	IKM	Stradey Woods
"	"	44	21-514999	28.4.96	IKM	Coronation Rd, Llanelli
"	"	44	22-260090	29.5.97	ME	Pendine
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	"	44	22-380069	18.8.98	IKM	nr.St Ishmael
"	monticola L	44	22-677182	4.8.94	IKM	Palycwrt
"	ruderalis L	44	22-430003	21.8.93	PMP	Pembrey Burrows*
"	campestris	44	22-487017	14.6.87	IKM	Stradey Woods
"	"	44	22-406336	16.8.90	IKM	Blaenduad Wood
"	"	44	22-456010	27.8.93	IKM	Burry Port
"	"	44	22-489018	11.6.94	IKM	Stradey Woods

"	sylvestris	44	22-470272	12.8.91	IKM	Mynydd styfflau-carn
"	"	44	22-612226	15.6.93	IKM	Dinefwr Park
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	vestalis	44	22-430003	21.8.93	PMP	Pembrey Burrows*
Apis mellifera		44	22-670192	29.6.93	IKM	Carreg Cennen
"	"	44	22-588066	8.7.93	IKM	Llanedi church
"	"	44	22-573022	8.7.93	IKM	Llangennech
"	"	44	22-555203	7.6.93	IKM	Dryslwyn
"	"	44	22-577160	7.6.93	IKM	nr Carmel
"	"	44	22-532015	5.6.93	IKM	Dafen Pond
"	"	44	22-493087	8.6.93	IKM	Cynheidre
"	"	44	22-495013	19.7.93	IKM	Stradey
"	"	44	22-535131	12.6.85	IKM	NE of Garn Fawr, Drefach
"	"	44	22-467128	28.7.90	IKM	Capel Dyddgen, nr Crwbin
"	"	44	22-635282	10.8.93	IKM	Taliaris Park
"	"	44	22-781435	23.8.93	IKM	Rhandirmwyn
"	"	44	22-552077	2.5.94	IKM	S. of Llwyn-têg
"	"	44	22-36-05-	7.5.94	IKM	Tywyn Burrows*
"	"	44	22-595197	23.5.94	IKM	Gelli Aur
"	"	44	22-222073	16.6.94	IKM	Ragwen Pt.
"	"	44	22-848359	25.6.94	IKM	Crychan Forest
"	"	44	22-357109	11.7.94	IKM	Llansteffan*
"	"	44	22-181075	22.7.94	IKM	nr. Telpyn Farm
"	"	44	22-713307	28.7.94	IKM	Llanwrda
"	"	44	22-507070	30.7.94	IKM	Penbryn, Cynheidre

#### Family - Pompilidae

Prilocnemis exaltata L	44	22-755437	26.6.86	IKM	Nant y Rhaeadr
" susterai L	44	22-394028	6.8.85	PMP	Pembrey*
" "	44	22-397007	12.6.94	PMP	Pembrey Forest
" "	44	22-839405	21.5.94	IKM	Crychan Forest
" fennica L	44	22-598065	28.5.91	IKM	Afon Llwhwr
" perturbator L	44	22-789279	9.5.91	IKM	N of Gwydre
" "	44	22-670189	14.5.94	IKM	Carreg Cennen
" "	44	22-575355	23.5.95	IKM	Abergorlech
Stilpnotus variegatus L	44	21-553991	28.8.90	IKM	Glynea, Bynea
Stilpnotus carbonarius Nb	44	21-542983	23.7.94	IKM	Penybryn, Bynea
<u>Stilpnotus cinctellus</u>					
" L	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
Pompilus cinereus L	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
" "	44	22-430003	21.8.93	PMP	Pembrey Burrows
" "	45	11-97-95-	20.7.88	SJF	Stackpole Burrows*
" "	44	22-357109	11.7.94	IKM	Llansteffan*
" "	44	22-365075	14.7.94	IKM	St Ishmael*
" "	44	22-36-05-	16.7.94	IKM	Tywyn Burrows*
" "	44	22-371120	15.8.94	IKM	Morfa-uchaf, Ferryside*
" "	44	22-26-07-	9.7.94	IKM	Laugharne Burrows*



"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*	
<u>Episyron rufipes</u>	L	44	21-510987	1.7.92	IKM	N of Machynys	
"	"	44	22-435003	8.8.92	PMP/IKM	Pembrey*	
"	"	44	22-391024	5.7.85	IKM	Pembrey Forest*	
"	"	44	22-427003	15.6.85	IKM	Pembrey Burrows*	
"	"	44	22-275073	18.7.88	SJF	Laugharne Burrows*	
"	"	44	22-430003	21.8.93	PMP	Pembrey Burrows*	
"	"	44	21-41-99-	28.5.97	ME	Pembrey Burrows*	
<u>Anoplius concinnus</u>	L	44	22-749463	20.7.91	PMP	Gwenffrwd	
"	"	44	22-713307	28.7.94	IKM	Llanwrda	
"	<u>nigerrimus</u>	L	44	22-496059	8.9.91	IKM	N of Horeb
"	"	44	22-470272	12.8.91	IKM	Mynydd Ystyfflau-carn	
"	"	44	21-515973	5.8.94	IKM	Penrhyngwyn	
"	<u>infuscatus</u>	L	44	22-283078	10.6.90	IKM	Laugharne Burrows*
"	"	44	22-392027	21.7.91	PMP/IKM	Pembrey*	
"	"	44	22-275073	18.7.88	SJF	Laugharne Burrows*	
"	"	44	22-430003	21.8.93	PMP	Pembrey Burrows*	
"	"	44	22-357109	11.7.94	IKM	Llansteffan*	
"	"	44	22-281074	14.6.97	ME	Pendine Burrows*	
"	<u>viaticus</u>	L	44	22-397007	17.4.90	IKM/PMP	Pembrey Forest*
"	"	44	22-401023	29.4.85	IKM	Pembrey Forest*	
"	"	44	22-395027	1.5.85	IKM	Pembrey Forest*	
"	"	44	22-393028	28.4.86	IKM	Pembrey Forest*	
"	"	44	22-28-07-	16.5.86	IKM	Laugharne Burrows*	
"	"	44	22-373033	17.5.86	IKM	Tywyn Burrows*	
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*	
"	"	44	22-426003	30.4.94	IKM	Pembrey Burrows (N)*	
"	"	44	22-375035	28.3.97	IKM	Pembrey Forest*	
<u>Arachnospila anceps</u>	L	44	22-430003	8.8.92	PMP	Pembrey*	
"	"	44	22-494137	7.88	IKM	Carreg Eidon, Mynydd Llanymdydd	
<u>Ceropeales maculata</u>	L	44	22-713307	28.7.94	IKM	Llanwrda	
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*	
"	"	44	21-44-94-	9.6.97	ME	Whiteford Burrows*	
Family - Sphecidae							
<u>Stenobothrus pinguis</u>	L	44	22-430003	21.8.93	PMP	Pembrey Burrows*	
<u>Tachysphex pompiliformis</u>	L	44	22-395005	5.8.92	PMP	Pembrey*	
"	"	44	22-39-01-	31.5.79	JTB	Pembrey Forest*	
"	"	44	22-26-07-	9.7.94	IKM	Laugharne Burrows*	



"	"	44	22-713307	28.7.94	IKM	Llanwrda
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	<u>nitidus</u> Nb	44	22-390008	14.6.89	IKM	Cefn Sidan*
"	"	44	21-41-99-	1.7.87	IKM	Pembrey Burrows*
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
Trypoxylon attenuatum		44	21-514980	27.8.88	PMP	Machynys
"	clavicerum	44	22-488025	20.6.92	PMP	Stradey Woods
"	figulus	44	22-395005	8.8.92	PMP	Pembrey*
<u>Crabro cribrarius</u> L		44	22-403047	20.6.88	PMP	Pembrey*
"	"	44	22-418018	25.6.85	IKM	Penybedd Woods*
"	"	44	22-282072	7.7.86	IKM	Laugharne Burrows*
"	"	44	22-274073	18.7.88	SJF	Laugharne Burrows*
"	"	44	22-281074	14.6.97	SJF	Pendine Burrows*
"	"	44	22-31-08-	14.6.97	SJF	Ginst Point
"	"	44	22-410050	11.6.97	SJF	Banc y Lord Cydweli
"	"	44	22-413050	14.6.97	ME	Banc y Lord Cydweli
"	"	44	22-281074	14.6.97	ME	Laugharne Burrows*
"	<u>peltarius</u> L	44	22-373039	21.7.91	IKM/ PMP	Pembrey*
"	"	44	22-283078	10.6.90	IKM	Laugharne Burrows*
"	"	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-357109	11.7.94	IKM	Llansteffan*
"	"	44	22-365075	14.7.94	IKM	St Ishmael*
"	"	44	22-281074	14.6.97	ME	Pendine Burrows*
<u>Crossocerus elongatulus</u>		44	22-227074	28.5.87	IKM	Gilman Point
"	ovalis L	44	22-823317	19.6.90	IKM	SE of Llanerch Goch
"	pusillus	44	22-823317	19.6.90	IKM	SE of Llanerch Goch
"	wesmaeli	44	22-435003	18.7.92	PMP	Pembrey*
"	cetratus L	44	22-419028	15.6.85	IKM	Ffrwd Mire
"	"	44	22-781275	6.6.91	IKM	Coed Tir-Hên
"	megacephalus	44	22-373030	27.5.89	IKM/ PMP	Pembrey*
"	"	44	22-612221	4.6.88	PMP	Dinefwr Park
"	"	44	22-488017	4.5.90	IKM	Stradey Woods
"	"	44	22-321100	12.7.90	IKM	Craig Ddu
"	"	44	22-611218	17.6.94	IKM	Dinefwr Castle Woods
"	"	44	22-495014	17.7.95	IKM	Stradey Woods
"	"	44	22-413050	14.6.97	ME	Banc y Lord, Cydweli
"	<u>quadrifasciatus</u>	44	22-395005	5.8.92	PMP	Pembrey*
"	binotatus Nb	44	22-606226	25.7.88	APF	Dinefwr Park
<u>Stenopus cavifrons</u>		44	22-608224	22.7.90	IKM/PMP	Dinefwr Park
"	"	44	22-397007	9.8.91	PMP	Pembrey*
"	<u>lapidarius</u> L	44	22-613224	22.7.90	IKM	Dinefwr Park
"	"	44	22-591159	8.8.90	IKM	S of Carmel

"	"	44	22-511145	17.8.85	IKM	Garn Farm, Drefach
"	"	44	22-489014	15.6.94	IKM	Stradey Woods
"	"	44	22-489014	30.7.94	IKM	Stradey Woods
"	"	44	22-495014	17.7.95	IKM	Stradey Woods
"	<u>ruficornis</u> Nb	44	22-613220	8.7.94	IKM	Dinefwr Park
"	<u>continuus</u>	44	22-373030	27.5.90	PMP	Pembrey*
"	"	44	22-608224	19.5.90	PMP	Dinefwr Park
"	"	44	22-371122	31.7.87	IKM	Morfa Uchaf, Ferryside*
"	"	44	22-115247	12.7.85	IKM	N of Alltypistyll
"	"	44	21-535991	26.5.87	IKM	Nr Ddôl Fawr
"	"	44	21-553988	12.6.88	IKM	Bynea
"	"	44	21-537993	11.7.90	IKM	Llwynhendy
"	"	44	22-418018	25.6.85	IKM	Penybedd Woods*
"	"	44	22-567151	17.8.85	IKM	Llyn Llech Owen
"	"	44	22-38-03-	17.7.88	MEA	Pembrey Forest*
"	"	44	22-668191	28.7.94	IKM	Carreg Cennen
"	"	44	22-413050	14.6.97	ME	Banc y Lord, Cydweli
"	<u>cephalotes</u>	44	22-433116	12.6.90	IKM	Coed Gwempa
"	"	44	22-498014	3.7.93	PMP	Stradey Woods
"	<u>sexcinctus</u> Nb	44	22-397007	20.6.92	PMP	Pembrey*
<u>Sindenus</u> albilabris		44	22-410049	17.6.92	IKM	Banc-y-lord, Kidwelly
<u>Strophalum</u> clavipes L		44	22-397007	24.6.90	PMP	Pembrey*
"	coarctatum L	44	22-612207	9.8.90	PMP	Dinefwr Castle
"	"	44	22-612218		IKM	Dinefwr Park
<u>Strophalus</u> argentatus Na		44	22-398000	18.7.92	PMP	Pembrey*
"	"	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-427003	23.7.85	IKM	Pembrey Burrows*
"	<u>uniglumis</u>	44	22-392012	6.8.90	PMP	Pembrey*
"	"	44	22-41-99-	23.7.90	IKM	Pembrey Burrows*
"	"	44	22-365075	14.7.94	IKM	St Ishmael*
<u>Psylla</u> dahlbomi L		44	22-608224	19.5.90	PMP	Dinefwr Park
"	"	44	22-395005	5.8.92	PMP	Pembrey*
"	<u>littoralis</u> RDB3	44	22-392012	6.8.90	PMP	Pembrey*
"	<u>equestris</u>	44	22-392012	6.8.90	PMP	Pembrey*
<u>Pemphredon</u> lugubris		44	22-608224	-10.88	PMP	Dinefwr Park
"	"	44	22-488025	20.6.92	IKM/PMP	Stradey Woods
"	"	44	21-537993	11.7.90	IKM	Llwynhendy
"	"	44	22-567012	13.8.85	IKM	Llangennech
"	"	44	22-523026	25.7.85	IKM	Felinfoel
"	<u>inornatus</u>	44	22-532133	10.6.85	IKM	Drefach
"	<u>lethifer</u>	44	22-221072	13.7.87	IKM	Ragwen Point
"	<u>morio</u> Nb	44	22-498014	3.7.93	PMP	Stradey Woods
<u>Pezomachus</u> gracilis		44	22-498014	3.7.93	PMP	Stradey Woods
"	"	44	22-609226	14.6.96	PMP	Dinefwr Deer Park
<u>Pezomachus</u> sabulosa L		44	22-397007	9.6.84	PMP	Pembrey*
"	"	44	22-393028	24.6.86	IKM	Pembrey Forest*
"	"	44	22-282076	7.7.86	IKM	Laugharne Burrows*
"	"	44	22-220072	28.5.87	IKM	Ragwen Point



"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	"	44	22-222073	16.6.94	IKM	Ragwen Pt.
"	"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
<u>Mellinus arvensis</u>		44	21-514980	27.8.88	IKM/PMP	Machynys
"	"	44	22-392012	6.8.90	IKM/PMP	Pembrey*
"	"	44	22-738465	1.10.90	IKM	Nant Melyn
"	"	44	22-489017	2.9.90	IKM	Stradey Woods
"	"	44	22-430003	4.9.93	PMP	Pembrey Burrows*
"	"	44	22-27-08-	26.9.91	IKM	Laugharne Burrows*
"	"	44	22-457009	7.93	IKM	Dyfatty Marsh, Burry Port
"	"	44	22-26-07-	9.7.94	IKM	Laugharne Burrows*
"	"	44	22-357109	11.7.94	IKM	Llansteffan*
"	"	44	22-233077	8.8.94	IKM	Dolwen Pt., Pendine
"	"	44	22-493085	5.8.94	IKM	Cynheidre
"	"	44	22-357109	14.8.94	IKM	Llansteffan
"	"	44	22-371120	15.8.94	IKM	Morfa-uchaf, Ferryside
<u>Pysson spinosus</u>		44	22-373039	27.5.87	PMP	Pembrey*
"	"	44	22-391024	5.7.85	IKM	Pembrey Forest*
"	"	44	22-507070	30.7.94	IKM	Penbryn, Cynheidre
"	<u>dimidiatus</u> Nb	44	22-430003	4.9.93	PMP	Pembrey Burrows*
<u>Gorytes tumidus</u> L		44	22-713307	28.7.94	IKM	Llanwrda
<u>Argogorytes mystaceus</u> L		44	22-397007	6.8.90	PMP	Pembrey*
"	"	44	22-643155	16.6.86	IKM	NE of Glyn Hir
"	"	44	22-433117	2.7.90	IKM	Coed Gwempa
"	"	44	22-684241	7.7.87	IKM	Crug-Las
"	"	44	22-605164	30.6.85	IKM	W of Pentregwenlais
"	"	44	22-511145	17.8.85	IKM	NW of Garn
"	"	44	22-509062	1.7.85	IKM	ESE of Myrtle Hill, Horeb
"	"	44	22-393028	23.6.90	IKM	Pembrey Forest*
"	"	44	22-489018	11.6.94	IKM	Stradey Woods
"	"	44	22-848359	25.6.94	IKM	Crychan Forest
"	"	44	22-598203	29.6.94	IKM	"Garden Cottage" Gelli Aur
"	"	44	22-489015	29.5.94	IKM	Stradey Woods
<u>Cerceris arenaria</u>		44	22-392012	6.8.90	IKM	
"	"	44	22-435003	8.8.94	/PMP IKM	Pembrey Forest* Pembrey Burrows (N) *

Family - Eumenidae - Vespidae - Tiphidae - Sapygidae

<u>Oenares spinipes</u>	44	22-217077	30.6.94	IKM	nr. Ragwen Pt.
<u>Acistrocerus gazella</u>	44	22-392007	21.7.91	PMP	Pembrey*
"	44	21-537993	11.7.90	IKM	Llwynhendy
"	44	22-532133	24.6.85	IKM	Drefach
"	44	21-511979	8.6.85	IKM	Machynys

"	"	44	22-305110	8.8.94	IKM	Laugharne
"	<u>parietinus</u>	44	22-470272	12.8.91	IKM	Mynydd
"	"	44	22-468128	12.6.90	IKM	Ystyfflau carn
"	"	44	22-619285	22.7.94	IKM	Capel Dyddgen
"	scoticus L	44	21-514980	28.5.90	PMP	Ffos-ddu
"	"	44	21-548985	8.6.95	IKM	Machynys
						S. of Berwick,
						Bynea
Symmorphus	bifasciatus	44	22-397007	24.6.90	PMP	Pembrey*
"	<u>gracilis</u> L	44	22-494016	16.7.85	IKM	Stradey Woods
"	"	44	22-392007	21.7.91	PMP	Pembrey*
"	crassicornis RDB3	44	22-394028	6.8.85	SJF	Pembrey Forest*
Dolichovespula	norwegica	44	22-597198	9.6.92	IKM	Gelli-Aur
"	"	44	22-567330	4.8.86	IKM	Pistyllgwyn
"	sylvestris	44	22-276358	17.8.90	IKM	Pont-Cych
"	"	44	22-38-03-	17.7.88	MEA	Pembrey Forest*
"	"	44	22-430003	4.9.93	PMP	Pembrey
						Burrows*
"	"	44	22-49-01-	9.85	IKM	Stradey
"	"	44	22-511145	17.8.85	IKM	NE of Garn-fawr
"	"	44	22-567151	17.8.85	IKM	Llyn Llech Owen
"	"	44	22-605131	25.6.86	IKM	Pant-y-blodau
"	"	44	22-357109	11.7.94	IKM	Llansteffan*
"	"	44	22-365075	14.7.94	IKM	St Ishmael*
"	"	44	22-713307	28.7.94	IKM	Llanwrda
"	"	44	22-570020	28.7.94	IKM	Llangennech
"	"	44	22-507070	30.7.94	IKM	Penbryn,
						Cynheidre
Vespula	rufa	44	22-37-04-	17.7.88	SJF	Tywyn Burrows*
"	"	44	22-430003	4.9.93	PMP	Pembrey
						Burrows*
"	"	44	22-457009	7.93	IKM	Dyfatty Marsh,
						Burry Port
"	germanica	44	22-457009	7.93	IKM	Dyfatty Marsh,
						Burry Port
"	"	44	22-490125	16.5.85	IKM	Ynys-uchaf
"	vulgaris	44	22-555203	5.11.85	IKM	Dryslwyn Castle
"	"	44	22-479033	9.8.85	IKM	Cencoed-uchaf
"	"	44	22-430003	4.9.93	PMP	Pembrey
						Burrows*
"	"	44	22-281074	14.6.97	ME	Pendine Burrows*
Vespula	femorata L	44	22-392012	6.8.90	PMP	Pembrey*
"	"	44	22-575025	6.8.92	PMP	nr Llangennech
"	"	44	22-275073	18.7.88	SJF	Laugharne
						Burrows*
"	"	44	22-36-04-	17.7.88	MEA	Tywyn Burrows*
"	"	44	22-430003	4.9.93	PMP	Pembrey
						Burrows*
"	"	44	22-457009	22.9.93	PK	Dyfatty Marsh,
						Burry Port
"	"	44	22-435003	8.8.94	IKM	Pembrey Burrows(N)*
"	"	44	22-462011	14.8.94	IKM	"Ashpits Pond",
						Burry Port
"	"	44	22-370034	15.7.95	IKM	Pembrey Forest
<u>Vespa</u>	<u>atra</u> L	44	22-713307	28.7.94	IKM	Llanwrda
"	"	44	22-507070	30.7.94	IKM	Penbryn,
						Cynheidre



Sapyga					
quinquepunctatus Nb	44	21-41-99-	20.5.90	IKM	Pembrey Burrows*
"	44	21-41-99-	23.4.95	IKM	Pembrey Burrows*
"	44	22-281074	14.6.97	ME	Pendine Burrows*
"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	44	22-44-94-	8.6.97	ME	Whiteford Burrows*

#### Family - Chrysididae

Trichysis cyanea	44	21-533983	7.90	IKM	Tir Morfa
"	44	22-390030	7.91	IKM	Pembrey Forest*
"	44	22-489014	3.7.93	IKM	Stradey Woods
"	44	22-388026	8.8.88	APF	Pembrey Forest*
"	44	21-537993	27.6.90	IKM	Llwynhendy
"	44	22-512062	26.5.90	IKM	Nr. Maes-llydan, Horeb
"	44	22-507070	30.7.94	IKM	Penbryn, Cynheidre
"	44	22-563011	13.6.95	IKM	Llangennech
Chrysis impressa s.l.	=	impressa/ignita/schenki complex			
"	44	22-783438	26.6.86	IKM	Ty'r Ysgol, Rhandirmwyn
"	44	22-233078	28.5.87	IKM	Dolwen Point
"	44	21-514980	14.7.89	PMP	Machynys
"	44	21-535991	26.5.87	IKM	nr Ddôl-fawr Llwynhendy
"	44	22-609225	27.6.88	IKM	Dinefwr Park
"	44	22-233078	20.6.91	IKM	Dolwen Point, Pendine
"	44	22-221072	13.7.87	IKM	Ragwen Point
"	44	22-545177	15.7.86	IKM	Rhyd-deg, Maesybont
"	44	21-537993	15.7.90	IKM	Llwynhendy
" ignita	44	22-222072	15.6.94	IKM	Ragwen Pt.
" angustula L	44	22-392007	27.8.91	PMP	Pembrey Forest*
"	44	22-611218	17.6.94	IKM	Dinefwr Castle Woods
"	44	22-397007	27.8.91	PMP	Pembrey Forest
"	44	22-495014	17.7.95	IKM	Stradey Woods
" viridula	44	22-290096	8.8.91	IKM	NE of Causeway Farm, Laugharne
Hedychridium ardens	44	22-39-01-	31.5.79	JTB	Pembrey Forest*
"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
"	44	22-397007	27.8.91	PMP	Pembrey*
"	44	22-221072	13.7.87	IKM	Ragwen Point
"	44	22-512062	26.5.90	IKM	nr Maes-llydan, Horeb
"	44	22-357109	11.7.94	IKM	Llansteffan*
"	44	22-563011	13.6.95	IKM	Llangennech
"	44	21-41-99-	11.6.97	ME	Pembrey Burrows*
Onalus auratus	44	21-537993	27.6.90	IKM	Llwynhendy

#### Family - Cephidae

Hartigia					
xanthostoma RDB3	44	22-413050	14.6.97	ME	Banc-y-Lord