

THE LAND AND FRESHWATER BUGS (HEMIPTERA) OF CORNWALL & THE ISLES OF SCILLY



by Keith N.A. Alexander

COVER PHOTOGRAPHS

Cape Cornwall

Corizus hyocyami

Dicranocephalus agilis

© Roger Key

Enoplops scapha

Piezodorus lituratus

Dannonchapel

Calocoris roseomaculatus

Trapezonotus ullrichi

on oxeye daisy at Mullion

© Dr Bernard Nau

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CISFBR & ERCCIS

OCCASIONAL PUBLICATION No. 2

2008

CiSFBR

&

ERCCIS

OCCASIONAL PUBLICATION No. 2
2008

Design and typesetting by Wheel Seton Press,
Dr Colin French, 12 Seton Gardens, Weeth Road, Camborne, Cornwall TR14 7JS, U.K.

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ISBN: 0 9534613 2 7

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1 INTRODUCTION

The bugs are a diverse group of insects, including such well-known animals as shield bugs, pond skaters, water boatmen, greenfly, and whitefly. Those species which have been found within Cornwall and the Isles of Scilly are listed in the following section and information is provided on their national and local status, their habitat associations, and all known records are listed by 10km square. This format has been pioneered by Duff (1993) as a way of making records more accessible to people who are not familiar with a particular county and at the same time providing a picture of the known distribution of each species in the county. Thus a species that has been recorded many times from a small area is readily seen to be of restricted distribution, whereas the number of records from the range of localities within that area might otherwise give a false impression of a widespread distribution.

2 SPECIAL FEATURES OF THE CORNISH FAUNA

The Cornish terrestrial Heteroptera fauna is of especial interest to British entomologists because it includes a relatively species-rich assemblage of Mediterranean and Atlantic (west European) species which is unique in Britain. Good examples of the Mediterranean species are the seed bug *Henestaris laticeps* and the shield bug *Geotomus punctulatus*; of the Atlantic species, the plant bug *Capsodes sulcatus*, the shore crevice bug *Aepophilus bonnairei* and the microphysid *Myrmedobia inconspicua*. The plant bug *Pachylops bicolor* is also of especial note as - although widespread on common gorse *Ulex europaeus* in southern England - it only occurs elsewhere in western France. The shore crevice bug *Aepophilus bonnairei* is a speciality of the rocky coasts of SW Britain and Ireland, west and south-west France and the Atlantic coasts of Spain and Morocco. Cornwall and the Isles of Scilly are the sole GB area for the following species: the shield bug *Geotomus punctulatus*, the seed bug *Pterotmetus staphyliniformis*, the beetbug *Piesma quadratum spergulariae* (endemic to the Isles of Scilly), thyme lace bug *Lasiacantha capucina*, and the plant bug *Halticus macrocephalus*.

The greatest variety of local specialities is associated with the freely draining dry soils of the sea cliffs and the wind-blown sand habitats. The sole GB locality for *Geotomus punctulatus* is the loose sand of Sennen Cove but the population appears robust and not under any particular threat. The seed bug *Emblethis griseus* is the other Sennen Cove speciality, and also occurs in the Isles of Scilly and, formerly, at Sandwich Bay (Kent) but nowhere else in Britain. The shield bugs *Odontoscelis fuliginosa* and *Legnotus picipes* have only been found at Perranporth. Other sand dune specialities are more widespread – especially along the north coast - and include another shield bug *Odontoscelis dorsalis*.

Sea cliff specialities include the seed bug *Pterotmetus staphyliniformis* - confined to the heathy cliffs of West Penwith - and thyme lacebug *Lasiacantha capucina* which is more widespread on the western cliffs, as well as the seed bug *Trapezonotus ullrichi* which is more widespread again, on ox-eye daisy flowering in the maritime grasslands. Although national rarities these are all readily to be found and appear to be under no threat. There is also a wide range of other species, more widespread nationally, but of restricted occurrence nonetheless, e.g. the seed bugs *Heterogaster artemisiae* and *Tropistethus holosericeus*. The Lizard peninsula has a few of its own specialities, particularly species more typical of calcareous grasslands such as the seed bugs *Drymus pilicornis*, *Taphropeltus hamulatus* and *Catoplatys fabricii*, as well as the leafhoppers *Ulopa trivialis* and *Agallia brachyptera*. Some of these may prove to be more threatened than the south-western specialities – searches for *T. hamulatus* have failed to find it in recent years, for example, while the *Drymus* has not been reported since 1970 and *Catoplatys* since 1965.

The majority of these species are well represented in the currently designated Sites of Special Scientific Interest but the unique fauna of the loose sand areas of Sennen Cove appears to have slipped through between the neighbouring rocky coast SSSIs and appears unprotected. The entire British population of the shieldbug *Geotomus punctulatus* occurs here together with a remarkably rich variety of other Nationally Scarce and British Red Data Book bug species. The omission of this extraordinary area from the SSSI series is remarkable.

Wetlands feature strongly amongst the fauna too, and land drainage for agriculture will have had serious consequences for these species. A number have not been found in the county for decades and are assumed to have become extinct: *Eysarcoris aeneus* – recorded in a rushy meadow in 1975, *Nabis brevis* and *Tytthus pygmaeus* both noted at Marazion in 1965, *Lamproplax picea* last seen in 1963, *Dictyla convergens* noted at Loe Pool in 1919, and *Acompus rufipes* – not seen for nearly 100 years.

Another suite of species which will have been decimated by the increasingly intensive agriculture of the past fifty years is the fauna of species-rich arable land. Two Nationally Scarce seed bugs are currently only known in the county from the arable fields of West Pentire: *Aphanus rolandri* and *Scolopostethus pictus* (Alexander, 2005).

Changing woodland management has also had consequences for the bug fauna. The ungrazed woods have largely been left unmanaged in recent decades and species which were formerly favoured by active coppice cutting have now largely died out, e.g. both *Sehirus biguttatus* and *Dicranocephalus medius* appear to be extinct in the county.

A wide range of bugs associated with trees, shrubs and dwarf shrubs appear to be of restricted occurrence locally. The deadwood species *Xylocoris cursitans* and *Aradus depressus* are known from very few sites, all in the east of the county and *X. cursitans* appears confined to the cluster of old growth sites of Boconnoc, Ethy and Lanhydrock Parks along the lower Fowey valley. The orchard speciality *Physatocheila smreczynskii* is another Boconnoc speciality but may be expected in other areas with old apple orchards.

One facet that became apparent during the compilation of this list is the surprising rarity of birch bugs in the county. The birch shieldbugs *Elasmucha grisea* and *Elasmostethus interstinctus*, the seed bug *Kleidocerys resedae* and the plant bugs *Lygus contaminatus* and *Psallus falleni* are very localised here and yet regarded as common and widespread up country. The same appears to be true of other “common” species and one needs to be wary of the status information provided in standard identification books.

The Auchenorrhyncha are too poorly investigated in the county to enable much discussion of the fauna. Only one RDB leafhopper has been reported, *Austrogallia sinuata*, and is represented by a single very old record - it may not be native to Britain as the old Lizard record is also the only GB record. It does however occur in the Channel Isles and France and so should not be dismissed as a native. Seven other species in the county are of Nationally Scarce status and are largely concentrated on the Lizard peninsula.

The only published lists are those of the Victoria County History (1906) and Thornley (1934). The national Auchenorrhyncha Recording Scheme has very few records.

Cornwall is even more under-recorded for Sternorrhyncha. Once again, the only published lists are those of the Victoria County History (1906) and Thornley (1934). They are best known for the established exotic species which have become serious pests in gardens and even crops. They do, however, include interesting native species such as the uncommon *Trioza crithmi* which feeds on rock samphire *Crithmum maritimum*.

Stella Turk provided the following text for the county RDB but it is equally relevant here:

“Only about 30% of aphids are regularly seen and only about 10% are common pests (Carter, 1993). The uncommon species of aphids (and indeed all Homoptera) are generally those which rely on one host. Some of the host plants are not native to Britain and some of them occur only in greenhouses, heated or unheated depending on the tender nature of the plant. Many of the introduced species pass unnoticed: for instance *Takecallis arundicolens* (Clarke) has been imported with bamboos and seems to be commonest on Arrow Bamboo *Pseudosasa japonica* which is little affected by this presence. On the other hand a giant species, the North American Lupin aphid *Macrosiphum albifrons*, which appeared in this country as recently as 1981 has devastated Tree Lupins *Lupinus arboreus* grown as pioneer crops on the china clay tips.

“Carter (1993) wrote of *Cinara schimitscheki* (Börner) ‘If any aphids are ever listed in the Red Data Book for insects, then this species is likely to be a candidate!’ Winged forms of this large species have been found in aerial traps, but in Britain it has only been found on its host, the Austrian Pine *Pinus nigra* three times. One of these sites is in Cornwall at Hayle where it occurs on an ageing tree - so it would qualify for Endangered Status.”

3 CHANGING DISTRIBUTIONS

Lack of study limits what can be said of changes in distribution and range with time – especially expansions and contractions. Contractions are a concern for the conservation movement via the Biodiversity Action Planning process. The shield bug *Carpocoris purpureipennis* may be an example of a long-term resident which died out early in the period of biological recording (Southwood, 1956). A large number of species formerly reported in the county have not been seen for more than 50 years, but to what extent this reflects under-recording rather than declines is difficult to decide. Southern European species have been spreading northwards with climate change (“global warming”) and many Heteroptera appear to be particularly mobile. Species associated with conifers have been able to become established in the past 200 years.

One of the more striking features of the earlier records which became apparent during the compilation of this review was the scarcity of records for species associated with tall and coarse grasses and nettles – species now more or less ubiquitous throughout the county. Could this just be that recorders concentrated on the nicer places to visit? But a few recorders were actually resident and would be expected to have investigated all habitats not just the nice ones. A clue comes from the recent BSBI Atlas where it was found that coarse grasses and nettle have increased significantly since the previous Atlas, and Preston *et al.* (2002) suggest this reflects extensive nutrient enrichment from modern high nutrient farming techniques and nitrogen deposition. So the historic scarcity of these species is likely to be real.

A number of species which are widespread up-country are noticeable by their absence from the Cornish record and these must be priorities either for discovering as overlooked species or as new colonists:

Miridae:

Calocoris alpestris (Meyer-Dür) (nettles etc in damp shady woodland), *Capsodes gothicus* (L.) (on large bushy plants of common bird’s-foot-trefoil *Lotus corniculatus*), *Pachytomella parallela* (Meyer-Dür) (with tormentil *Potentilla erecta*), *Orthotylus moncreaffi* (Douglas & Scott) (on sea purslane *Atriplex portulacoides*), *Atractotomus mali* (Meyer-Dür) (hawthorn and apple), *Macrotylus solitarius* (Meyer-Dür), *Phylus palliceps* Fieber (oak), *Psallus salicis* (Kirschbaum) (on alder);

Anthocoridae:

Anthocoris sarothamni Douglas & Scott (on broom).

4 SPECIES TOTALS

No county fauna is static - there are losses and gains with time. The 665 species listed here comprise a complex mixture of long-established natives, recent colonists, established introductions and casual importations - some seen in recent decades, others not. The status of a few species remains unclear, for a variety of reasons.

The best recorded are the terrestrial Heteroptera (shield bugs, plant bugs, etc). A total of 303 have been recorded from the county to date, but 33 of these have not been seen in the last 50 years. A further five species are of unclear status in the county. Similarly there are 46 aquatic bugs on the list of which 5 have not been seen in the past 50 years; there are also two additional species of unclear status. Nau (2002) includes 574 species on the British list, thus the Cornwall and Isles of Scilly fauna comprises about 60% of the full British check-list.

The Auchenorrhyncha (froghoppers, leafhoppers, etc) are much less well known. The list stands at 159 species of which 45 have not been reported in the last 50 years. Five further species are of unclear status. Le Quesne & Payne (1981) list 367 species as occurring in Britain and so 43% have been reported from the county. The Sternorrhyncha (plant lice, aphids, scale insects) are even more poorly recorded, but the list also stands at 158 species, with just over half not reported in the last 50 years. Two further species are of uncertain status.

5 EQUIPMENT FOR FIELDWORK

The most widely used piece of equipment for catching bugs is the standard entomological sweep-net which is used to capture specimens which are either otherwise invisible amongst tall vegetation or are too agile to capture by hand. Increasingly specialists are using the leaf-sucker devices now available from garden centres - a net securely placed across the opening of the sucker tube intercepts solid materials which can then be sorted in a tray. Pooters enable the recorder to capture the faster-moving and more agile species, notably leafhoppers. For water-bugs a pond-net, kitchen sieve, or both are essential.

While these devices enable capture for later study under a microscope, there is a lot to be said for direct observation of specimens in the field, whereby details of the ecology and behaviour of bugs can be better studied - aspects all too often neglected in the hunt for records and specimens.

A microscope is essential for the identification of many bugs, but the field naturalist can get by without one for most common shieldbugs and certain other species, and a hand-lens can help a lot. The most useful microscope to use is a binocular with magnification to x40, or even better x60. Some identification characters are best seen at higher magnification however.

6 RETENTION OF VOUCHER SPECIMENS

As with so many invertebrate groups, the retention of voucher material and the maintenance of a reference collection are essential. Even with the larger showy shield bugs there are a few critical species where voucher material may be needed and so it is advisable to retain vouchers of any unusual species. Common and widespread species with which recorders can demonstrate familiarity are not a problem.

Specimens for retention will normally need to be treated in some way to promote preservation. Micro-pinning to plastazote or polypore strips is probably the best option for the larger and more robust specimens, although carding is also a widely used technique. The strips are then mounted on a more robust pin. Smaller and more delicate specimens may either be carded or pickled in 70-80% industrial meths. For certain genera it is necessary to examine male genitalia and these would normally be pasted next to the specimen on the card.

Obviously all reference or voucher specimens need to have attached details of where found, when and by whom. Labels are either pinned with the specimen or kept in the same individual pickle storage container.

7 USEFUL LITERATURE

General introduction:

Dolling, WR 1991. *The Hemiptera*. Oxford University Press.

Heteroptera:

Southwood, TRE & Leston, D 1959. *Land and water bugs of the British Isles*. Warne Wayside & Woodland Series. This is still the basic text although it can be difficult to get hold of and is very expensive on the second-hand market.

A new publication is in preparation which will supersede this book; it is planned for publication by the British Entomological & Natural History Society.

Savage, AA 1989. Adults of the British aquatic Hemiptera Heteroptera: a key with ecological notes. *Scientific Publications of the Freshwater Biological Association* **50**: 173pp.

Auchenorrhyncha:

The standard British guides are:

Le Quesne, WJ, 1960. Hemiptera (Fulgoromorpha). *Handbooks for the Identification of British Insects* **2 (3)**. 68pp.

Le Quesne, WJ, 1965. Hemiptera Cicadomorpha (excluding Deltocephalinae and Typhlocybinae). *Handbooks for the Identification of British Insects* **2 (2a)**. 64pp.

Le Quesne, WJ, 1969. Hemiptera Cicadomorpha Deltocephalinae. *Handbooks for the Identification of British Insects* **2 (2b)**. 148pp.

Le Quesne, WJ, & Payne, KR 1981. Cicadellidae (Typhlocybinae) with a checklist of the British Auchenorrhyncha (Hemiptera, Homoptera). *Handbooks for the Identification of British Insects* **2 (2c)**. 95pp.

More detailed figures can be found in the following continental works:

Ossiannilsson, F, 1978, 1981, 1983. The Auchenorrhyncha (Homoptera) of Fennoscandia and Denmark. *Fauna Entomologica Scandinavica* **7 (1-3)**: 980pp. Text in English.

Ribaut, H 1936. Homoptères Auchénorhynques. I (Typhlocybidae). *Faune de France* **31**: 321pp.

Ribaut, H 1952. Homoptères Auchénorhynques. II (Jassidae). *Faune de France* **57**: 474pp.

della Giustina, W 1989. Homoptères Cicadellidae. Vol.3, Compléments aux ouvrages d'Henri Ribaut. *Faune de France* **73**: 350pp.

For nymphs:

Vilbaste, J 1968. Preliminary key for the identification of the nymphs of North European Homoptera Cicadinea. I. Delphacidae. *Annales Entomologici Fennici* **32**: 65-74.

Vilbaste, J 1982. Preliminary key for the identification of the nymphs of North European Homoptera Cicadinea. II. Cicadelloidea. *Annales Zoologici Fennici* **19**: 1-20.

Sternorrhyncha:

Psylloidea: the jumping plant lice. These are well covered by:

Hodkinson, ID & White, IM 1979. Homoptera: Psylloidea. *Handbooks for the Identification of British Insects* **11 (5a)**. 98pp.

White, IM & Hodkinson, ID 1982. Psylloidea (Nymphal Stages): Hemiptera, Homoptera. *Handbooks for the Identification of British Insects* **11 (5b)**. 50pp.

The rest of the group are much more specialist and there is an extensive identification literature. Anyone interested is referred to: Barnard, PC, ed., 1999: *Identifying British Insects and Arachnids: an annotated bibliography of key works*. Cambridge University Press.

8 NATIONAL RECORDING SCHEMES

There are currently three national recording schemes co-ordinated through the Biological Records Centre:

Aquatic Heteroptera: Dr Sheila Brooke, 18 Park Hill, Toddington, Dunstable, Beds LU5 6AW. E-mail: brooke.aquahet@btopenworld.com

Terrestrial Heteroptera: Dr Bernard Nau, 15 Park Hill, Toddington, Dunstable, Beds LU5 6AW. E-mail: nauhet@btinternet.com

Auchenorrhyncha: Dr Alan Stewart, School of Biological Sciences, University of Sussex, Falmer, Brighton BN1 9QG. E-mail: a.j.a.stewart@sussex.ac.uk

9 RECORDING IN CORNWALL

Records should be sent to: Keith Alexander, 59 Sweetbrier Lane, Heavitree, Exeter EX1 3AQ. E-mail: keith.alexander@waitrose.com. Tel: 01392 413092.

10 THE CATALOGUE OF LAND AND FRESHWATER BUGS OF CORNWALL & THE ISLES OF SCILLY

10.1 Sources of Records

The Hemiptera of Cornwall and the Isles of Scilly have been studied off and on for over a hundred years. There have been long breaks in the effort, however, making a detailed assessment of the fauna and the changes it has undergone over time very difficult. Additionally, few of the entomologists involved in recording the county fauna have actually been resident, and have targeted their visits at particular rarities or particular habitats. A consequence has been the serious neglect of recording of common and widespread species as well as of inland habitats. Thornley (1934) is of particular importance since this author was resident in the county and recorded all species which he encountered in the area in which he lived – his record is therefore the best statement of the fauna at that time.

Douglas and Scott (1865) provide a snapshot of how much was known about the Heteroptera of Britain and Ireland at that time and it is notable that Cornwall does not feature at all, leading one to suspect that the fauna was entirely unknown when they were writing. A few species were noted in Devon so the absence of references to Cornwall must be a true reflection of knowledge.

The earliest published records which I am aware of are as follows:

- *Transactions of the Penzance Natural History and Antiquarian Society* in the latter half of the 19th century; mainly from J.C. and C.W. Dale, father and son, of Glanvilles Wootton in Dorset; also F.

Holme, F. Walker and F. Norgate. The 1884-5 *Transactions* include a list of 56 species by E. D. Marquand.

- *Entomologist's Monthly Magazine* for 1889 includes a list taken in Scilly as well as the mainland by J.E. Mason; some notes by G.C. Champion in 1897.
- E. Saunders' book on *The Hemiptera Heteroptera of the British Islands*, 1892.
- James Edwards' book *The Hemiptera Homoptera of the British Islands*, 1896.
- *Victoria County History of Cornwall* (1906), in which James Clark gives long lists of both Heteroptera and Homoptera.
- Edward A. Butler's *A Biology of the British Hemiptera Heteroptera*, 1923.

Records given for St Mary's Island in Bold (1866) refer to the Northumberland island of that name and not the Isles of Scilly, but mistakenly lie amongst the records held by ERCCIS.

The details of many earlier records from the county are not readily available, being only listed by county (Clark, 1906 and Butler, 1923). The later county lists of Bedwell (1945) and Massee (1955) appear to mainly repeat the earlier records and should not be taken as implying more recent records.

A manuscript list held by the Entomological Section of the Devonshire Association includes Cornish records by A.V. Mitchell and J.H. Keys but does not give the source. Interestingly, some of these records have not been encountered elsewhere. The date of the manuscript is after 1948 and it may have been written as part of the Section's early work on the county fauna – the hand-writing appears to be that of G.A. Ashe, the Section's Coleoptera Recorder at the time.

The Heteroptera are the best recorded, although Miridae have been very neglected. The author's main interest is this group of bugs. Data on the Homoptera are largely accumulated here for the sake of completeness, the author having limited expertise or knowledge of many of these families.

Amongst recent recorders, two people merit special mention: R.T. Bannister dabbled with Heteroptera alongside his main interest in Coleoptera and discovered many important bug species, while the national authority on bugs Pete Kirby of Peterborough has made a series of visits. Steve Judd of Liverpool Museum has also recently reviewed information on seed bugs (Lygaeidae) and has visited the county in search of them.

Records based on comparison with illustrations in the various Collins Field Guides and similar publications are not generally acceptable without expert confirmation as those books are not comprehensive by any means. Few bug species are sufficiently distinctive for reliable identification by this means. Even Southwood and Leston (1959) needs to be used with caution as it is now out-of-date in many ways. Fortunately the Royal Entomological Society has published a series of keys covering the Auchenorrhyncha and the Psylloidea. A recent development has been the appearance of two high quality identification books on shield bugs and related bugs (Hawkins, 2003; Evans & Edmondson, 2005).

This account of Cornwall's bug fauna is heavily dependent on the extensive work carried out by the Cornwall Biological Records Unit (CBRU). Their literature extractions and fieldwork have made my own compilation much simpler than it might otherwise have been. The data has been made available by the Environmental Records Centre for Cornwall & the Isles of Scilly (ERCCIS). Aphids have been extensively recorded in the grounds of Duchy College, Rosewarne, as part of work on horticultural crops.

The presence in the county of the Sennen Cove rarities has meant that the list of visiting heteropterists reads like a *Who's Who* of the eminent entomologists of the day!

No claim is made that the records presented here are exhaustive. It is well known that publication is one of the most effective means of drawing out records!

10.2 Area of Study

The following accounts include records for the whole of the Watsonian Vice-Counties of West and East Cornwall (VCs 1 and 2 respectively).

10.3 Nomenclature

The nomenclature and systematic order used in this review is that of Nau (2002) for Heteroptera, Le Quesne and Payne (1981) for Auchenorrhyncha – with some limited updating, and Hodkinson & White (1979) for Psylloidea. A wide variety of sources have been drawn upon for the rest of the Sternorrhyncha and the nomenclature presented here is by no means authoritative.

10.4 Status

Where a species has been accorded “Nationally Scarce” or “British Red Data Book” status in Kirby (1992) this is shown immediately following the scientific name.

The various categories are defined in detail by Kirby and will not be repeated in full here. Essentially they are as follows:

RDB - species which are only known in Britain from fewer than 16 of the 10km squares of the National Grid.

- Category 1 Endangered - taxa in danger of extinction
- Category 2 Vulnerable - taxa believed likely to move into the endangered category in the near future
- Category 3 Rare - taxa with small populations which are not at present Endangered or Vulnerable, but are at risk

Notable Nationally Scarce - taxa which do not fall within RDB categories but which are none-the-less very uncommon in Britain and thought to occur in fewer than a hundred 10km squares of National Grid.

Local status, i.e. in Cornwall and the Isles of Scilly, is commented upon where sufficient information is believed to be available:

- County Rare- 1-3 sites known in the county since 1950;
- County Scarce - 10 or fewer sites known in county; or decline since 1950.

These statuses have not been applied precisely as the county has clearly been under-recorded, and especially in the case of “ordinary countryside”; some allowance is made for this in forming a judgement on the status that is most appropriate given current knowledge - they should be regarded as provisional

10.5 Organisation of 10km Square Records

In the following catalogue, the codes for the four 100km squares which coincide with the county are not organised alphabetically, but in the sequence SV, SW, SX, SS, as this more logically follows the sequence from west to east.

10.6 Abbreviations used for main recorders

Background information for deceased entomologists has largely been taken from the *Biographical Dictionary of British Coleopterists* by Michael Darby and accessible on line at www.coleopterist.org.uk, supplemented with information from the FENSCORE database fenscore.man.ac.uk

- AMM A.M. Masee, of East Malling, Kent, visited the Lizard in August 1960.
- APF Andy P. Foster, a current recorder; resident in county in 1970s, now lives in Wiltshire.
- AS Adrian Spalding, a current recorder; resident at Praze-an-Beeble, Camborne.
- AT Rev. Alfred Thornley (1855-1947): retired to live at Carbis Bay in 1925; mainly recorded in SW53/54 (St Ives, Carbis Bay, Lelant, St Erth) and started publishing his *Provisional List of Cornish Insects* in 1934.
- AVM A. Vincent Mitchell (d.1938); a Plymouth entomologist; recorded in the neighbouring areas of the county intermittently from 1918 until 1931, especially at 'Lezant'.
- BSBI Botanical Society of the British Isles.
- BSN Bernard S. Nau, National Organiser for the Terrestrial Heteroptera Recording Scheme, first visited in June 2001.
- CHN Charles H. Nicholson moved to Tresillian at the end of September 1928 and published insect records between 1930 and 1932, especially butterflies.
- CWD C.W. Dale (1851/2-1906), very active at the end of the 19th century; resident of Glanvilles Wootton in Dorset.
- DA ms The manuscript list of 'Local Hemiptera' held by the Devonshire Association.
- DAS Dave A. Sheppard, carried out a Lizard Invertebrate Survey 1980/81 for the England Field Unit of the Nature Conservancy Council.
- DCT D.C. Thomas worked as an agricultural entomologist in Devon and Cornwall in the 1930s and 1940s and appears to have specialised in Heteroptera; on moving to Kenya he left an unfinished article on British bugs with Dr China, which was then passed to Dennis Leston for editing and publication in the *Entomologist* (1954-56).
- DM/IK David Miller & Ian Kendall (London), lists from Beales Meadows & Creddacott Meadows, August 1998.
- EAB E.A. Butler (1845-1925) of London, visited the Tintagel area in August 1908 and his collection at the Natural History Museum includes local material; wrote *A Biology of the British Hemiptera-Heteroptera* (Butler, 1923).
- ECB E.C. Bedwell (1875-1945) visited Sennen Cove and the Lizard in October 1932 in search of thyme lacebug but found a *Myrmedobia* sp subsequently named after him (China, 1933).
- EDM Ernest D. Marquand (1848-1918) of Alphington, Exeter; active in the Land's End district (records provisionally allocated to SW32 in the list) in mid to late 19th century; resident in county for a period, died at Totnes; he acknowledged the assistance of Edward Parfitt of Exeter Museum in the determination of critical species (Marquand, 1884).
- ES Edward Saunders (1848-1910), of Reigate, Surrey; visited Sennen Cove & Kynance Cove, August 1871 (Saunders, 1871).
- FN Frank Norgate, of Sparham, Norfolk; visited the Isle of Scilly in August 1878 (Norgate, 1880).
- FS Frederick Smith, was the first to find shore crevice bug *Aepophilus bonnairei* in Britain, near Polperro (Waterhouse, 1881).
- FW Francis Walker, spent six days in Isles of Scilly, Sept..1872 (Walker 1872).
- GB Graham Bathe worked with the National Trust Biological Survey Team during their 1979 residence in the county.
- GB2 Graham Blow, a current recorder; resident at Crowlas, Penzance.
- GBH G. Bernard Hocking, of Rospanel Farm, Crows-an-Wra, Penzance; a current recorder.
- GCB George Carter Bignell (d.1910); a famous Plymouth lepidopterist; mentioned in Clark (1906), and address given as Saltash in 1900 (Bignell, 1901).
- GCC G.C. Champion (1851-1927), of Woking, Surrey, and primarily a Coleoptera specialist; visited Portscatho, Scilly, and Penzance between June 19 and July 15, 1897 (Champion, 1897a & b).
- GEH G.E. Hutchinson of Cambridge was in the St Minver area for much of late August and early September 1919.
- GEW G.E. Woodroffe of Maidenhead, Buckinghamshire; visited Padstow area in June 1956 and July 1957; on Scilly in August 1964, August 1965, mid June 1966.

- GMS G. Malcolm Spooner, resident in Devon but recorded widely in the South West in latter half of 20th Century.
- HGM H.G. Morgan, of Starcross, Exeter, carried out surveys of aquatic Heteroptera in Devon and Cornwall (Morgan, 1957).
- JAP J.A. Power (1810-1886), of London, recorded at Holmbush in 1866 and Sennen Cove in 1871.
- JCD J.C. Dale (1792-1872), of Glanvilles Wootton, Dorset, recorded in Cornwall in 1864.
- JD Jonty Denton, of Hampshire, a consultant entomologist, visited the moors around Bugle in July 2005.
- JEM James Eardley Mason, of Alford, Lincolnshire; holiday visits to Scilly, and St Ives and Hayle area, Oct..1886 & Sept..1888 (Mason, 1889).
- JHK James H. Keys (1855-1941) of Plymouth; recorded the Whitsand Bay area (VC2) very extensively over the period 1897-1921, also visited the Lizard regularly in 1919 and the 1920s; Boscastle, 1898; Rock sandhills, June 1919; Sennen Cove, July 1928. His "Plymouth" records include both Cornwall and Devon sites. He discovered thyme lace bug new to Britain on the Lizard in 1919.
- JJW J.J. Walker (1851-1939), a naval engineer, based in Devon for a period; recorded at Whitsand Bay, 21 August 1875 (Walker, 1875); retired to Oxford.
- KGB K.G. Blair (1882-1952) was a regular visitor to Scilly during 1919-32 and also visited St Merryn, July 1925; based at British Museum (Nat. Hist.) in London.
- KVGS Ken Smith, the London based Diptera specialist, recorded flies and other insects in the Isles of Scilly while on holiday there 17-24 June 1961 (Smith, 1963).
- KNAA Keith N.A. Alexander, a current recorder; resident in Exeter.
- KM Ken Merrifield, a current recorder; resident in London.
- KP-M Ken G & RA Preston-Mafham, current recorders; resident in Bodmin area.
- LRFDK Lee Knight carried out an aquatic invertebrate survey of Loe Pool during 2003; resident in SE Devon.
- LWH L.W. (Bill) Hardwick, of Winsford, Cheshire, visited SE Cornwall in 1985 & 1986.
- MGM Mike G. Morris, of Dorchester, visited west of county in 1963 and 1970.
- MJM M. Joan Morgan visited with the Diptera Recording Schemes, based at St Agnes in 1983.
- NM N. Mickelwood, recorded on Lizard, 1917-18, (Mickelwood, 1918).
- OWR O.W. Richards a regular visitor to Scilly 1925, 1927 & 1930; also in August 1924 visited Zennor, Lelant, Lamorna Cove and Chynhalls.
- PAG Paul Gainey, a current recorder, resident in Penryn.
- PJH Peter J. Hodge of Lewes, Sussex, many recent visits.
- PK Pete Kirby, of Peterborough; has made a series of visits: 1985, north-east area, incl. Coombe Valley & Dozmary Pool; 1987, Isles of Scilly & Sennen Cove; 1992, Lizard; 1999, south-east, incl. Whitesand Bay.
- RMP R.M. Phillips, recording aphids, scales, etc.
- RTB R.T. Bannister (d. 1979): resident, primarily a coleopterist, based at Penzance for much of the 20th century.
- SJ Steve Judd of Liverpool Museum visited July 1985 & August 1986, Sennen Cove, Zennor, Boscastle.
- SEB Sheila Brooke, visited with Bernard Nau in 2003.
- SJG Simon J. Grove worked with the NT Biological Survey Team during their visits in 1989/90.
- SMT Stella Turk, well known resident Cornwall biological recorder.
- TAM Thomas Ansell Marshall (1827-1903); rector of Botus Fleming 1889-1897; a famous entomologist, with wide interests.
- WAE W. (Bill) A. Ely, of Rotherham Museum, visited in August 1979.
- WEC W.E. China was based at Rosudgeon, near Marazion, Sept. 1931, and Portheras Cove, August 1932 and possibly 1933. Also visited Kynance Cove 1 Oct. 1932 (China, 1933).

Order Hemiptera
Sub-Order HETEROPTERA
Series DIPSOCOROMORPHA

Super-family DIPSOCOROIDEA

Family CERATOCOMBIDAE

Ceratocombus coleopratus (Zetterstedt) – **County Rare/Locally Extinct.**

A widespread but elusive species nationally, living among moss and dead leaves in damp places.
Cornwall (Butler, 1923).

Series NEPOMORPHA

Super-family NEPOIDEA

Family NEPIDAE

Nepa cinerea L. – Water scorpion.

Widely distributed; in shallow water on mud or thick vegetation.

SW32 Land's End district, ED Marquand (1844).

SW33 Bostraze Farm, 2000, T Huxley.

SW53 Marazion Marsh, vii.1925, OWR; 1965, RTB. Tregembo Pond, 1964, SMT. St Erth, 1964, RTB. Mr Laity's Pool, 1978, SMT. Loggans Moor, ix.2004, ECMH.

SW54 Gwithian, 1981, APF.

SW61 Hayle Kimbro Pool, 1873, ER Dale.

SW62 The Loe, 19.vi.2001, BSN; Loe Pool, 2003, KNAA & LRFDK.

SW63 Porkellis Moor, 1977, P Terry. Pendarves Pool, 1981, APF.

SW64 Bell Lake, 1968, SMT. Carn Brea, 1978, E Jackson. Red River Valley, Roscroggan, 1989, L Rowe.

SW71 Croft Pascoe Pool, 1971, SMT. Brays Cott Pool, 1980; Gwendreath, 1981, DAS.

SW74 Cusgarne, 1984, J Millet.

SW75 Carnkief Pond, 1978 & 1980, E Jackson. Ventongimps Moor, 1981, SMT.

SW83 Swanpool, 1972, AE Dorey.

SW96 Lower Polmorla, in new pond, 6.viii.2006, IJ Bennallick.

SX06 Red Moor, 1978, CA Brind.

SX17 Dozmary Pool, 15.v.1998, IJ Bennallick & Ro Fitzgerald.

SX18 Crowdy, 7.vii.2001, KP-M.

SX18 Davidstow, pond, 22.viii.1930 (Pearce & Walton, 1939).

SX19 Tregulland, St. Cleer, 1988, TJ Dingle.

SX25 Penzephyr, 1985, AS.

Ranatra linearis L. – **County Scarce.**

Water stick insect. Fairly common in the south of England; in thick vegetation in still water.
Cornwall (Clark, 1906); probably under-recorded.

SW64 Bell Lake, 1968, SMT.

SW71 Croft Pascoe Pool, 12.x.1971, SMT.

SS20 Bude Canal, 29.vi.2006, K Edwards.

Super-family CORIXOIDEA

Family CORIXIDAE

Micronecta poweri (Douglas & Scott) – **County Rare.**

Common nationally, in lakes and rivers where the bed is sandy or stony. "*Micronecta minutissima* (L.)" was reported in Cornwall by Clark (1906) but old records under this name are more likely to refer to *M. poweri*, which was reported in the county by Masee (1955) but not Bedwell (1945).

SV80 Big Pool, St Agnes, 1970, A Allison.

SX17 Colliford Lake, *Micronecta* sp., 22.vi.2003, BSN.

Cymatia bondsdorffi (Sahlberg) - **County Rare**.

Fairly common in lakes, rivers, and heath & moorland pools nationally. Reported in the county by Bedwell (1945) and Masee (1955) but details not known.

SX17 Colvannick Pond, Bodmin Moor, female swept, 27.vi.2004, K. Edwards, confirmed by S. Brooke.

Cymatia coleoprata (Fabricius) - **County Rare/ Locally Extinct**.

Fairly common in southern Britain in lakes, rivers, and heath & moorland pools. Cornwall (Clark, 1906; Butler 1923), but details not known.

Arctocorisa germari (Fieber) – **County Rare**.

Almost invariably found in still water bodies with little or no live vegetation. Most frequent in northern Britain, but widely scattered.

SV81 Abbey Pool, Tresco, male & 8 females in shallows on edge of cut grass area, 4.iv.2006, T Huxley (2006).

SW62 Loe Pool, 1995, Natural History Museum survey.

SX17 Dozmary Pool, 9.ix.1985, PK.

Callicorixa praeusta (Fieber)

Common in rich rivers and lakes nationally.

SW61 Hayle Kimbro Pool, 8.vi.1944, HG Morgan (1957).

SW63 Pendarves Pool, 24.ix.1977, SMT.

SX17 Dozmary Pool, 9.ix.1985, PK.

SX35 Crafhole Hotel, 5.iv.2000, TH.

SX36 Hepwell Bridge, Quethiock, 5.iv.2000, TH.

Corixa affinis Leach

In ponds, often near the sea. Cornwall (Clark, 1906) but question-marked by Bedwell (1945) and Masee (1955); presence confirmed since then, and best known locally on the Isles of Scilly. 'Mr E.S. Brown states (*in litt.*) that he has seen specimens collected from the north coast of Cornwall by Prof. G.D.H. Carpenter in about 1943' (Morgan, 1957).

SV Scilly, ix.1888, JEM (1889b).

SV80 Big Pool, St Agnes, 23.iii.1970, JA Lindley; 16.vi.1987, PK.

SV91 St Mary's, 1925-27, OWR.

SW63 Porkellis, 31.viii.1974, JA Paton.

SW75 Mount, Perranporth, 1.vii.1972, VS Paton.

Corixa panzeri (Fieber) – **County Rare**.

Lakes, rivers and ponds, where the water is clear, neutral to alkaline or slightly saline and with extensive weed growth.

SW53 Marazion, 6.vi.1944, HG Morgan (1957).

SW83 Swanpool, 1971, RSK Barnes.

Corixa punctata (Illiger) syn. *Corixa geoffroyi* Leach

Typically in rich ponds and widespread nationally.

SV Scilly, ix.1888, JEM (1889b).

SV91 St Mary's, 1925-27, OWR.

SW32 Land's End district, *C. geoffroyi*, ED Marquand (1844). Roskestal, 2.iv.2000, TH.

SW53 Tregembo Pond, Relubbus, 31.x.1964, SMT. Phillack Pool, 9.vi.1993, RS Cropper.

SW54 Gwithian, 1981, APF

SW61 Clahar Bridge, 22.ix.1980, DAS.

SW62 Goonhilly NNR, 1960, RTB; 23.vi.1976, SMT.

SW63 Porkellis Moor, 31.viii.1974, VS Paton.

SW64 Nancekuke, 1981-83, APF.

SW71 Chynhalls, viii.1924, OWR. Brays Cott Pool, 23.ix.1980, DAS. Croft Pascoe Pool, Goonhilly Down, 25.vi.2003, BSN.

SW72 Goonhilly, 2.viii.1980, DAS.

SW73 Rosemanowes Quarry, 1984, JK Williams.

SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).

- SW84 Pencalenick Pond, 1950, FA Turk. Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
 SX04 Treveague Farm, Gorran Haven, 4.iv.2000, TH.
 SX05 Wheal Martyn, 9.iii.1991 & 22.iv.1992, MD Bradford.
 SX06 Red Moor, 1978, CA Brind.
 SX17 South Penquite Farm, Blisland, in enriched peat pond, 26.ix.2005, KNAA.
 SX35 Crafhole Hotel, 5.iv.2000, TH.
 SS20 Bude Marshes LNR, 29.vi.2004, K Edwards.

Hesperocorixa castanea (Thomson)

Common in north and west of Britain; in thick vegetation where the water is deficient in bases.

- SW33 Bostraze Farm, 20.iv.2000, TH.
 SW61 Clahar Bridge, 22.ix.1980, DAS.
 SW71 Croft Pascoe Pool, 3.viii.1980, DAS; 25.vi.2003, BSN. Brays Cott Pool, 23.ix.1980, DAS.
 SW72 Goonhilly, 2.viii.1980 & 3.viii.1981, DAS. Goonhilly Downs, 20.ix.1992, PK.
 SW73 Rosemanowes Quarry, 1984, JK Williams.
 SW96 Goss Moor, 9.xii.1949, HG Morgan (1957).
 SX05 Mollinis, Roche CP, 2005, JD.
 SX06 Criggan, Roche CP, 2005, JD.
 SX17 South Penquite Farm, Blisland, in enriched peat pond, 26.ix.2005, KNAA.

Hesperocorixa linnaei (Fieber) – **County Rare**.

In rich lakes in thick reed-beds and sometimes in ponds.

- SW64 Nancekuke, 1981, APF.
 SW71 Chynhalls, viii.1924, OWR.
 SX17 Dozmary Pool, 3.vii.1983, coll. Leicester University students, det. PK.

Hesperocorixa moesta (Fieber) – **County Rare**.

In ponds with much vegetation; southern Britain, localised.

- SW32 Land's End district, ED Marquand (1884).
 SW61 Clahar Bridge, 30.vii.1980, DAS.
 SW71 Chynhalls, viii.1924, OWR.
 SX17 South Penquite Farm, Blisland, 25.iv.2006, PAG.

Hesperocorixa sahlbergi (Fieber)

In small water bodies with considerable amounts of dead vegetable matter, but not when the water is base-deficient. Cornwall (Clark, 1906).

- SW32 Land's End district, ED Marquand (1844).
 SW33 Bostraze Farm, 20.iv.2000, TH.
 SW61 Kynance Cove, 1966, RTB.
 SW71 Chynhalls, viii.1924, OWR.
 SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
 SX17 South Penquite Farm, Blisland, in enriched peat pond, 26.ix.2005, KNAA.
 SX26 Old Park Farm, Liskeard, 5.iv.2000, TH.

Sigara selecta (Fieber) – **County Rare/ Locally Extinct**.

A strictly coastal species, confined to strongly saline or brackish habitats. Isles of Scilly (Morgan, 1957).

- SV91 St. Mary's, 1925-27, OWR.

Sigara stagnalis (Leach) syn. *Sigara lugubris* – **County Rare**.

Typically in brackish pools and ditches. Cornwall & Scilly (Clark, 1906).

- SV81 Great Pool, Tresco, 5 males amongst *Phragmites* by bird hide & 3 males and 2 females in ditch at west end, 4.iv.2006, T Huxley (2006).
 SV91 St Mary's, vii.1897, GCC (1897); 1925-27, OWR.
 SW83 Swanpool, 1970, RSK Barnes.

Sigara concinna (Fieber) – **County Rare.**

A scarce species of lakes and rivers, on sandy bottoms.

- SV81 Abbey Pool, Tresco, 15.vi.1987, PK; one female in shallows on edge of cut grass area, 4.iv.2006, T Huxley (2006). Great Pool, Tresco, a male at east end, in sandy shore shallows, 4.iv.2006, T Huxley (2006).

Sigara nigrolineata (Fieber)

In ponds and pools of all kinds, especially those small and shallow. Cornwall (Clark, 1906). Isles of Scilly (Morgan, 1957).

- SV80 Big Pool, St Agnes, 27.iii.1970, JA Lindley.
SV91 St Mary's, 1927, OWR.
SW32 Roskestal, Land's End, 2.iv.2000, TH.
SW61 Clahar Bridge, 30.vii.1980, DAS.
SW62 Loe Pool, 2003, LRFDK.
SW71 Penhallick, 8.vi.1993, RS Cropper.
SW76 Cubert, 25.v.1989, KNAA.
SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
SW87 St Merryn, vii.1925, KG Blair.
SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.

Sigara limitata (Fieber) – **County Rare/ Locally Extinct.**

A species of lowland pools, ditches and streams, but precise requirements are unclear. The following is the only record for SW England.

- SW53 Marazion, 6.vi.1944, HG Morgan (1957).

Sigara semistriata (Fieber) – **Locally Extinct.**

Mainly in small base-poor ponds. Cornwall (Clark, 1906).

Sigara venusta (Douglas & Scott) – **County Rare.**

Fairly common in north and west, on heaths and moor, in small streams and ditches; occasionally in other situations. Cornwall (Butler 1923).

- SV91 St Mary's, 1927, OWR.
SW33 Bostraze Farm, 20.iv.2000, TH.
SW53 Marazion Marsh, vii.1925, OWR.

Sigara dorsalis (Leach) syn. *Sigara striata* partim

In lakes and rivers typically on a sandy bottom containing little organic matter.

- SW32 Bosistow Farm, 20.iv.2000, TH.
SW52 Tresowes Green, 3.iv.2000, TH.
SW62 Loe Pool, 2003, LK.
SW83 Swanpool, 1970, RSK Barnes.
SW87 St Merryn, 4.iv.2000, TH.
SX05 Par Sands, 1985, C Little.
SX17 Dozmary Pool, 3.vii.1983, coll. Leicester University students, det. PK. Colvannick Pond, 27.vi.2004, K Edwards
SX27 Siblyback Lake, 5.iv.2000, TH.
SX35 Crafhole, 5.iv.2000, TH.
SS20 Bude Canal, 29.vi.2004, K Edwards.

[*Sigara striata* (L.) – **Unconfirmed Species.**

A species confined to the extreme SE of England; old records need re-examination - nomenclature only clarified in 1956. Cornwall (Clark, 1906).

- SW53 Marazion Marsh, vii.1925, OWR.]

Sigara distincta (Fieber)

Nationally widespread in reed-beds in lakes with accumulations of organic matter. Cornwall (Clark, 1906).

- SW32 Roskestal, Land's End, 2.iv.2000, TH.
SW43 Rosemergy, a possible female, 17.v.1989, KNAA.
SW62 Loe Pool, 2003, LRFDK.

SX17 Dozmary Pool, 9.ix.1985, PK.

Sigara falleni (Fieber)

Common nationally in lakes and rivers; but very under-recorded. Cornwall (Clark, 1906).

SW32 Bosistow Farm, 20.iv.2000, Huxley (2003).

SW62 Loe Pool, 1995, Natural History Museum survey.

SW87 St Merryn, in a fishing pond to north east, 4.iv.2000, Huxley (2003).

Sigara fossarum (Leach) – **County Rare**.

Fairly common nationally; lakes and rivers and rich ponds. Very sparse in the south-west of Britain. Cornwall (Clark, 1906).

SW62 Loe Pool, 2003, LRFDK.

Sigara scotti (Fieber) – **County Rare**.

Very common in heath and moorland pools in Scotland, but much more localised in England and Wales. Cornwall (Clark, 1906).

SW63 Porkellis Moor, 1978, Anon.

SW71 Chynhalls, viii.1924, OWR.

SX17 Dozmary Pool, 3.vii.1983, coll. Leicester University students, det. PK; 9.ix.1985, PK.

Sigara lateralis (Leach) syn. *Sigara hieroglyphica*.

Common in ponds, particularly those fouled by animals or somewhat brackish. Cornwall (Clark, 1906).

SV Isles of Scilly, ix.1888, JEM (1889b). Morgan (1957).

SV80 St Agnes, 16.vi.1987, PK.

SV81 Abbey Pool, Tresco, 12 males & 14 females in shallows on edge of cut grass area, 4.iv.2006, T Huxley (2006). Great Pool, Tresco, 7 males & 9 females at east end, in sandy shore shallows; 2 males amongst *Phragmites* by bird hide; 1 male & 7 females in ditch at west end, 4.iv.2006, T Huxley (2006).

SV91 St Mary's, 1925, OWR.

SW62 Loe Pool, 2003, LRFDK.

SW73 Rosemanowes Quarry, 1984, JK Williams.

SX36 Hepwell Bridge, Quethiock, 5.iv.2000, TH.

Super-family NAUCOROIDEA

Family NAUCORIDAE - Saucer-bugs

Ilyocoris cimicoides L. – **County Scarce**.

Widely distributed nationally; usually in thick weeds in still water. Cornwall (Clark, 1906); very few records from Cornwall or Devon.

SW42 Trewoofe Woodland, Lamorna, 1989, M & A Common.

SW64 Nancekuke, 1981 & 1983, APF.

SW84 Pencalenick, 1950, FA Turk.

SS20 Bude Canal, 29.vi.2004, K Edwards.

Family APHELOCHEIRIDAE

Aphelocheirus aestivalis (Fabricius) – **County Rare**.

River bug. Present in many rivers and streams throughout lowland Britain, preferring relatively fast sections where the bottom is stony or gravelly, usually where there is some overhanging marginal vegetation or moss covered rocks. Probably under-recorded in Cornwall, where only one record is currently known.

SX07 Post 1970 record in Huxley (2003).

Super-family NOTONECTOIDEA

Family NOTONECTIDAE - Water-boatmen

Notonecta glauca L. – Common backswimmer.

Widely distributed and common, mainly lowland, and in neutral and base-rich waters.

- SV91 Isles of Scilly, ix.1888, JEM (1889b). St Mary's, 1919 (Huxley, 2006).
SW32 Land's End district, ED Marquand (1884). Roskestal, Land's End, 2000, TH.
SW53 Carbis Bay, common, AT (1934). Relubbus, 1964, RTB. Tregonning Hill, 1965, SMT. Angarrack, 1990; Loggans Moor, 1995; Phillack Towans, 1998, ECMH.
SW54 St Ives, common, AT (1934). Upton Towans, 1998, ECMH. Gwithian Green, 2004, PAG.
SW61 Lizard district, JHK. Ruan Pool, 2000, TH.
SW62 Goonhilly NNR, 1976, SMT.
SW64 Nancekuke, 1981, APF. Carn Entral Farm, Brea, 3.ii.2006, J Merrick.
SW71 Chynhalls, viii.1924, OWR. Brays Cott Pool, 1980, DAS.
SW72 Goonhilly, 1980/81, DAS.
SW73 Rosemanowes Quarry, 1984, JK Williams. Stithians Reservoir, 1988, SMT.
SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
SW83 Swanpool, 1970, RSK Barnes.
SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
SW86 White Cross Fisheries, 2000, TH.
SW87 St Merryn, 2000, TH.
SW96 Rosenannon Bog & Downs, 1997, Spalding & Haes (2000).
SW97 Polzeath, reared from larva, viii.ix.1919, GEH (Hutchinson, 1919).
SX04 Treveague Farm, Gorran Haven, 2000, TH.
SX05 Wheal Martyn, 1991-92, MD Bradford. Polmark Park, St Austell, viii.2000, AS & ECMH. Caerloggas Downs, Dryers Pit & Molinnas, Roche CP, 2005, JD.
SX06 Red Moor, 1978, CA Brind.
SX17 Colvannick Pond, 27.vi.2004, K Edwards
SX35 Crafhole, 2000, TH.

Notonecta maculata Fabricius

A Mediterranean species fairly common in southern England. Widespread in the county. In still waters and particularly associated with barren pools or artificial water bodies, such as concrete ponds and water troughs.

- SW64 Nancekuke, 1981, APF. Tolgus, 27.vii.1983, SMT.
SW71 Goonhilly, 1964, RTB. Croft Pascoe plantation, tracks, 4.x.2004, PAG.
SW73 Rosemanowes Quarry, 1984, JK Williams.
SW74 Bissoe, 20.x.1987, A Cory.
SW95 Burngullow Common, 21.iv.1973, JA Paton.
SW98 between Wadebridge and Port Isaac, viii.ix.1919, GEH (Hutchinson, 1919).

Notonecta obliqua Thunberg syn. *Notonecta furcata*

Widely distributed and common, especially in acid peaty pools on moorland.

- SW32 Roskestal, Land's End, 2000, TH.
SW33 Bostraze Farm, 2000, TH.
SW61 Lizard, ix.1926, JHK. Clahar Bridge, 1980 & 1981, DAS.
SW64 Nancekuke, 1981, APF.
SW71 Brays Cott Pool, 1980, DAS. Croft Pascoe Pool, Goonhilly Down, 25.vi.2003, BSN.
SW72 Goonhilly, 1964, RTB; 1980, DAS. Goonhilly Downs, 20.ix.1992, PK.
SW75 Ventongimps Moor, 1981, SMT.
SW84 Pencalenick Pond, 1950, FAT.
SW98 between Wadebridge and Port Isaac, viii.ix.1919, GEH (Hutchinson, 1919).
SX06 Red Moor, 1978, CA Brind.
SX17 South Penquite Farm, Blisland, in enriched peat pond, 26.ix.2005, KNAA.

Notonecta viridis Delcourt

A characteristic species of brackish water, but increasingly being found more widely. "It is the dominant species in West Cornwall" (Pearce & Walton, 1939); "the principal species between Wadebridge and Port Isaac" (Hutchinson, 1919).

- SV91 St Mary's, 1925-27, OWR.
- SW42 Clodgy Moor, 1967, SMT.
- SW53 Tregembo Pond, 1964; Phillack Towans, 1979, SMT.
- SW54 Gwithian Green, 19.ix.2004, PAG.
- SW61 Ruan Pool, 2000, TH.
- SW64 Nancekuke, 1981, APF.
- SW83 Swanpool, 1970, RSK Barnes.
- SW98 between Wadebridge and Port Isaac, *Notonecta halophila*, viii.ix.1919, GEH (Hutchinson, 1919).
- SX04 Treveague Farm, Gorran Haven, 2000, TH.
- SX17 Dozmary Pool, *Notonecta marmorea* Fab., 9.ix.1985, PK. South Penquite Farm, Blisland, in enriched peat pond, 26.ix.2005, KNAA.
- SX35 Crafhole, 2000, TH.
- SX36 Hepwell Bridge, Quethiock, 2000, TH.

Family PLEIDAE

Plea minutissima Leach syn. *Plea atomaria* syn. *Plea leachi* - Lesser water-boatman.

Common in south of England; in thick vegetation in rich lakes, ponds and ditches. Cornwall (Clark, 1906).

- SV81 Great Pool, Tresco, 8 in ditch at west end, 4.iv.2006, T Huxley (2006).
- SV91 St Mary's, 1925-27, OWR.
- SW54 Gwithian Stream, 21.ix.2004, S. Foster.
- SW61 Clahar Bridge, 1980/81, DS.
- SW62 Loe Pool, 2003, LRFDK.
- SW71 Lizard, 1948, ES Brown. Brays Cott Pool, 23.ix.1980, DAS. Gwendreath, 7.vi.1993, RS Cropper. Croft Pascoe Pool, 4.x.2004, PAG.
- SX05 Wheal Martyn, 29.v.1991 & 22.iv.1992, MD Bradford.
- SX17 South Penquite Farm, Blisland, one in peaty pond, 5.x.2005, S Foster. Colvannick Pond, 27.vi.2004, K Edwards
- SW54, 63, 85, SX15, 28, 29 and 46 in Huxley (2003) but details not with ERCCIS.
- SS20 Bude Marshes LNR, 29.vi.2004, K Edwards.

Series GERROMORPHA

Super-family HEBROIDEA

Family HEBRIDAE - Sphagnum bugs

Hebrus pusillus (Fallén) - **Nationally Scarce Category B & County Rare.**

Lives amongst dense vegetation on the surface of shallow water or at water margins, e.g. amongst *Sphagnum* in mires and at the margins of acid pools on lowland heaths, where it often occurs with the commoner and more widespread *H. ruficeps*. Occurs in the slumping clay cliffs of West Dorset. A characteristic species of ancient wetland across southern Britain.

- SW43 Zennor, swampy pool above village, v.1965, RTB.
- SW61 The Lizard, vi.1921 & in quantity, vi.1924, JH Keys.
- SX05 Carvear Moor, St Blaise, vii.1991, JL Gregory.
- SX17 Colvannick Pond, Bodmin Moor, 27.vi.2004, coll. Karen Edwards, det. SEB (pers. comm.).

Hebrus ruficeps Thomson – **County Rare**. Sphagnum bug.

Found amongst surface vegetation of acid waters. Patchily distributed throughout Britain.

SX05 Molinnis, Roche CP, 2005, JD.

SX06 Criggan, Roche CP, 2005, JD.

SX17 Bodmin Moor, on *Sphagnum* in wet hollows adjacent Colvannick Pond, 27.vi.2004, K. Edwards, confirmed by S. Brooke. South Penquite Farm, numerous amongst wet *Sphagnum* in mire, 23.viii.2005, KNAA.

Super-family HYDROMETROIDEA

Family HYDROMETRIDAE

Hydrometra stagnorum (L.) – Water measurer.

Widely distributed; amongst emergent vegetation at the edges of still and slowly flowing water.

SV81 Tresco, 1968 (Huxley, 2006).

SV91 St Mary's, 1919-1932, KG Blair & 1927, OWR.

SW32 Land's End district, *Limnobates*, ED Marquand (1844). Land's End, 20.vi.2001, BSN.

SW33 Porth Nanven, 1969, SMT.

SW43 Porthmeor Cove, 17.v.1989, SJG.

SW53 Common at Carbis Bay, AT (1934). Hayle River, 1976, SMT. Trevethoe, 1987, MD Hallett. Loggans Moor, 1995 & 2004, ECMH.

SW54 Common at St Ives, AT (1934). Gwithian, 1981, APF. Upton Towans, 1998, ECMH.

SW62 Gunwalloe Church Cove, 5.vi.1989, KNAA. Roscroggan, 1989, SP Jones. Church Cove, 19.ix.1992, PK. Loe Pool, 2003 KNAA & LRFDK.

SW63 Porkellis Moor, 1977, 1983, SP Jones.

SW64 Western Quarry Pool, 1977, E Jackson. Nancekuke, 1981, APF.

SW71 Kennack Sands, 1963, RTB. Poltesco, 1971, SMT. Brays Cott Pool, 1980, DAS. Erisey Barton, 1981, DAS. Halmill Pond, 1982, SMT. Traboe Cross, 1983, SP Jones. Croft Pascoe Pool, Goonhilly Down, 25.vi.2003, SEB.

SW72 Rosemullion Head, 1974, APF. Trevassack Quarry, 1981, DAS. Trebah, 1991, B Jackson.

SW75 The Kelseys, 10.vii.1979, KNAA. Chyverton, 1983, BE Jackson. Ventongimps Moor, 1997, Spalding & Haes (2000).

SW76 Porth Joke, 12.vi.1980, SMT.

SW83 Swanpool, 1970, RSK Barnes.

SW84 Pencalenick Pond, 1950, FA Turk. Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).

SW85 Metha Wood, Newlyn East, 1982, E Jackson.

SW94 Gorran Churchtown, 1961, RHL Disney.

SW95 Stepside, 1970, JA Paton.

SW96 Retallack, 1973, JA Paton.

SW97 Hawke's Wood, 1964, SMT.

SX05 Treffry Viaduct, 1988, SMT. Wheal Martyn, 1991-92, MD Bradford. Caerloggas Downs & Molinnis, Roche, 2005, JD

SX06 Red Moor, 1978, CA Brind. Retire Common, 1997, Spalding & Haes (2000). Criggan, Roche, 2005, JD.

SX07 Colquite Wood, River Camel, 1984, R Meyer.

SX08 Dannonchapel & Tregardock, 1995, AS & ECMH.

SX15 Pencarrow Head, 14.v.1990, KNAA.

SX16 Lanhydrock, along dry channels in riverside oakwood, 7.viii.1979, KNAA.

SX17 Colliford Lake, 22.vi.2003, BSN. Colvannick Pond, 27.vi.2004, K Edwards.

SX19 Valency Valley, 1964, R Murphy; 17.v.1990, KNAA.

SX26 Old Park Farm, Liskeard, 2000, TH.

SX29 Greena Moor, 23.vii.2003, KP-M.

SX37 Lezant, viii.1918, AVM (DA ms). Luckett, 1985, B Jackson.

SX39 Boyton, 1972, JA Paton.

SX46 Landulph, 1930, JH Adams. Cotehele, 21.vi.1989, KNAA.

Super-family GERROIDEA

Family VELIIDAE

[*Microvelia pygmaea* (Dufour) - **Nationally Scarce Category B; Unconfirmed Species.**

Semi-aquatic, living on the water surface of still or very slow flowing freshwaters, usually where there is a thick growth of emergent vegetation or extensive growth of overhanging marginal vegetation. Prior to 1939 all *Microvelia* were confused, so older records need confirmation.

Widespread across southern Britain and reported from Cornwall (Massee, 1955; Kirby, 1992) – reliability of Cornish records unclear at the moment however.

SW62 Helston, 17.v.1939, P Harwood (Brown, 1948).]

Microvelia reticulata (Burmeister) – **County Rare.**

A nationally widespread surface bug found in many types of still water amongst marginal vegetation; records sparse in far west of Britain but this species is the most widespread of the three.

SW71 Croft Pascoe Pool, Goonhilly Down, 25.vi.2003, BSN; 4.x.2004, PAG.

Velia caprai Tamanini - Water-cricket.

Widely distributed; usually on running water. Common (Thornley 1934) - as *V. currens*.

SV Isles of Scilly, 1925 & 1927, OWR.

SW32 Land's End district, *Velia currens*, ED Marquand (1884). Land's End, 20.vi.2001, BSN.

SW42 Carn Euny Well, 1992, E Jackson.

SW43 Rosemergy, 16.v.1989, KNAA.

SW53 Trevethoe, Lelant, 1987, BE Jackson.

SW54 Gwithian, 1981, APF.

SW61 Kynance, 1965, RTB. Clahar Bridge, 1981, DAS. Mullion Cliffs, 18.vi.2001, BSN.

SW62 Loe Pool, *Velia* sp. nymphs, 2003, LRFDK. Trewennack, 2006, KP-M.

SW64 Nancekuke, 1981, APF. Reskadinnick, 1981, BE Jackson.

SW72 Rosemullion, 1974, APF.

SW73 Swanpool, 1970, RSK Barnes; 1987, E Jackson. Rosemanowes, 1980, 1984, JK Williams.

SW84 Tregye, Devoran, 1982, SMT.

SW86 Whitecross Fisheries, 2000, TH.

SW94 Penare Farm, The Dodman, stream, Knight (2002).

SW96 Tregonetha, 2005, KP-M.

SX05 Wheal Martyn, 1991, 1992, MD Bradford. Dryers Pit, Molinnis & Caerloggas Downs, Roche CP, 2005, JD.

SX06 Bugle, 1981, APF. Halgavor Moor, Bodmin, 4.viii.2000, KP-M. Criggan, Roche CP, 2005, JD.

SX08 Trebarwith Strand, 4.ix.2000, KP-M.

SX15 Tregaminion, 2005, KP-M.

SX16 Hart Wood, 2006, KP-M.

SX17 Cardinham Water, 7.vi.2004, K Edwards.

SX18 Moorgate, 1966; Davidstow, 1965, FA Turk.

SX19 Valency Valley, 1964, R Murphy. Chipman Cliff, Dizzard, 13.vii.1989, KNAA.

SX26 Golitha Falls, 4.v.2000, KP-M.

SX39 Boyton, 1972, JA Paton.

SX45 Millbrook, 2005, KP-M.

SX46 Cotehele, 19.vi.1989, KNAA.

Family GERRIDAE - Pondskaters

Aquarius najas (DeGeer) – River skater.

Widely distributed, on running water and large bodies of still water. Reported in the county in Clark (1906).

- SW71 Erisey Barton, 31.vii.1980, 1.v.1981, DAS. Trerise, Poltesco Valley, 25.vi.2003, BSN.
- SW84 Pencalenick, 1950, H Wickison.
- SX05 Wheal Martyn, 16.vi.1991, MD Bradford.
- SX06 Respryn, R Fowey & Dunmere, R Camel, 2000; Laveddon, 9.ix.2000, KP-M.
- SX17 East of Devils Jump, 7.ix.2000; Palmers Bridge, R Fowey, 13.ix.2000, KP-M. South Penquite Farm, numerous on De Lank River, 23.viii.2005, KNAA.
- SX26 Golitha Falls, 8.viii.1999, PK; 2000, KP-M.
- SX27 Siblyback Dam, 22.viii.2000, KP-M.
- SX28 Hellescott Bridge, River Ottery, 12.xii.1981, APF. SW of Trerithick, 7.ix.2000, KP-M.
- SX37 Browda, 17.vi.2006, KP-M.
- SX47 River Tamar below Clitters Wood, Gunnislake, 29.ix.2004, coll. IJ Bennallick, det. KNAA.
- SS20 Bude Canal at Helebridge, 5.viii.2003, KP-M.
- SS21 Coombe Valley, 26.iv.1988, PJ Boon.

Gerris argentatus Schummel – **County Rare**. Little pond skater.

Widely distributed nationally but associated with fairly thin emergent vegetation close to the margins of base-rich waters, which restricts its occurrence in the county.

- SX45 Saltmills, Saltash, several in a meadow, 24.v. (GC Bignell in Clark, 1906).

Gerris gibbifer Schummel.

Widely distributed & common nationally; particularly frequent on acid still waters. Cornwall (Clark, 1906); clearly under-recorded.

- SW32 Land's End district, ED Marquand (1884).
- SW54 St Ives, AT (1934); 1965. Gwithian Towan, 23.vi.2003, BSN.
- SW61 Clahar Bridge, 22.ix.1980, DAS.
- SW71 Croft Pascoe Pool, 10.vi.1993, RS Cropper.
- SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
- SW96 Tregonetha, 27.vii.2002, KP-M.
- SX05 Dryers Pit & Molinnis, Roche CP, 2005, JD.
- SX06 Criggan, Roche CP, 2005, JD.
- SX17 Colvannick Pond, 27.vi.2004, K Edwards
- SX39 Boyton, 29.v.1972, JA Paton.

Gerris lacustris L. – Common pond skater.

Widely distributed & very common nationally; on a wide variety of waters. Cornwall (Clark, 1906).

- SW32 Land's End district, ED Marquand (1884). Land's End, 20.vi.2001, BSN.
- SW43 Carfury, Newmill, 1965, RTB.
- SW53 Tregonning Hill, 1965, SMT. Godolphin, 1965, RTB. Angarrack, 1990-94 & 2004; Phillack Pool, 1993; Phillack Towans, 1979 & 1998; Loggans Moor, 2004, ECMH.
- SW54 Upton Towans, 1998, ECMH. Gwithian Green, 2004, PAG.
- SW61 Clahar Bridge, 29.iv.1981, DAS.
- SW62 Loe Pool, 2003, LRFDK.
- SW63 Fox Grove, Clowance, 20.v.1991, BE Jackson.
- SW64 Bell Lake, 1968, SMT. Nancekuke, 1981 & 1983, APF. Tuckingmill/ South Crofty, 1993, GJ Dixon.
- SW71 Brays Cot Pool, 23.ix.1980, DAS; 6.vii.1983, MJ Morgan.
- SW72 Goonhilly, 1976, SMT; 3.viii.1981, DAS.
- SW74 Carn Marth, 1984, JU Tuck.
- SW75 Ventongimps Moor, 1981, SMT; 1997, Spalding & Haes (2000).
- SW83 Ladock Woods, 15.viii.1990, E Jackson.
- SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).

- SW96 Retallack, 1973, JA Paton. Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
- SX05 Wheal Martyn, 1991-93, MD Bradford. Polmark Park, St Austell, viii.2000, AS & ECMH. Dryers Pit, Molinnis & Caerloggas Downs, Roche CP, 2005, JD.
- SX06 Criggan, Roche CP, 2005, JD
- SX17 Colliford Lake, 22.vi.2003, BSN. South Penquite Farm, Blisland, in enriched peat pond, 26.ix.2005, KNAA. Colvannick Pond, 27.vi.2004, K Edwards
- SS21 Coombe Valley, Kilkhampton, 1988, PJ Boon.

Gerris odontogaster (Zetterstedt) – **County Rare**. Toothed pond skater.

Widely distributed nationally; on various types of still or gently flowing water and especially acid moorland waters. Cornwall (Clark, 1906), but few records from either Cornwall or Devon.

- SW33 Porth Nanven, 1969, RTB.
- SW73 Rosemanowes Quarry, 1984, JK Williams.

Gerris thoracicus Schummel

Widely distributed nationally, particularly on brackish water; ponds and slowly flowing water.

- SW53 Hayle, ix.1888, JEM (1889b).
- SW54 St Ives, ix.1888, JEM. (1889b)
- SW61 Clahar Bridge, 30.vii.1980, DAS.
- SW62 Marazion Marsh, vii.1925, OWR.
- SW64 Nancekuke, 1981, APF.
- SW71 Penhallick, 8.vi.1993, RS Cropper.
- SW72 Goonhilly, 2.viii.1980, DAS.
- SW84 Ruan Lanihorne Marsh, vi.1966, RE Stebbings (1971).
- SS20 Bude Marshes LNR, female, brackish ditch, 29.vi.2006, K Edwards.

Series LEPTOPODOMORPHA

Super-family SALDOIDEA

Family AEOPHILIDAE

Aepophilus bonnairei (Signoret) Shore crevice bug - **Nationally Scarce**.

A south-west Atlantic species living in rock crevices inter-tidally, in the *Fucus* zone between low spring and low neap levels. Discovered new to England by Frederick Smith at Polperro in 1879, and now known to be very widespread around the rocky southern Cornish coasts. Marquand (1887) noted it to be very local or rare in the Land's End district and about Penzance

- SW32 Sennen Cove, under stones partially buried in muddy sand at extreme low water, iv.1915, Tomlin (1915).
- SW42 Mousehole, 12.xi.1886 and two years previously, ED Marquand (1887).
- SW52 St Michael's Mount, one nymph, 1.ix.1985, SM Turk.
- SW61 The Lizard, ix.1927, JH Keys.
- SW62 Great Trigg Rocks, Porthleven, nymph, 16.ix.1977, SM Turk et al.
- SW71 Polpeor Cove, a small colony in shale rock in mid shore, 6.ix.1975, SM Turk.
- SW72 Bosahan Cove, 23.vi.1978, SM Turk et al. Prisk Cove, common in rock crevices, 1990-2005, PAG. Bream Cove, x.2005, PAG.
- SW83 Falmouth, 1897, GC Champion (1897a). Swanpool Pt, 13.xi.1977, SM Turk. Turnaware Point, one on reef, 25.v.1982, SM Turk.
- SX04 Chapel Point, one immature on rock surface, 6.iv.1981, SM Turk. Portmellon, 1998, ERCCIS; ix.1999, KP-M.
- SX15 Lansallos Cove, 2 & 13.viii.1999, PK.
- SX25 near Polperro, 1879, F Smith (Waterhouse, 1881). Looe, one, 1922, GCC.
- SX35 Batten, Keys (1918).

Family SALDIDAE Shorebugs

Chartoscirta cincta (Herrich-Schaeffer) - **County Scarce.**

A widespread insect nationally, found amongst reeds, rushes and other plants in marshes or at the sides of ponds, streams and rivers.

SW32 Land's End district, 1860s, JC Dale.

SW43 Marazion, Clark (1906).

SW53 St Erth, 1963, RTB.

SW61 Lizard, 1921, JHK.

SW62 Chymder Marsh, Gunwalloe, 19.v.1994, APF, det. P Kirby. Loe Pool, frequent around the shores, 20.v & 24.vi.2003, KNAA.

SW73 Trewedna Water Wood, 1983, BSBI.

SX17 South Penquite Farm, Blisland, amongst *Sphagnum* in mire and alongside pond in rush-pasture, 2005, KNAA.

Chartoscirta cocksi (Curtis) - **County Rare.**

Usually found in *Sphagnum* and in grass tussocks on bogs.

SW61 The Lizard, 1920, JHK.

SX06 Criggan, Roche CP, 2005, JD.

Halosalda lateralis (Fallén) - **County Rare/ Locally Extinct.**

A salt marsh species favouring silty mud amongst the shorter chenopods. Apparently widespread in 1888, but not seen in Cornwall for over 100 years and presumed to be extinct locally.

SV Isles of Scilly: ix.1888, JEM (Mason, 1889).

SW53 Hayle district, ix.1888, JEM (1889b). Lelant Harbour, plentiful on mud covered by the spring tides for more than two hours at a time, ix.1888, JEM (1889a).

SW54 St Ives district, ix.1888, JEM (1889b).

SW83 Falmouth (Clark, 1906).

Saldula c-album (Fieber) syn. *Saldula stellata* – **County Rare.**

Predominantly a northern and western species, found alongside gravelly and bouldery margins of rivers and streams.

SW32 Land's End district, ED Marquand (1884).

SW86 Gannel Estuary, saltmarsh, 10.vii.1979, KNAA.

SX08 St Teath, 1.ix.1919, GEH.

Saldula orthochila (Fieber) – **County Rare.**

A dry ground species, occurring on heaths, dunes, dry fields, etc, where the vegetation is low and sparse. '*Acanthia orthochila*' in Thornley (1934).

SW32 Gwynver, 1964, RTB.

SW43 Penzance, Billups (Saunders 1892). Zennor, viii.1924, OWR.

SW53 Carbis Bay & Lelant, AT (1934).

SW54 St Ives, AT (1934).

SW72 Goonhilly Downs, AT (1934). Goonhilly, 1981, DAS.

SX06 Nanstallon, J Holyoake (Thornley 1934).

SX35 Tregantle Down, Whitsand Bay, viii.1875, JJW (Walker, 1875).

Saldula pallipes (Fabricius) - **County Rare.**

The separation of *S. pallipes* from *S. palustris* (Douglas) is difficult, and the two have been regarded as the same species. The former is principally an inland species, found at flooded gravel workings, and pools on sandy clays and sandy gravels, although it does occasionally turn up in brackish habitats. The latter is essentially found on estuarine mud-flats. The species pair was reported from the county by Masee (1955) although Bedwell (1945) says *S. pallipes* but not *S. palustris*.

SV Isles of Scilly, x.1890, CW Dale (1890).

SW53 Hayle district, ix.1888, JEM (1889b).

SW54 St Ives district, '*Salda pallipes*', ix.1888, JEM (1889b).

SW61 Kynance, '*Saldula pallipes*', 1963, RTB.

SW86 Gannel Estuary, '*Saldula palustris*', 9.vii.1983, R Crossley.

SX45 Wivelscombe Creek, '*A. pallipes*', 10.viii.1915, JHK.

Saldula pilosella (Thomson) - **County Rare.**

In estuarine saltmarshes, brackish pools on raised beaches, and certain freshwater marshes. Reported in the county by Masee (1955) but not Bedwell (1945).

SW53 St Erth, 1963, RTB.

Saldula saltatoria (L.) - Common in all sorts of lowland waterside situation, wherever there is firm mud.

'*Acanthia saltatoria*' in Thornley (1934). 'Cornwall', CW Dale.

SV81 Tresco, 1925 & 1927, OWR; abundant around the shores of the Abbey pond, 1964/65, GE Woodroffe (1966).

SV91 St Mary's, far from margin of tides, did not affect mud flats, JEM (Mason, 1889). St Mary's, 14-18.vi.1987, PK.

SW32 Land's End district, ED Marquand (1884).

SW33 Cape Cornwall, 15.v.1989, KNAA. Kenidjack, 1995, AS & ECMH.

SW43 Zennor, viii.1924, OWR. Bosigran, 16.v.1989, KNAA.

SW53 Hayle district, ix.1888, JEM (1889b). Lelant Harbour, ix. 1888, JEM (Mason, 1889a). St Erth, 1962, RTB.

SW54 St Ives district, ix.188, JEM (1889b). Gwithian Towan, 23.vi.2003, BSN.

SW61 Clahar Bridge, 1980 & 1981; Mullion, 1981, DAS. Predannack, 1981, DAS; 1989, KNAA. Mullion Cliffs, 18.vi.2001, BSN.

SW62 Porthleven, Sargent (1968). The Loe, 19.vi.2001, BSN; Loe Pool, frequent around the shores, 20.v. & 24.vi.2003, KNAA.

SW71 Kennack Sands, 1960, RTB. Erisey Barton, 1981; Golgotham, 1981; Gwendreath, 1981; Brays Cott Pool, 1981, DAS. Coverack, 20.ix.1992, PK.

SW72 Goonhilly, 1981, DAS; 2006, PAG. Trevassack, 1981, DAS. Prisk Cove, 1995-2004, PAG.

SW73 Stithians Down, 26.vii.2006, PAG.

SW75 Holywell, streamside, 30.v.1989, KNAA. Ventongimps Moor, 1997, Spalding & Haes (2000).

SW62 Penrose, 6.vi.1989, KNAA.

SW76 Cubert, 30.v.1989, KNAA.

SW85 Newlyn Downs, 1997, Spalding & Haes (2000).

SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).

SX05 Dryers Pit, Roche CP, 2005, JD.

SX06 Lanhydrock, 27.vi.1989, KNAA. Dunmere Wood, 28.vi.2006, PAG.

SX08 River Camel, near St Teath, ix.1919, GEH. Dannonchapel & Tregardock, 1995, AS & ECMH.

SX16 Fowey River, above Respryn Bridge, Lanhydrock, 27.vi.1989, KNAA.

SX17 Colliford Lake, 22.vi.2003, BSN. South Penquite Farm, Blisland, var. *marginella*, 13.vi.2005, KNAA.

SX19 Valency Valley, off oak, 17.v.1990, KNAA.

SX25 Hore Point, 22.vi.1989, KNAA.

SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.

SX36 Cadsonbury Woods, 13.vii.2001, KNAA.

SX45 Near Ince Castle, Saltash, vi.1915, JHK.

SS11 Tidna Valley, 11.ix.1985, PK.

SS21 Welcombe & Marsland Reserve, 1970, BSBI. Duckpool, 6.vi.1989, KNAA.

Salda littoralis (Linnaeus) – **County Scarce.**

A coastal species in the south but more widespread in the north - a northern European species. A speciality of well-vegetated silty water margins.

SV81 Tresco, vi.1961, KGV Smith (1963).

SW45 Wivelscombe Creek near Saltash, pre-1906, JHK. Antony, 1969, RTB.

SW53 Hayle Saltmarsh, 4.vii.1983, KNAA.

SW83 Falmouth (Clark, 1906).

SW84 Trelonk, mudflats of River Fal, 4.vii.1979, KNAA.

Series CIMICOMORPHA

Super-family TINGOIDEA

Family TINGIDAE Lacebugs

Acalypta brunnea (Germar) - **County Rare**.

Occurs amongst moss on the base of tree trunks or on decaying stumps.

SW72 Gweek Oak Wood, ix.1951, AMM (1953).

SX18 Camelford, viii.1908, EA Butler coll. (BM) checked by WE China.

SX19 Millook (Clark, 1906).

SS21 Coombe Valley and Kilkhampton (Clark, 1906).

Acalypta carinata (Panzer) - **County Rare/ Locally Extinct**.

Lives amongst mosses, especially where growing on rotting logs. Cornwall (Butler, 1923).

Acalypta parvula (Fallén)

The smallest and commonest *Acalypta*, occurring amongst short mosses generally. The 1967 Isles of Scilly records "were always on the underside of pieces of driftwood lying on a dense sward of thrift near the littoral limit of terrestrial vegetation" (Woodroffe, 1968).

SV80 St Agnes & Gugh, 1967, GEW (1968).

SV81 Bryher & Tresco, 1967, GEW (1968).

SV91 St Mary's & St Martin's, including White Island, 1967, GEW (1968); 14-18.vi.1987, PK.

SW32 "Land's End district", *Orthostira obscura*, ED Marquand (1884). Whitesand Bay, 19.vi.1987, PK.

SW42 Paul, v.1965, RTB.

SW43 Penzance district, EDM (Clark, 1906).

SW44 Treveal Cliff, 29.ix.1995, PAG.

SW52 Cudden Point, 26.x.1997, PJH.

SW53 Lelant Towans, 19.viii.1924, OWR.

SW61 Lizard Town, ix.1951, AM Masee (1953). Caerthillian Cove, 3.ix.1970, MGM. Predannack North Cliff, 19.ix.1998, & South Cliff, 23.ix.1998, PJH. Kynance Cove, ix.1951, AM Masee (1953); 2.ix.1970, MGM; 27.x.1997, 22.ix.1998, PJH.

SW72 Porthallow, 23.ix.1992, PK.

SW82 Porthoustock, 23.ix.1992, PK.

SX05 Dryers Pit, Roche CP, 2005, JD.

SX15 Pencarrow Head, Lanteglos, 29.viii.2006, KNAA.

SX17 South Penquite Farm, amongst dry acid grassland, 23.viii.2005, KNAA.

SX18 Camelford, viii.1908, EA Butler coll. (BM) *teste* WE China.

SX35 Tregantle, JH Keys.

SS11 Tidna Valley, 11.ix.1985, PK.

SS21 Duck Pool, 11.ix.1985, PK.

Agramma laetum (Fallén) - **County Rare/ Locally Extinct**.

Probably associated with sedges, woodrushes and rushes, and occurs on salt marshes, limestone grasslands, in damp woodland, and elsewhere.

SX45 Wivelscombe near Saltash, as *Serenthia laeta*, vi.1915, in quantity, JH Keys.

SX46 Landulph & environs, 1930, JH Adams.

Campylosteira verna (Fallén) - **County Rare**.

Lives amongst moss on hot dry slopes, usually calcareous grassland, across southern England.

Discovered in the county only in 1985.

SW62 Porthleven, at roots of thyme, 28.xii.1985, APF.

SW76 West Pentire Farm, Crantock, plentiful on undersides of rocks resting on soil in arable fields, 31.viii.2006, KNAA.

Catoplatus fabricii (Stål) – **Nationally Scarce & County Rare.**

Associated with ox-eye daisy in warm, well-drained and sunny sites, and usually in short or sparse vegetation on long-established pastures. Only known in the county from one record on the Lizard peninsula.

SW61 Kynance Cove, 1965, RTB.

Derephysia foliacea (Fallén) - Ivy lacebug.

A local species nationally, generally found in dry, low-growing vegetation. Recent recording has demonstrated that it is very widespread on ivy in Cornwall.

SW32 Porthgwarra, ivy, viii.1997 & 20.viii.2006; Porthcurno, 20.viii.2006; Pordenack Point & Gwynver, 10.viii.2006, PAG.

SW42 Carn Mellyn, 19.viii. & Porthguarnon Cove, 20.viii.2006, PAG.

SW43 Kenegie, vii.1969, RTB.

SW53 Hayle district, ix.1888, JE Mason (1889b). Venton Farm, 19.viii.2006, PAG.

SW54 St Ives district, ix.1888, JE Mason (1889b).

SW61 Lizard Town, ix.1951, AM Masee (1953). Kynance, 17.ix.1992, PK & 24.viii.2006, PAG. Predannack Wollas & Gew Graze, 8.viii.2006, PAG.

SW62 Porthleven, HSB (1968); 25.ix.1992, PK. Loe Bar, 15.viii.2006, PAG.

SW71 Black Head & north of Pedn-myin, from ivy-covered rocks, 2.viii.2005 & 27.vii.2006, PAG.

SW72 Gillan Harbour, 4.viii.2006, PAG.

SW73 Gorrangorras Creek, Penryn, 17.viii.2006, PAG.

SW93 Nare Head, beaten from ivy-covered rock face, 14.vii.2004, KNAA.

SW97 Harbour Cove, Padstow, large numbers, 26.viii.2006, PAG.

SX15 Lantic Bay, 7 & 11.viii.1999, PK.

SX19 Peters Wood, v.1964, R Murphy.

SX37 Lezant, viii.1919, AVM.

Dictyla convergens (Herrich-Schaeffer) syn. *Dictyla humuli* - **County Rare/ Locally Extinct.**

Host-plant is water forget-me-not, and adults overwinter in sedge tussocks and litter.

SW62 Helston and Loe Pool, *Monanthia humuli*, vi.1919, JH Keys.

Dictyonota strichnocera Fieber - Gorse lacebug. **County Scarce.**

Common on gorse and broom nationally, but surprisingly scarce in the county. It appears to mainly be a heathland species. The Liskeard record may need to be treated with caution.

SW71 Croft Pascoe, broom in plantation, 21.vii.2006, PAG.

SW75 Newdowns Head, 30.vi.1989, SJG.

SX08 Dannonchapel & Tregardock, 1995, AS & ECMH.

SX17 Colliford Lake, 17.vi.2001, BSN.

SX26 Liskeard, "on firs and pines" (Clark, 1906).

SX28 Lewannick, viii.1925, AVM (DA ms).

SX36 Cadsonbury Down, gorse heath, late nymph, 22.vi.1989, KNAA.

SX37 Lezant, viii.1919, AVM.

Kalama tricornis (Schrank) - **County Scarce.**

Lives in dry, low-growing vegetation, and is thought to be associated with ants.

SW32 Sennen Cove, three, vii.1928, JHK; ix.1951, AMM (1953). North of Aire Point, 20.viii.2005, PAG.

SW54 Upton Towans, 9.vii.1983, AE Stubbs; 8.vii.2006, J. Widgery.

SW61 The Lizard, vi.1919, JH Keys. Lizard Town & Kynance Cove, ix.1951, AM Masee (1953).

SW62 Porthleven, Sargent (1968).

SW64 Duchy College, Rosewarne, 13.viii.1976, S Parker; 21.v. & 5.vi.1984, A Riley (via ERCCIS).

SW97 Pentireglaze, in sparse sward of south-facing pasture, 31.viii.2006, KNAA.

SW98 Port Quin valley, wind-blown sand grassland, 31.viii.2006, KNAA.

SX25 Hore Point, 27.vi.1989, KNAA.

SX35 Tregantle, two, x.1911, JHK.

Lasiacantha capucina (Germar) - Thyme lacebug. **Red Data Book Category 3 (Rare).**

First discovered in Britain by JH Keys in June 1919 on The Lizard (Butler, 1919), and for the next 30 years or so was only known from Kynance Cove and Sennen Cove (Massee, 1953). In 1989 it was found to be present on every cliff section examined between Loe Pool and Beagles Point, wherever herb-rich grassland and grass heath was developed **and** where rocky outcrops were covered in mats of thyme. Where a lack of grazing had led to coarsening of the grassland and scrub development, covering rock faces, then none were found. Conversely none were found in a heavily grazed area (Alexander & Grove, 1991). Widespread and common over much of central Europe. The Cornish population is flightless, so a poor coloniser, and assumed to be relicts from an interglacial period. Southwood (1956) suggests the Cornish population may be a distinct subspecies.

SW32 Sennen Cove, ix.1951, AMM (1953). Boscregan Cliff, 5.v.1999, KNAA. Lower Bosistow Cliff, 26.iii.2004, KNAA.

SW52 Rinsey Head, 26.x.1997, PJH; 23 & 24.v.1999, PJH.

SW61 "Lizard", vi.1919 & 1920, JHK (Keys, 1919); 1.x.1932, EC Bedwell; "still abundant on the Lizard cliffs" (Thomas, 1956). Lizard Point, 15.vi.1989, KNAA. Kynance Cove, ix.1951, AMM (1953); vii.1965, RTB; 27.x.1997 & 22.ix.1998, PJH; Kynance Cliff, 29.v.1989, KNAA. Caerthillian Cove, 21.vii.1970. MGM. Lower Predannack Cliff, 21.v. & 14.vi.1989, KNAA; 20.ix.1992, PK; 18.iv.1998, 7.vi.2000, KNAA. Mullion Cliff, 9.vii.1989, KNAA. Holestrow, 18.v.1994, AP Foster. Gew-graze, 12.v.1996, KNAA. Mullion Cliffs, 18.vi.2001, BSN; 13.vii.2006, J. Widgery.

SW62 Chyvarloe Cliffs, 7.vi.1989, KNAA. Chyanvounder Cliff, 7.vi.1989, SJG.

SW64 Chapel Porth to Porth Towan, 23.v.1990, SJG.

SW71 Beagles Point, 28.v.1989, KNAA.

SW93 Nare Head, 4.vii.1989, KNAA; 14.vii.2004, PAG & KNAA.

Physatocheila smreczynskii China - **Nationally Scarce & County Rare.**

Found on old lichen-covered apple trees in old orchards and on crab apple in open woodlands across southern England.

SX15 Boconnoc Park, old orchard apple trees, 20.v.1990, KNAA.

SX46 Haye Farm, St Dominick, frequent on old orchard apple trees, 20.vii.2006, KNAA.

Physatocheila dumetorum (Herrich-Schaeffer)

Found on hawthorn, whitebeam and blackthorn (sloe) across southern Britain. Cornwall (Clark, 1906); commonly all along the coast at Padstow on lichen-covered sloe (Woodroffe, 1958), and proving to be very widespread in the county.

SW32 Tregiffian Vean Cliff, 10.viii.2006; Porth Chapel & Porthgwarra, 20.viii.2006, PAG.

SW52 Hoe Point to Pestreath, blackthorn, 15.viii.2005 & 19.viii.2006, PAG.

SW61 Kynance Cove, 24.viii.2006, PAG.

SW62 Chyvarloe, 15.viii.2006, PAG.

SW71 Lizard, 1960, RTB. Erisey Barton, 1.v.1981, DS. Chynhalls Point, 16.v.1996, APF. Cadgwith, to east, 4.viii.2006, PAG. Predannack Wollas, large numbers, 8.viii.2006, PAG.

SW72 Gillan Harbour, 4.viii.2006, PAG. Mawnan Church to Porth Saxon, 29.viii.2006, PAG.

SW76 Pentire Point West, Crantock, on blackthorn, 7.viii.2006, KNAA.

SW83 Penance Point, Swanpool, 28.vii.2006 & between Trefusis Point & Mylor Harbour, 6.viii.2006, PAG.

SW93 Gorrangorras Creek, Penryn, large numbers on sloe, 17.viii.2006, PAG.

SW97 Daymer Bay, 9.ix.1985, PK.

SW97 Lundy Hole, St Minver Highlands, abundant on lichen-covered sloe, 3.viii.2006, KNAA. Harbour Cove, Padstow, huge population, 26.viii.2006, PAG.

SW98 Port Quin valley, on streamside hawthorn and blackthorn, 31.viii.2006, KNAA.

SX07 Allen Valley, lichen-covered sloe, vii.1957, GEW (1958).

SX15 Frogmore Farm, 26.viii.2006; St Saviour's Point & Pencarrow Head, Lanteglos, 29.viii.2006, KNAA.

SX19 Bynorth Cliff, hawthorn, 8.vi.2000, KNAA.

SX46 Haye Farm, St Dominick, 20.vii.2006, KNAA.

Tingis ampliata (Herrich-Schaeffer) - **County Rare.**

Creeping thistle lacebug. One of the commonest lacebugs in southern England, living on creeping thistle, but remarkably few local records. Cornwall (Clark, 1906) but details not recorded.

SW33 Kenidjack, 1995, AS & ECMH.

SW54 Upton Towans, 1998 & 2004, ECMH.

SW61 Gew Graze, 20.vi.1998, PAG.

SW81 Lowland Point, 17.vi.2004, PAG.

SW87 Park Head, 1996, ECMH.

SX06 Polbrock, 20.vii.2006, KP-M.

Tingis cardui (L.) - Spear thistle lacebug.

Common and widespread nationally, on spear thistle *Cirsium vulgare*; also known from musk and marsh thistles.

SV81 Tresco, vii.1897, GCC (1897).

SV91 Tean, "on *Cirsium vulgare*", 1964/65, GE Woodroffe (1966a).

SW32 Land's End district, as '*Monanthia cardui*', ED Marquand (1884).

SW33 Kenidjack, 1995, AS & ECMH; 30.iv.2000, KNAA. Portheras Cove, on marsh thistle, 6.vi.2005, PAG.

SW43 Rosewall Hill, 5.vi.2000, KNAA.

SW44 Carn Naun Point, 29.v.1995, PAG.

SW52 Rinsey, 6.viii.2004, KP-M.

SW53 Carbis Bay, common on thistles, AT (1934). St Erth, vi.1963, RTB.

SW54 Near St Ives, from a hedge of mixed vegetation, ix.1888, JEM (1889b). St Ives, common on thistles, AT (1934). Upton Towans, 1998 & 2004, ECMH. Nanterrow, Gwithian, 4.vi.2005, KNAA.

SW61 Lizard Town, ix.1951, AM Masee (1953). Caerthillian Cove, 3.vii.1970, MGM. Clahar Bridge, 3.vi.1981, DS. Holestrow, 18.v.1994, APF. Gew Graze, 22.v.2003, PAG.

SW71 Corgerrick Farm, Poltesco, 16.v.1994, APF.

SW76 West Pentire Farm, Crantock, one swept from arable fields, 31.viii.2006, KNAA.

SW85 Ennis Farm, 2006, KP-M.

SW95 Carnwinnick Farm, Trenowth, 28.v.2000, KNAA.

SW97 Harbour Cove, Padstow, 26.viii.2006, PAG.

SX06 Polbrock, 2006, KP-M.

SX08 Dannonchapel & Tregardock, 1995, AS & ECMH.

SX15 Polruan, v.1994, APF.

SX17 South Penquite Farm, Blisland, 25.viii.2005, KNAA.

SX27 Wimalford, 2006, KP-M.

SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.

SX35 Bonvalva, 2006, KP-M.

SX36 Berry Farm, 2006, KP-M.

SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.

SX46 Moditonham Quay, 2006, KP-M.

SS20 Sandy Mouth, cliffs to south, 12.vii.2006, KNAA.

Super-family MIROIDEA

Family MICROPHYSIDAE Minute bugs

Loricula elegantula (Baerensprung)

Throughout Britain, either associated with i) lichens encrusting tree-trunks, large stones and old stone walls, especially *Parmelia*, ii) fruiting bodies of wood-rotting fungi, or iii) dry litter of gorse, etc.

SW61 Predannack, female from *Ulex gallii* cushion in pasture, 6.vi.2000, KNAA.

SW84 Malpas (Clark, 1906).

SW93 The Straythe, Caragloose, 11.vii.2001, KNAA.

- SX06 Red Moor, beaten from lichen-covered blackthorn & off oak, 8.vii.2001, KNAA.
 SX15 Penpoll Creek, beaten from oak branches, 19.viii.2002, KNAA.
 SX19 Dizzard Oakwood, blackthorn & elder, 10.vii.2001, KNAA.
 SX26 Liskeard (Clark, 1906).
 SX46 Botus Fleming, beaten out of Whitethorn hedge, GC Bignell (Clark, 1906). Cotehele Estate, Calstock & St Dominick, widely on old open-grown trees, vii.2006, KNAA.
 SS21 Stowe Barton, on dead aerial branches of oak in old avenue, 13.vii.2006, KNAA.

Myrmedobia coleoptrata (Fallén) - **Nationally Scarce & County Rare.**

Known upcountry from beneath bark on various trees, especially spruce, and occasionally in tufts of moss around the trunk base. Discovered in Cornwall by Keys in 1922, where it is found on the rocky coasts of the Lizard.

- SW61 The Lizard, five, ix.1922, JHK, det. EAB (Keys, 1923). Mullion Cliff, under thyme mat on rock outcrop, 9.vii.1989, KNAA. Kynance Cove, 22.ix.1998, PJH.

Myrmedobia bedwelli China

Only two specimens of this bug have ever been found; they were discovered by E.C. Bedwell at the Lizard in autumn 1932 and described new to science (China, 1933). Subsequent searches have failed to rediscover it. Treated as a subspecies of *M. coleoptrata* by Kirby (1992).

- SW61 The Lizard, 2f, at the roots of wild thyme along the cliffs, 1.x.1932, ECB (China, 1933).

Myrmedobia distinguenda Reuter - **County Rare/ Locally Extinct.**

Associated with old lichen-covered conifer trees, especially firs. The larvae live amongst the dead needles below the trees, while the adults ascend onto the lower branches where they touch the ground. Also found in gorse litter. Cornwall (Butler, 1923).

Myrmedobia exilis (Fallén) syn. *Myrmedobia tenella* (Zetterstedt) – **County Rare.**

Widespread nationally. The larvae develop amongst moss in open clearings on acid or sandy soils, while the adult females feed on aphids on conifers.

- SV91 St Mary's, 14-18.vi.1987, PK.

Myrmedobia inconspicua (Douglas & Scott) - **Nationally Scarce & County Scarce.**

A coastal species, at the roots of grass on sandhills and on lichen-covered boulders on cliffs.

Woodroffe (1966a) reported the apterous females around the roots of *Erodium cicutarium* colonising small patches of loose sand, caused by rabbits, in the consolidated dune grassland. The winged males occurred in the same areas but in the open, making short flights among the scanty vegetation.

- SV81 Tresco, vii.1897, GCC (1897). Bryher, 1964/65, GE Woodroffe (1966a).
 SV91 St Martin's, 1964/65, GE Woodroffe (1966a). Garrison, St Mary's, 14-16.vi.1987, PK.
 SW32 Treryn Dinas, moving across thyme patch on outcrop, 7.v.1999, KNAA. Logan Rock, one, 25.v.1999, PJH.
 SW61 Kynance Cove, 1955, AM Masee.

Family MIRIDAE Capsid bugs

Bryocoris pteridis (Fallén) - Fernbug.

Occurs in damp shady woodlands, feeding on lady fern and male fern in particular. Widespread in Cornwall but very patchy distribution.

- SW32 Land's End district, ED Marquand (1884).
 SW33 Portheras Cove, viii.1932, WE China.
 SW42 St Buryan, 1963, RTB.
 SW53 Carbis Bay, vii.1932, AT (1934). Steeple Wood & Trelyon Downs, 21.vii.1998, AS & ECMH.
 SW62 Helston, 1965, RTB.
 SW73 Kennal Vale, 30.ix.2002, PAG.
 SW95 Crowhill Valley, Trenowth, 12.vii.2001, KNAA.
 SX04 Ropehaven Cliffs, 12.vii.2001, KNAA.
 SX06 Red Moor, 8.vii.2001, KNAA.
 SX08 Rocky Valley, 22.viii.2002, KNAA.
 SX15 East & West Coombes, Lansallos, 22 & 26.viii.2006, KNAA.

- SX17 South Penquite Farm, Blisland, wooded river valley, 2005, KNAA.
 SX19 Bynorth Cliff, 8.vi.2000, KNAA. Millook Woods, 2005, PAG.
 SX36 Cadsonbury Woods, 13.vii.2001, KNAA.
 SX46 Cotehele, 1989, KNAA. Cotehele Wood, 17.vii.2006; Smeaton, St Dominick, 20.vii.2006, KNAA.
 SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.

Monalocoris filicis (L.) - Bracken bug.

Common on bracken and other ferns nationally and in Cornwall, feeding on the sporangia. Common (Thornley, 1934).

- SW33 Portheras Cove, viii.1932, WE China. Lower Bosweddan Cliff, lady fern, 15.v.1989; Kenidjack Cliff, 13.v.1996, KNAA; 13.vii.2006, PAG..
 SW43 Trevean Cliff, 17.v.1989; Boswednack, 22.v.1989, KNAA. Foage Farm, 23.v.1989, SJG.
 SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, AT (1934).
 SW54 St Ives district, ix.1888, JEM (1889b). St Ives, AT (1934).
 SW61 Mullion Cove village, 20.vi.2001, BSN.
 SW62 Porthleven, Sargent (1968). Penrose, 7.vi.1989, 15.v.1996, KNAA.
 SW71 Main Dale, 6.vii.1981, DAS.
 SW72 Manaccan, 1962, RTB. Goonhilly, 1981, DAS. Tremayne Woods, 1989, KNAA.
 SW73 Argal Reservoir, 2005, PAG.
 SW74 United Downs, v.1998, AS & ECMH. Carnon Valley, 16.vii.2006, PAG.
 SW87 Park Head, 1996, ECMH.
 SX03 Dodman, 28.vi.1989, KNAA; 2005, PAG.
 SX06 Red Moor, 8.vii.2001, KNAA. Criggan, Roche CP, 2005, JD.
 SX08 Rocky Valley, 22.viii.2002, KNAA.
 SX15 Ethy Woods, 13.vii.2001; Penpoll Creek, 19.viii.2002, KNAA. Carne Farm, Penpoll, 19.vii.2002, JF.
 SX16 Cabilla Woods, 2002, PAG.
 SX17 South Penquite Farm, 23.viii.2005, KNAA.
 SX27 Trebartha, 1.vii.1989, KNAA.
 SX36 Cadsonbury, 22.vi.1989, KNAA.
 SX46 Cotehele, 19.vi.1989, KNAA. Cotehele Wood, 17.vii.2006, KNAA.
 SS21 Coombe Valley, 6.vii.1989, 13.vii.2006, KNAA.

Campyloneura virgula (Herrich-Schäffer)

Widespread nationally, on a variety of broad-leaved trees, especially hawthorn, hazel and oak.

Recorded in Clark (1906) but apparently very localised in the west of the county, more widespread in the east.

- SW53 St Erth, 1963, RTB.
 SW72 Gweek, 1962, RTB.
 SW73 Gorrangorras Creek, Penryn, on ivy, 17.viii.2006, PAG.
 SW83 Pendennis Point, 1.viii.2006, PAG.
 SX06 Dunmere Wood, 13.vii.2001, KNAA.
 SX15 Ethy Woods, 13.vii.2001, KNAA.
 SX16 Lanhydrock Estate, on alder, 14.viii.2006, PAG.
 SX19 The Dizzard, 13.vii.1989, KNAA.
 SX28 Innyside woodland, Penheale, 10.vii.2001, KNAA. Tregear Down, 10.vii.2001, KNAA.
 SX36 Cadsonbury Woods, 13.vii.2001, KNAA.
 SX45 Saltash, abundant from privet in bloom, vii.1900, JHK.
 SX46 Cotehele Wood, 17.vii.2006; Smeaton, St Dominick, 20.vii.2006, KNAA.

Dicyphus stachydis Reuter – **County Rare**.

Widespread across much of Britain on hedge woundwort but thins out around the Cornwall/Devon border.

- SS21 Coombe Wood, Stowe Barton, 13.vii.2006, KNAA.

Dicyphus annulatus (Wolff) – **County Scarce.**

Widespread nationally on restharrow, especially in sandy coastal areas. Discovered in the county only in 1985, which suggest it may be truly scarce in the county despite its habitat being so widespread.

- SW61 Poldhu Cove, 21.vi.2001, BSN.
- SX05 Par, 16.viii.2001, KP-M.
- SX15 Parson's Cove, Lansallos, windblown sand on cliffs, 22.viii.2006, KNAA.
- SS21 Duckpool, 11.ix.1985, PK.

Dicyphus globulifer (Fallén)

Widespread nationally on red and white campion in ungrazed woods, hedgerows and fields. Cornwall (Clark, 1906), although apparently rather local.

- SW53 St Erth, 1963, RTB.
- SW61 Mullion Cliffs & Poldhu Cove, 21.vi.2001, BSN.
- SW62 Porthleven, Sargent (1968). Loe Bar, south end, 14.ix.1992, PK.
- SW71 Housel Bay, 1960, RTB. Poltesco East, 20.ix.1998; Chynhalls Point, 21.ix.1998, PJH. Poltesco Cove, 2004, PAG. Porthbear Cove, 2004, PAG.
- SW76 West Pentire Farm, 11.vii.2003, KNAA.
- SX05 Dryers Pit, Mollinis & Caerloggas Downs, Roche CP, 2005, JD.
- SX08 Tintagel, viii.1908, EAB. Bossiney, 22.viii.2002, KNAA.
- SX15 Lansallos, 14.v.1990, KNAA. Carne Farm, Lanteglos, 26.viii.2006, KNAA.
- SX25 Hore Point, 22.vi.1989, KNAA.

Dicyphus constrictus (Boheman)

Local, but widespread, mainly on hedge woundwort, hemp nettle, white campion and red campion. Its world distribution is Boreo-alpine; although widespread in Britain it is elsewhere confined to more boreal and alpine regions of Europe. Although few Cornish records historically, it has recently proven relatively easy to find if sought specifically and would appear to be widespread in the county. The nationally much more widespread *D. stachydis* Sahlberg J. appears to be absent from the county (Woodroffe, 1958).

- SW53 St Erth, two, viii.1930, AT (1934).
- SW62 Bochym Manor, 13.ix.1992, PK.
- SW95 Crowhill Valley, Trenowth, 12.vii.2001, KNAA.
- SX04 Ropehaven Cliffs, 12.vii.2001, KNAA.
- SX06 Lanhydrock, one, ix.1930, AT (1934).
- SX08 Tintagel, viii.1908, EAB.
- SX15 Lansallos West Coombe, 22.viii.2006 & Churchtown Farm, Lanteglos, 29.viii.2006, KNAA.
- SX28 Innyside woodland, Penheale, 10.vii.2001, KNAA.
- SX46 Smeaton, St Dominick, 20.vii.2006, KNAA.
- SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.

Dicyphus epilobii Reuter

An abundant species nationally, on great hairy willow-herb. First reported in the county by Butler (1923); it appears to have been overlooked.

- SW53 St Erth, viii.1928, AT (1934); 1962, RTB.
- SW61 Clahar Bridge, 28.vii.1980 & 1.viii.1981; Mullion, 28.vii.1981, DAS.
- SW62 Porthleven, Sargent (1968).
- SW75 Ventongimps Moor, 1997, Spalding & Haes (2000). Porth Joke, Cubert, 7.viii.2006, KNAA.
- SW87 Park Head, 1996, ECMH.
- SW97 Trevathan, 27.vii.2006, KP-M.
- SX06 Polbrock, 20.vii.2006, KP-M.
- SX07 St Kew Highway, 27.vii.2006, KP-M.
- SX35 Bonvalva, 22.vii.2006, & Catchfrench, 27.vii.2006, KP-M.

Dicyphus errans (Wolff)

Widespread, on a variety of plants, including nettle, hedge woundwort, mullein, hemp nettle and herb robert.

- SV81 Tresco, abundant on *Melandrium rubrum* (*Silene dioica*) in shady places, vi.1966, Woodroffe (1967); 15.vi.1987, PK.
- SV91 St Mary's, 14-18.vi.1987, PK. St Martin's, 17.vi.1987, PK.
- SW32 Land's End district, *Idolocoris errans*, ED Marquand (1884).
- SW33 Cape Cornwall, 24.vi.2003, BSN.
- SW43 Penzance (Saunders, 1892).
- SW53 Carbis Bay & Lelant, AT (1934). St Erth, AT (1934); 1963, RTB. Phillack Towans, 1998, ECMH. Mexico Towans, 2000, ECMH. Hayle, 2004, PAG.
- SW54 Upton Towans, 1998, ECMH.
- SW61 Mullion Cove village, 20.vi.2001, BSN.
- SW62 Porthleven, Sargent (1968). Penrose, 7.vi.1989, KNAA. Mullion Golf Course, 2000, GA Collins & ECMH. Loe Pool, 20.v. & 24.vi.2003, KNAA.
- SW71 Coverack, 20.ix.1992, PK.
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW87 Park Head, 1996, ECMH.
- SW95 Crowhill Valley, Trenowth, 12.vii.2001, KNAA.
- SX06 Retire Common, 1997, Spalding & Haes (2000). Bodmin, 4.vii.2004, KP-M. Nanstallon, 30.vi.2006, KP-M.
- SX07 Heligan Wood, 2006, KP-M.
- SX08 Dannonchapel & Tregardock, 1995, ECMH. Trewarmett, 17.viii.1995, ECMH. Rocky Valley, 16.vii.1996, ECMH. Port Gaverne, 6.vii.2005, KP-M.
- SX15 Carne Farm, Penpoll, 19.vii.2002, JF.
- SX25 Struddicks, St Martin, 1999, AS & ECMH.
- SX27 2005, KP-M.
- SX46 Cotehele Estate, widely, vii.2006, KNAA.

Dicyphus pallicornis (Meyer-Dur)

Widespread nationally, on foxglove. Apparently very localised in county.

- SV80 St Agnes, 16.vi.1987, PK.
- SV81 Tresco, 15.vi.1987, PK.
- SV91 Garrison, St Mary's, 14-16.vi.1987, PK. St Martins, on foxglove growing on rock slopes on the northwest coast, 1964/65, GE Woodroffe (1966a); 17.vi.1987, PK.
- SW32 Porthgwarra, on foxgloves, 28.vii.2001, PAG.
- SW43 Madron, 1965, RTB.
- SW54 Navax Point, 23.vi.2003, BSN.
- SW84 Truro, one, viii.1932, AT (1934).
- SX08 Tintagel, viii.1908, EA Butler.
- SX16 Hart Wood, 21.vii.2006, KP-M.
- SX17 Dozmary Pool, 9.ix.1985, PK. Colliford Lake, 17.vi.2001, BSN. Newton, 10.viii.2006, KP-M.

Macrolophus rubi Woodroffe

Occurs on bramble in August. Probably overlooked.

- SW52 Praa Sands, 1968, RTB.

Deraeocoris ruber (L.) – **County Scarce.**

Feeds on small insects, especially aphids, on many plants and bushes, especially nettles. Southern Britain. Cornwall (Clark, 1906) but apparently uncommon in county.

- SW32 Rospanel Farm, Crows-an-Wra, 2003, GBH.
- SW43 Penzance, 1962, RTB.
- SW61 Windmill Farm Reserve, 2.viii.2004, PAG.
- SW83 Pendower Beach, 11.vii.2001, KNAA. Trelissick Estate, 27.vii.2004, PAG.
- SX07 St Kew Highway, 27.vii.2006, KP-M.

- SX19 St Gennys, wooded gully, 1989, coll. SJG, det. PK.
Valency Valley, 12.vii.2001, K Merrifield.
- SX37 Lezant, viii.1918, AVM (DA ms).
- SX46 Bohetherick, St Dominick, on nettles in cherry orchard, 19.vii.2006, KNAA.
- SX47 Chilsworthy, 14.ix.1972, JA Paton.

Deraeocoris scutellaris (Fabricius) - **County Rare/ Locally Extinct.**

Most old records are from heather or heaths but more recently hazel has been suggested as the foodplant. Cornwall (Clark, 1906).

Deraeocoris lutescens (Schilling)

Feeds on small insects and possibly sap, on foliage of oak, hazel, and other trees; mainly southern. Under-recorded in the county.

- SW33 Ballowal, 1993, AS.
- SW62 Helston, 1960, RTB.
- SX17 South Penquite Farm, teneral and mature adults on mature oaks, 23.viii.2005, KNAA.

Adelphocoris lineolatus (Goeze) - Lucerne plantbug.

Widely distributed and abundant nationally on Leguminosae growing in full sunshine. Cornwall (Clark, 1906); "common" (Thornley, 1934), but apparently much less so now.

- SV81 Tresco, vi.1961, KGV Smith (1963).
- SW32 Land's End district, *Dereocoris chenopodii*, ED Marquand (1884). Rospannel Farm, Crows-an-Wra, 2003, GBH.
- SW33 Boscawell Cliff, 20.viii.2002, KNAA.
- SW42 Sancreed, 1962, ERCCIS.
- SW43 Foage Farm, Zennor, wet heath, 8.viii.2006, KNAA.
- SW53 Carbis Bay and Lelant, AT (1934).
- SW54 St Ives, AT (1934).
- SW61 Mullion Cliff, 20.vii.1970, ERCCIS. Clahar Bridge, 1.viii.1980 & 1981; Mullion, 3.viii.1981, DS. Hayle Kimbro Pool, meadows, 2004, PAG.
- SW71 Kennack Sands, 1960, ERCCIS. Crousa Downs, 17.ix.1980; Erisey Barton, 21.ix.1980 & 2.viii.1981; Golgotham, 20.ix.1980; Main Dale, 29.vii.1981, DS.
- SW72 Goonhilly, 2.viii.1980 & 31.vii.1981, DS.
- SW75 Penhale Dunes, 28.viii.2006, PAG.
- SW83 St Anthony's Head, 2006, KP-M.
- SX05 Molinnis, Roche CP, 2005, JD.
- SX06 Breney, 2003 & 2005, KP-M. Criggan, Roche CP, 2005, JD.
- SX15 Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000).
- SX17 South Penquite Farm, Blisland, a few adults and nymphs on *Ulex gallii* in mire, and on dry acid grassland slopes, 25.viii.2005, KNAA.
- SX19 High Cliff, 10.ix.1985, PK.

Calocoris roseomaculatus (DeGeer) – Rose-spotted Plant Bug.

Feeds on the flowers and unripe fruits of Compositae and Leguminosae in open dry situations. Rather local in Cornwall and apparently in more base-rich areas.

- SW32 Land's End district, *Dereocoris ferrugatus*, ED Marquand (1884).
- SW52 Rosudgeon, ix.1931, WE China.
- SW53 Hayle, viii.1926, AT (1934). St Erth, 1962, RTB. Upton Towans, 2.viii.2006, PAG.
- SW54 Gwithian, 1981, APF. Gwithian Towan, 23.vi.2003, BSN.
- SW62 Porthleven, Sargent (1968).
- SW71 Golgotham, 20.ix.1980, DAS. Beagles Point, 8.vii.1983, MJM.
- SW72 Goonhilly Downs, 1930, AT (1934).
- SW75 Mount Field Reserve, 2.ix.1998, PAG.
- SW87 Trevoise Head, 1999, KP-M.
- SW97 Harbour Cove, viii.1999, KP-M; 23.vii.2004, M. Lee.
- SW98 Port Isaac, viii.1919, GEH.
- SX08 Glebe Cliff, Tintagel, 10.vii.1989, numerous, 9.vii.2001, KNAA.

- SX37 Lezant, viii.1918, AVM (DA ms).
 SX46 Cotehele, weedy hillside, 19.vi.1989, KNAA.

Calocoris fulvomaculatus (DeGeer) – **County Scarce**. Hop capsid.

Widespread nationally in hedges and open woodland, usually in moist situations where it occurs on meadow-sweet, elm, nettle and hop. Apparently rather localised in Cornwall.

- SW32 Land's End district, ED Marquand (1884).
 SW53 Angarrack, 1990, ECMH.
 SW83 The Straythe, Nare, 11.vii.2001, KNAA.
 SX06 Bugle, 1981, APF.
 SX28 Penheale Manor, 10.vii.2001, KNAA.
 SX46 Botus Fleming, TA Marshall (Saunders 1892).

Calocoris norvegicus (Gmelin) syn. *Calocoris bipunctatus* - Potato capsid.

Very widespread, in a variety of situations where tall vegetation occurs.

- SV80 Rosvean, 1927, OWR. St Agnes & Gugh, vi.1966, GE Woodroffe (1967); 16.vi.1987, PK.
 SV81 Bryher, 1964/65, GE Woodroffe (1966a). Tresco, vi.1966, GE Woodroffe (1967).
 SV91 St Mary's, 1927, OWR; 14-18.vi.1987, PK. St Martin's, 17.vi.1987, PK.
 SW32 Land's End district, ED Marquand (1884).
 SW33 Pendeen Old Cliff, 21.viii.2002, KNAA. Cape Cornwall, 24.vi.2003, BSN.
 SW43 Zennor, viii.1924, OWR. Foage Farm, Zennor, 2006, KNAA.
 SW52 Rosudgeon, ix.1931, WE China.
 SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay. Lelant, St Erth, & Marazion, AT (1934). Hayle Estuary, 26.vi.2003, BSN.
 SW54 St Ives district, ix.1888, JEM (1889b). St Ives, AT (1934). Gwithian, 1963; 1981; 1992, PK. Gwithian Towan, 2003, BSN. Navax Point, 2003, BSN.
 SW61 Caerthillian Cove, 1970, MGM. Clahar Bridge, 1980, 1981; Mullion, 1981; Predannack, 1981, DAS. Mullion Cliffs, 2001, BSN. Poldhu Cove, 2001, 2003, BSN. Gunwalloe, 2004, PAG.
 SW62 Porthleven, Sargent (1968). Gunwalloe, 13.vi.1989, KNAA. Loe Pool, 20.v.2003, KNAA.
 SW71 Kennack, 1960, RTB. Erisey Barton, 1980; Golgotham, 1980; Gwendreath, 1980; DAS. Gwavas Cliff, 2000, AS & R. Howard.
 SW72 Goonhilly, 1980, DAS.
 SW75 Cubert Common, 1979, WAE. Ventongimps Moor, 1997, Spalding & Haes (2000).
 SW76 Crantock Beach, 6-8.viii.1979, WAE. West Pentire Farm, Crantock, 3.vii.1997, KNAA. Porth Joke, Crantock, 7.viii.2006, KNAA.
 SW83 St Anthony in Roseland, maritime grassland, 3.vii.1979; Zone Point, St Anthony Head, 3.vii.1989; Treluggan Cliff, 5.vii.1989, KNAA.
 SW84 Truro and district, AT (1934). Ruan Laniorne Marsh, 1966, RE Stebbings (1971).
 SW85 Trerice, 8.viii.1979, WAE.
 SW87 St Merryn, vii.1925, KG Blair.
 SW94 Porthluney Cove, 9.viii.1999, PK.
 SW98 Pentire Head, St Minver Highlands, 2.viii.2006, KNAA.
 SX06 Bugle, 1981, APF. Retire Common (east), 8.vii.2001, KNAA.
 SX08 Tintagel, viii.1908, EA Butler.
 SX15 Lantic Bay, 7 & 11.viii.1999, PK. Carne Farm, Penpoll, 19.vii.2002, JF.
 SX17 Colliford Lake, 17.vi.2001, 22.vi.2003, BSN.
 SX25 Polperro to Talland, 1979, BJ Lempke (1980). Hore Point, 1989, KNAA.
 SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
 SX35 Seaton, 31.vii.1986, LWH.
 SX38 Beales Meadows Reserve, viii.1998, DM/IK.
 SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Cotehele, 21.vi.1989, KNAA. Cotehele Wood, 17.vii.2006, KNAA.
 SS21 Stowe Barton, Kilkhampton, 2006, KNAA.

Calocoris stysi Wagner syn. *Calocoris sexguttatus* – **County Scarce.**

Common and widespread nationally on nettles in shady, nutrient-rich places. Long known in Cornwall but apparently largely confined to the far east, with remarkably few records for such a distinctive and nationally common species; it is perhaps increasing its range.

- SW73 Devichoy Wood, 8.vii.2006, PAG.
- SX06 Dunmere Wood, 28.vi.2006, GBH & PAG. Lanhydrock, 9.vi.2004, KP-M. Nanstallon, 30.vi.2006, KP-M.
- SX16 Hart Wood, 14.vi.2006, & Fletcher's Bridge, 14.vii.2006, KP-M.
- SX28 Innyside woodland, Penheale, 10.vii.2001, KNAA.
- SX35 Whitsand Bay, vii.1897, JHK. Catchfrench, 22.vii.2006, KP-M.
- SX46 Cotehele Quay, 9.vii.2001, J Kramer.

Calocoris striatellus (Fab.) syn. *Calocoris quadripunctatus* syn. *Calocoris ochromelas*

Widespread on oak. Reported in the county by Clark (1906) and Butler (1923).

- SW71 Erisey Barton, 1980, DAS.
- SW72 Tremayne Woods, 31.v.1989, KNAA.
- SW95 Carnwinnick Wood, Trenowth, 28.v.2000, KNAA.
- SX19 Valency Valley, off oak, 17.v.1990, KNAA. Peter's Wood, Valency Valley, & Millook Valley, 29.v.2000, KNAA.
- SX15 Boconnoc Park, 20.v.1990, KNAA. Ethy Woods, 30.v.2000, KNAA.
- SX19 Millook Valley, 29.v.2000, KNAA. Bynorth Cliff & Lower Tresmorn, 8.vi.2000, KNAA.
- SX25 Kilminorth Wood, 1.vi.2000, KNAA.
- SX29 Hilton Wood, Week St Mary, 31.v.2000, KNAA.
- SX38 Eggbear, 31.v.2000, KNAA.
- SS21 Coombe Valley, 31.v.2000, KNAA.

Camptozygum aequale (Villers) syn. *Camptozygum pinastris* – **Naturalised Introduction.**

Widespread on Scot's pine, occasionally on spruce. Cornwall (Clark, 1906). Not native to county.

Capsodes flavomarginatus (Donovan) - **Nationally Scarce & County Rare.**

Usually found on large bird's-foot trefoil in damp sheltered places.

- SW53 Loggans Moor, 1995, ECMH.
- SX19 The Dizzard, in wet flush, 10.vii.1985, SM Turk.
- SX25 Polperro, TA Marshall (Saunders 1892).

Capsodes sulcatus (Fieber) - **Nationally Scarce & County Scarce.**

A western Mediterranean species known from the south-west of England. Feeds on various Papilionaceae, but best known from large clumps on *Lotus corniculatus* growing in bare or sparsely-vegetated ground on south-facing unconsolidated cliff slopes.

- SW61 Mullion Cove, 2.vii.1989, PAG. Poldhu Cove, 21.vi.2001, 23.vi.2003, BSN.
- SW62 Poldhu Cove, Gunwalloe, flushed gully on north side, 13.vi.1989, KNAA. Gunwalloe Church Cove to Poldhu Cove, adults & some nymphs, on ox-eye daisy, 12.vii.2004, PAG.
- SW83 Treluggan Cliff, eroding head cliff, 5.vii.1989, 11.vii.2001, KNAA.
- SW93 The Straythe, Caragloose, 11.vii.2001, KNAA.
- SX15 Lantic Bay, in some numbers, 23.vi.1999, KP-M.
- SX35 Tregantle, pre-1906, JHK; frequent on *Lotus corniculatus* clumps on open sandy heads, 1.vi.2000, KNAA. Portwrinkle, 23.vi.1928, AVM (DA ms).

Capsus ater (L.)

Common and widespread wherever grasses grow tall. Cornwall (Clark, 1906; Bedwell, 1945, and Masee, 1955).

- SV80 St Agnes, 16.vi.1987, PK.
- SV91 St Mary's, 14-18.vi.1987, PK.
- SW32 Whitesand Bay, 19.vi.1987, PK.
- SW33 Kenidjack, 1995, ECMH. Cape Cornwall, 24.vi.2003, BSN.
- SW53 Carbis Bay, AT (1934). Angarrack, 1990-4; Loggans Moor, 1994-5 & 2004; Mexico Towans, 2000, ECMH.
- SW54 St Ives, AT (1934). Upton Towans, 1998, ECMH.

- SW61 Kynance Cove, 1963, MGM. Mullion Cliffs, 21.vi.2001, BSN. Predannack, 27.vi.2005, PAG. Hayle Kimbro Pool, 25.vi.2006, PAG.
- SW62 Porthleven, Sargent (1968). Loe Bar, 8.vi.1989, KNAA.
- SW63 Porkellis Moor, 8.vii.1983, KNAA.
- SW71 Main Dale, 1981, DAS.
- SW73 Enys Woods, 2003, PAG.
- SW76 West Pentire, 22.vi.2005, PAG.
- SW83 Trelissick, 12.vi.1989; St Just in Roseland, 29.vi.1989, KNAA. Pendower Beach, 1989, SJG, det. PK. Towan Beach, 3.vii.1989, SJG.
- SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
- SW86 St Colan churchyard, 1991, ERCCIS.
- SW96 Tregoss Moor, 1997, Spalding & Haes (2000).
- SX06 Bodmin, AT (1934).
- SX03 Dodman, 28.vi.1989, KNAA.
- SX06 Dunmere Wood, 17.vii.2006, PAG.
- SX07 Shell Woods, 16.vi.2006, PAG.
- SX15 Boconnoc Park, 24.vi.1989, KNAA.
- SX19 Trevigue, 11.vii.1989, SJG.
- SX25 Polperro to Talland, vii.1979, BJ Lempke (1980).
- SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
- SX36 Cadsonbury, 22.vi.1989, KNAA.
- SX45 Millbrook Creek, JHK. Churchtown Farm, Saltash, 20.vii.2005, KNAA.
- SX46 Cotehele Estate, Calstock, 19.vi.1989 & vii.2006, KNAA.
- SS21 Stowe Barton, Kilkhampton, 2006, KNAA.

Charagochilus gyllenhali (Fallén)

Widespread nationally in dry sandy places on bedstraws.

- SW52 Rosudgeon, ix.1931, WE China.
- SW53 Hayle district, x.1886, JEM (1889b). Carbis Bay, one, vi.1932, AT (1934).
- SW54 St Ives, x.1886, JEM (1889b). Upton Towans, 1998 & 2004, ECMH.
- SW61 Caerthillian Cove, 21.vii.1970, MGM.
- SW62 Porthleven, 1960, RTB.
- SW71 Kennack Sands, 1964, RTB.
- SW83 Treluggan Cliff, 5.vii.1989, KNAA.
- SW84 Calenick, Truro, one, viii.1932, AT (1934).
- SW97 St Endelion, viii.1919, GEH.
- SX08 Tintagel, 1989. Bossiney, 21.viii.2002, KNAA.
- SX15 Lantic Bay, Lanteglos, 7 & 11.viii.1999, PK. Lansallos East Coombe, 22.viii.2006, KNAA.
- SX17 South Penquite Farm, over-wintering individual beaten from gorse, 15.x.2005, KNAA.
- SX25 Talland Cliff, 1.vi.2000, KNAA.
- SX37 Lezant, viii.1919, AVM.
- SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
- SX46 Botus Fleming, 22.vii.2006, KP-M.

Liocoris tripustulatus (Fabricius)

A common species on nettles throughout Britain. Common (Thornley, 1934).

- SW32 Land's End district, ED Marquand (1884).
- SW33 Cape Cornwall, 24.vi.2003, BSN.
- SW43 Treveffa Farm, 5.vi.2000, KNAA.
- SW44 Treveffa Farm, 14.v.1996, KNAA.
- SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay & Lelant, AT (1934). St Erth, 1962, RTB. Angarrack, 2004, ECMH. Upton Towans, 2.viii.2006, PAG.
- SW54 St Ives district, ix.1888, JEM (1889b). St Ives, AT (1934). Nanterrow, Gwithian, 4.vi.2005, KNAA.

- SW61 Windmill Farm Reserve, 14.v.1997, PAG.
 SW62 Helston, 1960. Porthleven, Sargent (1968).
 SW64 Duchy College, Rosewarne, in gardens, 9.ix.2006, KNAA.
 SW71 Cadgwith South, & Chynhalls South Cliff, 1998, PJH. Chynhalls Point, 2002, PAG. Lizard Head, 1998, PJH. Black Head, 2006, PAG.
 SW72 Rosemullion Head, 1974, APF. Porthallow, 23.ix.1992, PK. St Martin's-in-Meneage, 7.viii.2005, KNAA.
 SW73 Penryn, in garden, vi.2006, PAG.
 SW84 Truro district, AT (1934).
 SW85 Treuffal, 2006, KP-M.
 SW97 Pentireglaze, St Minver Highlands, 2.viii.2006, KNAA.
 SW98 Port Quin, GEH.
 SX05 Boskell, 2006, KP-M.
 SX06 Polbrock, 2006, KP-M.
 SX07 St Kew Highway, 2006, KP-M.
 SX09 Boscastle, 17.v.1990, KNAA.
 SX15 Lostwithiel, 27.vii.1999, KP-M.
 SX25 Struddicks, St Martin, 1999, AS & ECMH. Talland Bay, 1.vi.2000, KNAA.
 SX27 Wimalford, 2006, KP-M.
 SX35 Whitsand Bay, JHK.
 SX45 Wivelscombe Creek, JHK. Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Cotehele Estate, Calstock & St Dominick, vii.2006, KNAA.

Lygocoris lucorum (Meyer-Dür)

Widespread nationally, on nettle, mugwort, tansy, etc, feeding on their buds, flowers and unripe fruits. Cornwall (Clark, 1906), but very few records.

- SV Isles of Scilly, 1927, OWR.
 SW42 Lamorna Cove, viii.1924, OWR.
 SW52 Rosudgeon, ix.1931, WE China.
 SW53 St Erth, 1962, RTB.
 SW54 Gwithian, 1964, RTB.
 SW61 Lizard Town, ix.1951, AM Masee (1953).
 SW83 Newton Cliff, St Mawes, 3.vii.1989, KNAA.
 SX08 Tintagel, viii.1908, EA Butler.

Lygocoris spinolai (Meyer-Dür)

Widespread nationally, on plants such as creeping thistle, bramble, nettle, meadow-sweet, etc. Cornwall (Butler, 1923), but apparently very local.

- SW32 Gwenver, Sennen Cove, 1963, RTB.
 SW84 Calenick, Truro, two, 30.vii.1932, AT.
 SX06 Lanhydrock, one, 8.ix.1930, AT.
 SX08 Barras Nose, cliff stream, 10.vii.1989, SJG.
 SX17 South Penquite Farm, Blisland, one off sallow, 25.viii.2005, KNAA.
 SX19 Crackington Haven, 12.vii.1989, SJG.

Lygocoris pabulinus (L.) - Common green capsid.

Abundant nationally on a wide variety of herbs. Common, and a pest of potatoes (Thornley, 1934).

- SV80 St Agnes, 16.vi.1987, PK.
 SV81 Tresco, 1927, OWR; 1919-1932, KG Blair.
 SV91 St Mary's, 1927, OWR; St Mary's, 14-18.vi.1987, PK.
 SW32 Land's End district, *Lygus*, ED Marquand (1884).
 SW42 Sancreed, 1962, RTB.
 SW43 Watchcroft, 1993, AS & ECMH.
 SW52 Rosudgeon, ix.1931, WE China.

- SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, Lelant & St Erth, AT (1934). Tremelling Wood, 1978. Angarrack, 1989-94 & 2004; Loggans Moor, 1995 & 2004; Phillack Towans, 1998; Steeple Wood & Trelyon Downs, 1998, ECMH; Mexico Towans, 2000.
- SW54 St Ives district, ix.1888, JEM (1889b); AT (1934). Gwithian, 1981. Upton Towans, 1998 & 2004, ECMH. Nanterrow Farm, Gwithian, 4.vi.2005, KNAA.
- SW61 Clahar Bridge, 1981, DAS. Mullion Cove village, 20.vi.2001, BSN.
- SW62 Mullion Golf Course, 2000, GA Collins & ECMH.
- SW64 Nancekuke, 1981, APF. Western Hill, 1999, AS & ECMH.
- SW71 Main Dale, 1981, DAS. Gwavas Cliff, 2000, AS & R Howard.
- SW72 St Martin's-in-Meneage, 7.viii.2005, KNAA.
- SW73 Tregonigge, 1986, E Jackson.
- SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
- SW76 Rushy Green, Crantock, vi.vii.2000, GA Collins & ECM Haes.
- SW83 The Straythe, Nare, 11.vii.2001, KNAA.
- SW84 Truro district, Calenick, Pencalenick and St Clement, AT (1934).
- SW85 Trerice, 8.viii.1979, WAE. Newlyn Downs, 1997, Spalding & Haes (2000).
- SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
- SX04 Kings Wood, Pentewan, 10.vii.2001, K Merrifield.
- SX06 Bugle, 1981, APF. Bodmin Beacon, 1995, ECMH. Retire Common, 1997, ECMH (2000).
- SX08 Tintagel, viii.1908, EA Butler. Port Gaverne, 1993; Trewarmett, 1995; Rocky Valley, 16.vii.1996, ECMH.
- SX15 Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000).
- SX17 Dozmary Pool, 9.ix.1985, PK.
- SX18 Rough Tor, 16.vii.1996, ECMH.
- SX19 Valency Valley, 12.vii.2001, K Merrifield.
- SX25 Struddicks, St Martin, 1999, AS & ECMH.
- SX36 Cadsonbury Woods, 13.vii.2001, KNAA.
- SX37 The Holmbush, Kelly Bray, 12.viii.1998, AS & ECMH.
- SX47 Clitters Mine, Gunnislake, 14.viii.1998, AS.
- SS21 Stowe Wood, 11.ix.1985, PK.

Lygocoris rugicollis (Fallén) - Apple capsid.

Widely, but sparsely distributed, on willow and bog-myrtle; in recent years has also been found on apple, currant and gooseberry. Cornwall (Butler, 1923). Reported as a severe pest in the county in 1928 (Thornley 1934).

- SV81 Tresco, on *Salix* around Abbey Pond, vi.1966, GE Woodroffe (1967).
- SV91 St Mary's, 14-18.vi.1987, PK.
- SW61 Mullion, 27.vii.1981, DAS. Mullion Cove village, 20.vi.2001, BSN.
- SW64 Chapel Porth, 23.v.1990, KNAA. Nanterrow Farm, Gwithian, off willows, 4.vi.2005, KNAA.
- SW71 Crousa Downs, 29.vii.1981; Erisey Barton, 8.vi.1981; Gwendreath, 22.ix.1980, DAS.
- SW72 Trevassack, 7.vii.1981, DAS.
- SW97 Pentire Head, *Salix*, 22.v.1989, KNAA.
- SX06 Red Moor, 8.vii.2001, KNAA.

[Lygocoris contaminatus (Fallén) – **Unconfirmed Species.**

Throughout Britain on birch but apparently of very restricted occurrence in Cornwall. The following records really need vouchers examining before they can be fully accepted.

- SW53 Hayle district, ix.1888, JEM (1889b).
- SW54 St Ives district, ix.1888, JEM (1889b).
- SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).]

Lygocoris viridis (Fallén)

Widespread and common nationally, on various broad-leaved trees. Cornwall (Clark, 1906); clearly overlooked in past.

SW44 Trevessa Farm, *Salix*, 14.v.1996, KNAA.

SW61 Mullion Cove village, 20.vi.2001, BSN.

SX04 Ropehaven Cliffs, 12.vii.2001, KNAA.

SX06 Laveddon, 12.vii.2004, KP-M.

[*Lygus pratensis* (Linnaeus) **complex**

Reported in the county by Bedwell (1945) and Masee (1955) but at that time five species were covered by the name (Leston, 1951). **The true *L. pratensis* is not known from the county.** Leston (in Thomas, 1954) suggests that most records refer to *Lygocoris rugulipennis* although Masee (1953) reported both.

SV Scilly, ix.1888, JEM (1889b).

SW61 Lizard Town, ix.1951, AM Masee (1953) – probably *L. maritimus*.]

Lygus maritimus Wagner

A coastal species on the continent but more widespread in Britain. Commonly found on a wide range of host plants, especially scentless mayweed, fat hen, sorrel, gorse and clovers.

SW52 Praa Sands, 25.ix.1992, PK.

SW53 Angarrack, 1990, ECMH.

SW61 Predannack, 20.ix.1980, DAS.

SW62 Helston, 1960. Penrose, 7.vi.1989, KNAA.

SW64 Camborne, 1964, RTB.

SW71 Kennack Sands, 24.ix.1992, PK.

SW72 Porthallow, 23.ix.1992, PK.

SW76 West Pentire Farm, Crantock, swept from weedy arable fields, 31.viii.2006, KNAA.

SW87 Park Head, on mayweed, 1996, ECMH.

SW97 Daymer Bay, 9.ix.1985, PK. Harbour Cove, Padstow, 26.viii.2006, PAG.

SW98 The Rumps & Doyden Point, St Minver Highlands, 3.viii.2006, KNAA.

SX15 Lantic Bay, 7 & 11.viii.1999, PK.

SX35 Freathy, 10.viii.1999, PK.

SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.

Lygus rugulipennis Poppius – Tarnished Plant Bug.

One of Britain's commonest bugs, feeding on a wide variety of herbs and shrubs. Records given as *L. pratensis* - reported as a pest of potatoes and currants (Thornley, 1934) and sugar beet and mangolds (Thomas, 1954) - are assumed to be this species but could also include *Lygus maritimus*. Masee (1953) claimed the first county record.

SV Scilly, '*L. pratensis*', ix.1888, JEM (Mason, 1889).

SV80 St Agnes, vi.1966, GE Woodroffe (1967).

SV81 Bryher, 1964/65, GE Woodroffe (1966a).

SV91 St Martins, 17.vi.1987, PK.

SW33 Kenidjack, 1995, AS & ECMH.

SW42 Sancreed, 1962, RTB.

SW53 Carbis Bay, '*L. pratensis*', 7.x.1929, AT. Angarrack, 1989-94; Loggans Moor, 1995 & 2004, ECMH.

SW54 Upton Towans, 1998 & 2004, ECMH.

SW61 Lizard Town, ix.1951, AM Masee (1953). Mullion Cliffs, 17.vi.2001, BSN.

SW71 Corgerrick Farm, Poltesco, 16.v.1994, APF. Cadgwith South, 20.ix.1998, PJH.

SW72 Maenporth, 11.ix.2004, KP-M.

SW74 United Downs, v.1998, AS & ECMH. Carnon Valley, 2004, PAG.

SW86 Mawgan Porth, 2.vii.1937, GDH Carpenter.

SW87 Park Head, 1996, ECMH.

SW97 Daymer Bay, 9.ix.1985, PK. Harbour Cove, 2.ix.2004, KP-M.

SW98 The Rumps, St Minver Highlands, 3.viii.2006, KNAA.

- SX08 Rocky Valley, 16.vii.1996, ECMH.
 SX15 Frogmore Farm, Lanteglos, 26.viii.2006, KNAA. Lansallos East Coombe, 22.viii.2006, KNAA.
 SX16 Cabilla Wood, 1988, AS.
 SX19 Peters Wood, Boscastle, 6.vi.1965, R Murphy. 29.v.2000; Bynorth Cliff, 8.vi.2000, KNAA.
 SX35 Tregantle, '*L. pratensis*' on *Cakile*, x.1911, JHK.
 SX45 Saltash, 1956, GCE Scudder. Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Comfort Wood, Cotehele, 20.vii.2006, KNAA.

Megacoelum infusum (Herrich-Schäffer) - **County Rare/ Locally Extinct.**

Local in southern Britain on oak foliage, where it mainly feeds on small insects. Cornwall (Clark, 1906).

Miridius quadrivirgatus (Costa)

In rough pastures and uncultivated coarse vegetation in southern coastal counties, especially with wall barley.

- SW62 Gunwalloe Towans, 20.vii.1970, MGM.
 SW71 Goonhilly, 1965, RTB. Chynhalls Point, 16.viii.2002, PAG.
 SW75 Cubert Common, 6.viii.1979 & 1983 WAE; 9.viii.2006, KNAA.
 SW97 Harbour Cove, 7.viii.2002, PAG.
 SW98 Port Isaac, 15.viii.1919, GEH. The Rumps, St Minver Highlands, 3.viii.2006, KNAA.
 SX08 Tintagel, viii.1908, EA Butler.
 SX37 Lezant, viii.1918 (DA ms) & viii.1919, AVM.
 SX45 St John's, vii.1920, AVM (DA ms).
 SX46 Botus Fleming, TA Marshall (Saunders 1892). Woodlands Farm, St Dominick, 20.vii.2006, KNAA.

Miris striatus (L.) – **County Scarce.**

Widespread in Britain, but very local in the south. Largely feeds on small insects, but also young leaves, growing shoots and unripe fruits; on many broad-leaved trees, especially oak and hawthorn. *Pycnopterna striata* in Cornwall (Clark, 1906). The few records of this large and distinctive species actually suggest that it may be more widespread than appreciated, with four recent reports.

- SW72 Tremayne Woods, hawthorn, 31.v.1989, KNAA.
 SX06 Bodmin, along green lane to north, 31.v.2000, John Harper.
 SX15 Boconnoc Park, hawthorn, 20.v.1990, KNAA.
 SX19 Bynorth Cliff, hawthorn, 8.vi.2000, KNAA.

Orthops campestris (L.) syn. *Orthops pastinacae*

Widespread on various Umbelliferae. Reported in the county by Bedwell (1945) and Masee (1955).

- SV91 St Mary's, 1925 & 1927, OWR; St Mary's, 14-18.vi.1987, PK.
 SW32 Land's End district, ED Marquand (1884).
 SW44 Treveal, 24.v.1989, KNAA.
 SW53 Carbis Bay, Lelant, St Erth, common, AT (1934). Hayle Estuary, 26.vi.2003, BSN. Hayle, 6.vii.2004, PAG.
 SW54 St Ives, common, AT (1934). Gwithian, 1962, RTB.
 SW61 Clahar Bridge, Mullion, & Predannack, 1980 & 1981, DAS. Poldhu Cove, 23.vi.2003, BSN. Kynance Cove, on sea carrot, 23.vi.2004, PAG.
 SW62 Helston, 1960, RTB. Porthleven, Sargent (1968). Loe Pool, 20.v. & 23.vi.2003, KNAA.
 SW63 Coverack Bridges, 6.viii.2004, KP-M.
 SW71 Erisey Barton, 1981, DAS. Cadgwith South & Poltesco East, 20.ix.1998, PJH.
 SW82 Porthoustock, 18.viii.2006, PAG.
 SW83 Pendennis Point, 1.viii.2006, PAG.
 SW84 Truro district, common, AT (1934).
 SW93 Nare Head, 14.vii.2004, KNAA.
 SW97 St Endelion, viii.1919; St Teath, ix.1919, GEH. Lundy Bay & Trevathan, 2006, KPM.

- SX06 Bodmin district, common, AT (1934). Breney Common, 28.v.2000, KNAA. Laveddon, 29.vii.2005, KP-M.
- SX07 Pengenna, 2006, KP-M.
- SX08 Tintagel, viii.1908, EAB. Sufferton, 2006, KP-M.
- SX16 Redrice Wood, 3.vii.2004, KP-M.
- SX26 Menheniot, 2006, KP-M.
- SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
- SX35 Trevollard, 2006, KP-M.
- SX46 Moditonham Quay, 2006, KP-M.
- SS21 Stowe Wood, 11.ix.1985, PK. Coombe Valley, 30.v.2000, K. Merrifield.

Orthops kalmii (L.) – **County Scarce.**

Widespread nationally on a variety of Umbelliferae. Cornwall (Clark, 1906).

- SV Scilly, ix.1888, JEM (1889b).
- SW71 Kennack Sands, 1964, RTB.
- SW84 Pencalenick, several, viii.1932, AT (1934).
- SX06 Boscarne, 20.vii.2006, KP-M.
- SX08 Tintagel, viii.1908, EA Butler.
- SX35 Catchfrench, 22.vii.2006, KP-M.
- SX37 Lezant, viii.1918, AVM (DA ms).
- SX46 Moditonham Quay, 22.vii.2006, KP-M.

Pantilius tunicatus (Fabricius) - **County Rare.**

Widespread nationally on hazel, alder and birch. Cornwall (Clark, 1906).

- SW74 Carnon Valley, 2 on alder, 28.ix.2004, P Gainey.
- SX06 South of Lesquite Farm, at entrance to Red Moor Reserve, numerous on hazel, 27.ix.2005, PAG.

Phytocoris ulmi (L.) – **County Scarce.**

Widespread on broad-leaved trees and shrubs nationally, especially hawthorn. Apparently very localised in the county.

- SW32 Land's End district, ED Marquand (1884). Sennen, 1963, RTB.
- SW43 New Mill, 1962, RTB.
- SW61 Mullion Cove village, 20.vi.2001, BSN.
- SW76 Crantock Beach, 6-8.viii.1979, WAE.
- SW98 Port Isaac, viii.1919, GEH.
- SX06 Bugle, 1981, APF. Camel Trail, Bodmin, 2001, KP-M. Laveddon, 2006, KP-M.

Phytocoris varipes Boheman

Feeds mostly on unripe fruits and flowers of various plants, and is found in dry open grassy places where the vegetation is tall and rank. Cornwall (Clark, 1906).

- SV91 St Martin's, a few on the dunes near Lower Town, 1964/65, GE Woodroffe (1966a).
- SW33 Boscawell Cliff, 20.viii.2002; Pendeen Old Cliff, 21.viii.2002, KNAA.
- SW52 Praa Sands, 25.ix.1992, PK.
- SW53 Hayle district, ix.1888, JEM (1889b); 1962, RTB. Carbis Bay and Lelant Towans, AT (1934).
- SW54 St Ives, ix.1888, JEM (1889b).
- SW61 Kynance Cove, 1970, MGM; 1998, PJH. Caerthillian Cove, 1970, MGM. Clahar Bridge, 1981; Mullion, 1980, DAS. Mullion Cliffs, 21.vi.2001, BSN.
- SW62 Porthleven, H Sargent (1968).
- SW64 Nancekuke, 1981, APF.
- SW71 Erisey Barton, 1980; Golgotham, 1980; Gwendreath, 1980; Main Dale, 1980, DAS. Poltesco East, 20.ix.1998; Chynhalls Point, 21.ix.1998, PJH.
- SW72 Goonhilly, 1980 & 1981; Trevassack, 1981, DAS. Goonhilly Downs, 20.ix.1992, PK.
- SW75 Cubert Common, 9.viii.2006, KNAA.
- SW76 Crantock Beach, 6-8.viii.1979, WAE. Porth Joke, Crantock, 7.viii.2006, KNAA. West Pentire Farm, Crantock, 2006, KNAA.

- SW83 Treluggan Cliff, 5.vii.1989, KNAA. The Straythe, 11.vii.2001, KNAA. Porthcurnick, 20.viii.2002, KNAA.
- SW97 Harbour Cove, 15.viii.2002, KP-M. Pentireglaze, 2.viii.2006 & Pennywilgie Point, 3.viii.2006, St Minver Highlands, KNAA.
- SW98 Port Isaac, viii.1919, GEH. Port Quin, 10.ix.1985, PK & 3.viii.2006, KNAA. Pentire Point, 2.viii.2006 & Com Head, 3.viii.2006, St Minver Highlands, KNAA.
- SX06 Bugle, 1981, APF.
- SX08 St Teath, viii.1919, GEH. Barras Nose, 10.vii.1989, SJG. Bossiney Cliffs, 21.viii.2002, KNAA.
- SX15 Lansallos East Coombe & Cove, 22.viii.2006, KNAA.
- SX19 Crackington Haven, 12.vii.1989, SJG. Pentargon Cliff, 12.vii.1989, KNAA. The Dizzard, 14.vii.1979, GB; 13.vii.1989, KNAA.
- SX25 Polperro to Talland, vii.1979, BJ Lempke (1980).
- SX35 Whitsands, JHK.
- SS20 Sandy Mouth, cliffs to south, 12.vii.2006, KNAA.
- SS21 Stanbury Combe, Morwenstow, 1992, SJ Grove.

Phytocoris dimidiatus Kirschbaum

Widespread on broad-leaved trees nationally. Discovered in the county by Masee (1953).

- SW32 Land's End district, ED Marquand (1884).
- SW42 Paul, 1963, RTB.
- SW54 Gwithian, 1981, APF.
- SW61 Lizard Town, ix.1951, AM Masee (1953).
- SW62 Helston, 1960, RTB.
- SX15 Lansallos Farm, 24.viii.2006; Frogmore Farm, 26.viii.2006, KNAA.
- SX46 Boar's Bridge, Calstock, field oak, 18.vii.2006; Smeaton, St Dominick, 20.vii.2006, KNAA.

Phytocoris longipennis Flor

Found on the trunks and branches of broad-leaved trees, especially hazel, oak and hawthorn.

- SW32 Land's End district, EDM (not listed in Marquand, 1884).
- SW52 Rosudgeon, ix.1931, WE China.
- SW53 Hayle district, ix.1888, JEM (1889b).
- SW54 St Ives district, ix.1888, JEM (1889b).
- SW62 Helston, 1960, RTB. Porthleven, Sargent (1968).
- SX08 St Teath, 26.viii.1919, GEH.
- SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
- SS21 Stowe Wood, 11.ix.1985, PK.

Phytocoris populi (L.) – **County Rare.**

Widespread on broad-leaved trees nationally, feeding on bark-lice and jumping plant bugs which they find on trunks and twigs. Cornwall (Clark, 1906).

- SW62 Porthleven, Sargent (1968).
- SX46 Botus Fleming, *teste* JHK (1906).

Phytocoris reuteri Saunders – **County Scarce.**

Widespread nationally on broadleaved trees, mainly feeding on small arthropods.

- SW86 Newquay, appeared in small orchard, 1900 (Clark, 1906).
- SX17 South Penquite Farm, on rowan, sallow & sycamore, 23.viii.2005, KNAA.

Phytocoris tiliae (Fabricius)

Found on almost all broad-leaved tree species, feeding on small insects and mites.

- SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, one, 15.ix.1932, and Lelant, one, 22.ix.1927, AT. Steeple Wood & Trelyon Downs, 21.vii.1998, AS & ECMH.
- SW54 St Ives district, ix.1888, JEM (1889b).
- SW61 Clahar Bridge, 18.ix.1980, DAS.
- SW71 Erisey Barton, 21.ix.1980, DAS. Cadgwith, to east, 4.viii.2006, PAG.
- SW72 St Anthony-in-Meneage, 1962, RTB. Gillan Harbour, 4.viii.2006, PAG.

- SW73 Gorrangorras Creek, Penryn, on ivy, 17.viii.2006, PAG.
 SW76 Portquin, off elm in hedge, 7.viii.2006, KNAA.
 SW93 Nare Head, from elm, 21.viii.2004, PAG.
 SW98 Portquin, from elm, 31.viii.2006, KNAA.
 SX06 Lockengate, Luxulyan CP, 2005, JD.
 SX08 Portgaverne, 1992, M Lee.
 SX15 Frogmore Farm, Lanteglos, 26.viii.2006, KNAA.
 SX16 Lanhydrock Estate, 14.viii.2006, PAG.
 SX19 The Dizzard, 14.vii.1979, GB; 13.vii.1989, KNAA.

Pinalitus cervinus (Herrich-Schäffer)

Widespread and common on foliage of lime, occasionally on ash and hazel; regularly on ivy.

- SW32 Land's End district, ED Marquand (1884).
 SW53 Hayle district, ix.1888, JEM (1889b). Lelant Towans, one, viii.1930; Carbis Bay, one, ix.1932, AT (1934).
 SW54 St Ives district, ix.1888, JEM (1889b). Nanterrow Farm, Gwithian, 4.vi.2005, KNAA.
 SW61 Lizard, vi.1921, JHK.
 SW72 Gweek, 1988, AS. St Martin's-in-Meneage, 7.viii.2005, KNAA.
 SW73 Kennall Vale, 1988; Devichoys Reserve, 1988, AS. Gorrangorras Creek, Penryn, 17.viii.2006, PAG.
 SW85 Trerice, 30.v.1989, KNAA.
 SW96 Goss Moor, 1988, AS.
 SW97 St Minver, viii.1919, GEH. Harbour Cove, Padstow, 26.viii.2006, PAG.
 SX05 Pelyn Reserve, 1988, AS.
 SX07 Hengar, 1988, AS.
 SX08 Tintagel, viii.1908, EAB.
 SX15 Lerryn, 1988, AS.
 SX17 Colliford Lake, on hawthorn, 17.vi.2001, BSN. South Penquite Farm, 15.x.2005, KNAA.
 SX25 Pendruffle Wood, 1988, AS.
 SX27 Caradon, 1988, AS.
 SX36 Cadsonbury, 1988, AS.
 SX45 Saltash, vii.1900, JHK.
 SX46 Morden Valley, Calstock, 18.vii.2006, KNAA.

Pinalitus rubricatus (Fallén) – **Naturalised Introduction.**

Widespread on spruce nationally; not native to county.

- SX26 Liskeard (Clark, 1906).
 SX46 Valley of the Lynher (Clark, 1906).

Polymerus palustris Reuter - **County Rare.**

Widespread nationally on marsh bedstraw. Reported in the county by Masee (1955) but not Bedwell (1945) or Thornley (1934).

- SW42 Sancreed, 1962, RTB.
 SX06 Criggan Moors, Roche CP, 13.vii.2005, JD.

Polymerus unifasciatus (Fabricius) - **County Rare.**

Widespread nationally on bedstraws.

- SW53 Marazion Marshes, ix.1951, AMM (1953).
 SW54 St Ives district, ix,1888, JEM (Mason, 1889).

Polymerus nigrita (Fallén) - **County Scarce.**

Widespread nationally on goosegrass and other *Galium* spp. Cornwall (Butler 1923; Masee 1955).

- SW61 Mullion Cliffs, 18.vi.2001, BSN.
 SW72 Manaccan, 1962, RTB.
 SX06 Boscarne, 20.vii.2006, KP-M.
 SX08 Bossiney Cliffs, hedge bedstraw, 21.viii.2002, KNAA.
 SX37 Lezant, viii.1918, AVM (DA ms).

Stenotus binotatus (Fabricius)

Often abundant on hedge-banks, neglected pastures and other situations where grasses grow tall and flowery.

- SW33 Cape Cornwall, 24.vi.2003, BSN.
SW43 Watchcroft, 1993, ECMH.
SW53 Hayle district, *Oncognathus binotatus*, ix.1888, JEM (1889b). Carbis Bay, Lelant Towans, AT (1934). St Erth, 1963, RTB. Angarrack, 2004, ECMH.
SW54 St Ives district, ix.1888, JEM (1889b). Gwithian Towan, 23.vi.2003, BSN.
SW61 Caerthillian Cove, 1970, MGM. Poldhu Cove, 21.vi.2001, BSN. Mullion Cove village, 20.vi.2001, BSN. Poldhu Cove, 23.vi.2003, BSN.
SW62 Porthleven, Sargent (1968). Loe Pool, 23.vi.2003, KNAA.
SW71 Erisey Barton, 1981, DAS.
SW72 Goonhilly Downs, AT (1934). Manaccan, 1960, RTB.
SW76 West Pentire Farm, 17.vii.2003, KNAA.
SW83 St Just in Roseland, 29.vi.1989; Zone Point, St Anthony Head, 3.vii.1989; Treluggan Cliff, 5.vii.1989, KNAA. Porthcurnick, 20.viii.2002, KNAA.
SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
SW87 St Merryn, vii.1925, KG Blair.
SW93 Nare Head, 4.vii.1989, KNAA. The Straythe, Caragloose, 11.vii.2001, KNAA.
SW98 Kellan Head, 1999, AS & ECMH.
SX06 Retire Common (east) & Red Moor, 2001, KNAA. Lanhydrock, 2004, KP-M.
SX08 Glebe Cliff, Tintagel, 10.vii.1989; Treknow Cliff, Tintagel, 10.vii.1989, KNAA. Bossiney Cliffs, 21.viii.2002, KNAA.
SX15 Carne Farm, Penpoll, 19.vii.2002, JF.
SX19 Crackington Haven, 1989; Pentargon Cliff, Boscastle, 1989, KNAA.
SX25 Polperro to Talland, vii.1979, BJ Lempke (1980).
SX36 Cadsonbury, 22.vi.1989, KNAA.
SX38 Beales Meadows Reserve, viii.1998, DM/IK.
SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
SX46 Cotehele, Calstock, 1989 & 2006; Bohetherick, St Dominick, 2006, KNAA.
SS20 Sandy Mouth, cliffs to south, 12.vii.2006, KNAA.
SS21 Duckpool, 1989; Morwenstow, 1989; Stowe Barton, 2006, KNAA.

Acetropis gimmerthali (Flor)

Associated with tall, uncut grasslands, especially with oat-grass, and more usually on heaths and in marshes. Only recorded once until recent years, possibly suggesting a former rarity which has expanded dramatically, probably following the widescale abandonment of rough grazing land.

- SW61 The Lizard, vi.1919, JHK. Kynance, 1966, RTB. Lizard Point, grass heath, 15.vi.1989, KNAA.
SW72 Frenchman's Creek, open scrubby hillside, 31.v.1989, KNAA.
SW83 St Just in Roseland, scrubby grassland, 29.vi.1989, KNAA.
SW93 Nare Head, coarse grassland, 4.vii.1989, KNAA.
SX06 Retire Common (east) & Red Moor, 8.vii.2001, KNAA.
SX17 South Penquite Farm, Blisland, 2005, KNAA.
SX25 Hore Point, Hendersick, scrubby herb-rich grassland on cliff slopes, 22.vi.1989, KNAA.
SX46 Cotehele, Calstock, 21.vi.1989 & 17.vii.2006; Haye Farm, St Dominick, 19.vii.2006, KNAA.

Leptopterna dolabrata (L.)

Widespread and abundant in fairly moist grasslands. Cornwall (Clark 1906).

- SW33 Cape Cornwall, 24.vi.2003, BSN.
SW53 Marazion Marsh, 1990, ECMH. Loggans Moor, 1994-95 & 2004, ECMH. Hayle Estuary, 26.vi.2003, BSN.
SW54 Gwithian, 1981, APF. Upton Towans, 1998, ECMH.
SW61 Clahar Bridge, 1980 & 1981, DAS.

- SW62 Porthleven, Sargent (1968). Gunwalloe, 1989.
 SW64 Nancekuke, 1981, APF.
 SW71 Kennack Sands, 1963, RTB. Crousa Downs, 1981; Erisey Barton, 1981, DAS.
 SW72 Goonhilly, 1980 & 1981, DAS.
 SW83 Trellisick, 12.vi.1989; St Anthony Head, 3.vii.1989; St Just in Roseland, 29.vi.1989, KNAA.
 SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
 SW86 Tregunnel Saltings, 2000, ECMH & GAC.
 SW93 Pendower Beach, 1983, J Morgan.
 SW96 Tregoss Moor, 1997, Spalding & Haes (2000).
 SX03 The Dodman, 1989, KNAA.
 SX06 Bugle, 1981, APF.
 SX08 Tintagel, 1989, KNAA.
 SX15 Carne Farm, Penpoll, 19.vii.2002, JF.
 SX17 Colliford Lake, 17.vi.2001, BSN.
 SX19 Valency Valley, 12.vii.2001, K Merrifield. Millook Valley, 8.vii.2001, K Merrifield.
 SX25 Polperro to Talland, vii.1979, BJ Lempke (1980).
 SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
 SX36 Cadsonbury Camp, 22.vi.1989 & 13.vii.2001, KNAA.
 SX46 Cotehele, 19.vi.1989, KNAA.
 SS21 Coombe Valley & Kilkhampton Castle, 6.vii.1989, KNAA.

Leptopterna ferrugata (Fallén)

Feeds on red fescue, common bent, wavy hair-grass, oat-grass and meadow-grass in relatively dry grasslands.

- SW33 Cape Cornwall, 24.vi.2003, BSN.
 SW53 Carbis Bay, Land's End, Marazion, AT (1934).
 SW54 St Ives, AT (1934). Upton Towans, 1998, ECMH. Gwithian Towan, 23.vi.2003, BSN.
 SW61 The Lizard, JHK. Kynance Cliff, 1963, RTB. Clahar Bridge, 1981; Mullion, 1981; Predannack, 1981, DAS. Poldhu Cove, 21.vi.2001, BSN.
 SW62 Porthleven, Sargent (1968). Gunwalloe Church Cove, 13.vi.1989, KNAA.
 SW71 Crousa Downs, 1981; Erisey Barton, 1981; Gwendreath, 1981; Main Dale, 1981; Brays Cott Pool, 1981, DAS.
 SW72 Goonhilly, 1980 & 1981, DAS.
 SW83 Zone Point, St Anthony Head, 3.vii.1989, KNAA. Pendower Beach, 11.vii.2001, KNAA.
 SW93 Nare Head, 4.vii.1989, KNAA.
 SW96 Tregoss Moor, 1997, Spalding & Haes (2000).
 SX03 Dodman, 28.vi.1989, KNAA.
 SX06 Retire Common (east), 8.vii.2001, KNAA.
 SX08 Tintagel, 1989, KNAA.
 SX09 Pentargon Cliff, 12.vii.1989, KNAA.
 SX19 Cambeak, Crackington, 11.vii; Pentargon Cliff, 12.vii.1989; Chipman Cliff, Dizzard, 1979, GB; 1989, KNAA.
 SX25 Hendersick, 22.vi.1989, KNAA.
 SX36 Cadsonbury, 22.vi.1989, KNAA.
 SX46 Cotehele, 19.vi.1989, KNAA.

Megaloceraea reticornis (Geoffroy) syn. *Megaloceraea linearis* - **County Rare/ Locally Extinct.**

In places where grasses grow tall and coarse. Widespread nationally.

- SW54 St Ives, JEM (Saunders 1892).

Notostira elongata (Geoffroy)

Nationally a widespread species of tall grassland in dry places, especially roadside verges. Very few local records however. Referred to as *Notostira erratica* L. in old literature but this name is now applied to a separate species.

- SW32 Whitesand Bay, 19.vi.1987, PK.

- SW53 Hayle district, x.1886, JEM (1889b).
 SW54 St Ives district, x.1886, JEM (1889b).
 SW61 Lizard Town, ix.1951, AM Masee (1953).
 SW62 Porthleven, Sargent (1968).
 SW97 Rock, 21.viii.1919, GEH.
 SX06 Bugle, 1981, APF.
 SX38 Beales Meadows Reserve, viii.1998, DM/IK.
 SX45 Forder Creek, Saltash, on couch grass along tidal creek, 20.vii.2005, KNAA.
 SS21 Coombe Valley, swept from rank marshy vegetation by pool, 13.vii.2006, KNAA.

Pithanus maerkeli (Herrich-Schäffer)

- Widespread; amongst tall grasses, especially in damper situations with a few rushes. Common in Cornwall (Thornley, 1934) and still reasonably so.
- SV80 St Agnes, one macropter female, vi.1966, GE Woodroffe (1967).
 SV81 Bryher, vi.1966, GE Woodroffe (1967).
 SV91 St Mary's, in marshy places on grasses and rushes, vi.1966, GE Woodroffe (1967); 14-18.vi.1987, PK.
 SW32 Land's End district, ED Marquand (1884).
 SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, AT (1934). Loggans Moor, 1994, ECMH.
 SW54 St Ives district, 1888, JEM (1889b). St Ives, AT (1934). Gwithian Towan, 23.vi.2003, BSN.
 SW61 Mullion Cliff, 1970, MGM. Clahar Bridge, 1980, DAS. Hayle Kimbro Pool, 25.vi.2006, PAG.
 SW62 Porthleven, Sargent (1968).
 SW72 Gweek, 1962, RTB.
 SW73 Stithians Down, 26.vii.2006, PAG.
 SW75 Newdowns Head, 30.vi.1989, SJG.
 SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
 SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
 SW93 Nare Head, 4.vii.1989, KNAA. Carne Beach, 21.vi.2004, PAG.
 SX06 Red Moor, 8.vii.2001, KNAA.
 SX07 Shell Woods, 16.vi.2006, PAG.
 SX08 Tintagel, viii.1919, GEH. Bossiney, 10.vii.1989, SJG. Glebe Cliff, Tintagel, 9.vii.2001, KNAA.
 SX15 Boconnoc Park, 24.vi.1989; Hoggs Moor, 12.vii.2001, KNAA.
 SX17 Colliford Lake, 17.vi.2001, BSN.
 SX19 Crackington Haven, 11.vii.1989, KNAA. Rusey Cliff, Trevigue, 11.vii.1979, SJG. Millook Valley, 8.vii.2001, K Merrifield.
 SX25 Hendersick, 22.vi.1989, KNAA.
 SX36 Cadsonbury Camp, 22.vi.1989 & 13.vii.2001, KNAA.
 SX46 Landulph, 1930. Cotehele, Calstock, 21.vi.1989 & 17.vii.2006; Haye Farm, St Dominick, 19.vii.2006, KNAA.
 SS21 Coombe Valley, 6.vii.1989, SJ Grove. Marsland Mouth, 2005, PAG. Stowe Barton Farm, 2006, KNAA.

Stenodema calcarata (Fallén)

- Feeds on the flower buds and unripe grain of grasses such as common bent and meadow foxtail. Most frequent in better-drained grasslands. Common (Thornley, 1934).
- SV91 St Mary's, 14-16.vi.1987; St Martins, 17.vi.1987, PK.
 SW32 Land's End district, *Miris*, ED Marquand (1884). Whitesand Bay, 19.vi.1987, PK.
 SW43 Treveffa Farm, 5.vi.2000, KNAA.
 SW52 Rosudgeon, ix.1931, WE China.
 SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay and St Erth, AT (1934). Phillack Towans, 1998, ECMH.

- SW54 St Ives district, ix.1888, JEM (1889b). Upton Towans, 1998 & 2004, ECMH. Nanterrow, Gwithian, 4.vi.2005, KNAA.
- SW61 The Lizard, vi.1924, JHK. Lizard Town, ix.1951, AM Masee (1953). Clahar Bridge, 1981; Mullion, 1980, DAS. Kynance Cove, 24.viii.2006, PAG.
- SW62 Gunwalloe Church Cove, 20.vii.1970, MGM; 13.vi.1989, KNAA.
- SW71 Crousa Paddock, 1981; Main Dale, 1981, DAS.
- SW72 Gweek, 1962, RTB. Porthallow, 23.ix.1992, PK.
- SW84 Calenick, near Truro, AT (1934). Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
- SW98 Lundy Bay, 22.v.1990, KNAA. Port Quin, 10.ix.1985, PK.
- SX06 Breney Common, 28.v.2000, KNAA.
- SX08 Tregardock Cliff, 2.vi.2000, KNAA.
- SX15 Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000).
- SX17 Fernacre Farm Mire, Bodmin Moor, 29.v.2000, KNAA. Colliford Lake, 17.vi.2001, BSN. South Penquite Farm, 23.viii.2005, KNAA.
- SX19 Millook Valley, 29.v.2000, KNAA.
- SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
- SX38 Beales Meadows Reserve, viii.1998, DM/IK.
- SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
- SX46 Bohetherick, St Dominick, weedy grassland, 19.vii.2006, KNAA.
- SS21 Coombe Valley, 13.vii.2006, KNAA.

Stenodema holsata (Fabricius)

Mainly northern and western in Britain, where found in upland pastures and humid shady woodlands; much less frequent towards south and east, and absent from Home Counties. Locally common (Thornley 1934) and less restricted by habitat than in much of country.

- SW42 Clodgy Moor, 2.vii.1967; Chy-en-hal Moor, 9.vi.1968, SMT.
- SW43 Zennor, 1962, RTB. Pennance Farm, 23.v.1989, KNAA. Foage Farm, Zennor, 2006, KNAA.
- SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, AT (1934).
- SW54 St Ives district, ix.1888, JEM (1889b). St Ives, AT (1934).
- SX05 Molinnis, Roche CP, 2005, JD.
- SX06 Bugle, 1981, APF. Lockengate, Luxulyan CP, 2005, JD.
- SX17 Fernacre Farm Mire, Bodmin Moor, 29.v.2000, KNAA. Colliford Lake, 17.vi.2001, BSN. South Penquite Farm, 23.viii.2005, KNAA.
- SX18 Lowertown, Moorgate, 10.vi.1965. FA Turk.
- SX19 Crackington Haven, 11.vii.1989, KNAA. Lower Tresmorn, 8.vi.2000, KNAA.
- SX26 Draynes Wood, 30.v.2000, KNAA.
- SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.

Stenodema laevigata (L.)

Occurs in damper, more luxuriant, grasslands than *S. calcaratum*. Very common (Thornley 1934).

- SW32 Land's End district, ED Marquand (1884).
- SW33 Portheras Cove, viii.1933, WE China. Kenidjack Cliff, 13.v.1996, KNAA. Boscawell Cliff, 20.viii.2002, KNAA.
- SW43 Zennor and Morvah, viii.1924, OWR. Treen Cliff, 22.v.1979, KNAA. Rosewall Hill, 5.vi.2000, KNAA. Foage Farm, Zennor, 8.viii.2006, KNAA.
- SW44 Treveal, 23.v.1989, KNAA.
- SW52 Rosudgeon, ix.1931, WE China.
- SW53 Hayle district, ix.1888, JEM (1889b). Lelant, Carbis Bay, St Erth, AT (1934). Trescowe, 26.v.1989, KNAA. Loggans Moor, 1994,1995 2004, ECMH. Hayle Estuary, 26.vi.2003, BSN.
- SW54 St Ives district, ix.1888, JEM (1889b). St Ives, AT (1934).
- SW61 Lizard district, AT (1934). Lizard Town, ix.1951, AM Masee (1953). Caerthillan Cove, 1970, MGM. Clahar Bridge, 1981; Mullion, 1981, DAS. Predannack, 22.viii.1988; 6.vi.2000, KNAA. Holestrow, 18.v.1994, APF. Kynance Cove, 24.viii.2006, PAG.

- SW62 Porthleven, Sargent (1968). Gunwalloe Towans, 1970, MGM. Gunwalloe Marsh, 1.vi.1989; Penrose, 5.vi.1989, KNAA.
- SW64 Duchy College, Rosewarne, 1983. Nancekuke, 1983, APF.
- SW71 Carleon Cove, 14.vi.1979, KNAA. Erisey Barton, 1981; Golgotham, 1981; Gwendreath, 1981, DAS. Gwavas Cliff, 2000, AS & R. Howard.
- SW72 Goonhilly Downs, AT (1934). Manaccan, 1962, RTB. Porthallow, 23.ix.1992, PK.
- SW75 Perranporth, 2005, PAG.
- SW76 Pentire Point West, 25.v.1989 & Porth Joke valley, 31.viii.2006, KNAA.
- SW82 Porthoustock, 18.viii.2006, PAG.
- SW83 Trelessick, 12.vi.1989; Pill Farm, 19.v.1994, KNAA.
- SW84 Pencalenick and Idless, near Truro, AT (1934). Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971). Bussavean, Kenwyn, 5.vi.2000, KNAA.
- SW85 Trerice, 30.v.1989, KNAA.
- SW86 Bre-Pen Farm, 11.vi.2000, GA Collins.
- SW87 Park Head, 1996, ECMH.
- SW94 Porthluney Cove, 9.viii.1999, PK.
- SW97 Pentireglaze, St Minver Highlands, 2.viii.2006, KNAA. Harbour Cove, Padstow, 26.viii.2006, PAG.
- SW98 Port Quin, 3.viii.2006, KNAA.
- SX06 Bugle, 1981, APF. Retire Common, 1997, Spalding & Haes (2000).
- SX08 Port Gaverne, 1992. Tregardock Cliff, 2.vi.2000; Bossiney Cliffs, 21.viii.2002, KNAA.
- SX15 Lansallos, 14.v.1990; Ethy Wood, 26.v.1990, KNAA. Lantic Bay, 7 & 11.viii.1999, PK. Penpoll Creek, 19.viii.2002, KNAA. Carne Farm, Lanteglos, 26.viii.2006, KNAA.
- SX17 Delford Bridge, Kerrow Downs, Bodmin Moor, 29.v.2000, KNAA. Dozmary Pool, 9.ix.1985, PK.
- SX19 Minster Field, Valency Valley, 17.v.1990, KNAA. Lower Tresmorn, 8.vi.2000, KNAA.
- SX25 Talland Bay, 1.vi.2000, KNAA.
- SX28 Laneast Downs, 1994, ECMH.
- SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
- SX35 Tregantle, x.1911, JHK. Hessenford, 1988, AS.
- SX37 Windsor Lane, Kelly Bray, 12.viii.1998, AS & ECMH. Tregonnett Wood, Kerney Bridge, South Hill, 30.v.2006, KNAA.
- SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
- SX46 Cotehele Estate, Calstock, 19.vi.1989 & vii.2006; Haye Farm, St Dominick, 19.vii.2006, KNAA.
- SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.
- SS21 Stowe Wood, 11.ix.1985, PK. Coombe Valley, 31.v.2000, KNAA.

Teratocoris saundersi Douglas & Scott - **County Rare**.

Widespread in marshes nationally, feeding on sea club-rush, glaucous bulrush, mud rush, spike rush, sea poa and reed.

SX17 Dozmary Pool, 9.ix.1985, PK.

Trigonotylus caelestialium Kirkaldy

Breeds on various grasses in both moist and dry habitats, as well as on crops such as barley, corn, oats, rye and wheat. Overlooked in past amongst *T. ruficornis*; first noticed in Britain amongst museum specimens dated 1900, 1922 and 1953, from Surrey and Sussex (Aukema & Nau, 1992); presumably some of the older Cornish records may refer to this species.

SW53 Hayle Estuary, by sea wall, 26.vi.2003, BSN.

SW72 Goonhilly Downs, swept from grassy trackside, 2006, J Widgery.

Trigonotylus ruficornis (Geoffroy)

Found in dry grassy places, on wavy hair-grass, common bent and red fescue; also on timothy and other grasses in meadows, and sea poa and creeping bent on upper saltmarsh. *T. caelestialium* was until relatively recently mistakenly identified as *T. ruficornis* and so all records before 1992 need to be taken with caution.

- SV91 St Mary's, 1927, OWR. Porthellick, vi.1961, KGV Smith (1963).
SW43 Foage Farm, Zennor, 8.viii.2006, KNAA.
SW52 Rosudgeon, ix.1931, WE China.
SW53 Hayle district, ix.1888, JEM (1889b). St Erth, 1963, RTB.
SW54 St Ives district, ix.1888, JEM (1889b).
SW61 Clahar Bridge, 1980 & 1981; Mullion, 1981; Predannack, 1981, DAS.
SW64 Nancekuke, 1981, APF.
SW71 Kennack Sands, 1960, RTB. Crousa Downs, 1981; Erisey Barton, 1980 & 1981; Main Dale, 1981, DAS.
SW72 Goonhilly, 1980 & 1981; Trevassack, 1981, DAS.
SW96 Retire Common (west), 8.vii.2001, KNAA.
SW98 Pentire Head, St Minver Highlands, 2.viii.2006, KNAA.
SX06 Bugle, 1981, APF. Red Moor, 8.vii.2001, KNAA.
SX08 Bossiney Common, 22.viii.2002, KNAA.
SX15 Lostwithiel, saltmarsh, 23.viii.2000, KP-M.
SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
SX38 Beales Meadows Reserve, viii.1998, DM/IK.
SX46 Cotehele, 21.vi.1989, KNAA. Haye Farm, St Dominick, 20.vii.2006, KNAA.

Halticus apterus (L.) - **County Rare/ Locally Extinct.**

On Leguminosae and bedstraws in southern counties. Reported in the county by Bedwell (1945) and Masee (1955).

Halticus macrocephalus Fieber - **Red Data Book Category K (Insufficiently Known).**

A Mediterranean species only known in Britain from north Cornwall where it is associated with lady's bedstraw on sand dunes. Feeding leaves extensive damage to the leaves, in the form of large white patches. Very localised colonies.

- SW53 Porth Kidney Sands, vii.1968; Lelant, vii.1970, RT Bannister.
SW97 Rock, near Padstow, minute nymphs under lady's bedstraw on the sand-dunes, vi.1956 (Woodroffe, 1956) - colony destroyed by wind-blow a year later; "an exhaustive search of the abundant foodplant finally disclosed another colony occupying an area of less than a square yard", vii. 1957, GE Woodroffe (1958).

Orthocephalus coriaceus (Fabricius) – **County Rare.**

A scarce species of disturbed ground, associated with bedstraws, yarrow, tansy and greater knapweed. Only discovered in county in 2002.

- SW83 Pednvanan, Porthcurnick, 20.viii.2002, swept from large patch of yarrow in coastal grassland, KNAA.

Orthocephalus saltator (Hahn)

A widespread species nationally, feeding on Compositae in weedy situations, in marshes and on the coast. Cornwall (Clark, 1906) – the local sites tend to be old herb-rich grasslands rather than wet or disturbed ground, and the grasslands tend to be on seacliffs rather than inland.

- SV91 St Mary's, 1927, OWR.
SW32 Sennen Cove, 20.vi.2001, BSN. Whitesand Bay, 24.vi.2003, BSN. Trevean, 28.v.2004, PAG.
SW52 Prussia Cove, 11.vii.2006, PAG.
SW61 Predannack South Cliff, 23.ix.1998, PJH. Caerthillian Cove, 2.vi.2004, PAG. Gew Graze, 21.vii.2005, PAG.
SW62 Chyvarloe Cliffs, 20.vii.1970, MGM. Loe Bar, 20.vii.2006, PAG.
SW76 West Pentire Head, female micropter, 11.vii.2003, KNAA.
SW83 Pendower Beach, 1989, SJG, det. PK.

- SW93 Pennare Valley, Nare Head, 4.vii.1989, KNAA.
 SX05 The Gribbin, 1989, coll. SJG, det. PK.
 SX08 Treknow Cliff, Tintagel, 10.vii.1989, KNAA.
 SX25 Hore Point, 22.vi.1989, KNAA.
 SX46 Burraton Lane, Cotehele, flowery pasture, 21.vi.1989, KNAA. Haye Farm, St Dominick, 20.vii.2006, KNAA.

Strongylocoris luridus (Fallén) - **Nationally Scarce.**

Feeds on sheep's-bit, where it grows in open-structured habitats and where there is much bare ground or rock; chiefly south-western England. Discovered on the Lizard in 1921, but now known to be more widespread.

- SV91 St Martin's, in numbers under sheep's-bit, vi.1966, GE Woodroffe (1967); rather common on sheep's-bit on old walls, 17.vi.1987, PK. St Mary's, in numbers, vi.1966, GE Woodroffe (1967); rather common on sheep's-bit on old walls, 14-18.vi.1987, PK.
 SW32 Gwynver, near Sennen, vii.1963, RTB. Land's End, 1978, AP Foster.
 SW33 Boscean, 1986, PFW.
 SW52 Prussia Cove, 11.vii.2006, PAG. Rinsey Head, 4.vii.2006, J Widgery.
 SW61 The Lizard, six, vi.1921, JHK, det. EA Butler (Bacchus, 1924). Lower Predannack Cliff, 13.vi. & 21.vii.2005, PAG.
 SW98 Pentire Head, in numbers, vi.1956, GEW (1956).
 SX03 The Dodman, 28.vi.1989, SJ Grove, det. PK.
 SX04 The Gribbin, 1989, coll. SJG, det. PK.
 SX05 Dryers Pit, Bugle, Roche CP, adults on sheep's-bit, 13.vii.2005 (Denton, 2005).
 SX08 Tregardock, in numbers on the cliffs, 9.vi.1956, GEW (1956).

Blepharidopterus angulatus (Fallén) – Black-kneed capsid. **County Scarce.**

Widespread nationally on apple, alder, elm, birch, lime, etc. Feeds on small insects and mites as well as sucking sap. Reported in the county in Clark (1906) but apparently very localised here.

- SW73 Argal Dam, 21.viii.2006, PAG.
 SX08 Port Gaverne, 1992, M Lee.
 SX16 Lanhydrock Estate, 14.viii.2006, PAG.

Blepharidopterus diaphanus (Kirschbaum) – **Locally Extinct.**

Widespread nationally on white willow, and other willows. Reported in the county by Masee (1955) but not Bedwell (1945) or Thornley (1953).

Cyllecoris histrionius (L.) - Widespread and common nationally on oak foliage.

Reported in the county in Clark (1906). Present in the main stands of oak throughout Cornwall, although localised; the ease with which it has been found recently suggests that it has been overlooked.

- SW53 Godolphin, 1965, RTB.
 SW72 Tremayne Woods, teneral, 31.v.1989, KNAA.
 SX06 Dunmere Wood, 28.vi.2006, GBH. Lanhydrock, 9.vi.2004, KP-M.
 SX15 Boconnoc Park, 24.vi.1989, KNAA.
 SX17 South Penquite Farm, Blisland, wooded river valley, 2005, KNAA.
 SX27 Middlewood, 13.vi.2004, KP-M.
 SX46 Cotehele, 21.vi.1989, KNAA.
 SX83 Trelissick, 5.vii.1979, KNAA.

Cyrtorhinus caricis (Fallén) - **County Scarce.**

Widespread nationally; found around the bases of clumps of sedge and rushes, where it feeds on the eggs of leafhoppers. Cornwall (Clark, 1906).

- SV81 Tresco, on *Juncus* around the Abbey Pond, 1964/65, GE Woodroffe (1966a).
 SW43 Foage Farm, Zennor, in rushy mire areas, 8.viii.2006, KNAA.
 SW53 St Erth, 1963, RTB.
 SW54 St Ives, one, ix.1929, AT (1934).
 SX05 Molinnis, Roche CP, 2005, JD.
 SX06 Criggan, Roche CP, 2005, JD.

SX17 Dozmary Pool, 9.ix.1985, PK.

Dryophilocoris flavoquadrimaculatus (DeGeer)

Common on oak foliage nationally. Cornwall (Clark, 1906). Present in the main stands of oak throughout the county.

SW72 Tremayne Woods, 31.v.1989, KNAA. Merthen Wood, 28.v.1994, PAG. Frenchman's Pill, 12.v.1994, PAG.

SW83 Trelassick, off oak, 5.vii.1979, 12.vi.1989, KNAA.

SW84 Bussavean, Kenwyn, 5.vi.2000, KNAA.

SX05 Prideaux Wood, 28.v.2000, KNAA.

SX06 Boscarne Junction, 31.v.2006, KP-M.

SX15 Boconnoc Park, 20.v.1990; Ethy Wood, 26.v.1990, 30.v.2000, KNAA. Lombard Farm, Penpoll Creek, 12.vi.2000, GA Collins. Carne Farm, Penpoll, 19.vii.2002, JF.

SX19 Peter's Wood, Valency Valley, & Millook Valley, 29.v.2000; Lower Tresmorn, 8.vi.2000, KNAA. Minster Wood, 16.vi.2000, GA Collins & A Spalding.

SX25 Kilminorth Wood, 1.vi.2000, KNAA.

SX28 Two Bridges, Polyphant, 29.v.2000, John Harper.

SX29 Hilton Wood, Week St Mary, 31.v.2000, KNAA.

SX36 Cadsonbury, 22.vi.1989, KNAA.

SX38 Tamar Bridge, 2.vi.2000, John Harper.

Globiceps flavomaculatus (Fab.) - **Nationally Scarce & County Rare.**

Widely distributed across southern Britain, but very local, occurring around luxuriant vegetation and low shrubs in water meadows, woodland margins, and other damp situations. Some older records may be erroneous due to confusion with *G. woodroffei*, which was only recognised in Britain in 1959. Reported in the county by Bedwell (1945) and Masee (1955) but not in Thornley (1934).

SW33 Cape Cornwall, female amongst rank grass, 14.vii.2006, J. Widgery.

SW71 Kennack Sands, vii.1963, RTB.

Heterocordylus genistae (Scopoli) – **County Rare.**

Widespread nationally on dyer's greenweed *Genista tinctoria*. Not listed by Clark (1906), Bedwell (1945) or Masee (1955). Currently only known from the Lizard peninsula where it was found widely in 1989.

SW61 Lower Predannack Cliff, *G. tinctoria*, 14.vi.1989; Lizard Point, *G. tinctoria*, 15.vi.1989, KNAA. Mullion Cliffs, 8.vi.2005, PAG; 13.vii.2006, J. Widgery.

SW62 Pedngwinian, Gunwalloe, Penrose Estate, plentiful on *G. tinctoria*, 5.vi.1989, KNAA.

Heterocordylus tibialis (Hahn) syn. *Heterocordylus leptocerus*

Common on broom nationally and also occurs on *Genista pilosa* in Pembrokeshire. Cornwall (Bedwell, 1945).

SW32 Land's End district, ED Marquand (1884).

SW42 Sancreed, 1965, RTB.

SW54 Navax Point, 23.vi.2003, BSN. Nanterrow Farm, Gwithian, 4.vi.2005, KNAA.

SW61 Lizard, 4.vii.1981. Clahar Bridge, 1.viii.1981, DAS.

SX06 Hart Wood, Lanhydrock, broom, 26.vi.1989, KNAA.

Heterotoma planicornis (Pallas) syn. *Heterotoma merioptera*

Abundant on rank vegetation in southern Britain, rarer in the north; favours nettles. Widespread in the county.

SV91 St Mary's, 1925-27, OWR.

SW32 Land's End district, ED Marquand (1884).

SW33 Kenidjack, 1995, AS & ECMH.

SW43 Watchcroft, 1993, AS & ECMH.

SW52 Rosudgeon, ix.1931, WEC. Prussia Cove, nymphs, 11.vii.2006, PAG.

SW53 Hayle district, ix.1888, JEM (1889b). Loggans Moor, 24.vii.1994, 1995, 2004, ECMH. Upton Towans, 2.viii.2006, PAG.

SW54 St Ives district, ix.1888, JEM (1889b); common on nettles, AT (1934). Gwithian, 1962. Upton Towans, 1998, ECMH. Navax Point, 23.vi.2003, BSN.

- SW61 Mullion, 28.vii.1981, DAS.
 SW62 Porthleven, Sargent (1968); Porthleven to Loe Bar, nymph, 18.v.2004, PAG. Loe Bar, 20.vii.2006, PAG.
 SW64 Reskadinnick, 4.vii.1976, FAT. Duchy College, Rosewarne, 3.ix.2005, KNAA.
 SW71 Erisey Barton, 5.viii.1980, DAS. Kennack Sands, 22.ix.2002, PAG.
 SW83 St Just in Roseland, 29.vi.1989; Newton Cliff, St Mawes, 3.vii.1989; Treluggan Cliff, Gerrans Bay, 5.vii.1989, KNAA. Pendower Beach, 11.vii.2001, KNAA. Towan Beach, 3.vii.1989, SJG. Killigerran Head, 21.viii.2004, PAG.
 SW87 Park Head, 1996, ECMH.
 SW96 Rosenannon Bog & Downs, 1997, Spalding & Haes (2000).
 SW97 Trevathan, 2006, KP-M.
 SW98 Pentire Farm, 2.viii.2006 & Com Head, 3.viii.2006, St Minver Highlands, KNAA.
 SX06 Bugle, 1981, APF. Laveddon, 29.vii.2005, KP-M.
 SX08 Dannonchapel & Tregardock, 1995, AS & ECMH.
 SX15 Lansallos, tall herbs of flush on coastal cliff, 1.viii.1979, KNAA.
 SX19 Dizzard Oakwood, 10.vii.2001, KNAA.
 SX27 Wimalford, 19.vii.2006, KP-M.
 SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
 SX38 Beales Meadows Reserve, viii.1998, DM/IK.
 SX45 Torpoint, vii.1931, AVM (DA ms). Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Cotehele Estate, Calstock & St Dominick, vii.2006, KNAA.

Malacocoris chlorizans (Panzer) – **County Rare/ Locally Extinct**. Delicate apple-capsid.

Widespread species nationally, especially common on hazel, but also on other broad-leaved trees such as elm and apple. No modern records from county, although perhaps just overlooked.

- SX08 St Teath, on hazel, viii.1919, GEH.
 SX37 Lezant, viii.1919, AVM.

Mecomma dispar (Boheman) – **County Rare**.

A boreo-montane species in Europe but surprisingly versatile in Britain and Ireland. Usually found in open grasslands, often rank, on marshes, in sand dunes and on seacliffs. Widespread in the north and west, also known from East Anglia and Surrey, but not previously reported from the south west.

- SX17 South Penquite Farm, 22.vi.2005, KNAA.
 SX19 Millook Valley, single male, 10.vii.2001, KNAA.

Mecomma ambulans (Fallén)

Common nationally, amongst rank vegetation throughout Britain. Few local records but perhaps just overlooked.

- SW43 Foage Farm, Zennor, 8.viii.2006, KNAA.
 SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, AT (1934).
 SW54 St Ives district, ix.1888, JEM (Mason, 1889).
 SW72 Manaccan, 1962, RTB. Tremayne Quay, 21.vii.2002, PAG.
 SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
 SW84 Calenick, Truro, AT (1934).
 SW95 Crowhill Valley, Trenowth, 12.vii.2001, KNAA.
 SX17 South Penquite Farm, 23.viii.2005, KNAA.
 SX46 Comfort Wood, Cotehele, 20.vii.2006, KNAA.

Orthotylus ericetorum (Fallén)

Throughout Britain, wherever heather and cross-leaved heath grow.

- SW33 Boscawell Cliff, 20.viii.2002; Pendeen Old Cliff, 21.viii.2002, KNAA.
 SW43 Foage Farm, Zennor, 8.viii.2006, KNAA.
 SW52 Rosudgeon, ix.1931, WE China.
 SW53 Hayle district, x.1886, JEM (1889b). Carbis Bay, ix.1932, AT (1934).
 SW54 St Ives district, x.1886, JEM (1889b).
 SW61 Clahar Bridge, 1980; Mullion, 1980/81, DAS. Kynance, 17.ix.1992, PK. Predannack, 20.ix.1992, PK.

- SW71 Crousa Downs, 1980; Erisey Barton, 1980-81; Golgotham, 1980; Gwendreath, 1980; Main Dale, 1980, DAS.
- SW72 Goonhilly Downs, ix.1932, AT (1934); 1981, DAS; 20.ix.1992, PK. Trevassack, 1981, DAS.
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW97 Pennywilgie Point, St Minver Highlands, 3.viii.2006, KNAA.
- SX08 Bossiney Cliffs, 22.viii.2002, KNAA.
- SX19 Pony Cliff, The Dizzard, 13.vii.1989, KNAA. High Cliff, 10.ix.1985, PK.
- SX47 Clitters Mine, Gunnislake, 14.viii.1998, AS; 29.ix.2004, KNAA.
- SS11 Tidna Valley, 11.ix.1985, PK.

Orthotylus flavosparsus (Sahlberg, C.R.)

Common on chenopods over much of Britain, especially fat hen and goosefoots. Reported in the county in Clark (1906). The recent flurry of records suggests that it has been overlooked.

- SV91 St Mary's, 14-18.vi.1987, PK.
- SW53 Lelant, four, from *Beta maritima*, ix.1931, AT (1934).
- SW61 Kynance Cove, 22.ix.1998, PJH.
- SW76 West Pentire Farm, Crantock, numerous on *Atriplex* in arable fields, 31.viii.2006, KNAA.
- SX05 Par, 9.viii.2003, KP-M.
- SX25 Kilminorth Wood, 12.viii.1999, PK.

Orthotylus flavinervis (Kirschbaum) – **County Scarce.**

Locally abundant on alder across the southern counties; also on sycamore. Reported in the county in Clark (1906).

- SW61 Mullion Cove village, on sycamore, 20.vi.2001, BSN.

Orthotylus marginalis Reuter - Dark green apple-capsid.

Common and often abundant on sallow, willow, alder and apple; also on currants and sloe. Cornwall (Butler, 1923).

- SW53 St Erth, 1965, RTB.
- SW61 Mullion, 27.vii.1981, DAS.
- SW62 Porthleven, Sargent (1968).
- SW71 Golgotham, 20.ix.1980, DAS.
- SW76 Cubert, off hedge by village hall, 11.vii.2003, KNAA.
- SW83 St Anthony Head, 3.vii.1989, KNAA.
- SX06 Retire Common, 8.vii.2001, KNAA.
- SX15 Penpoll Creek, 19.viii.2002, KNAA.
- SX17 South Penquite Farm, Blisland, 2005, KNAA.
- SX25 Hore Point, 22.vi.1987, KNAA.
- SX46 Cotehele, 20.vi.1989, KNAA.

Orthotylus nassatus (Fabricius) – **County Rare/ Locally Extinct.**

A widespread species nationally, on lime, oak and occasionally ash and willow.

- SW32 Land's End district, *Litosoma*, ED Marquand (1884).
- SS21 Kilkhampton district: in the oak-lined coombes (Clark, 1906).

Orthotylus ochrotrichus Fieber – **County Scarce.**

Widespread nationally; on various plants, but principally elm and nettles, especially where the latter are growing in hedgerows or at woodland margins. Has been confused with *O. prasinus* in the past and so old records require checking.

- SV91 St Mary's, 1927, OWR.
- SW84 Calenick, Truro, three, viii.1932, AT (1934).
- SW85 Trerice, 8.viii.1979, WAE.
- SW95 Crowhill Valley, Trenowth, 12.vii.2001, KNAA.
- SX28 Innside woodland, Penheale, 10.vii.2001, KNAA.

[Orthotylus prasinus (Fallén) syn. *Orthotylus scotti* – **Unconfirmed Species.**

Widespread over much of southern England on various broad-leaved trees, principally elm. Past confusion with the preceding species means that old records require confirmation. Cornwall (Thornley, 1934).

- SV Scilly, ix.1888, JEM (1889b).
- SW53 Hayle district, ix.1888, JEM (1889b).
- SW54 St Ives district, ix.1888, JEM (1889b).]

Orthotylus tenellus (Fallén) - **County Rare.**

Widespread nationally on ash foliage, also on hazel and oak. Reported in the county in Clark (1906).

- SX19 Dizzard Wood, 10.vii.2001, KNAA.

Orthotylus viridinervis (Kirschbaum) – **County Scarce.**

Widespread nationally on wych elm.

- SW93 Nare Head, elm, 4.vii.1989, KNAA.
- SX46 Cotehele, 21.vi.1989, KNAA.

Orthotylus adenocarpi (Perris) - **County Rare.**

Widespread nationally on broom.

- SW71 Goonhilly, 1965, RTB.
- SW72 Mawgan, 1960, RTB.

Orthotylus virescens (Douglas & Scott) - **County Scarce.**

Common on broom nationally. Cornwall (Clark, 1906).

- SV91 St Mary's, 1925-27, OWR.
- SW43 Penzance, 1962, RTB.
- SX17 South Penquite Farm, two off gorse, 23.viii.2005, KNAA.
- SX19 The Dizzard, 13.vii.1989, KNAA.

Platycranus bicolor (Douglas & Scott)

A western European species which is often abundant on gorse in August and September; southern Britain only. Cornwall (Thornley, 1934).

- SV81 Tresco, 15.vi.1987, PK.
- SW52 Rosudgeon, ix.1931, WE China.
- SW53 Carbis Bay, common on gorse, AT (1934). St Erth, 1964, RTB.
- SW61 Kynance, 17.ix.1992, PK.
- SW71 Crousa Downs, 17.ix.1980, DAS.
- SX15 Lansallos East Coombe, plentiful on gorse, 22.viii.2006, KNAA.
- SX17 South Penquite Farm, in small numbers on gorse, 23 & 25.viii.2005, KNAA.
- SX19 High Cliff, 10.ix.1985, PK.
- SS21 Stowe Wood, 11.ix.1985, PK.

Pseudoloxops coccineus (Meyer-Dür) – **Locally Extinct.**

Found locally on ash, especially large trees with numerous fruits; mainly southern Britain. Cornwall (Clark, 1906).

Hallodapus rufescens (Burmeister) - **County Rare.**

A scarce heathland species.

- SV91 St Martin's, "on the most exposed part... where nothing grows but the dwarfed heather prostrate to the ground, and scathed by the fierce west winds, ix.1888, JEM (1889b); one brachypter walking on a footpath near Great Bay, 1964/65, GE Woodroffe (1966a). St Mary's, 1927, OWR.
- SW62 Chyvarloe Cliffs, 20.vii.1970, MGM.

Amblytylus nasutus (Kirschbaum) - **County Rare.**

Feeds on various grasses, especially meadow-grass; an early successional species, colonising disturbed and re-establishing grasslands, mainly in southern Britain. Only known in county from Lizard peninsula.

- SW61 Clahar Bridge, 1980/81, DAS.
- SW71 Golgotham, 20.ix.1980, DAS. Lizard, 4.vii.1981, DAS.

Asciodema obsoleta (Fieber)

Common on gorse and broom.

- SW33 Boscawell, 21.viii.2003, KNAA. Cape Cornwall, 24.vi.2003, BSN.
SW52 Rosudgeon, ix.1931, WEC.
SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, viii.1931, AT (1934).
SW54 St Ives district, ix.1888, JEM (1889b). Gwithian, 1962, RTB.
SW61 Mullion, 1981, DAS. Mullion Cove village, 20.vi.2001, BSN. Poldhu Cove, 23.vi.2003, BSN.
SW71 Kennack Sands, 1960, RTB. Crousa Downs, 1981; Erisey Barton, 1981; Main Dale; 1980, DAS.
SW76 Crantock Beach, 6-8.viii.1979, WAE. West Pentire, 11.vii.2003, KNAA.
SW84 Pencalenick, viii.1932, AT (1934).
SW96 Tregoss Moor, 1997, Spalding & Haes (2000).
SX05 Dryers Pit, Roche CP, 2005, JD.
SX06 Retire Common (east), 8.vii.2001, KNAA.
SX08 Bossiney Cliffs, 22.viii.2002, KNAA.
SX15 Carne Farm, Penpoll, 19.vii.2002, JF.
SX17 Colliford Lake, 17.vi.2001, BSN. South Penquite Farm, 25.viii.2005, KNAA.
SX19 Dizzard, 13.vii.1989, KNAA.
SX25 Hore Point, 22.vi.1989, KNAA.
SS21 Stowe Wood, 11.ix.1985, PK.

Atractotomus parvulus Reuter syn. *Atractotomus mirificus* Woodroffe

Feeds on Scots pine and has colonised Britain from the south-east in recent years. Not native in county.

- SW63 Duchy College, Rosewarne, male, B. Nau (WR Dolling, in *Heteroptera Study Group Newsletter* No. 3, May 1984).

Chlamydatus saltitans (Fallén) – **Locally Extinct.**

Occurs in short dry grassland, such as lawns and ruderal situations, feeding on various Leguminosae. Taken sparingly all over the western part of the county (Clark, 1906), but not since.

- SW32 Land's End district, *Agalliastes*, ED Marquand (1884).

Chlamydatus pullus (Reuter) – **County Rare.**

Widespread nationally amongst low-growing plants, especially in hot dry situations. Probably feeds on medick and clover. Discovered on the Lizard as recently as 1970.

- SW61 Mullion Cliff, 20.vii.1970, MGM.

Compsidolon salicellum (Herrich-Schäffer) – **County Rare.**

Found widely in the southern half of Britain on hazel, willow, alder, apple, and a variety of other trees and shrubs. *Psallus salicellus* in Thornley (1934).

- SW53 Carbis Bay, from *Salix*, ix.1929, AT (1934).
SW62 Porthleven, Sargent (1968),
SX05 Holm Bush, 1866 (Power coll.).

Conostethus roseus (Fallén) – **County Rare.**

Associated with clovers growing in dry areas of short grasses; uncommon, mainly southern.

- SW71 Kennack Sands, 1964, RTB.

Europiella artemisiae (Becker) or *Europiella decolor* (Uhler) – **County Rare.**

These species have only recently been distinguished in GB from *Europiella albipennis* (Fallén); the former appears to be associated mainly with mugwort *Artemisia vulgaris*, the latter with sea mugwort *Seriphidium maritimum*; the true *E. albipennis* with *A. campestris* which is in GB a Breckland speciality (Dolling, 1999). Associations with cultivated varieties of *Artemisia* remain unclear. “*Plagiognathus albipennis*” in Clark (1906).

Harpocera thoracica (Fallén)

A common species on oak foliage in early summer. Reported in the county in Clark (1906).

- SW62 Helston, 1965, RTB. Cury, 2.vi.1981, DAS.
SW72 Tremayne Woods, 31.v.1989, KNAA.

- SW95 Carnwinnick Wood, Trenowth, 28.v.2000, KNAA.
 SX06 Breney Common, 28.v.2000, KNAA. Bodmin, garden, 1999-2003, KP-M.
 SX09 Boscastle, 17.v.1990, KNAA.
 SX15 Ethy Woods, 30.v.2000, KNAA.
 SX16 Warleggan, 26.v.1985, AS. Hart Wood, 2006, KP-M.
 SX19 Peter's Wood, Valency Valley, & Millook Valley, 29.v.2000, KNAA. Bynorth Cliff & Lower Tresmorn, 8.vi.2000, KNAA.
 SX25 Kilminorth Wood, 1.vi.2000, KNAA.
 SX29 Hilton Wood, Week St Mary, 31.v.2000, KNAA.
 SX36 Clapper Bridge, 24.v.1985, AS.
 SX37 Penharget Wood, 25.v.1985, AS.
 SX38 Beales Meadow Reserve, 1.vi.2000, K. Merrifield.
 SS21 Coombe Valley, 31.v.2000, KNAA.

Hoplomachus thunbergii (Fallén) - **County Rare/ Locally Extinct.**

Feeds on mouse-ear hawkweed, across southern Britain. Reported in the county in Clark (1906).

Lopus decolor (Fallén)

A widespread species nationally, on undisturbed grasslands such as commons, saltmarshes and marshes, feeding on bents. Surprisingly few records from county.

- SW53 St Erth, one, viii.1930, AT (1934); 1963, RTB. Carbis Bay, several, vii.viii.1932, AT (1934).
 SW61 Clahar Bridge, 1.viii.1981, DAS.
 SW62 Porthleven, Sargent (1968).
 SW71 Crousa Downs, 29.vii.1981, DAS.
 SX05 Molinnis, Roche CP, 2005, JD.
 SX06 Criggan, Roche CP, 2005, JD.
 SX19 The Dizzard, 13.vii.1989, KNAA.
 SX46 Haye Farm, St Dominick, 19.vii.2006, KNAA.

Macrotylus paykulli (Fallén)

An abundant species on restharrow. Reported in the county in Clark (1906).

- SW32 Sennen Cove, 20.vi.2001, BSN. Whitesand Bay, 24.vi.2003, BSN.
 SW33 Kenidjack, 1995, AS & ECMH.
 SW53 Phillack Towans, 1998, ECMH.
 SW54 Gwithian, 1981, APF. Upton Towans, 1998, 2002 & 2004, ECMH.
 SW61 Caerthillian Cove, 1970, MGM. Lower Predannack Cliff, 14.vi.1989; Lizard Point, 15.vi.1989, KNAA. Poldhu Cove, 21.vi.2001, BSN.
 SW62 Gunwalloe Church Cove, 5.vi.1989; Loe Bar, 8.vi.1989, KNAA. Mullion Golf Course, 2000, GA Collins & ECMH.
 SW71 Kennack Sands, 1963, RTB.
 SW75 Penhale Dunes, 14.vi.1994, PAG.
 SW76 Rushy Green, Crantock, vi.vii.2000, GA Collins & ECM Haes.
 SW83 Pendower Beach, 2.vii.2001, PAG.
 SX08 Dannonchapel & Tregardock, 1995, AS & ECMH.
 SX25 Struddicks, St Martin, 1999, AS & ECMH.
 SS20 Northcott Mouth, 12.vii.1989, KNAA. Sandy Mouth, cliffs to south, 12.vii.2006, KNAA.
 SS21 Steeple Point, 13.vii.2006, KNAA.

Megalocoleus molliculus (Fallén) - **County Scarce.**

Reputedly a common species on yarrow, but perhaps only where large stands of the food plant are flowering.

- SW53 Carbis Bay, two, ix.1932, AT (1934).
 SW83 Falmouth (Clark,1906). Pednvdan, Porthcurnick, abundant on large stand of yarrow, 20.viii.2002, KNAA; 11.viii.2004, PAG.
 SX15 Fowey (Clark,1906). Lansallos East Coombe, 22.viii.2006, KNAA.

Megalocoleus tanaceti (Fallén) syn. *Megalocoleus pilosus* (Schrank) - **County Rare/ Locally Extinct.**

Feeds on flower buds, flowers and unripe fruits of tansy.

SW97 Padstow (Clark, 1906).

SX38 Launceston, not uncommon (Clark, 1906).

Oncotylus viridiflavus (Goeze) - Knapweed Plant Bug.

Locally abundant in southern counties on the flower-heads of common knapweed, but appears to be of restricted occurrence in Cornwall. The foodplant is widespread in the county and the lack of records suggests that the requirement for good aerial development and flowering of the host is seldom met.

SW53 Marazion, viii.1996, PAG.

SW54 Gwithian, 1964, RTB; 1981, APF.

SW62 Loe Bar, 15.viii.2006, PAG.

SW75 Cubert Common, 9.viii.2006, KNAA.

SW76 Porth Joke, Crantock, on cliff-top grassland north of bay, 7.viii.2006, KNAA.

SW83 St Anthony's Head, 2006, KP-M.

SW85 Tresawna & Carland Cross, 2006, KP-M.

SW94 Hemmick, abundant on carpets of knapweed, 11.viii.2004, KP-M.

SW97 St Minver, viii.1919, GEH. Harbour Cove, 4.viii.2002, KP-M. Lundy Bay, St Minver Highlands, 25.vii.2004, M. Lee; numerous on host plant in valley behind Markham's Key, 3.viii.2006, KNAA.

SX06 Laveddon, abundant, 5.viii.2004, KP-M. Dunmere, 2006, KPM.

SX07 Polbrock, 2006, KP-M.

SX08 Trekee, 2006, KP-M.

SX35 Trevollard, 2006, KP-M.

SX37 Lezant, viii.1919, AVM.

SX45 Churchtown Farm, Saltash, two off knapweed, 20.vii.2005, KNAA.

SX46 Haye Farm, St Dominick, 19.vii.2006, KNAA. Cargreen, 22.vii.2006, KP-M.

Orthonotus rufifrons (Fallén) - **County Rare/ Locally Extinct.**

Feeds on the flower buds and unripe fruits of nettle, but is only abundant on plants growing in damp shady woodland; southern Britain. Reported in the county by Butler (1923); *Byrsoptera rufifrons* in Thornley (1934).

SW53 St Erth, vii.1928, AT (1934).

Phylus coryli (L.) syn. *Phylus avellanae*

Widespread on hazel foliage nationally.

SW32 Land's End district, ED Marquand (1884).

SW53 St Erth, 1968, RTB.

SW62 Porthleven, Sargent (1968).

SW72 Lanarth, 1960, RTB.

SW95 Crowhill Valley, Trenowth, 12.vii.2001, KNAA.

SX06 Bugle, 1981, APF. Little Cutmadoc, Lanhydrock, 26.vi.1989; Red Moor, 8.vii.2001, KNAA.

SX15 Hoggs Moor, 12.vii.2001, KNAA. Carne Farm, Penpoll, 19.vii.2002, JF.

SX19 Millook Valley & Dizzard Oakwood, 10.vii.2001, KNAA.

SX46 Cotehele Estate, widely, vii.2006, KNAA.

Phylus melanocephalus (L.)

Widespread on oak foliage nationally. Reported in the county in Clark (1906).

SW83 Trelissick Park, 12.vi.1989, KNAA.

SX06 Bugle, 1981, APF. Hart Wood, Lanhydrock, 26.vi.1989; Red Moor, 8.vii.2001, KNAA.

SX19 Bynorth Cliff, very teneral, 8.vi.2000; Millook Valley, 10.vii.2001, KNAA.

SX36 Cadsonbury, 22.vi.1989, KNAA.

SX46 Bohetherick Wood, Cotehele, 20.vi.1989, KNAA.

Plagiognathus arbustorum (Fabricius)

One of the commonest and most widespread bugs nationally, occurring on many different plants, but especially nettle.

- SV80 St Agnes, 1964/65, GE Woodroffe (1966a).
SW32 Land's End district, ED Marquand (1884).
SW33 Kenidjack, 1995, AS & ECMH.
SW52 Rosudgeon, ix.1931, WEC.
SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay and Lelant Towans, common, AT (1934).
Phillack Towans, 1998 & 2004, ECM Haes. Angarrack, 2004, ECMH.
SW54 St Ives district, JEM (1889b). Upton Towans, 1998 & 2004, ECMH.
SW61 Clahar Bridge, 1980 & 1981; Mullion Quarry, 1981, DAS.
SW62 Porthleven, Sargent (1962). Loe Pool, 23.vi.2003, KNAA.
SW71 Chynhalls South Cliff, 21.ix.1998, PJH.
SW72 Gweek, 1962, RTB. St Martin's-in-Meneage, 7.viii.2005, KNAA.
SW75 Cubert Common, 6.viii.1979, WAE.
SW76 Crantock Beach, 6-8.viii.1979, WAE.
SW83 Porthcurnick, 20.viii.2002, KNAA.
SW94 Hemmick, 11.viii.2004, KP-M.
SW98 Pentire Farm, St Minver Highlands, 2.viii.2006, KNAA.
SX06 Bodmin, garden, 30.vi.2004, KP-M.
SX15 Carne Farm, Penpoll, 19.vii.2002, JF.
SX19 Valency Valley, 12.vii.2001, K Merrifield.
SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
SX38 Beales Meadows Reserve, viii.1998, DM/IK.
SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
SX46 Cotehele Estate, Calstock, vii.2006; Haye Farm, St Dominick, 19.vii.2006, KNAA.
SS21 Kilkhampton Castle, 6.vii.1989, KNAA. Stowe Barton, 2006, KNAA.

Plagiognathus chrysanthemi (Wolff)

Widespread and common in early successional dry grasslands, on plants such as ragwort, scentless mayweed, yarrow and black medick. Reported in the county by Clark (1906).

- SV80 St Agnes & Gugh, vi.1966, Woodroffe (1967).
SV81 Bryher & Tresco, vi.1966, Woodroffe (1967).
SV91 St Mary's, 1925-27, OWR; St Mary's, 14-18.vi.1987, PK. St Martin's, vi.1966, Woodroffe (1967); 17.vi.1987, PK.
SW52 Rosudgeon, ix.1931, WEC.
SW53 Carbis Bay, Lelant Towans, AT (1934).
SW54 Upton Towans, 1998, ECMH.
SW61 Caerthillian Cove & Mullion Cliff, 1970, MGM. Clahar Bridge, 1980 & 1981, DAS. Mullion Cliffs, 18.vi.2001, 25.vi.2003, BSN.
SW62 Porthleven, Sargent (1968). Chyvarloe Woods, 1970, MGM.
SW71 Erisey Barton, 1980, DAS.
SW76 Crantock Beach, 6-8.viii.1979, WAE.
SW84 Truro, AT (1934).
SX06 Laveddon, 29.vii.2005, KP-M.
SX08 Treknow Cliff, Tintagel, 10.vii.1989, KNAA.
SX19 Crackington, 11.vii.1989, KNAA.

Psallus betuleti (Fallén) - **County Rare/ Locally Extinct.**

Widespread on birch nationally. Reported in the county in Clark (1906).

Psallus perrisi (Mulsant & Rey)

Widespread on oak, hawthorn, and occasionally other trees. Only recognised in Britain since 1957; previously confused with related species.

- SW53 Godolphin, 1965, RTB.
SW71 Tremayne, 31.v.1989, KNAA.

- SW83 Trellissick, dissected male, 12.vi.1989, KNAA.
 SX19 Valency Valley, off oak, 17.v.1990, KNAA. Bynorth Cliff, 8.vi.2000, KNAA (det. PK).
- Psallus variabilis* (Fallén) - **County Rare/ Locally Extinct.**
 Local, but widespread nationally, on oak foliage.
 SW32 Land's End district, *Apocremnus variabilis*, ED Marquand (1884).
- Psallus wagneri* Ossiannilsson – **County Scarce.**
 Widespread on oak nationally, occasionally on hawthorn.
 SX19 Dizzard Wood, male dissected, 10.vii.2001, KNAA.
- Psallus ambiguus* (Fallén) - **County Scarce.**
 Widespread nationally on apple, hawthorn, willow and alder trees. Feed on aphids and other small insects, as well as sap of host tree.
 SV91 St Mary's, 14-18.vi.1987, PK.
 SW32 Land's End district, *Psallus obscurus*, ED Marquand (1884).
 SW54 Gwithian, 1981, APF.
- [*Psallus quercus* (Kirschbaum) – **Unconfirmed Species.**
 An uncommon species on oak foliage. This appears the most likely interpretation of Marquand's "*A. simillimus*" as the alternative would be *P. assimilis* which feeds on field maple.
 SW32 Land's End district, *Apocremnus simillimus*, ED Marquand (1884).]
- Psallus falleni* Reuter – **County Rare.**
 Widespread on birch nationally.
 SW53 Godolphin, 1965, RTB.
- Psallus flavellus* Stichel
 Widespread nationally on ash foliage; probably under-recorded locally.
 SW43 New Mill, 1963, RTB.
 SX06 Retire Common (east), 8.vii.2001, KNAA.
 SX19 Dizzard Wood, 10.vii.2001, KNAA.
- Psallus haematodes* (Gmelin) syn. *roseus*
 Widespread on *Salix* spp nationally. Cornwall (Clark, 1906; Thornley, 1934).
 SW32 Land's End district, ED Marquand (1884).
 SW53 Marazion Marshes, ix.1951, AMM (1953).
 SW54 Gwithian, 1981, APF.
 SW62 Porthleven, Sargent (1968).
 SW71 Chynhalls, viii.1924, OWR. Erisey Barton, 21.ix.1980; Golgotham, 20.ix.1980; Main Dale, 23.ix.1980, DAS.
 SW72 Gweek, 1960, RTB. Goonhilly Downs, 20.ix.1992, PK.
 SX08 St Teath, ix.1919, GEH.
 SX17 South Penquite Farm, Blisland, in flight, 25.viii.2005, KNAA.
- Psallus lepidus* Fieber
 Common on ash foliage nationally; probably overlooked locally.
 SW42 Paul, 1963, RTB.
 SW61 Mullion Cove village, 20.vi.2001, BSN.
 SX06 Retire Common (east), 8.vii.2001, KNAA.
- Psallus mollis* (Mulsant & Rey) syn. *Psallus diminutus* (Kirschbaum) – **County Rare.**
 Widespread nationally on oak, aspen and poplar. Discovered in the county by Masee (1953) but not reported since.
 SW53 Marazion Marshes, ix.1951, AMM (1953).
- Psallus varians* (Herrich-Schäffer)
 Usually abundant on oak nationally, and clearly overlooked locally. Cornwall (Clark, 1906).
 SW72 Gweek, 1960, RTB. Tremayne Woods, 31.v.1989, KNAA.
 SW83 Trellissick, 12.vi.1989, KNAA.
 SX15 Boconnoc Park, 20.v.1990, KNAA.

Salicarus roseri (Herrich-Schäffer)

Widespread in lowland Britain on sallow and willow; it feeds on aphids and other soft-bodied insects. Almost certainly overlooked in the county.

SW62 Helston, 1960, RTB.

SX15 Penpoll Creek, 19.viii.2002, KNAA.

Sthenarus rotermundi (Scholtz)

Widespread in southern Britain on white and grey poplars; not native to county.

SW53 St Erth, 1964, RTB.

SW72 Gweek, 1960, RTB.

Tytthus pubescens (Knight) syn. *Tytthus geminus* (Flor) – **Nationally Scarce & County Rare.**

Lives around the bases of large clumps of rush and sedge in a variety of wetland situations, perhaps usually long-established wetlands. Widely scattered across southern Britain.

SW53 St Erth, 1962, RTB.

Tytthus pygmaeus (Zetterstedt) – **County Rare.**

Widespread species nationally, feeding on eggs and possibly young leafhoppers, in poorly-drained, rushy grassland.

SW53 Marazion, 1965, RTB.

Super-family CIMICOIDEA

Family NABIDAE Damsel bugs

Himacerus major (Costa, A.) - Grey damsel bug.

A widespread species, most often found on sand-dunes and salt marshes, but also in other grassy situations. Rather common (Thornley 1934).

SV91 St Mary's 1925 and 1927, OWR.

SW33 Boscaswell Cliff, 21.viii.2002, KNAA.

SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay and Lelant, AT (1934). Phillack Towans, 1998 & 2004, ECMH. Marazion, 20.ix.1996, PAG.

SW54 St Ives district, JEM (1889b). St Ives, AT (1934). Upton Towans, 1998, ECMH.

SW61 Lizard Town, ix.1951, AM Masee (1953). Caerthillian Cove, 1970, MGM. Clahar Bridge & Mullion, 1980, DAS. Predannack, 20.ix.1992, PK.

SW62 Porthleven, Sargent (1968). Chyvarloe Cliffs & Gunwalloe Towans, 1970, MGM. Mullion Golf Course, 2000, GA Collins & ECMH.

SW71 Coverack, 20.ix.1992; Kennack Sands, 24.ix.1992, PK.

SW72 Manaccan, 1962, RTB. Glendurgan Gardens, 16.ix.1992; Porthallow, 23.ix.1992, PK.

SW76 Crantock Beach, 6-8.viii.1979, WAE. Rushy Green, Crantock, vi.vii.2000, GA Collins & ECM Haes. West Pentire Farm, Crantock, arable fields, 31.viii.2006, KNAA.

SW87 Constantine Sands, ix.1919, GEH.

SW93 Nare Head, 4.vii.1989, SJG.

SW97 St Endelion, viii.1919, GEH. Daymer Bay, 9.ix.1985, PK.

SX08 Bossiney Cliffs, 21.viii.2002, KNAA.

SX15 Lantic Bay, 7 & 11.viii.1999, PK.

SX35 St Germans Hut, JHK. Freathy, 10.viii.1999, PK.

SX45 St John's, vii.1921, AVM (DA ms).

SS21 Steeple Point, south-facing slopes, 13.vii.2006, KNAA.

Himacerus mirmicoides (Costa, O.) syn. *Himacerus lativentris* - Ant damsel bug.

A species of open, dry and sunny situations, occurring amongst vegetation. Widely distributed and not uncommon (Thornley 1934) and this is still the case.

SW32 Porthgwarra, 1963, RTB. Whitesand Bay, 19.vi.1987, PK. Carn Barges, 2.v.2000, KNAA.

SW33 Cape Cornwall, 15.v.1989, KNAA. Kenidjack, 1995, AS & ECMH; 2006, PAG.

SW43 Gurnards Head, viii.1924, OWR. Zennor Head, 22.v.1989, SJG.

SW52 Praa Sands, 25.ix.1992, PK. Prussia Cove, nymphs, 11.vii.2006, PAG.

SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, AT (1934). St Erth, 1962, RTB. Angarrack, 1991, 1994, ECMH.

- SW54 St Ives district, ix.1888, JEM (1889b). St Ives, AT (1934).
- SW61 Lizard Town, ix.1951, AM Masee (1953). Predannack, 20.ix.1992, PK. Poldhu Cove, 23.vi.2003, BSN. Kynance Cove, 24.viii.2006, PAG.
- SW62 Loe Bar, Helston, JH Keys. Porthleven, HB Sargent (1968). Loe Bar, clifflet at north end, 14.ix.1992, PK.
- SW64 Red River Valley, Roscroghan, 14.viii.1989, E Jackson.
- SW71 Cadgwith, 15.ix.1992, PK. Coverack, 20.ix.1992; Kennack Sands, 24.ix.1992, PK. Poltesco East, 20.ix.1998; Porthbeer Cove, 21.ix.1998, PJH. Lizard Head, 25.ix.1998, PJH. Chynhalls Point, 26.ix.2005, PAG.
- SW72 Glendurgan Gardens, 16.ix.1992; Trebah Gardens, 22.ix.1992; Porthallow, 23.ix.1992, PK. Tremayne Quay, nymph, 21.vii.2002, PAG. Mawnan Church to Porth Saxon, 29.viii.2006, PAG.
- SW73 Trewavas Point, 25.vi.2004, PAG. College Reservoirs, near Penryn, 2004, PAG.
- SW76 West Pentire Farm, 11.vii.2003, KNAA. Porth Joke, 13.vii.2004, PAG.
- SW82 Porthoustock, 23.ix.1992, PK; 2006, PAG.
- SW83 Towan Beach, St Anthony in Roseland, 3.vii.1979, KNAA; 3.vii.1989, SJG. Porthbeer Beach, St Anthony, 3.vii.1989; Treluggan Cliff, 5.vii.1989, KNAA. Pendower Beach, 11.vii.2001, KNAA; 2004, PAG. Porthcurnick, 20.viii.2002, KNAA.
- SW84 Truro, 31.iii.1974, VS Paton.
- SW87 Porthcothan Bay, larva amongst workers of *Formica fusca*, and another running over a nest of *Lasius niger*, 9.vii.1920 (Donisthorpe, 1921a, b & c).
- SW93 Pendower Beach, 21.vi.1989, SJG; viii.1995, PAG. Kiberick Cove, Nare Head, 5.vii.1989, KNAA. Nare Head, 4.vii.1989, SJG.
- SW97 Daymer Bay, 9.ix.1985, PK. Pentireglaze, 2.viii.2006 & Pennywilgie Point, 3.viii.2006, St Minver Highlands, KNAA.
- SW98 Port Quin, 1919, GEH. Pentire Farm, St Minver Highlands, 2.viii.2006, KNAA.
- SX06 Dunmere Wood, 28.vi. & 17.vii.2006, PAG.
- SX08 Port Gaverne, 1919, GEH; 1993, ECMH.
- SX15 Lantic Bay, 7 & 11.viii.1999, PK. Lansallos Cliff & Cove, 22.viii.2006, KNAA.
- SX16 Cabilla Woods, 2004, PAG.
- SX17 South Penquite Farm, Blisland, off *Calluna* on dry acid hillside, 25.viii.2005, KNAA.
- SX25 Looe, vii.1930, DE Kimmins. Struddicks, St Martin, 1999, AS & ECMH.
- SX35 Whitsands, Tregantle, JH Keys. Freathy, 10.viii.1999, PK.
- SX36 Cadsonbury, swept from roadside vegetation, 22.vi.1989, KNAA.
- SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
- SX46 Cotehele, weedy hillside, 19.vi.1989; Bohetherick, St Dominick, weedy grassland, 19.vii.2006, KNAA.
- SS11 Tidna Valley, 11.ix.1985, PK.
- SS21 Stowe Wood, 11.ix.1985, PK.

Himacerus apterus (Fabricius) - Tree damsel bug. **County Rare.**

A tree dweller, mainly on broadleaves, and a southern species in Britain.

SW32 Land's End district, ED Marquand (1884).

SX15 Boconnoc Park, hawthorn, 20.v.1990, KNAA. Ethy Park, 30.v.2000, KNAA.

Himacerus boops (Schiodte) - **County Rare/ Locally Extinct.**

A southern species of dry grasslands such as occur on heaths and limestone pastures. Stays low down, between tussocks. Reported in the county by Bedwell (1945) and Masee (1955) but not in Thornley (1934).

Nabis limbatus (Dahlbom) - Marsh damsel bug.

Widespread in poorly-drained grasslands and amongst rank vegetation. Cornwall (Clark, 1906).

SW33 Boscawell Cliff, 21.viii.2002, KNAA. Kenidjack Valley, 13.vii.2006, PAG.

SW53 Loggans Moor, 1994,1995 & 2004, ECMH.

SW61 Predannack, 1981, DAS.

SW63 Camborne, 1965, RTB.

- SW71 Crousa Downs, 1981; Erisey Barton, 1980; Main Dale, 1980 & 1981; DAS.
 SW72 Goonhilly, 1980 & 1981, DAS.
 SW73 Norway Inn, saltmarsh, 13.viii.2004, PAG. Argal Dam, 21.viii.2006, PAG.
 SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
 SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
 SW87 Park Head, 1996, ECMH.
 SW96 Rosenannon Bog & Downs, 1997, Spalding & Haes (2000).
 SX06 Bugle, 1981, APF. Retire Common, 1997, Spalding & Haes (2000). Breney & Laveddon, 2004, KP-M.
 SX08 Port Gaverne, 1992, M Lee. Dannonchapel & Tregardock, 1995, AS & ECMH.
 SX15 South of Lostwithiel, 15.viii.1995, PAG.
 SX17 Dozmary Pool, 9.ix.1985, PK. South Penquite Farm, 23.viii.2005, KNAA.
 SX18 Rough Tor, 16.vii.1996, ECMH.
 SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
 SX38 Beales Meadows Reserve, viii.1998, DM/IK.

Nabis lineatus (Dahlbom) - Reed damsel bug. **County Rare.**

A marsh insect, hunting around the bases of clumps of reeds, rushes and sedges; also saltmarshes with chenopods. Not in Bedwell (1945) or Masee (1955). Formerly known as *Nabicula lineata*.

- SX19 Cam Draught, Crackington, one in cattle-grazed wet valley with *Molinia* tussocks, 11.vii.1989, KNAA.

Nabis flavomarginatus Scholtz - Broad damsel bug.

Common and widely distributed nationally, amongst tall grasses, especially poorly-drained. First reported in the county by Bedwell (1945) and Masee (1955), and remarkably few records since then. There may be confusion with *Nabis major* Costa in Thornley (1934).

- SV91 St Mary's, a few specimens on waste land, 1964/65, GE Woodroffe (1966a).
 SW52 Rinsey Cliffs, 23.viii.2006, PAG.
 SW53 Phillack Towans, 1998, ECMH.
 SW54 Upton Towans, 1998 & 2004, ECMH.
 SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
 SW97 Lundy Hole, 21.viii.2006, KNAA.
 SX17 Dozmary Pool, 9.ix.1985, PK.
 SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.

Nabis brevis Scholtz – **Red Data Book Category 3 (Rare).**

Most British records are from bogs and wet heaths. Widely scattered across lowlands. No Cornish record recognised in Kirby (1992).

- SW53 Marazion, 1965, RTB.

Nabis ericetorum Scholtz - Heath damsel bug.

Normally restricted to heaths and heather, but has been known to persist after their disappearance from a site.

- SW52 Rosudgeon, ix.1931, WE China. Praa Sands, 25.ix.1992, PK.
 SW53 Hayle district, x.1886, JEM (1889b).
 SW54 St Ives district, x.1886, JEM (1889b). Gwithian, 1962, RTB. Godrevy & The Knavocks, 1990, SJG.
 SW61 Lizard Town, ix.1951, AM Masee (1953). Kynance Cove, ix.1951, AMM (1953); 17.ix.1992, PK. Predannack, 20.ix.1992, PK. Lizard Downs, 19.ix.2005, PAG.
 SW62 Porthleven, Sargent (1968).
 SW64 Hudder & Reskajeage, 1990, SJG,
 SW71 Golgotham, 7.vii.1981; Gwendreath, 22.ix.1980; Main Dale, 6.vii.1981, DAS.
 SW72 Goonhilly Downs, 18.viii.1996, PAG.
 SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
 SW97 St Minver, viii.1919, GEH.
 SX06 Retire Common, 1997, Spalding & Haes (2000).
 SX15 Lantic Bay, 7 & 11.viii.1999, PK.

SX28 Laneast Downs, 20.viii.1994.

SX35 Freathy, 10.viii.1999, PK.

Nabis ferus (L.) - Field damsel bug.

Widespread in relatively dry grasslands nationally.

SV Isles of Scilly, ix.1888, JEM (1889b).

SV91 St Mary's, 1927, OWR; a few on the dunes at Bar Point, 1964/65, GE Woodroffe (1966a).

SW33 Kenidjack, 1995, AS & ECMH.

SW52 Praa Sands, 25.ix.1992, PK.

SW53 Hayle district, ix.1888, JEM (1889b). Angarrack, 1990-94 & 2004; Phillack Towans, 1998 & 2004, ECMH.

SW54 St Ives district, ix.1888, JEM (1889b). Upton Towans, 1998 & 2004, ECMH.

SW61 Lizard Town, ix.1951, AM Masee (1953). Kynance Cove, 2.ix.1970, MGM.

SW62 Porthleven, Sargent (1968). Chyvarloe Cliffs & Gunwalloe Towans, 1970, MGM. Loe Bar, 14.ix.1992, PK; 2006, PAG. Loe Pool, 2003, KNAA.

SW71 Coverack, 20.ix.1992; Kennack Sands, 24.ix.1992, PK.

SW72 Porthallow, 23.ix.1992, PK.

SW76 Rushy Green, Crantock, vi.vii.2000, GA Collins & ECM Haes. West Pentire Farm, 11.vii.2003, KNAA.

SW82 Porthoustock, 23.ix.1992, PK.

SW83 Pendower Beach, 11.vii.2001, KNAA.

SW87 Park Head, 1996, ECMH.

SW97 Daymer Bay, 9.ix.1985, PK.

SX06 Kirland Bower, 2005, KP-M.

SX08 St Teath, ix.1919, GEH.

SX17 South Penquite Farm, Blisland, mossy outcrop in relict dry acid grassland, 25.viii.2005, KNAA.

SX35 Whitsands, JHK.

SX37 The Holmbush, Kelly Bray, 12.viii.1998, AS & ECMH.

SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.

Nabis pseudoferus Remane - **Nationally Scarce & County Scarce.**

First recognised in Britain only in 1956. Confined to coastal areas in the south, amongst sparse grass tussocks in dry, open, sunny, and usually sandy, habitats. May prove to be rather frequent on the Cornish dune systems.

SW53 St Erth, 1963, RTB.

SW61 Kynance Cove, 21.vii.1970, MGM.

SW71 Main Dale, 19.ix.1980, DAS.

SW97 Daymer Bay, 9.ix.1985, PK.

Nabis rugosus (L.) - Common damsel bug.

Common and widespread in all types of tall grassy habitats.

SV Scilly, ix.1888, JEM (1889b); 1919-1932, KG Blair.

SV91 St Mary's, 1930, OWR; 1964/65, GE Woodroffe (1966a). St Martin's, 1964/65, GE Woodroffe (1966a).

SW33 Portheras Cove, viii.1932, WE China. Kenidjack, 1995, AS & ECMH.

SW42 Sancreed Beacon, 18.vii.1998, AS & ECMH.

SW43 Penance Farm, 23.v.1989, KNAA. Watchcroft, 1994, AS & ECMH.

SW52 Praa Sands, 25.ix.1992, PK.

SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, Lelant, AT (1934). Angarrack, 1990-94 & 2004; Loggans Moor, 1995 & 2004; Phillack Towans, 1998; Mexico Towans, 2000, ECMH.

SW54 St Ives district, 1888, JEM (1889b). St Ives, AT (1934). Gwithian, 1962, RTB. Upton Towans, 1998 & 2004, ECMH.

SW62 Porthleven, Sargent (1968). Gunwalloe, 1970, MGM. Bochym Manor, 1992, PK. Penrose Estate, 1989, SJG.

- SW64 Chapel Porth, 1979, KNAA. Nancekuke, 1981, APF. Tywarnhale Mine, 1999, AS & ECMH.
- SW71 Goonhilly Downs, AT (1934). Kennack Sands, 1960, RTB. Erisey Barton, 1980, DAS. Kennack Sands, 24.ix.1992, PK.
- SW72 Goonhilly, 1980, DAS.
- SW74 Cusgarne, 1992, AS. Tywarnhale Mine, 1999, AS & ECMH.
- SW85 Penhallow Moor, 1983, KNAA. Newlyn Downs, 1997, Spalding & Haes (2000).
- SW87 Park Head, 1996, ECMH.
- SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
- SW98 Port Isaac, 1919, GEH. Kellan Head, 1999, AS & ECMH.
- SX06 Bodmin Beacon, 1995, ECMH. Retire Common, 1997, Spalding & Haes (2000).
- SX07 Gaff Wood, Camel Valley, 3.v.2001, KNAA.
- SX08 Port Gaverne, 1919; Port Endell, 1919, GEH. Grammers Chair, 1993; Trewarmett, 1995; Dannonchapel & Tregardock, 1995, AS & ECMH.
- SX15 Lansallos Cliff, 1990, KNAA. Lantic Bay, 1999, PK. Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000).
- SX19 Bynorth Cliff, 8.vi.2000, KNAA.
- SX25 Polperro to Talland, vii.1979, BJ Lempke (1980).
- SX26 Draynes Wood, 30.v.2000, KNAA.
- SX28 Laneast Downs, 1994, ECMH.
- SX35 Tregantle, JHK; 1.vi.2000, KNAA.
- SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.
- SS10 Widemouth Bay, 10.ix.1985, PK.
- SS21 Stowe Wood, 11.ix.1985, PK.

Family ANTHOCORIDAE Flower bugs

Acomporis pygmaeus (Fallén) – **Naturalised Introduction.**

Widespread on Scots pine and other conifers, feeding on aphids, psocids and other small invertebrates. Cornwall (Clark, 1906), but not native.

Anthocoris confusus Reuter

Widely distributed and common nationally, mostly occurring on broad-leaved trees, but also in other vegetation. Reported in the county by Butler (1923).

- SW44 Trevesa Farm, hawthorn, 14.v.1996, KNAA.
- SW61 Clahar Bridge, 29.iv.1981, DAS. Mullion Cove village, 20.vi.2001, BSN.
- SW62 Porthleven, 1968, HB Sargent. Penrose, 7.vi.1989, KNAA.
- SW71 Lizard, 1964, RTB. Erisey Barton, 21.ix.1980, DAS.
- SW72 St Anthony-in-Meneage, 1960, RTB. Glendurgan, 1.vi.1989, KNAA.
- SW83 Newton Cliff, 3.vii.1989, KNAA. St Anthony Head, v.1995, PAG.
- SW87 Park Head, 1996, ECMH.
- SW93 Kiberick Cove, v.1995, PAG.
- SX06 Lanhydrock Park, 27.vi.1989, 9.v.2003, KNAA.
- SX15 Penpoll Creek, 19.viii.2002, KNAA.
- SX17 South Penquite Farm, off oak, 23.viii.2005, KNAA.
- SX19 Valency Valley, off oak, 17.v.1990; Lower Tresmorn, 8.vi.2000, KNAA.
- SX46 Cotehele Wood, 17.vii.2006, KNAA.

Anthocoris gallarum-ulmi (DeGeer) - **County Rare/ Locally Extinct.**

Widespread nationally; lives in the curled leaf galls on elm caused by the aphid *Eriosoma ulmi*; also in aphid galls on ash, blackthorn, hawthorn and currant. Cornwall (Clark, 1906).

Anthocoris limbatus Fieber - **County Rare.**

A fen speciality, almost entirely found on *Salix* spp. and very local nationally.

- SW61 Clahar Bridge, 18.ix.1980, DAS.

Anthocoris nemoralis (Fab.)

Common and widespread on broad-leaved trees, less so in other vegetation. Reported in the county by Butler (1923)

- SV81 Tresco, on *Salix* around the Abbey Pond, vi.1966, Woodroffe (1967).
SV91 St Mary's, 1927, OWR; 1963, KGV Smith.
SW32 Land's End district, ED Marquand (1884).
SW42 Lamorna Cove, 1.ix.2004, PAG.
SW53 Hayle, 1962, RTB. Angarrack, 1989-1994, ECMH.
SW54 Gwithian, 1981, APF.
SW61 Lizard Town, ix.1951, AM Masee (1953). Clahar Bridge, 18.ix.1980, 5.vii.1981; Mullion, 23.ix.1980, DAS. Mullion Cliffs, 2003, BSN.
SW62 Porthleven, 1968, HB Sargent.
SW71 Goonhilly, 1960, RTB. Erisey Barton, 21.ix.1980; Golgotham, 7.vii.1981; Main Dale, 23.ix.1980; 1980/81, DAS.
SW73 Pencoose Farm, Stithians, 19.vi.1988, E Jackson.
SW74 Wheal Busy, Chacewater, 1.vii.1989, BE Jackson.
SW83 Penance Point, 23.viii.1994, PAG.
SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
SW85 Trerice, 8.viii.1979, WAE.
SW87 Park Head, 1996, ECMH.
SX06 Bugle, 1981, APF.
SX17 South Penquite Farm, Blisland, off *Salix* on hedge bank, 25.viii.2005, KNAA.
SX19 Crackington Haven, 1961, AR Smith.
SX46 Morden Valley, Cotehele, *Salix*, 20.vi.1989, KNAA.
SS21 Stowe Warren, wet valley bottom, 13.vii.2006, KNAA.

Anthocoris nemorum (L.) - Common flower bug.

One of Britain's commonest bugs, occurring on many broad-leaved trees as well as nettlebeds, etc.

- SV81 Tresco, on *Salix* by Abbey Pond, vi.1966, Woodroffe (1967); 15.vi.1987, PK. Garrison, St Mary's, 14-16.vi.1987, PK.
SV91 St Mary's, vi.1961, KGV Smith (1963); 1987, PK. St Martin's, PK.
SW32 Land's End district, ED Marquand (1884).
SW33 Kenidjack, 1995, ECMH. Cape Cornwall, 2003, BSN.
SW42 St Loy Valley, 1994, PAG.
SW43 Bosigran, 24.v.1979, 16.v.1989; Boswednack, 22.v.1989, KNAA.
SW44 Treveffa Farm, 14.v.1996, KNAA.
SW52 Rosudgeon, 1931, WE China. Praa Sands, 1992, PK. Prussia Cove, 2005, PAG.
SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, and Lelant, AT (1934). Loggans Moor, 1995; Phillack Towans, 1998, ECMH. Steeple Wood & Trelyon Downs, 1998, ECMH. Hayle Estuary, 2003, BSN. Hayle, 2004, PAG. Angarrack, 2004, ECMH.
SW54 St Ives district, 1888, JEM (1889b). St Ives, AT (1934). Gwithian, 1962, RTB. Upton Towans, 1998 & 2004, ECMH.
SW61 Clahar Bridge, 1980 & 1981; Mullion, 1981; 1980/81, DAS. Predannack, 1992, PK. Mullion Cove, 2001, BSN. Poldhu Cove, 2003, BSN. Mullion Cliffs, 2003, BSN.
SW62 Penrose, 1989; Gunwalloe, 1989, KNAA. Bochym Manor, 1992, PK. Loe Bar, 1992, PK. Mullion Golf Course, 2000, GA Collins & ECMH. Loe Pool, 2003, KNAA; 2004, PAG.
SW64 Nancekuke, 1981, APF.
SW71 Lizard Town, 1951, AMM. Crousa Downs, 1980; Erisey Barton, 1980 & 1981; Golgotham, 1981; Main Dale, 1980 & 1981; DAS. Coverack, 1992; Kennack Sands, 1992, PK; 2002, 2003, PAG. Chynhalls South Cliff, 21.ix.1998, PJH. Black Head, 2006, PAG.
SW72 Rosemullion Head, 1975, APF. Frenchman's Creek, 1989, KNAA. Glendurgan Gardens, 1992; Goonhilly Downs, 1992; Trebah Gardens, 1992; Porthallow, 1992, PK. Merthen Wood, 2004, PAG. St Martin's-in-Meneage, 2005, KNAA.
SW74 United Downs, v.1998, AS & ECMH.

- SW75 Ventongimps Moor, 1997, Spalding & Haes (2000). Perranporth, 2005, PAG.
 SW76 Rushy Green, Crantock, vi.vii.2000, GA Collins & ECM Haes.
 SW83 Newton Cliff, 3.vii.1989, KNAA. Pendower Beach, 11.vii.2001, KNAA.
 SW84 Lamorran Wood, 2001, PAG.
 SW85 Trerice, 8.viii.1979, WAE. Newlyn Downs, 1997, Spalding & Haes (2000).
 SW86 St Colan Churchyard, 1991, E & BE Jackson.
 SW87 Park Head, 1996, ECMH. Porthcothan, 2005, PAG.
 SW93 Pendower Beach, 1983, MJM.
 SW95 Crowhill Valley, Trenowth, 12.vii.2001, KNAA.
 SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
 SW98 Port Quin, 10.ix.1985, PK; 3.viii.2006, KNAA.
 SX04 Ropehaven, 1993, PAG.
 SX05 Polmark Park, St Austell, 2000, ECMH. Dryers Pit, Bugle, 2005, JD.
 SX06 Bodmin, AT (1934). Bugle, 1981, APF. Breney Common, 28.v.2000, KNAA. Retire Common, 1997, Spalding & Haes (2000); 2001, KNAA.
 SX07 Gaff Wood, Camel Valley, 2001, KNAA.
 SX08 Port Gaverne, 1992/93, M Lee. Dannonchapel & Tregardock, 1995, AS & ECMH. Bossiney Cliffs, 21.viii.2002, KNAA.
 SX15 Hogs Moor, 12.vii.2001; Penpoll Creek, 19.viii.2002; Carne Farm, Lanteglos, 26.viii.2006; Lansallos East Coombe, 22.viii.2006, KNAA.
 SX16 Cabilla Woods, 2002, PAG.
 SX17 Dozmary Pool, 9.ix.1985, PK. South Penquite Farm, 23.viii.2005, KNAA.
 SX19 The Dizzard, 1989; Peter's Wood, Valency Valley, 2000, KNAA. High Cliff, 1985, PK.
 SX25 Hore Point, 22.vi.1989, KNAA. Struddicks, St Martin, 1999, AS & ECMH.
 SX28 Innside woodland, Penheale, 10.vii.2001, KNAA.
 SX37 The Holmbush, Kelly Bray, 12.viii.1998, AS & ECMH.
 SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Cotehele Wood, 17.vii.2006, KNAA.
 SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.

Temnostethus gracilis Horváth

Feeds on psocids and other small insects occurring amongst lichens, growing either on tree trunks and twigs, or on rocks and walls. Most often found in Cornwall on old blackthorn (sloe) and willow scrub – commonly all along the coast at Padstow on lichen-covered sloe (Woodroffe, 1958). Confused with *T. pusillus* up until 1955 and early records under that name need confirmation before being accepted.

- SW32 Porth Chapel, 20.viii.2006, PAG.
 SW43 Foage Farm, Zennor, hawthorns and blackthorns along hedge banks, 8.viii.2006, KNAA.
 SW52 Hor Point, 19.viii.2006, PAG.
 SW72 Mawnan Church to Porth Saxon, 29.viii.2006, PAG.
 SW73 Gorrangorras Creek, Penryn, 17.viii.2006, PAG.
 SW84 Long Downs, near Truro, AMM (Le Quesne, 1955).
 SW93 The Straythe, Caragloose, off willow branch, 11.vii.2001, KNAA.
 SW95 Crowhill Valley, Trenowth, willow, 12.vii.2001, KNAA.
 SW97 Harbour Cove, Padstow, 26.viii.2006, PAG.
 SW98 Port Quin valley, streamside willow, 31.viii.2006, KNAA.
 SX06 Red Moor, beaten from lichen-covered blackthorn, 8.vii.2001, KNAA.
 SX07 Allen Valley, one macropterous adult amongst five taken, vii.1957, GEW.
 SX15 Penpoll Creek, 19.viii.2002; Pendower House, Lanteglos, 26.viii.2006; Lansallos East & West Coombes, 22.viii.2006, KNAA.
 SX17 South Penquite Farm, on oak branches, 23.viii.2005, KNAA.
 SX19 Dizzard Oakwood, blackthorn, 10.vii.2001, KNAA.
 SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Cotehele Estate, Calstock & St Dominick, vii.2006, KNAA.

Temnostethus pusillus (Herrich-Schäffer) – **County Scarce.**

Feeds on bark-lice and other small insects occurring amongst lichens growing either on tree trunks and twigs, or on rocks and walls.

- SV91 St Mary's, 1927, OWR.
- SW42 Sancreed, 1965, RTB.
- SW54 Gwithian, 1981, APF.
- SW61 Mullion Car Park, on sycamore, 25.vi.2003, BSN.
- SW62 Helston Boating Lake, amongst lichens on sycamore at car park, 14.vi.2005, PAG.
- SW83 Swanpool, amongst lichens on sycamore at north end, 20.vi.2005, PAG.
- SX15 Pendower House, Lanteglos, old apple tree, 26.viii.2006, KNAA.

Orius majusculus (Reuter) - **County Rare/ Locally Extinct.**

Occurs on a wide variety of trees and herbs, mainly in southern Britain.

- SX46 Botus Fleming (Clark, 1906).

Orius vicinus (Ribaut) syn. *Orius minutus* - **County Rare/ Locally Extinct.**

Found in a wide variety of situations, generally on low-growing vegetation. Clark (1906).

Orius laevigatus (Fieber)

Found in a wide variety of tall rank herbage, particularly along hedge-banks, and on mullein. First reported from the county by Masee (1953).

- SW53 St Erth, 1964, RTB.
- SW61 Lizard Town, ix.1951, AM Masee (1953).
- SW62 Church Cove, 19.ix.1992, PK. Loe Pool, 25.x.2003, KNAA.
- SW71 Kennack Sands, 1960, RTB.
- SW72 Mawgan, 1963, RTB. Mawnan Church to Porth Saxon, 29.viii.2006, PAG.
- SW98 Port Quin valley, swept from *Mentha* and *Pulicaria*, 31.viii.2006, KNAA.
- SX15 Lansallos East Coombe, on dead foxglove stems, 22.viii.2006, KNAA.

Orius niger (Wolff) - **County Scarce.**

Particularly associated with heaths and heathers, but also on other low-growing plants in open dry situations, such as mugwort. Cornwall (Thornley, 1934).

- SV91 St Mary's, 1927, OWR.
- SW61 Mullion Cove village, on Tamarisk flowers, 20.vi.2001, BSN.
- SW86 Newquay (Clark, 1906).
- SX35 Tregantle, four on *Cakile*, x.1911, JHK.
- SX45 Churchtown Farm, Saltash, on sea mayweed of upper shore, 20.vii.2005, KNAA.

Cardiastethus fasciventris (Garbiglietti)

A recent arrival in the county, having been spreading from the south and east of England over recent decades; its widespread appearance here in 2006 is remarkable. Occurs widely on lichen-covered branches and foliage of trees and shrubs, where feeds on soft-bodied invertebrates.

- SW97 Lundy Hole, St Minver Highlands, on blackthorn scrub, 3.viii.2006, KNAA. Harbour Cove, Padstow, 26.viii.2006, PAG.
- SW98 Port Quin valley, on streamside sallows and blackthorns, 31.viii.2006, KNAA.
- SX15 Carne Farm, Lanteglos, lichen-covered blackthorns in old hedge bank, 26.viii.2006, KNAA.
- SX46 Cotehele House orchards, off mistletoe, 18.vii.2006, KNAA.

Lyctocoris campestris (Fab.) - Debris bug. **County Scarce.**

Feeds on a wide variety of small invertebrates in all sorts of vegetable refuse, including straw stacks, flood debris, bird nests, granaries, etc.

- SV81 Castle Bryher and Illiswilsig, 1927, OWR.
- SV91 Innisvouls, 1927, OWR.
- SW53 Carbis Bay, AT (1934). Marazion Marsh, 1951. Hayle, 1962, RTB.
- SW54 St Ives, AT (1934).
- SW61 Lizard Town, ix.1951, AM Masee (1953).
- SW71 Golgotham, 20.ix.1980, DAS.
- SW84 Idless near Truro, AT (1934).

SX46 Valley of the Lynher (Clark, 1906).

Xylocoris galactinus (Fieber) - Hot-bed bug.

Lives in places where decaying vegetation maintains a relatively high and stable temperature, such as manure heaps, hot-beds, stable straw, grain bins, etc. Cornwall (Clark, 1906); may not be native.

SW72 Glendurgan Gardens, 16.ix.1992, PK.

Xylocoris cursitans (Fallén) - **County Rare**.

A predator of other insects beneath bark on deadwood which is in the early stages of decay and often still sappy. Both broad-leaves and conifers are inhabited, but the sites are generally ancient wood-pastures. Cornwall (Clark, 1906). Apparently confined to the old growth stands of the Fowey and Fal valleys.

SW83 Treliwick Estate, 22.vi.2006, PAG.

SX06 Lanhydrock Park, oak bough, 27.vi.1989; Higginsmoor Wood, Lanhydrock, 16.iii.1993, KNAA.

SX15 Boconnoc Park, beech stump, 24.vi.1989; Ethy Woods, beech, 14.vii.1989, KNAA.

Family CIMICIDAE Bedbugs

Cimex columbarius Jenyns - **Red Data Book Category 3 (Rare)**.

In dove-cotes, possibly only old wooden ones in which the birds are crowded and the temperatures higher. Cornwall (Clark, 1906).

Cimex lectularius L. - The bedbug. **County Rare/ Locally Extinct**.

Feed by sucking blood from sleeping or resting people, hiding during the day in cracks and crevices. Cornwall (Butler, 1923).

SW32 Land's End district, ED Marquand (1884).

Super-family REDUVOIDEA

Family REDUVIIDAE Assassin bugs

Empicoris vagabundus (L.)

Widespread nationally on both broad-leaved and coniferous trees, and also found in and around buildings. Few old records, but perhaps overlooked in the past.

SW52 Rinsey Cliffs, 23.viii.2006, PAG.

SW61 Gew Graze, 8.viii.2006, PAG. Kynance Cove, prostrate broom, 24.viii.2006, PAG.

SW62 Chyvarloe, 15.viii.2006, PAG.

SW71 Erisey Barton, 21.ix.1980, DAS.

SW73 Norway Inn, gorse by saltmarsh, 12.viii.2006; Gorrangorras Creek, Penryn, 17.viii.2006, PAG.

SX06 Bodmin, in garden, KP-M (pers. comm. 2003).

SX08 Tintagel, viii.1908, EA Butler.

SX15 Lansallos East Coombe, on gorse bush in valley & off ivy on cliffs at mouth, 22.viii.2006, KNAA.

SX46 Danescombe, Calstock, dead branch of pear tree, 17.vii.2006, KNAA. Morden farm, St Dominick, off old cherry trees, 18.vii.2006, KNAA.

Reduvius personatus (L.) - Flybug.

Adults and larvae live in buildings, feeding on silverfish, booklice, etc. Strangely scarce in county, but perhaps overlooked.

SW83 Falmouth (Clark, 1906).

Coranus subapterus (DeGeer) - Heath assassin bug.

Lives on the open parts of heaths and sand-dunes, and hunts on the ground for insects and spiders. Bugs from heaths have been regarded as a separate species from dune ones, the latter described as *Coranus woodroffeii* Putshkov, P.V. but the differences are minor and very variable, and the distinction has not been recognised in GB until very recently.

SW32 Land's End, Dale (Saunders, 1892); one, vii.1928, JH Keys. Whitesand Bay, cliffs to north, 30.ix.1962, GEW (1966a). Gwenver, 1964, RTB. Whitesand Bay, "*Coranus* sp", 19.vi.1987, PK.

- SW33 Kenidjack, 1995, ECMH.
 SW53 Phillack Towans, 1998, ECMH.
 SW54 Upton Towans, 1998 & 2004, ECMH.
 SW61 Lizard Town & Kynance Cove, ix.1951, AM Masee (1953).
 SW75 Penhale Dunes, nymphs in some numbers where the dunes adjoined the rocky headland of Ligger Point, 10.vi.1956, GEW; 20.viii.2005, PAG.
 SW83 Falmouth, heathy places (Clark, 1906).
 SW87 Park Head, 1996, ECMH.
 SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
 SX08 The Main, Port Gaverne, 22.vi.1993, ECMH.

Series PENTATOMORPHA

Super-family ARADOIDEA

Family ARADIDAE - Flatbugs and barkbugs

Aradus depressus (Fabricius) - **County Rare**.

The most widespread flatbug in Britain, living beneath loose bark on decaying wood of broad-leaved trees, where it feeds on the fungal mycelium. Reported in Cornwall by Clark (1906) without details and very few reports since then.

SW97 Wadebridge, v.1966, RTB.

SX06 Bodmin, one flew into garden on south-west edge of town, Spring 2004, Rod Preston-Mafham (pers. comm.) – also one seen in 2003.

Super-family PIESMATOIDEA

Family PIESMIDAE

Piesma maculatum (Laporte) - **County Rare**.

A widespread lowland species, although most frequent in the south. Feeds on a variety of chenopod weeds.

SW54 Green Lane, Gwithian, by sweeping, 4.vi.2005, KNAA & PAG.

SW62 Porthleven, in moss litter, HS (1968).

SW76 West Pentire Farm, Crantock, nymphs with *Atriplex* in arable fields, 31.viii.2006, KNAA.

SX19 Millook (Clark, 1906).

Piesma quadratum (Fieber) – Beet Leaf-bug.

Associated with hastate and shore oraches and sea purslane in saltmarshes around the British coast, but much more closely associated with sea beet along shores and on cliffs along the Cornish coast.

SV Isles of Scilly, ix.1888, JEM (1889b).

SV81 Bryher, under *Atriplex* on the edge of a freshwater lake, vi.1966, Woodroffe (1967).

SV91 Innisvouls, 1927, OWR, teste GEW (1967). St Mary's, 1927, OWR; 14-18.vi.1987, PK. St Martin's, 17.vi.1987, PK.

SW42 Lamorna Cove, viii.1924, OW Richards.

SW52 Perranuthnoe, 15.v.1996, KNAA.

SW53 Hayle, vii.1963, RTB.

SW61 Lizard Town, ix.1951, AM Masee (1953). Kynance Cove, 22.ix.1998, PJH. Poldhu Cove, 21.vi.2001, BSN. Kynance Cove to Caerthillian Valley, under sea beat, 6.vi.2004, PAG.

SW62 Porthleven, 25.ix.1992, PK. Pedngwinian Head & between Poldhu Cove and Gunwalloe, 18.vi.2004, PAG.

SW71 Lizard Town, ix.1951, AMM (1953). Kennack Sands, 24.ix.1992, PK.

SW72 St Anthony-in-Meneage, 1964, RTB.

SW83 Falmouth (Clark, 1906). Porthcurnick, 20.viii.2002, KNAA.

SW87 Porthmissen, 27.iv.2003, KNAA. Porthcothan, sea beat, 17.vi.2002, PAG.

SX15 Lantic Bay, 7 & 11.viii.1999, PK.

SX16 Doublebois (Clark, 1906).

- SX25 Kilminorth Wood, 12.viii.1999, PK.
 SX26 Liskeard (Clark, 1906).
 SX35 Whitsands, JH Keys.
 SX45 Wivelscombe and Millbrook, JH Keys.

Piesma quadratum spergulariae Woodroffe - **Red Data Book Category 3 (Rare Endemic).**

Described as new to science from the Isles of Scilly (Woodroffe, 1966b). Feeds on *Spergularia rupicola*, which is widespread in the Scillies on stone walls, etc, but the bug appears to be confined to plants hanging from cliffs at the very edge of the sea (P. Kirby, pers. comm.).

- SV80 St Agnes, 1965, GE Woodroffe (1966a).
 SV81 Bryher & Samson, 1965, GE Woodroffe (1966a).
 SV90 Peninnis Head, St Mary's, larvae and adults, 1964, GEW (1966a); m under *Spergularia rupicola* on rocky headland, 18.viii.1965, GEW (1966b).
 SV91 St Mary's, 1965, GE Woodroffe (1966a); 14-18.vi.1987, PK. St Martin's, under *Spergularia rupicola* near the quay, vi.1966, Woodroffe (1967); 17.vi.1987, PK.

Super-family COREOIDEA

Family BERYTIDAE - Stilt bugs

Berytinus hirticornis (Brullé) - **Nationally Scarce & County Rare.**

Typically a species of dry or sparse grassland, usually on neutral to calcareous soils. Sites combine tall flowering grasses with bare ground. Not recognised in Britain until 1943 and discovered at the Lizard by AM Masee in August 1960, in long grass growing under a thick hedge (Masee, 1960).

Berytinus minor (Herrich-Schäffer) - **County Scarce.**

Reputedly the most widespread stilt bug in Britain, occurring in a wide variety of dry grassy situations.

- SV91 St Mary's, OW Richards.
 SW53 Lelant Towans, viii.1924, OW Richards. Knill Moor, St Ives, one, iv.1927 & one ix.1929, AT.
 SW61 Lizard Town, ix.1951, AM Masee (1953).
 SW94 Grampond (Clark, 1906).
 SX05 Dryers Pit, Roche CP, 2005, JD.
 SX06 Lockengate, Luxulyan CP, 2005, JD.
 SX18 Camelford (Clark, 1906).

Berytinus crassipes (Herrich-Schäffer) - **County Rare.**

Sparsely-vegetated ground on dry freely-draining substrates; associated with chickweeds.

- SW61 Predannack, vi.1981, DAS.
 SW98 Port Isaac, 16.viii.1919, GEH.

Berytinus montivagus (Meyer-Dür) - **County Rare.**

Feeds on black medick in dry sandy or cindery places. Reported from Cornwall in Butler (1923) although details not known.

- SW54 Gwithian, vii.1956, RTB.
 SW76 Holywell Beach, cliff-top grassland, 25.v.1989, SJG.

Berytinus signoreti (Fieber)

A species of calcareous grasslands and sand-dunes, usually associated with bird's-foot-trefoil.

- SV80 Wingletang Downs, St Agnes, occasional colonies on flat, stony waste land with short mixed vegetation, 1964/65, GE Woodroffe (1966a).
 SV91 St Martin's, 1964/65, GE Woodroffe (1966a).
 SW43 Gulval, v.1965, RTB.
 SW53 Lelant Towans, one, 25.ix.1931, AT; viii.1996, PAG.
 SW61 Caerthillian Cove, 21.vii.1970; Kynance Cove, 2.ix.1970, MGM.
 SW62 Porthleven, HBS (1968). Loe Bar, south end, 14.ix.1992, PK.
 SW64 Tregea and Carvannel, v.1990, PK. Godrevy, v.1990, SJG.
 SW71 Kennack Sands, vii.1964, RTB.
 SW83 Falmouth (Clark, 1906).

- SW84 Truro (Clark, 1906).
 SW97 Rock sandhills, 21.viii.1919, GEH.
 SW98 Port Isaac, 23.viii.1919, GEH.
 SX08 Glebe Cliff, Tintagel, 31.v.2000, KNAA.
 SX25 Looe (Clark, 1906).
 SX36 Valley of the Lynher (Clark, 1906).

Neides tipularius (L.) - **County Scarce.**

Dry habitats in the south: sand dunes and heaths, under mats of vegetation and in large dry grass tussocks in sheltered hollows; also dry litter in open woods and weedy arable fields - large populations in the latter situation in Devon. Feeds on a wide range of plants including thyme-leaved sandwort and mouse-eared chickweed. Large numbers of nymphs noted under *Erodium* by Woodroffe (1956).

- SW62 Loe Bar, clifflet at north end and at south end, 14.ix.1992, PK.
 SW75 Penhale Sands, 10.vi.1956, GEW (1956).
 SW87 Constantine Bay, 8.vi.1956, GEW (1956).
 SW97 Rock sandhills, 2.viii.1919, GEH; 7.vi.1956, GEW (1956).

Gampsocoris punctipes (Germar)

Associated with restharrow and usually readily found beneath the plant; most frequent on sandy soils.

- SW32 Sennen Cove, 29.v.1989, SJG.
 SW53 Lelant Towans, 19.viii.1924, OWR; three on *Ononis*, 17.v.1929, AT. Upton Towans, large numbers, 27.viii.2006, PAG.
 SW54 Gwithian, viii.1962, RTB.
 SW71 Kennack, 1960, RTB. Coverack, 20.ix.1992, PK.
 SW75 Penhale Dunes, 6.ix.2004 & 28.viii.2006, PAG. Cubert Common, 9.viii.2006, KNAA.
 SW76 Porth Joke, Crantock, 7.viii.2006; Kelsey Head, Cubert 9.viii.2006, KNAA.
 SW83 Killigerran & Porthmellin Heads, 3.vii.1989, SJG. Porthcurnick, 20.viii.2002, KNAA.
 SW93 Nare Head, 4.vii.1989, KNAA.
 SW97 Daymer Bay, 9.ix.1985, PK. Trebetherick Point, 2.v.2001, KNAA.
 SX15 Parson's Cove, Lansallos, windblown sand on cliffs, 22.viii.2006; Sandheap Point & Frogmore Farm, Lanteglos, one beaten from ivy in old lane, 26.viii.2006, KNAA.
 SX35 Whitsand Bay, JJ Walker.
 SS21 Duck Pool, 11.ix.1985, PK; 5.vii.1989, SJG. Steeple Point, adults & nymphs with *Ononis* alongside coastal footpath cutting up slope across windblown sand grassland, 13.vii.2006, KNAA.

Metatropis rufescens (Herrich-Schäffer)

A southern species, widespread in ungrazed and shady woodlands wherever its food-plant, enchanter's nightshade, grows. At Butler's (1923) time it was mainly known from the far south-east of England, and appears to have spread extensively since then. Mentioned as "from near Bodmin" (Thomas, 1955b) and "uncommon in...Cornwall" in Southwood & Leston (1959), it was first found widely in the county in 1983.

- SW72 Tremayne Woods, 8.vii.1983, KNAA & 2.vii.2006, PAG. Merthen Wood & Trelowarren Woods, 29.viii.2005; Bosloe, 9.vii.2006, PAG.
 SW73 Kennall Vale Reserve, vii.1994, KM. Devichoys Wood, 19.viii.2003, PAG. Enys Wood, 4.vii.2006, PAG.
 SW84 Lamorran Wood, 9.vii.1983, KNAA.
 SX05 Prideaux Wood, 28.v.2000, KNAA.
 SX06 Polbrock, 5.vii.1983, R Crossley & AE Stubbs.
 SX15 Ethy Wood, 7.vii.1983, KNAA & AE Stubbs; 26.v.1990, KNAA. Carne Farm, Penpoll, 19.vii.2002, JF. West Coombe, Lansallos, 26.viii.2006, KNAA.
 SX06 Bodmin, 15.vii.2006, KP-M.
 SX16 Cabilla Wood, vi.1999, KP-M; 8.vii.2002, PAG.
 SX19 Bynorth Cliff Wood, 10.vii.1983, AE Stubbs.

- SX46 Danscombe, Calstock, 17.vii.2006; Smeaton, St Dominick, 20.vii.2006, KNAA.
 SS21 Welcombe & Marsland Reserve, 1970 (via ERCCIS). Coombe Valley, 31.v.2000, KNAA.

Family LYGAEIDAE – Seed-bugs or groundbugs

Nysius ericae (Schilling)

Occurs on well-drained sandy or cindery, sparsely-vegetated ground. The host-plants are numerous, but especially Compositae, and it may be partially insectivorous. It is widespread, but most frequent on the coast. *Nysius thymi* (Wolff) was reported in the county by Bedwell (1945) and Masee (1955), but it has since been shown that most British records refer to the very closely related *N. ericae* (Woodroffe, 1959). The old records are therefore included here until evidence is found that they refer to the true *N. thymi*, as are more recent ones where evidence has not been provided that the material has received expert confirmation. Woodroffe (1966a) was very clear that the earlier records from Scilly actually refer to *N. ericae*, which he found widely there himself. He also reported (1956) the species to be in vast numbers all along the coast around Padstow on cliffs and rocky slopes, wherever the vegetation was sparse.

- SV Scilly: “*N. thymi*”, ix.1888, JEM (1889b).
 SV80 St Agnes, 1964/65, GE Woodroffe (1966a); 16.vi.1987, PK.
 SV81 Tresco, “*N. thymi*”, 1925, MS Boscawen; “*N. thymi*”, 1927, OWR; *N. ericae*, 1964/65, GE Woodroffe (1966a); 15.vi.1987, PK. Bryher, *N. ericae*, 1964/65, GE Woodroffe (1966a). Samson, 1964/65, GE Woodroffe (1966a).
 SV91 St Mary’s, “*N. thymi*”, vii.1897, GCC (1897); *N. ericae*, 1964/65, GE Woodroffe (1966a); 14-18.vi.1987, PK. St Martins, *N. ericae*, 1964/65, GE Woodroffe (1966a); 17.vi.1987, PK.
 SW32 Land’s End, 24.viii.1863, JC Dale. Sennen Cove, JH Keys; ix.1951, AMM. Gwenver, Whitesand Bay, 9.vii.1985 & 4.viii.1986, SJ.
 SW43 Zennor, 12.vii.1985, SJ.
 SW52 St Michael’s Mount, *Nysius* sp, 8.vii.1985, SJ.
 SW53 Loggans Moor, 1995 & 2004, ECMH. Phillack Towans, 2004, ECMH.
 SW61 Lizard, JH Keys.
 SW62 Gunwalloe, 13.vi.1989, KNAA.
 SW87 St Merryn, vii.1925, KG Blair. Park Head, “*N. thymi*”1996, ECMH.
 SW97 Rock sandhills, 7.vi.1956, GEW (1956, 1957, 1959). Daymer Bay, 9.ix.1985, PK.
 SW98 Port Quin, 10.ix.1985, PK.

Nysius thymi (Wolff) – **County Rare.**

Found specifically in mats of thyme growing on sand, usually coastal dunes. Confirmed as occurring in Cornwall by Woodroffe (1959) but only one definite reliable identification since then.

- SW62 Loe Bar, clifflet at north end & at south end, 14.ix.1992, PK.
 SW97 Rock sandhills, 7.vi.1956, GEW (1956, 1957, 1959).

Kleidocerys resedae (Panzer) – **County Scarce.**

Feeds in catkins and fruits of alder and birch, and is widespread across lowland England and Wales. Adults overwinter under bark on deadwood and in other situations. Reported in the county in Clark (1906) but this may refer to *K. trunculatus ericae* (see below) as the two were not treated as separate species at that time.

- SW64 Red River Trail near Menadarva, on birch, 2004, PAG.
 SX06 Kirland Bower, 27.viii.2006, KP-M.
 SX17 South Penquite Farm, Blisland, on birches along De Lank River, 2005, KNAA.
 SX37 Tregonnett Wood, Kerney Bridge, South Hill, alders alongside River Lynher, 30.v.2006, KNAA.
 SS11 Vicarage Cliff, Morwenstow, one at flowers of *Cochlearia danica*, 18.iv.2003, KNAA.

Kleidocerys truncatulus ericae (Horváth)

A widespread species of lowland heaths throughout England and Wales, where it feeds on heather and heaths. Widespread but apparently uncommon in Cornwall.

- SW33 Ballowall Common, 4.v.2000, KNAA.
SW42 Cribba Head, 7.v.1999, KNAA.
SW43 Kenegie, vii.1969, RTB.
SW44 Trevega Cliff, 18.v.1994, KNAA.
SW52 Prussia Cove, 11.vii.2006, PAG.
SW61 Clahar Bridge, 1.viii.1981, DS. Kynance, 17.ix.1992, PK. Windmill Farm, 25.ix.2002, PAG.
SW64 Nancekuke, 1981, APF. Duchy College, Rosewarne, from heather garden, 25.ix.2004, KNAA. Red River Trail near Menadarva, 2004, PAG.
SW65 St Agnes Head, 24.ix.2002, 7.v.2005, PAG.
SW71 Kennack Sands, vii.1964, RTB. Crousa Downs, 29.vii.1981; Golgotham, 7.vii.1981; Gwendreath, 22.ix.1980 & 5.vi.1981, DAS. Goonhilly Downs, 2003, PAG. Treleaver Cliff, 27.vii.2006, PAG.
SW72 Goonhilly, 29.vii.1980, & Trevassack, 7.vii.1981, DAS. Goonhilly Downs, 20.ix.1992, PK.
SW74 United Downs, 21.vii.2004, PAG.
SX05 Dryers Pit & Molinnis, Roche CP, 2005, JD.
SX35 Whitsand Bay, v.1908, and Penlee Point, vi.1910, JHK.
SX19 Crackington Haven, 11.vii.1989; Pentargon Cliff, Boscastle, bell-heather, 12.vii.1989, KNAA.
SX35 Whitesand Bay, v.1908, JHK.
SX44 Penlee Point, vi.1910, JHK.

Cymus claviculus (Fallén)

Occurs in dry grassy places, associated with plants such as knotgrass and toad rush, across southern Britain. Cornwall (Clark, 1906); very localised and mostly in west of county.

- SV91 St Mary's, 14-18.vi.1987, PK.
SW32 Gwenver, Whitesand Bay, 4.viii.1986, SJ.
SW43 Penzance, iv.1965, RTB.
SW44 Treveffa Farm, knocked from elder in mixed scrub near rushy pastures, 14.v.1996, KNAA.
SW52 Rosudgeon, near Marazion, ix.1931, WE China.
SW61 Clahar Bridge, 3.vi.1981, DAS.
SW62 Porthleven, Sargent (1968) & 25.ix.1992, PK.
SW82 Porthoustock, 23.ix.1992, PK.

Cymus glandicolor Hahn

Nationally common in well-developed marshland vegetation, feeding on sedges. Cornwall (Clark, 1906). Clearly very localised in Cornwall and known only from the west especially the Lizard.

- SW53 Trescowe, tussock sedge, 26.v.1989, KNAA.
SW54 St Ives, three, 7.v.1927, AT. Gwithian, vii.1964, RTB.
SW61 Mullion Quarry, 6.vii.1981, DAS.
SW62 Porthleven, Sargent (1968). Craig-a-Bella, Gunwalloe, swept from tussocky *Schoenus*, 14.vi.1989, KNAA.
SW71 Goonhilly, 1960, RTB. West of Coverack, 19.vi.1998, PAG. Gwavas Cliff, 2000, AS & R Howard.
SW75 Holywell Dunes, 25.v.1989, SJG. Gear & Penhale Dunes, 20.viii.2002, PAG. Mount Field, Perranporth, 7.v.2005, PAG.

Cymus melanocephalus Fieber - **County Scarce.**

In damp rushy places across southern Britain, rushes being the host-plant. Its distribution was believed by Butler (1923) to be very localised in Britain and it may have become much commoner. In Cornwall however it is clearly scarce, but possibly a recent arrival.

- SX19 Dizzard Wood, swept, 13.vii.1989, KNAA.

SX46 Haye Farm, St Dominick, 19.vii.2006, KNAA.

Henestaris halophilus (Burmeister) - **Red Data Book Category 2 (Vulnerable) & Locally Extinct.**

A salt-marsh species, confined to sea purslane areas flooded at spring tides - nymphs are submerged at some high tides but the adults climb plant stems to avoid inundation. Known in Britain today only from north Kent; it was reported by J.J. Walker from a now lost saltmarsh at Whitesand Bay, near Plymouth, in the 1880's - this record is not supported by a voucher and is not widely accepted (Southwood & Leston, 1959; Kirby, 1992). Saunders (1891), in adding the species to the British list from north Kent, says "Mr Champion records its capture also from Whitsand Bay, Cornwall, by Mr J.J. Walker."

Henestaris laticeps (Curtis)

Characteristic of the maritime therophyte zone – the sparsely-vegetated brows to seacliffs - along south and south-west coasts; also on open heaths developed on mine spoil; feeds on buck's-horn plantain. A Mediterranean species which extends from the western coasts of France up as far north as south Wales. Noted as one of the commonest insects on the cliff-tops around Padstow by Woodroffe (1958) and to be found almost anywhere on the coast between Tintagel and Perranporth (Woodroffe, 1956).

- SW32 Land's End district, ED Marquand (1884). Sennen Cove, JHK. Whitesand Bay, cliffs to north, 30.ix.1962, GEW (1966a). Sennen, viii.1963, RTB. Whitesand Bay, 9.vii.1985; Gwenver, 13.vii.1985, SJ. Sennen Cove, 19.vi.1987 (Kirby & Lambert, 1989). Boscregan, 22.v.1989, SJG. Logan Rock, 25.v.1999, PJH. Porthgwarra, 1996, PAG.
- SW33 Kenidjack Cliff, 13.v.1996, KNAA; 13.vii.2006, PAG. Boscaswell Cliff, 20.viii.2002, KNAA. Priest's Cove, 16.iv.2003, PAG.
- SW42 Cribba Head, 7.v.1999, KNAA.
- SW43 Zennor, "*H. halophilus*", 15.viii.1924, OWR; 12.vii.1985, SJ. Carn Glouce, Treen, 3.v.1999, KNAA.
- SW44 Treveal Cliff, 23.v.1989, KNAA.
- SW52 Rinsey, 12.18.vii.1959, M Ackland. Cudden Point & Rinsey Head, 23.24.v.1999, PJH.
- SW53 Trenow Cove, Marazion, 24.ix.1998, PJH.
- SW54 Godrevy Towans, 16.v.1990, SJG.
- SW61 Lizard, JH Keys; 22.24.iv.1938, 15.v.1939, P Harwood; 1940-90, AA Allen; 2.ix.1951, 29.viii.1954, AMM. Lizard Town, ix.1951, Masee (1953). Kynance Cove, 2.ix.1951, 29.viii.1954, AMM. Predannack, 1981, DAS; 2006, PAG. Lower Predannack Cliff, 1989 & 2000, KNAA; 1998, PJH. Lizard Point, 1989, KNAA; 1999, PJH. Holestrow, 1994, APF. Mullion Cliffs, 2001, BSN; 2006, J. Widgery. Caerthillian Valley, 2004, PAG.
- SW62 Porthleven, Sargent (1968); 25.ix.1992, PK. Penrose Estate, 1983, 19.vii.1989, K Porter. Chyvarloe Cliffs, 1970, MGM; 1989, KNAA. Loe Bar, 14.ix.1992, PK. The Loe, 19.vi.2001, BSN.
- SW65 Tubby's Head, Chapel Porth, 23.v.1990, KNAA. St Agnes Head, 24.ix.2002, PAG.
- SW71 Treleaver Cliff, 27.vii.2006, PAG.
- SW76 Pentire Point West, Crantock, 7.viii.2006, KNAA.
- SW75 The Kelseys, Cubert, 9.viii.2006, KNAA.
- SW81 Lowland Point, 30.iii.2003, PAG.
- SW83 Killigerran & Porthmellin Heads, 3.vii.1989, SJG.
- SW86 Mawgan Porth, 14.vi.1956, GEW. Bre-Pen Farm, 11.vi.2000, GA Collins.
- SW87 Constantine Bay, 14.vi.1956; Porthcothan, vi.1956, 11.vii.1957, 8.vi.1958, 10.vii.1975, GEW. Park Head, 9.vii.1989, SJG; frequent & in cop., 3.v.2002, KNAA.
- SW93 Kibberick Cove, 14.vii.2004, PAG.
- SW97 Rock, 10.vii.1957, GEW. Pentire Head, St Minver Highlands, 2.viii.2006, KNAA.
- SW98 Port Quin, 10.ix.1985, PK. Pentire Point, 1.vi.2006, PAG & 2.viii.2006, KNAA.
- SX04 Pabyer Point, Gorran Haven, 3.v.1995, KNAA.
- SX08 Treknow Cliff, Tintagel, viii.1908, FH Day & EA Butler (1923); 10.vii.1989, KNAA. Tregardock, 9.v.1956, GEW. Willapark, 10.vii.1989, SJG; 21.viii.2002, KNAA. Bossiney Cliffs, one swept from yarrow, 21.viii.2002, KNAA.

- SX09 Boscastle, 7.viii.1986, SJ.
 SX15 Lansallos Cove, 2 & 13.viii.1999, PK; 22.viii.2006, KNAA. Lantic Bay, 7 & 11.viii.1999, PK.
 SX19 Cambeak, Crackington Haven, 11.vii.1989, KNAA. Pencannow Point, 12.vii.1989, SJG. Chipman Point, 13.vii.1989; Dizzard, 13.vii.1989, KNAA. High Cliff, 10.ix.1985, PK. Strangles Beach, cliff edge above, 11.v.2006, PAG.
 SX25 Looe, 12.vi.1937, HW Daltry.
 SX35 Whitsand Bay, 21.viii.1875, JJ Walker (1875). Tregantle and Donderry, JH Keys. Donderry, viii.1905, EA Newberry. Freathy, 10.viii.1999, PK.
 SX44 Rame Head, 19.iv.1900, HStJK Donisthorpe.
 SS20 Sandy Mouth, cliffs to south, 12.vii.2006, KNAA.
 SS21 Duck Pool, 11.ix.1985, PK. Duckpool to Sandymouth, 5.6.vii.1989, SJG. Steeple Point, 30.v.1998, RS Key. Stowe Cliffs, 29.v.2005 & 12.vii.2006, KNAA.

Chilacis typhae (Perris) – Reedmace Bug. **County Scarce.**

Although described as “throughout England” in Southwood & Leston (1959), this is not the case in Cornwall. This bug develops in the seed heads of reed-mace *Typha latifolia* and the adults generally overwinter in the old heads too. It is unclear whether its recent discovery reflects a small elusive population or an introduction – the latter seems more likely given the presence of the plant in so many commercial garden centres.

- SW53 Marazion, “bulrush” heads, 15.ix.2002, 20.viii.2003, PAG. Loggans Moor, 2.viii.2006, PAG.
 SW62 Helston, 2.viii.2006, PAG.
 SW97 Trevathan, 27.vii.2005, KP-M.
 SX05 Par, 14.viii.2006, PAG.

Heterogaster artemisiae Schilling - **Nationally Scarce & County Scarce.**

A very rare bug which feeds on thyme where it grows in hot, dry situations on coastal sandhills and cliff-tops. Favours large clumps overhanging bare ground, and so tends to occur at the margins of tracks, in quarries and on cliffs, particularly scree patches. First discovered in the county in 1948 and now known from a handful of localities around the more exposed coasts.

- SW32 Gwenver, near Sennen, vii.1963, RTB.
 SW33 Ballowall Common, viii.1993, A Spalding.
 SW75 Penhale Sands, numbers of young nymphs on patches of thyme growing on rocky slopes, 10.vi.1956, GEW (1956).
 SW97 Rock, thyme on rocky slope, 7.vi.1956, GEW (1956); 12.vi.2000, PAG.
 SS20 Bude Sandhills, in profusion, 18.vi.1948, DC Thomas (1955c).

Heterogaster urticae (Fab.) - Nettle Seed-bug.

A widespread species across lowland southern Britain. It lives on stinging nettle where it grows in warm, sunny situations. Adults overwinter in deadwood and within hollow woody stems of a variety of plants growing close by the nettlebeds. Remarkably few reports until recently, perhaps reflecting increased nutrient enrichment due to modern farming.

- SV “Isles of Scilly”, ix.1888, JEM (1889b); F Jenkinson (1889).
 SV81 Tresco, 1927, OWR; appeared associated with Boraginaceae rather than nettle (Woodroffe, 1966a).
 SV91 St Mary’s, 1927, OWR. St Martins, 17.vi.1987, PK.
 SW33 Kenidjack, 1995, ECMH.
 SW43 Penzance, vi.1963, RTB.
 SW53 Hayle Saltmarsh, 4.vii.1983, MJ Morgan. Angarrack, 1990 & 2004; Phillack Towans, 1998 & 2004; Mexico Towans, 2000, ECMH.
 SW54 Upton Towans, 1998 & 2004, ECMH.
 SW61 Kynance Cove, 24.viii.2006, PAG.
 SW62 Church Cove, 19.ix.1992, PK.
 SW64 Duchy College, Rosewarne, 3.ix.2005, KNAA.
 SW71 Lizard lighthouse, 27.v.1998, PAG.

- SW74 United Downs, v.1998, AS & ECMH.
 SW95 Carnwinnick Farm, Trenowth, 28.v.2000, KNAA.
 SX25 Struddicks, St Martin, 1999, AS & ECMH.
 SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.

Plinthisus brevipennis (Latreille)

Lives on sandhills and sandy heaths across southern Britain, preferring thin, low vegetation.

- SV Scilly, ix.1888, JE Mason (1889b).
 SV81 Tresco, vii.1897, GCC (1897).
 SW32 Sennen, 28.v.1962, GEW. Gwenver, 13.vii.1985, 4.viii.1986, SJ.
 Nanjulian Cliff, 2.v.2000; Ardensawah Cliff, 3.v.2000, KNAA. Whitesand Bay,
 24.vi.2003, SEB.
 SW33 Pendeen, iv.1963, RTB. Kenidjack, 13.v.1996, KNAA. Cape Cornwall, 24.ix.1998, PJH.
 SW43 Zennor Head, heather, 23.v.1979, KNAA.
 SW44 Economy Cove, Treveal, 23.v.1989, KNAA.
 SW53 Hayle district, ix.1888, JEM (1889b).
 SW52 Cudden Point, 23.v.1999, PJH.
 SW54 St Ives, JEM (1889b).
 SW61 Lizard, JH Keys; ix.1932, EC Bedwell Lizard Town, ix.1951, AM Masee (1953). Kynance
 Cove, ix.1951, AMM (1953). Poldhu Cove, 30.v.1962, GEW. Clahar Bridge, 1981;
 Predannack, 1981, DAS. Predannack, 6.vi.2000, KNAA.
 SW71 Kennack Sands, vii.1963, RTB. Erisey Barton, 1980, DAS. Beagles Point, 18.iv.1984,
 KNAA.
 SW72 Glendurgan Gardens, 16.ix.1992; Porthallow, 23.ix.1992, PK.
 SW75 Perranporth, 25.iv.1968, GEW.
 SW82 Porthoustock, 23.ix.1992, PK.
 SW86 Bre-Pen Farm, 11.vi.2000, GA Collins.
 SX09 Boscastle, 7.viii.1986, SJ.
 SX25 Polperro, TA Marshall (Clark, 1906); P Skidmore.
 SX35 Whitsand Bay, JH Keys.
 SS11 Tidna Valley, 11.ix.1985, PK.
 SS21 Steeple Point, 30.v.1998, RS Key.

Acompus rufipes (Wolff) - **Locally Extinct**.

Feeds on fruits of marsh-valerian where it grows in fens and bogs, however, marsh-valerian
(Valeriana dioica) does not occur in Cornwall.

- SW32 Land's End, JC Dale (Clark, 1906).

Stygnocoris fuliginus (Geoffroy) syn. *Stygnocoris arenarius* Hahn

Often abundant in meadows and on wasteland, throughout lowland Britain. Rather common
 (Thornley, 1934) and still so.

- SV "Scilly", ix.1888, JEM (1889b).
 SV80 St Agnes, 1964/65, GE Woodroffe (1966a); 16.vi.1987, PK.
 SV81 Castle Bryher, 1930, OWR. Bryher & Tresco, 1964/65, GE Woodroffe (1966a).
 SV91 St Mary's, vii.1897, GCC (1897); vii.1925, KGB; 1927, OWR; 1964/65, GE Woodroffe
 (1966a); 14-18.vi.1987, PK. St Martin's, 1964/65, GE Woodroffe (1966a); 17.vi.1987, PK.
 Tean, 1964/65, GE Woodroffe (1966a).
 SW32 Land's End district, ED Marquand (1884). Gwenver, Whitesand Bay, 9, 13.vii.1985 &
 4.viii.1986, SJ. Whitesand Bay, 31.v.1982, PJH. Whitesand Bay, 19.vi.1987, PK. Nanjizal,
 17.iv.1987, KNAA. Sennen Cove, 29.v.1989, SJG. Mayon Cliff, 2.v.2000; Trevilley Cliff,
 3.v.2000, KNAA.
 SW33 Cape Cornwall, 15.v.1989; Letcha, 16.v.1994; Kenidjack, 13.v.1996, KNAA.
 SW42 Sancreed, viii.1962, RTB. Cribba Head, Penberth, 19.v.1989, KNAA.
 SW44 Treveal, 10.vi.1989, KNAA. Pen Enys Point, 1.ix.1995, PAG.
 SW53 Hayle district, ix.1888, JEM (1889b).
 SW52 St Michael's Mount, 8.vii.1985, SJ. Praa Sands, 25.ix.1992, PK.

- SW53 Hayle district, ix.1888, JEM (1889b). Carbis Bay, 18.ix.1928 & 6.v.1935, AT. Lelant Towans, 1.x.1931 & 12.v.1934, AT.
- SW54 St Ives district, ix.1888, JEM (1889). St Ives, 16.iii.1931, AT. Gwithian, 18.ix.1992, PK.
- SW61 Lizard, JHK; ix.1932 & 13.ix.1933, EC Bedwell; 26.v.1962, GEW. Lizard Head, 1967?, PS Broomfield & H Seal. Caerthillian Cove, 1970, MGM. Mullion, 1980; Predannack, 1981, DAS. Lower Predannack Cliff, 1989, KNAA; 1998, PJH. Ogo-dour Cove, 1997, PJH. Kynance, 1992, PK. Predannack, 1992, PK; 2000, KNAA; 2006, PAG. Holestrow, 1994, APF. Mullion Cove village, 2001, BSN.
- SW62 Porthleven, Sargent (1968); 25.ix.1992, PK. Chyvarloe Cliffs, 1970, MGM. Parc-an-als Cliff, 24.ix.1998, PJH. Loe Bar, clifflet at north end, 14.ix.1992, PK; Loe Bar, by pool, 20.v. & 24.vi.2003, KNAA. Church Cove, 19.ix.1992, PK.
- SW64 Nancekuke, 19.iv.1984, KNAA. Godrevy, 1990, SJG.
- SW71 Cadgwith, 15.ix.1992; Kennack Sands, 24.ix.1992, PK. Carn Barrow, Cadgwith, 26.ix.2004, KNAA.
- SW72 Glendurgan Gardens, 16.ix.1992; Trebah Gardens, 22.ix.1992, PK. Porthallow, 23.ix.1992, PK. Goonhilly Downs, 20.ix.1992, PK; 10.x.1998, PAG.
- SW75 Holywell Dunes, 25.v.1989, SJG.
- SW82 Porthoustock, 23.ix.1992, PK.
- SW83 Gerrans Bay, viii.1900, EA Newberry.
- SW87 Constantine Sands, 8.x.1919, GEH. Padstow, ix.1909, CG Lamb. Porthcothan, 6.viii.1986, SJ; 3.v.2002, KNAA. Rock Sandhills, 30.iv.2001, KNAA.
- SW98 Port Quin, 10.ix.1985, PK.
- SX08 Tregardock Cliff, 2.vi.2000, KNAA.
- SX09 Boscastle, 7.viii.1986; Trevalgo, 28.v.1987, SJ.
- SX15 Lansallos Cove, 2 & 13.viii.1999, PK. Lantic Bay, 7 & 11.viii.1999, PK.
- SX19 Crackington, vi.195-, GEW; 21.vi.1962, WJ Le Q. High Cliff, 10.ix.1985, PK. Crackington Haven, 12.vii.1989, SJG.
- SX35 Tregantle, JHK; 1.vi.2000, KNAA. Freathy, 10.viii.1999, PK.
- SS11 Tidna Valley, 11.ix.1985, PK.
- SS21 Duck Pool, 11.ix.1985, PK.

Stygnocoris rusticus (Fallén)

In open dry places with plenty of flowers. Widespread throughout lowland England and Wales, although apparently rather local in Cornwall. Listed by Clark (1906).

- SV Scilly, 1925, KG Blair.
- SW33 Kenidjack Cliff, 13.v.1996, KNAA.
- SW43 Madron, iv.1967, RTB.
- SW52 Perranuthnoe, under *Armeria* tussock, 15.v.1996, KNAA.
- SW53 Lelant Towans, viii.1924, OW Richards. Carbis Bay, 1933, AT.
- SW61 Caerthillian Cove, 3.ix.1970, MGM. Kynance Cove, 24.viii.2006, PAG.
- SW83 Porthcurnick, 20.viii.2002, KNAA.
- SW87 Porthcothan, 27.v.1987, SJ.
- SW98 Kellan Head, 24.iv.2002, KNAA.
- SX09 Boscastle, 17.ix.1933, EC Bedwell; 16.v.1990, KNAA.
- SX15 Pencarrow Head, 15.v.1990, KNAA.
- SX37 Lezant, viii.1918, AVM (DA ms).
- SS11 Steeple Point, under spurrey on rock outcrop, 1.iv.1989, KNAA.

Stygnocoris sabulosus (Schilling) syn. *pedestris*

A widespread species, usually on dry soils with a good cover of vegetation. Listed in Clark (1906).

- SV "Scilly", ix.1888, JEM (1889b).
- SV81 Bryher, 1964/65, GE Woodroffe (1966a).
- SV91 St Martin's, 1964/65, GE Woodroffe (1966a).
- SW32 Land's End district, ED Marquand (1884). Gwenver, 13.vii.1985 & 4.viii.1986; Sennen, 4.viii.1986, SJ.

- SW33 Boscawell Cliff, 20.viii.2002, KNAA.
 SW43 Zennor, viii.1924, OW Richards; viii.1962, RTB. Gurnard's Head, 31.viii.1934, AT. Foage Farm, Zennor, 8.viii.2006, KNAA.
 SW52 Rosudgeon, ix.1931, WE China. Praa Sands, 25.ix.1992, PK. Rinsey Cliffs, 23.viii.2006, PAG.
 SW53 Near Hayle, ix.1888, JE Mason (1889b). Not uncommon at Carbis Bay, AT. Carbis Bay, 12.x.1928, AT. Lelant Towans, 2.x.1933, AT.
 SW54 Near St Ives, ix.1888, JE Mason (1889b). Not uncommon at St. Ives, AT. Krill Moor, 2.x.1928, AT.
 SW61 Lizard, 13.ix.1933, ECB. Kynance Cove, 2.ix.1951, AMM. Mullion Cove, 22.ix.1967, PS Broomfield & H Seal. Caerthillian Cove, 1970, MGM. Clahar Bridge, 1980; Mullion, 1980 & 1981, DAS. Kynance, 17.ix.1992, PK. Predannack, 20.ix.1992, PK.
 SW62 Chyvarloe Cliffs & Gunwalloe Towans, 1970, MGM. Porthleven, 25.ix.1992, PK.
 SW71 Goonhilly Downs, not uncommon, 7.ix.1932, AT. Gwendreath, 1980, DAS. Coverack, 20.ix.1992; Kennack Sands, 24.ix.1992, PK.
 SW72 Goonhilly, 1980, DAS. Glendurgan Gardens, 16.ix.1992, PK. Goonhilly Downs, 20.ix.1992, PK; 1.viii.2004, PAG. Trebah Gardens, 22.ix.1992; Porthallow, 23.ix.1992, PK.
 SW82 Porthoustock, 23.ix.1992, PK.
 SW86 Newquay, 18.ix.1967, PS Broomfield & H Seal.
 SW98 Pentire Head, 2.viii.2006, KNAA.
 SX06 Lockengate, Luxulyan CP, 2005, JD.
 SX08 Tregardock, 7.vi.1956, GEW. Bossiney Cliffs, 22.viii.2002, KNAA.
 SX09 Boscastle, 7.viii.1986, SJ.
 SX15 Lantic Bay, 7 & 11.viii.1999, PK. Lansallos East Coombe, 22.viii.2006, KNAA.
 SX17 Dozmary Pool, 9.ix.1985, PK. South Penquite Farm, 4 amongst *Sphagnum* in mire, 23.viii.2005, KNAA.
 SX19 High Cliff, 10.ix.1985, PK.
 SX35 Whitsand Bay, JH Keys.
 SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.
 SS11 Tidna Valley, 11.ix.1985, PK.

Drymus pilicornis (Mulsant) - **Nationally Scarce & County Rare.**

Occurs mainly in moss amongst grass on calcareous or base-rich grassland. Only known from two records on the Lizard.

- SW61 Caerthillian Cove, 21.vii.1970, MGM.
 SW71 Treleaver Cliffs, vii.1998, PAG.

Drymus brunneus (Sahlberg) – **County Scarce.**

A widespread bug nationally, on damper soils than other *Drymus*, in shady woods and gardens, occurring in ground litter and mosses.

- SV91 St Martins, 17.vi.1987, PK.
 SW53 Hayle district, ix.1888, JE Mason (1889b).
 SW53 St Ives district, ix.1888, JE Mason (1889b).
 SW61 Lizard Town, ix.1951, AM Masee (1953).
 SW62 Porthleven, Sargent (1968).
 SW71 Goonhilly SSSI, 1962, WFH Ansell.
 SW72 Gweek, 19.viii.1963, C MacKechnie-Jarvis.
 SX26 Golitha Falls, 8.viii.1999, PK.

Drymus ryei Douglas & Scott – **County Scarce.**

Dry places on light soils, occasionally in open woodland. Widespread nationally, but not particularly common. First discovered in Cornwall in 1969, and now known from a small number of localities.

- SW43 Zennor Head, on path through coastal dry heath, 31.v.1979, KNAA.
 SW53 Angarrack, 27.v.1991, ECMH det, PJH.
 SW72 Glendurgan Gardens, 16.ix.1992, PK.

- SW84 Ruan Laniorne, in woodland leaf litter, 7.iv.1986, KNAA.
 SW87 Porthcothan, 4.5.ix.1989, SJ.
 SW93 Veryan, 6.iv.1969, EC Pelham-Clinton.
 SX05 Prideaux Wood, 28.v.2000, KNAA.

Drymus sylvaticus (Fabricius)

Reputedly one of the commonest British bugs. It occurs on the ground, in grass, moss or litter, on almost all dry soil types. It feeds at night on mosses and fungal hyphae. Apparently common (Thornley, 1934).

- SV90 Peninnis Head, St Mary's, one on a rock, vi.1966, Woodroffe (1967).
 SV91 St Mary's, 14-18.vi.1987, PK.
 SW32 Gwenver & Sennen, 4.viii.1986, SJ. Porthgwarra, cliffs to east, 23.iii.2004, KNAA.
 SW52 Rosudgeon, ix.1931, WE China.
 SW53 Carbis Bay & Lelant Towans, AT. Marazion, iv.1965, RTB. Angarrack, 2002, ECMH.
 SW54 St Ives, AT (1932). Gwithian, 1981, APF.
 SW61 Lizard Town, ix.1951, AM Masee (1953). Lizard, 1960, RTB.
 SW62 Porthleven, HB Sargent (1968). Gweek Wood, 18.iv.1984, KNAA. Loe Pool, 26.x.2003, KNAA.
 SW71 Goonhilly SSSI, 1962, WFH Ansell. Erisey Barton, 1981, DAS.
 SW72 Goonhilly SSSI, 1962, WFH Ansell. Glendurgan Gardens, 16.ix.1992, PK.
 SW83 Gerrans Bay, viii.1900, EA Newberry. Sett Bridge, River Fal, 3.v.1995, KNAA.
 SW84 Round Wood, Fal, 25.iii.1985, KNAA.
 SW87 Porthcothan, 9.vi.1956, GEW; 4.ix.1989, SJ.
 SW97 Padstow, iv.1900, CG Lamb. Daymer Bay, 9.ix.1985, PK.
 SW98 Port Isaac, 24.iv.2002, KNAA.
 SX05 Dryers Pit, Roche CP, 2005, JD.
 SX06 Lockengate, Luxulyan CP, 2005, JD.
 SX07 St Kew, 2.v.2002, KNAA.
 SX15 Pencarrow Head, 15.v.1990, KNAA.
 SX25 Polperro, 8.vi.1937, HW Daltry.
 SX37 Lezant, viii.1918, AVM (DA ms).
 SS21 Stowe Wood, 11.ix.1985, PK.

Eremocoris podagricus (Fabricius) - **County Rare/ Locally Extinct.**

A species of dry barren sandy or chalky ground, with rubble, dead leaves and other debris.

- SX19 Millook, GL Allen (Clark, 1906).

Gastrodes grossipes (DeGeer) - Pine-cone bug. **Naturalised Introduction.**

A species which shelters mainly in pine cones during daylight hours, but spends the night roaming over the tree, feeding upon sap which is extracted from needles through the bugs' long rostra.

- SX16 Doublebois (Clark, 1906).
 SS21 Kilkhampston (Clark, 1906). Marsland Mouth, beaten from Scots pine, 13.vi.2005, PAG.

Ischnocoris angustulus (Boheman)

On the warmer parts of heaths. Listed in Clark (1906).

- SV80 St Agnes, 16.vi.1987, PK.
 SV81 Tresco, 1930, OW Richards; 1964/65, GE Woodroffe (1966a); 15.vi.1987, PK.
 SV91 St Martins, 1964/65, GE Woodroffe (1966a); 17.vi.1987, PK. St Mary's, 1964/65, GE Woodroffe (1966a).
 SW32 Whitesand Bay, towards Cape Cornwall, v.1962, GEW. Gwenver, Whitesand Bay, 4.viii.1986, SJ. Logan Rock, 28.x.1997, PJH. Boscregan Cliff, 5.v.1999, KNAA. Pordenack Point & Trevilly Cliff, 3.v.2000, KNAA.
 SW33 St Just, 27.v.1962, GEW. Kenidjack Cliff, 13.v.1996, KNAA.
 SW42 Cribba Head, Treen, 7.v.1999; Lamorna Point, 22.v.2004, KNAA.
 SW52 Rinsey, 12.vii.1959, M Ackland.

- SW61 Lizard Town, ix.1951, AM Masee (1953). Kynance Cove, 2.ix.1951, AMM; 22.ix.1967, PS Broomfield & H Seal; 3.vi.1982, PJH. Kynance Cliff, 29.v.1989, KNAA. Kynance, 17.ix.1992, PK.
- SW71 Kennack Sands, vii.1963, RTB.
- SW93 Nare Head, 4.vii.1989, KNAA.
- SX25 Polperro, 8.vi.1937, HW Daltry.
- SX35 Whitsand Bay, 15 with *Formica rufa*, v.1911, JH Keys. Freathy, 10.viii.1999, PK.

Lamprolax picea (Flor) - **County Rare.**

Mainly known from *Sphagnum* bogs, with heath rush or sharp-flowered rush on sheltered heaths; also known from non-acid marshes and amongst fen litter. Mainly across southern Britain; in Cornwall only known from West Penwith.

- SW43 Zennor, 26.viii.1924, OWR. Penzance, viii.1963, RTB.

Scolopostethus affinis (Schilling) syn. *Scolopostethus adjunctus*

Typical of partly-bare ground in the early stages of succession, and also amongst tall ruderals such as nettle, fat-hen and mugwort.

- SV Scilly, 1927, OWR.
- SV91 St Martins, 17.vi.1987, PK. St Mary's, 14-18.vi.1987, PK.
- SW32 Land's End district, ED Marquand (1884). Sennen, JCD. Chapel Carn Brea, 7.vi.2000, KNAA.
- SW43 Penzance, viii.1962, RTB.
- SW52 Perranuthnoe, amongst *Pellitoria* on hedge-bank, 15.v.1996, KNAA.
- SW53 Carbis Bay, 23.iii.1929, 11.v.1933, 23.iv.1935; Lelant, 12.iv.1934, AT.
- SW54 St Ives, 7.v.1927, AT. Upton Towans, 7.vii.1985, SJ. Gwithian, 18.ix.1992, PK.
- SW61 Predannack, 6.vi.2000, KNAA. Mullion Cove village, 20.vi.2001, BSN. Poldhu Cove, 23.vi.2003, BSN.
- SW62 Porthleven, Sargent (1968). Loe Bar, clifflet at north end, 14.ix.1992, PK. Church Cove, 19.ix.1992, PK.
- SW64 Tregea & Carvannel, v.1990, SJG.
- SW71 Cadgwith, 15.ix.1992; Coverack, 20.ix.1992, PK.
- SW72 Glendurgan Gardens, 16.ix.1992; Porthallow, 23.ix.1992, PK.
- SW76 Porth Joke, Cubert, from mixed herbs on sandy cliff, 25.v.1989, KNAA.
- SW82 Porthoustock, 23.ix.1992, PK.
- SW87 Porthcothan, 9.vi.1956 & 12.vi.1958, GEW.
- SX06 Bodmin, garden, 3.vii.2001, KP-M. Kirland Bower, 28.v.2006, KP-M.
- SX07 Gaff Wood, Camel Valley, 3.v.2001, KNAA.
- SX25 Kilminorth Wood, 1.vi.2000; Talland Cliff, 1.vi.2000, KNAA.
- SX35 Dowderry, abundant on shore at base of cliffs, 8.viii.1900, JH Keys.
- SX46 Cotehele, roadside nettles, etc, 19.vi.1989, KNAA.

Scolopostethus decoratus (Hahn) syn. *Scolopostethus ericetorum*

Widespread on heaths and heather moors throughout Britain.

- SV Isles of Scilly, 1919-1932, KG Blair.
- SV80 St Agnes, 1964/65, GE Woodroffe (1966a); 16.vi.1987, PK.
- SV81 Bryher, 1964/65, GE Woodroffe (1966a). Treco, 1964/65, GE Woodroffe (1966a); 15.vi.1987, PK.
- SV91 St Mary's, vii.1897, GCC (1897); 1964/65, GE Woodroffe (1966a). St Martin's, 1964/65, GE Woodroffe (1966a); 17.vi.1987, PK.
- SW32 Gwenver, Whitesand Bay, 13.vii.1985 & 4.viii.1986, SJ. Gurland & Boscregan Cliff, 5.v.1999, KNAA. Letcha Cliff, 2.v.2000; Trevilley Cliff, Higher Bosistow Cliff & Ardensawah Cliff, 3.v.2000, KNAA.
- SW33 Kenidjack Cliff, 13.v.1996; Carn Leskys, 2.v.2000; Boscawell Cliff, 20.viii.2002; Pendeen Old Cliff, 21.viii.2002, KNAA.

- SW43 Gurnards Head, 31.viii.1934, AT; 18.v.1989, SJG. Madron, vii.1962, RTB. Bosigran Castle, 6.v.1999, 1.v.2000, KNAA. Tregarthen Cliff, 5.v.2000, KNAA. Rosewall Hill, 5.vi.2000, KNAA. Foage Farm, Zennor, 2006, KNAA.
- SW52 Rosudgeon, 8.ix.1931, WE China.
- SW53 Hayle district, ix.1888, JE Mason (1889b). Carbis Bay, 12.x.1928, 23.iii.1929, 19.iv.1929, AT.
- SW54 St Ives district, ix.1888, JE Mason (1889b). St Ives, AT.
- SW61 Lizard, JH Keys; JCD; 1960, RTB. Lizard Town, ix.1951, AM Masee (1953). Kynance Cove, ix.1951, AMM (1953). Clahar Bridge, 1980 & 1981; Mullion, 1980 & 1981; Predannack, 1981, DAS. Lower Predannack Cliff, 14.vi.1989, 18.iv.1998, KNAA. Kynance, 17.ix.1992, PK. Predannack, 20.ix.1992, PK. Hayle Kimbro, 1995, PAG.
- SW64 Chapel Porth, 23.v.1990; Godrevy & The Knavocks, v.1990, SJG. Duchy College, Rosewarne, from heather garden, 25.ix.2004, KNAA.
- SW71 Goonhilly SSSI, 1962, WFH Ansell. Crousa Downs, 1981; Erisey Barton, 1981; Gwendreath, ix.1980, 5.vi.1981; Main Dale; 1980 & 1981, DAS; Kennack, 1.viii.2002 & 22.ix.2002, PAG.
- SW72 Goonhilly SSSI, 1962, WFH Ansell. Goonhilly, 1980 & Trevassack, 7.vii.1981, 1.viii.1981, DAS. Goonhilly Downs, 20.ix.1992, PK.
- SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW96 Tregoss Moor, 1997, Spalding & Haes (2000).
- SW97 Pennywilgie Point, St Minver Highlands, 3.viii.2006, KNAA.
- SX05 Prideaux Wood, 28.v.2000, KNAA. Dryers Pit & Molinnis, Roche CP, 2005, JD.
- SX08 Glebe Cliff, 10.vii.1989, KNAA. Dannonchapel & Tregardock, 1995, AS & ECMH. Bossiney, 21.viii.2002, KNAA.
- SX09 Boscastle, 7.viii.1986, SJ.
- SX17 Dozmary Pool, 9.ix.1985, PK. Colliford Lake, 17.vi.2001, BSN.
- SX19 Pentargon Cliff, Boscastle, 12.vii.1989, KNAA. High Cliff, 10.ix.1985, PK.
- SW25 Looe, GC Champion.
- SX35 Whitsands, JH Keys.
- SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.
- SS21 Henna Cliff, Morwenstow, 29.v.2005, KNAA.

Scolopostethus grandis Horváth – **County Scarce**.

A southern lowland species found amongst dead leaves in hedges, woods, etc.

- SV81 Tresco, 1930, OWR.
- SW53 Carbis Bay, one, 24.iii.1928, AT.
- SW82 Porthoustock, male & female macropterus, 18.viii.2006, PAG.
- SW87 Porthcothan, 6.viii.1986 & 4.ix.1989, SJ.
- SW94 Tregenna, 17.v.1996, KNAA.
- SX15 Blackbottle Rock, Lantic Bay, path through scrub, 14.v.1990, SJG, det. PK.
- SX19 Lower Tresmorn, 8.vi.2000, KNAA.

Scolopostethus pictus (Schilling) - **Nationally Scarce & County Rare**.

Lives in accumulations of dry plant material, presumably feeding on small fungi. Typical wild sites are ant nests and reed litter, while it also occurs in haystacks, thatch, etc. A southern species.

- SW76 West Pentire Farm, amongst vegetable debris in arable field, 11.vii.2003, KNAA.
- SX05 Holmbush, 1866, JA Power, per SJ.

Scolopostethus puberulus Horváth – **County Scarce**.

Damp mossy places. Discovered in the county in 1956.

- SW44 Cornelius Zawn, Treveal, maritime grassland, 24.v.1989, KNAA.
- SW61 Near Kynance Cove, amongst heather, 11.vii.2006, J. Widgery.
- SW71 Near Church Cove, amongst grass, 11.vii.2006, J. Widgery.
- SW72 Goonhilly Downs, 20.ix.1992, PK.
- SW97 Downhedge Cove, Pentire Head, amongst tall herbs in damp hollow, 22.v.1990, KNAA.

SX25 Looe, 24.ix.1956, KGV Smith.

Scolopostethus thomsoni Reuter

Closely associated with nettles, especially where vegetation is mixed and luxuriant. Common and widespread nationally. Reported in the county in Clark (1906); possibly overlooked in the past but prevalence of modern records may suggest recent nutrient-enrichment of farmland.

SW33 Cape Cornwall, 24.vi.2003, BSN.

SW43 Penzance, x.1962, RTB. Trevesa, 5.vi.2000, KNAA.

SW61 Poldhu Cove, 21.vi.2001, BSN. Mullion Cove village, 20.vi.2001, BSN.

SW62 Porthleven, Sargent (1968).

SW71 Erisey Barton, 1981, DS.

SW72 Glendurgan Gardens, 16.ix.1992, PK.

SW82 Porthoustock, 18.viii.2006, PAG.

SX06 Red Moor, 8.vii.2001, KNAA.

SX08 Tintagel, viii.1908, EAB. Dannonchapel & Tregardock, 1995, AS & ECMH.

SX28 Tregeare Down, 10.vii.2001, KNAA.

SX36 Cadsonbury, nettles beneath willow carr, 22.vi.1989, KNAA.

Taphropeltus contractus (Herrich-Schäffer)

A species of open vegetation in dry sandy, cindery or limestone rubble situations. Widespread across England and Wales. Reported in the county in Clark (1906).

SW32 Gwenver, 13.vii.1985, 4.viii.1986, SJ. Sennen Cove, viii.1965, RTB; 4.viii.1986, SJ; 29.v.1989, SJ Grove. Whitesand Bay, 31.v.1982, PJH; 9.vii.1985, SJ. Nanjulian Cliff, 2.v.2000, KNAA. Sennen Cove, 20.vi.2001, BSN.

SW33 Cape Cornwall, 15.v.1989; Kenidjack, 13.14.v.1996; Carn Leskys, Letcha Cliff, 2 under heather mat on outcrop, 5.v.1999, KNAA.

SW44 Carn Naun, Trevega Cliff, frequent under bell heather mat, 18.v.1994, KNAA.

SW54 St Ives, 29.v.1962, GEW.

SW61 Lizard, iv.1935, P Harwood; 23.25.26.iv.1936, ECB.

SW62 Porthleven, Sargent (1968). Loe Bar, clifflet at north end, 14.ix.1992, PK.

SW64 Chapel Porth, under stones in open dry heath, 23.v.1990, KNAA.

SW71 Coverack, 20.ix.1992, PK.

SW72 Porthallow, 23.ix.1992, PK.

SW82 Porthoustock, 23.ix.1992, PK.

SW83 Gerrans Bay, viii.1900, EA Newberry.

SW84 Allen Valley, 7.vi.1956, GEW.

SW87 St Merryn, vii.1925, KGB. Porthcothan, 8.vi.1956, GEW; 6.viii.1986, 27.v.1987, 4.ix.1989, SJ.

SX09 Boscastle, 7.viii.1986, SJ.

SX25 Looe, 14.vi.1937, HW Daltry. Polperro, P Skidmore.

SS21 Henna Cliff, Morwenstow, 29.v.2005, KNAA.

Taphropeltus hamulatus (Thomson) - **Nationally Scarce & County Rare.**

All records are from well-drained base-rich sites across southern England, generally amongst moss in areas with loose rocks. Added to the Cornish list by Masee (1953) from two Lizard sites. Kirby (pers. comm.) has recently sought this species locally in vain.

SW61 Kynance Cove, ix.1951, AMM (1953).

SW71 Lizard Town, ix.1951, AMM (1953).

Tropistethus holosericeus (Scholtz) - **Nationally Scarce & County Rare.**

Found in dry, freely-draining, open and sunny situations, amongst short or sparse vegetation. Southern Britain. Only discovered in county as recently as 1985.

SW72 Mawnan, at roots of *Sedum anglicum* on sea cliff, 28.xii.1985, AP Foster, teste PK.

Aphanus rolandri (L.) - **Nationally Scarce & County Rare.**

A bug of sheltered fields or cliffs, always on firm and dry substrates, usually with a thin covering of stones or litter. Probably once a locally frequent species on arable land. Thomas (1954) says that it feeds on the eggs of the beetle *Gastrophysa polygoni* on its host plant *Polygonum aviculare*. Possibly more widespread than current records suggest, in litter beneath thorn scrub (P. Kirby, pers. comm.). Strongly southern and warmth-loving in Britain.

SV91 St Mary's, 1925 & 1927, OWR.

SW76 West Pentire Farm, in bare area within margin of arable field, 11.vii.2003, KNAA; 100s of nymphs & some adults under stones in arable fields, 13.vii.2004, PAG.

SW87 Porthcothan, 21 amongst fine grass, *Plantago* and tufts of thrift on a cliff ledge, together with dry leaf litter from a thicket of sloe, bramble and gorse above, 8.vi.1956, GEW (1956).

SW97 Padstow, vi.1900, CG Lamb. Pentireglaze, St Minver Highlands, one running on coastal path, 2.viii.2006, KNAA.

SX26 Liskeard, under some blown hay, vii.1901 (Clark, 1906).

Emblethis griseus (Wolff) nec *Emblethis verbasci* - **Red Data Book Category 3 (Rare).**

A speciality of coastal sand with sparse vegetation, and only known from the Isles of Scilly, Sennen Cove and Kent. In the Scilly Isles the bug is common amidst the rich vegetation of the shore (Southwood & Leston, 1956), while the population at Sennen appears resilient and under no particular threat. Ground-dwelling seed-feeders. It was first discovered in Scilly by Champion (1897) and later at Sennen Cove by JH Keys in 1928.

SV "Scilly", 1919-1932, KG Blair.

SV80 Gugh, among *Erodium* in derelict bulb fields, vi.1966, Woodroffe (1967).
St Agnes, vi.1966, Woodroffe (1967); 16.vi.1987, PK.

SV81 Tresco, abundant, vii.1897, GCC (1897); 1964/65, GE Woodroffe (1966a); Kirby (1992).
Samson, abundant, vii.1897, GCC (1897); 1964/65, GE Woodroffe (1966a); Kirby (1992).
Bryher, 1964/65, GE Woodroffe (1966a); Kirby (1992).

SV91 St Mary's, one, at the roots of *Euphorbia* and *Erodium*, in all its stages, vii.1897, GCC (1897); 1925, OWR; Kirby (1992). St Martin's, 1964/65, GE Woodroffe (1966a);
17.vi.1987, PK; Kirby (1992). Tean, 1964/65, GE Woodroffe (1966a); Kirby (1992).

SW32 Sennen Cove, one, vii.1928, JH Keys; 20.21.27.iv.1935, P Harwood; 17.27.28.iv.1936, ECB;
7.ix.1951 (Masse, 1953), 7.ix.1952, 7.ix.1958, AMM; present on the dunes in considerable numbers, 28.v.1962, GEW (1962); AA Allen; v.1970, MG Morris; 31.v.1982, 4.vi.1982, PJH;
12.viii.1986 & 19.vi.1987, PK; 29.v.1989, SJ Grove. Gwenver, 13.vii.1985, 4.viii.1986, SJ.
Trevedra Cliff, 5.v.1999, KNAA. Gwenver, under sea mayweed, 2.v.2000, KNAA. Sennen Cove, 8.vii.2001, M Pavett; 20.vi.2001, BSN. Sennen, 26.iv.2004, P. Gainey.

Macrodemia micropterum (Curtis)

A speciality of lowland heaths, widespread in southern Britain. Occurs amongst open droughted vegetation on sea cliff brows in Cornwall as well as on heaths.

SW32 Land's End, CW Dale. Whitesand Bay, towards Cape Cornwall, v.1962, GEW. Gwenver, 4.viii.1986, SJ. Boscregan Cliff, 5.v.1999, KNAA. Mayon Cliff, 2.v.2000; Ardensawah Cliff, 3.v.2000, KNAA. Sennen, 26.iv.2004, P. Gainey.

SW33 Kenidjack, 14.v.1996, KNAA.

SW42 Boscawen Point, 22.v.2004, KNAA.

SW43 Penzance, ED Marquand (Clark, 1906).

SW44 Treveal, 24.v.1989, KNAA.

SW53 Hayle district, ix.1888, JEM (1889b).

SW54 St Ives, ix.1888, JEM (1889b).

SW61 Kynance Cove, 2.ix.1951, AMM; vi.1963, RTB. Kynance to Gew Graze, 2004, PAG. Lizard Town, ix.1951, AM Masse (1953). Mullion, 1980 & 1981, DAS.

SW64 Chapel Porth, coastal heath, 6.vi.1979, 23.v.1990, KNAA.

SW65 Chapel Porth to St Agnes Head, 7.v.2005, PAG.

SW71 Goonhilly, 1961, WFH Ansell.

SW72 Trevassack Quarry, 1981, DAS. Goonhilly Downs, 20.ix.1992, PK.

- SW75 Cligga Head, 4.v.2001, KNAA.
 SW84 Truro (Clark, 1906).
 SX04 Pabyer Point, Gorran Haven, 22.iv.2002, KNAA.
 SX06 Bodmin (Clark, 1906).
 SX09 Boscastle, 7.viii.1986, SJ.
 SX15 Lantic Bay, 14.v.1990, SJG.
 SX19 The Strangles, 11.vii.1989, KNAA. Castle Point, St Gennys, 12.vii.1989, SJG. Cam Beak, 12.vii.1989; Chipman Point, 13.vii.1989, KNAA.
 SS11 Vicarage Cliff, Morwenstow, 12.vii.1989, KNAA.

Pterotmetus staphyliniformis (Schilling) - **Red Data Book Category 3 (Rare).**

Only known in GB along the coast between Sennen Cove and Cape Cornwall, although widely distributed in Europe. On cliff-tops in areas of sparse vegetation with *Sedum*, etc, and also on lichen-covered boulders. Superficially resembles the ant *Formica fusca*. Probably a seed-feeder. First discovered in 1962 (Woodroffe, 1963) and still only known from this limited section of sea-cliff nationally, albeit probably under no particular threat.

- SW32 Whitesand Bay, towards Cape Cornwall, several colonies, 27.v.1962; cliffs to north, 30.ix.1962, GEW (1966a); viii.1964, RTB. Gwenver, on moss-covered boulder on the cliffs and on a cliff top track-way running through the bulb fields, 13.vii.1986, 4.viii.1986, S. Judd. Sennen Cove, 19.vi.1987 (Kirby & Lambert, 1989). Boscregan Cliff, 5.v.1999, 2.v.2000, KNAA. Nanjulian Cliff, 2.v.2000, KNAA. Aire Point, 8.vii.2001, M Pavett; 26.iv.2004, P. Gainey. Nanjizal (SW359236), 2004, PAG.
 SW33 "Cape Cornwall", AA Allen (during period 1940-90). Letcha (SW361304), 23.vii.2004, PAG. Cot Valley, 14.vii.2006, J. Widgery.

Trapezonotus arenarius (L.) syn. *Trapezonotus agrestis*

Widespread, and found in a variety of habitats on dry, well-drained soils.

- SW32 Land's End district, ED Marquand (1884). Whitesand Bay, 19.vi.1987, PK.
 SW33 Kenidjack, 1995, AS & ECMH
 SW43 Madron, vii.1962, RTB. Bosigran, 16.v.1989, SJG.
 SW44 Pen Enys Point, 24.v.1989, SJG; 21.iv.1995, PAG.
 SX53 Angarrack, vi.1990, ECMH.
 SW54 St Ives, one, 18.iii.1929; one, 21.iv.1930, AT. Upton Towans, 1998, ECMH.
 SW61 Kynance Cove, 1960, RTB.
 SW74 United Downs, v.1998, AS & ECMH.
 SW75 Penhale, GEW.
 SW76 Kelsey Head, 23.v.1997, PAG.
 SW87 Park Head, 1996, ECMH.
 SX05 Holmbush, 1866, Power.

Trapezonotus desertus Seidenstücker - **County Rare.**

Associated with a variety of habitats on light, freely-draining soils, and especially heaths and base-rich grasslands. Taxonomic status unclear; variously regarded as a form of *Trapezonotus arenarius* or as a separate species.

- SW61 Lizard, 12.ix.1933, ECB.
 SW64 Hudder Down, 3 nymphs amongst dry moss & lichen, 12.vii.2006, reared on, J. Widgery.
 SX05 Dryers Pit, Roche CP, 2005, JD.
 SX47 Clitters Mine, 29.ix.2004, KNAA.

Trapezonotus ullrichi (Fieber) - **Red Data Book Category 3 (Rare).**

A Mediterranean species occurring along south-west coastal grasslands and associated with flowering oxeye daisy. First recorded in Britain from the north Cornwall coast in 1891 (Saunders, 1892) and subsequently discovered on the south coast near Craffhole, Whitesand Bay in 1953; it is now known to be widespread on the Cornish sea cliff grasslands. Now also known from Devon & SW Wales.

- SW61 Mullion Cliffs, on oxeye daisy flowers, 21.vi.2001, 25.vi.2003, BSN. Poldhu Cove, swept from oxeye, 21.vi.2001, BSN; 23.vi.2003, SEB.

- SW71 Beagles Bay, 1977, AC Warne: Beagles Point, 26.v.2004, PAG. Chynhalls Point, 24.vi.2003, PAG. Poltesco, 23.v.2004, PAG. Housel Bay, 26.v.2004, PAG. Porthbear Cove, 26.v.2004, PAG. Landewednack Church Cove, 6.vi.2004, PAG.
- SW72 Porthallow, 23.ix.1992, PK. Nare Point, Porthallow, 29.v.2001, GA Collins.
- SW97 Lundy Hole, Pentire Head, 22.v.1990, KNAA. Lundy Bay (958798), 24.v.2004, PAG.
- SX08 Tregardock Cliff, 2.vi.2000, KNAA.
- SX09 “last summer on the cliffs near Boscastle or Tintagel”, 1891, TA Marshall (Saunders, 1892).
- SX15 West Coombe, Lansallos, 14.v.1990, KNAA. Lantic Bay, 7 & 11.viii.1999, PK.
- SX25 Talland Cliff, 1.vi.2000, KNAA.
- SX35 Crafhole, Whitesand Bay, at roots of dry grass, 1953, AMM. Freathy, 10.viii.1999, PK.
- SS21 Vicarage Cliff, Morwenstow, six counted amongst abundance of ox-eye flowers, 29.v.2005, KNAA.

Megalonotus antennatus (Schilling) - **Nationally Scarce & County Rare.**

A particularly poorly-known species. Lives on ground surface amongst low vegetation, often with a cover of dead leaves; often sandy or clay soils, but not exclusively. Southern and south-eastern. Cornwall (Marquand, 1884, and Thornley, 1934).

- SW32 Land’s End district, ED Marquand (1884).
- SW53 St Erth, ix.1962, RTB.
- SW62 Porthleven, root of vegetation, HB Sargent (1968).
- SW83 Falmouth (Clark, 1906).
- SX05 Holmbush, 1866, Power.

Megalonotus chiragra (Fabricius) – **County Scarce**

A species of well-drained soils, particularly sandy heaths, sandhills and quarries, but also in areas of limestone rubble.

- SW32 Sennen Cove, on sand dunes, AA Allen (1993). Logan Rock, 25.v.1999, PJH. Nanjizal, 3.vii.2004, PAG.
- SW52 Rinsey Head, 24.v.1999, PJH.
- SW61 Mullion Cliffs, 18.vi.2001, BSN.
- SW62 Porthleven to Loe Bar, 18.vii.2004, PAG. Loe Bar, 20.vii.2006, PAG.
- SW71 Church Cove Landewednack, 23.vi.2004, PAG.
- SW75 Cubert Common, 25.v.1989 & 9.viii.2006, KNAA. Penhale Dunes, 28.viii.2006, PAG.
- SW83 Pednvasen, 11.viii.2004, PAG.
- SW98 Kellan Head, Port Isaac, 24.iv.2002, KNAA.
- SX09 Willapark, Boscastle, shaley crags, 16.v.1990, KNAA.

Older records need voucher material to check for *Megalonotus emarginatus* which may prove to be the more widespread of the two, and for *Megalonotus sabulicola*:

- SV91 St Mary’s, Scilly, vii.1897, GCC (1897).
- SW32 Sennen Cove; 18.vii.1934, AT; AMM; sand dunes, AA Allen (1993); 4.viii.1986, SJ. Gwenver, 4.viii.1986, SJ. Whitesand Bay, 31.v.1982, PJH; 9.vii.1985, SJ.
- SW53 Hayle district, ix.1888, JEM (1889b). Lelant Towans, 12.v.1930, 27.iv.1935, 27.v.1935, AT.
- SW54 St Ives district, ix.1888, JEM (1889b). Gwithian, viii.1962, RTB. St Ives Island, ii.1975, RTB & J Humphreys.
- SW61 Lizard, 22.iv.1938, P Harwood.
- SW62 Porthleven, HB Sargent (1968). Chyvarloe Cliffs, 2.ix.1970, MGM.
- SW86 Bre-Pen Farm, 11.vi.2000, GA Collins.
- SW87 Porthcothan, 13.vi.1956, GEW.
- SW97 Padstow, iv.1900, CG Lamb.
- SX45 St John’s, 24.vii.1920, AVM (DA ms).

Megalonotus emarginatus (Rey) - **County Scarce.**

Confused in GB with *M. chiragra* until 1992, but actually a long term resident and now known to be widespread across southern England. Favours clayey or other alluvial soils. Added to the county list by Judd (1998).

SW32 Nanjulian, 14.iii.2005, KNAA.

SW54 Upton Towans, female beneath storks-bill, 8.vii.2006, J. Widgery.

SW62 Loe Bar, 20.vii. & 15.viii.2006, PAG.

SW76 West Pentire Farm, one in arable field, 11.vii.2003; three adults and mature nymphs in arable fields and in short dry pasture, 31.viii.2006, KNAA.

SW82 Porthoustock, 18.viii.2006, PAG.

SW83 Gerrans Bay, viii.1900, EA Newberry, specimen in Cambridge Univ. Museum (Judd, 1998).

SW87 Porthcothan, adult and nymphs sieved from coarse litter of twigs and leaves under blackthorn at the side of a cliff path, 6.viii.1986, S Judd (1998).

SX09 Boscastle, one adult, 7.viii.1986, S Judd (1998).

Megalonotus praetextatus (Herrich-Schäffer) - **Nationally Scarce & County Scarce.**

In warm sunny places: mainly dunes and quarries, on dry sandy or chalky soils; also on cliffs in small grain, fairly stable or loose mineral material and moss on partly vegetated ledges and gentler slopes. Host plants include stork's-bill; probably seed-feeding.

SW32 Whitesand Bay, 28.v.1962, GEW; a corpse, 24.vi.2003, BSN. Sennen Cove, 29.v.1989, SJG.

SW53 Hayle district, ix.1888, JEM (1889b).

SW54 St Ives, ix.1888, JEM (1889b).

SW62 Gunwalloe Towans, 3.vii.1970, MGM.

SW75 Perranporth, iv.1911, P Harwood; JC Melville. Penhale Sands, abundant under *Erodium*, and captive nymphs fed freely on its fruits, vii.1956; 7.viii.1957, GEW (1958).

SW97 Rock, 21.viii.1919, GEH; 7.vi.1956, GEW.

Megalonotus sabulicola Thomson - **Nationally Scarce & County Scarce.**

A southern and south-eastern species of dry and well-drained situations. Mainly coastal. A ground-dwelling insect favouring short and sparse vegetation and most readily found by searching in moss.

Only separated from *M. chiragra* in 1963 (Southwood, 1963) so not in Masee (1955).

SW32 Gwenver, Sennen Cove, 12.viii.1986, PFW. Nanjizal, 13.vi.2004, PAG.

SW33 Cape Cornwall, 28.viii.2005, PAG.

SW52 Rinsey Cove, 28.v.2004, PAG.

SW61 Lizard Town, 2.ix.1951, AMM (Southwood, 1963, cf Masee, 1953). Kynance Cove, 2.vi.2003, PAG.

SW75 Penhale Dunes, 28.viii.2006, PAG.

Megalonotus dilatatus (Herrich-Schäffer) - **Nationally Scarce & County Scarce.**

Found in dry, often sandy, places where there is a covering of dead leaves. Largely south-eastern, but appears to be increasing and spreading in response to climate change.

SW32 Land's End, CW & JC Dale (Clark, 1906). Porthgwarra, dead under sea campion mat on cliffs to east, 23.v.2004, KNAA.

SW43 Penzance, JC Dale (in coll.).

SW71 Kennack Sands, 29.iv.1936, ECB.

SW87 Porthcothan, 4.ix.1989, SJ.

SW97 Lundy Bay, one under board by path through dense gorse scrub on coastal slope, 21.viii.2006, KNAA.

SX05 Dryers Pit, Roche CP, 2005, JD.

SS21 Stowe Wood, 11.ix.1985, PK.

Beosus maritimus (Scopoli) syn. *luscus*

Mainly a species of coastal dunes, but also on the drier parts of the lower slopes of Dartmoor.

Widespread and often abundant on the cliffs around Padstow (Woodroffe, 1958).

- SW32 Whitesand Bay, "one larva", 1871, Saunders (1871); 4.vi.1982, PJH; 9.vii.1985, SJ; , 19.vi.1987, PK. Near Land's End (Saunders, 1892). Whitesand Bay, cliffs to north, 30.ix.1962, GEW (1966a). Boscregan, 22.v.1989, SJG. Porthcurno Beach, 18.v.1994, KNAA. Trevedra Cliff, 5.v.1999, KNAA. Logan Rock, 25.v.1999, PJH. Gwenver, 13.vii.1985, 4.viii.1986, SJ. Sennen, viii.1963, RTB. Aire Point, 26.iv.2004, PAG.
- SW33 Cape Cornwall, 24.ix.1998, PJH; Carn Rôs, Pendeen, 30.iv.2000, KNAA. Priest's Cove, 16.iv.2003, PAG.
- SW42 Lamorna Cove, 28.x.1997, PJH.
- SW43 Penzance, 15.ix.1908, P Harwood.
- SW52 Rinsey, 13.vii.1959, M Ackland.
- SW53 Hayle, x.1886, JEM (1889b). Hayle Towans, 19.ix.1922 & ix.1926, AT.
- SW54 St Ives, x.1886, JEM (1889b). Gwithian, 2.3.viii.1936, FH Day; 18.ix.1992, PK. Godrevy Towans, 16.v.1990, SJG.
- SW61 Kynance Cove, 1871, Saunders (1871). Lizard, viii.1871, viii.1891, E Saunders; JH Keys; 24.25.iv.1935, 22.iv.1938, P Harwood. Lizard Town, ix.1951, AM Masee (1953). Predannack South Cliff, 19.ix.1998, PJH. Lizard Point, 24.v.1999, PJH. Mullion, 19.ix.1908, P Harwood. Lower Predannack Cliff, in tussocks in valley mire, 18.iv.1998, KNAA. Mullion Cliffs, 18.vi.2001, BSN.
- SW62 Porthleven, HBS (1968); 25.ix.1992, PK. Loe Bar, clifflet at north end, 14.ix.1992, PK. Porthleven to Loe Bar, 18.v.2004, PAG.
- SW64 Godrevy, v.1990, SJG.
- SW71 Housel Bay, 1960, RTB. Coverack Cove, 10.vii.1985, SJ. Cadgwith, 15.ix.1992, PK Poltesco East, 20.ix.1998; Chynhalls Point, 21.ix.1998, PJH. Lizard Head, 25.ix.1998, PJH. Kennack Sands, 4.vi.2003, PAG.
- SW72 Porthallow, 23.ix.1992, PK.
- SW75 Penhale Sands, 8.vii.1957, GEW; vi.2000, PAG.
- SW82 Porthoustock, 23.ix.1992, PK.
- SW83 Portscatho, 1897, GC Champion (1897a). Gerrans, JH Keys; viii.1900, EA Newberry. Porthbeor Beach, St Anthony-in-Roseland, 3.vii.1989, KNAA. Pendower Beach, 1989, SJG, det PK.
- SW87 Padstow, ix.1900, CG Lamb. Mother Ivey's Bay, 8.vii.1908, H St JK Donisthorpe. Constantine Bay, 8.ix.1919, GEH. St Merryn, vii.1925, KG Blair. Harlyn Bay, vii.1957, GEW (1958). Porthcothan, 8.vi.1956, GEW; 6.viii.1986, SJ.
- SW97 Lundy Hole, St Minver Highlands, 3.viii.2006, KNAA.
- SW98 Port Quin, 10.ix.1985, PK. Pentire Head, St Minver Highlands, 2.viii.2006, KNAA.
- SX05 Par Sands, 1999, KP-M.
- SX09 Boscastle, JH Keys.
- SX15 St Saviours Point, 15.vi.2000, A Spalding & GA Collins. Lantic Bay, in numbers, 1999, KP-M; 21.vi.1999, PAG. Lansallos Cove, 22.viii.2006, KNAA.
- SX35 Whitsand Bay, viii.1875, JJ Walker (1875). Downderry, Whitsands, and Tregantle, JH Keys.
- SS21 Duck Pool, 11.ix.1985, PK. Henna Cliff, Morwenstow, 2005, KNAA.

Graptopeltus lynceus (Fabricius) - **Nationally Scarce**.

Warm dry sandy localities - coastal dunes and sandpits but not heaths; south and south-east England.

Boraginaceae are main host-plants, including *Echium*, and therefore favoured by disturbance.

- SW32 Whitesand Bay, cliffs to north, 28.v.1962, 30.ix.1962, GEW (1966a). Gwenver, 13.vii.1985, SJ. Sennen, 4.viii.1986, SJ; 26.iv.2004, PAG.
- SW52 Praa Sands, 22.iv.1936, ECB.
- SW53 Lelant Towans, several at roots of grasses, 7.ix.1888, JE Mason (1889b); four: 17.viii.1927, 2.viii.1928, 27.v.1930 & 26.vi.1930, AT. Phillack Towans, 1998 & 2004,

- ECMH. Upton Towans, 2.viii.2006, PAG.
- SW54 Gwithian, v.1963, RTB. Upton Towans, 9.iv.1984, AP Foster; 8.11.vii.1985, SJ; 1998 & 2004, ECMH; 2006, J. Widgery.
- SW61 Lizard, 19.22.23.iv.1938, P Harwood.
- SW75 Penhale Dunes, one close to some dead *Myosotis*, 10.vi.1956, GEW (1956). Several from inflorescences of *Cynoglossum*, vii.1957, GEW (1958); 2.iv.2003, early forget-me-not, 13.iv.2004, PAG.
- SW97 Rock, several associated with *Echium* inflorescences, vii.1956, vii.1957, GEW (1958); two in loose sand beneath vegetation mat, 1.v.2002, KNAA. Stepper Point quarry, 19.vi.2004, KP-M.

Peritrechus geniculatus (Hahn)

A widespread, southern species nationally, occurring on light, dry soils, amongst leaves, moss and low vegetation. Widespread in western Cornwall but few reports from the east.

- SV91 St Martin's, "one larva only, on the rocky northern coast of the island", 1964/65, GE Woodroffe (1966a).
- SW32 Gwenver, 13.vii.1985, 4.viii.1986, SJ. Sennen Cove, ix.1951, AMM (1953); 24.ix.1997, PAG. Whitesand Bay, 7.ix.1957, AMM; 9.vii.1985, SJ. Porthgwarra, 6.vi.2004, PAG.
- SW43 Zennor Head, on path through coastal grass heath, 31.v.1979, KNAA; 5.vi.1996, PAG.
- SW44 Treveal, swept, grass heath, 24.v.1989, KNAA.
- SW52 Rinsey Cove, 28.v.2004, PAG.
- SW53 St Erth, xi.1962, RTB.
- SW54 Nanterrow, Gwithian, one or two each in samples of grass litter from rank alluvial grassland, 4.vi.2005, KNAA. Upton Towans, 8.vii.2006, J. Widgery.
- SW61 Lizard, JH Keys; 25.iv.1935, P Harwood. Lizard Town, ix.1951, AM Masee (1953). Kynance Cove, 1960, RTB. Clahar Bridge, 1.viii.1981, DAS. Kynance Cove area, 13.vi.2004, PAG. Hayle Kimbro Pool, 25.vi.2006, PAG.
- SW62 Gunwalloe Towans, 2.ix.1970, MGM. Loe Pool, 1.vi.2004, PAG.
- SW64 Portreath, heathland, iv.1994, PAG.
- SW71 Goonhilly SSSI, 1962, WFH Ansell.
- SW72 Goonhilly SSSI, 1962, WFH Ansell. Glendurgan Gardens, 16.ix.1992, PK.
- SW97 Padstow, 1915, CG Lamb.
- SX06 Dunmere Wood, 28.vi. & 17.vii.2006, PAG.

Peritrechus gracilicornis (Puton) – **Red Data Book Category K (Insufficiently Known)**.

A ground dwelling species with a preference for warm sheltered and sunny locations with low or sparse vegetation and some bare ground; a seed feeder. A Mediterranean species established along a few sections of the south coast.

- SW72 Glendurgan Gardens, five in top material of compost heap (a possible overwintering site), 16.ix.1992; Porthallow, one beaten from large clump of sea plantain low on sea cliff, 23.ix.1992, PK (2000).

Peritrechus lundii (Gmelin) syn. *Peritrechus luniger* – **County Scarce**.

Widespread, although local, throughout lowland England. Occurs in a variety of situations, including sandhills, heaths, meadows and crop fields, although always close to hedges, woods or scrub where they overwinter in aggregations under loose bark of old stumps, etc. On warm days the bugs are found within the vegetation, feeding on buds and seeds of weeds such as mouse-ear chickweed and fat-hen. Reported in the county - as *P. sylvestris* Fab. - by TA Marshall (Saunders, 1892).

- SV "Scilly", ix.1888, JE Mason (1889b).
- SV80 St Agnes, vii.1897, GCC (1897). Gugh, a few adults and large numbers of larvae among dry litter in derelict bulb fields, vi.1966, Woodroffe (1967).
- SV81 Castle Bryher, 1930, OWR.
- SW32 Gwenver, 4.viii.1986, SJ.
- SW53 Hayle district, ix.1888, JEM (1889b).
- SW54 St Ives, ix.1888, JEM (1889b).
- SW61 Lizard, JH Keys.

- SW83 Portsatho and Falmouth (Clark, 1906).
 SW97 Padstow, iii.1900, CG Lamb.
 SW98 Pentire Head, 4-20, iv.1948, GD Hale Carpenter.
 SX35 Donderry, GC Bignell. Whitsand Bay, JH Keys.
 SX37 Lezant, viii.1918 (DA ms) & viii.1919, AVM.

Peritrechus nubilus (Fallén) - **County Rare.**

Found in saltmarshes, fens, on dry grassy banks and sandhills, usually near the coast, and from Norfolk to Cornwall.

- SV Scilly, 1925, KG Blair.
 SW33 Cape Cornwall, nymphs in grass & under thyme, 14.vii.2006, reared through, J. Widgery.
 SW72 Porthallow, 23.ix.1992, PK.
 SW84 Ruan Laniorne, saltmarsh, ix. 1996, PAG.
 SW86 River Gannel and Newquay (Clark, 1906).

Raglius alboacuminatus Goeze - **Nationally Scarce & County Rare/ Locally Extinct.**

Usually on light sandy or chalky soils, in sheltered situations. Feed on fallen seeds, perhaps mainly black horehound *Ballota nigra*. Appears to prefer a fairly firm substrate and densely tufted plants growing in ground partly bare or covered with thin leaf litter. May prove to be associated with the humid environment of the southern rocky coast in Cornwall.

- SX35 Tregantle, JH Keys.

Rhyparochromus pini (L.) - **Nationally Scarce & County Scarce.**

A species of sheltered dry sandy heaths and sand dunes, with a scattered distribution across southern Britain. In Cornwall favours sheltered fairly gentle slopes with a mix of vegetation heights (P. Kirby, pers. comm.). Woodroffe (1956) found nymphs “in large numbers on rocky hillsides along most of the coast” of north Cornwall near Padstow.

- SW32 Land’s End, CW Dale; viii.1864, JCD. Sennen Cove, 7.ix.1951, AMM (1953). Whitesand Bay, cliffs to north, 28.v.1962, 30.ix.1962, GEW (1966a). Gwenver, 4.viii.1986, SJ.
 SW43 Zennor Head, 12.vii.1985, S. Judd.
 SW53 Lelant Towans, two, 27.vi.1928 & 2.viii.1928, 25.v.1934, AT.
 SW61 Mullion Cliffs, 22.viii.1997 & 23.ix.2000, PAG.
 SW71 Kennack Sands, 29.iv.1936, ECB; ix.1962, RTB; 4.vi.2003, PAG.
 SW75 Reen Sands, Perranporth, 1.vi.1982, PJH. Holywell Dunes, 2.ix.2002, PAG.
 SW87 Porthcothan, one on ledge with *Plantago* sp, *Armeria*, and dry litter below thicket, 8.vi.1956, GEW (1956).
 SW97 Trebetherick, 14.ix.1996, PAG.
 SX09 Boscastle, 6.viii.1986, SJ.
 SS10 Widemouth Bay, 28.vi.1996, PAG.
 SS20 Bude dunes, 28.vi.1996, PAG.

Pachybrachius fracticollis (Schilling) - **County Rare.**

A speciality of lowland bogs and fens, characterised by cotton grass and bog myrtle; sedges may be the host plants. Mainly known in GB from the Norfolk Broads and New Forest, but very widespread in Ireland.

- SX06 Criggan Moors, Roche CP, 13.vii.2005 (Denton, 2005).
 SX15 Lostwithiel, vi.1974, RTB.

Family PYRRHOCORIDAE

[Pyrrhocoris apterus (L.) – Fire Bug. **Red Data Book Category 1 (Endangered); Unconfirmed Species.**

The only authenticated resident British population is on the Orestone Rock, off Torquay, where it is associated with tree mallow *Lavatera*; it is very widespread on the continent and polyphagous there. Care in identification is needed owing to the potential for confusion with *Corizus hyoscyami*; the following record has not been authenticated.

- SW75 Ellenglaze, near Perranporth, 1970, CA Brind.]

Family STENOCEPHALIDAE - Spurgebugs

Dicranocephalus agilis (Scopoli) - **Nationally Scarce.**

Feeds mainly on Portland spurge, but also sea spurge and cypress spurge, on dunes, shingle and cliffs. Confined to the coastal counties of the south and south-west. Cornwall (Clark, 1906); “occurs sparingly on the sand-dunes of the south coast...but is very rare on the north coast” (Thomas, 1955a) – this pattern appears to have changed as it has been found widely along the north coast in recent decades.

- SV “Isles of Scilly”, 1904, F Jenkinson; 1927 & 1930, OWR (Thornley, 1934).
SV81 Tresco, viii.1878, F Norgate (1880). Tresco, not rare, vii.1897, GCC (1897). Samson North End, 5.vii.1984, BM Spooner.
SV91 St Martin’s, not rare, vii.1897, GCC (1897).
SW53 Hayle district, x.1886, JEM (1889b). Lelant Towans, 22.v. & 8.viii.1928, AT. Common Towans, 9.ix.1992, SM Turk. Phillack Towans, 1998 & 2004, ECMH. Mexico Towans, 2000, ECMH. Hatch’s Hill, Angarrack, in garden after a heavy shower – dunes about 1 mile distant, 27.viii.2005, coll. ECMH, det KNAA.
SW54 St Ives, x.1886, JEM (1889b). Upton Towans, 18.iv.1984, KNAA; 1998 & 2004, ECMH.
SW62 Loe Bar, clifflet at north end, 14.ix.1992, PK; one on shingle, 10.vi.1999, PAG.
SW64 Porthtowan, nymphs, 12.vii.2006, J. Widgery.
SW75 Penhale Point, 30.viii.1930, Nicholson. Penhale Sands, vast numbers, 10.vi.1956, GEW (1956); 2001, ECMH. Holywell Dunes, 10.vii.1979, KNAA; 28.iv.1996, ECMH; 1998, KP-M. Reen Dunes, 1995, PAG.
SW76 Porth Joke, 16.vi.2004, PAG.
SW86 Trenance, dunes, 1999, KP-M.
SW87 St Merryn, vii.1925, KG Blair. Constantine Bay, vast numbers, 8.vi.1956, GEW (1956); 9.vii.1989, SJG. Porthcothnan, 1999, KP-M.
SW97 Rock, extremely abundant, 7.vi.1956, GEW (1956).
SX15 Lantic Bay, 7 & 11.viii.1999, PK.
SX35 Tregantle, v. 1917, JHK (DA ms); ‘many’, JHK.

[*Dicranocephalus medius* (Mulsant & Rey) - **Nationally Scarce; Unconfirmed Species.**

This species feeds on wood spurge where it grows in abundance in warm sheltered clearings within ungrazed woodland or at wood edge. It appears to be a species of active coppices and has declined severely in recent decades due to changing woodland management practices. The only record is a rather loose reference to its presence in “Devon and Cornwall” (Thomas, 1955a) which may refer to the region rather than specifically Cornwall; it still survives in a few Devon localities around the fringes of Dartmoor.]

[*Dicranocephalus albipes* (Fabricius) – **Unconfirmed Species/Vagrant?**

Reported over 100 years ago from vague localities in Devon, Cornwall and Hampshire; the records may have been correct as the species is reported from Normandy. Records may alternatively however refer to *D. agilis*. Cornwall (Butler, 1923).]

Family COREIDAE - Squashbugs

Coreus marginatus (L.) – Dock Bug.

A very common bug in the southern counties, and especially so in Cornwall; it feeds on a wide variety of Polygonaceae in an equally wide variety of situations. “Common and widely distributed” (Thornley, 1934) and still so.

- SW32 Whitesand Bay, 1983, R Crossley. Penberth, 1999, KNAA. Porthgwarra, 1999, PAG. Rospannel Farm, Crows-an-Wra, 2003, 2004, GBH.
SW33 Kenidjack, 1995, ECMH.
SW42 Trewoofe Woods, 1989, M & A Common. Sancreed, 1994, F Potts.
SW52 Perranuthnoe, dock, 1996, KNAA.
SW53 Carbis Bay, Lelant & St Erth, AT (1934). Tremelling, Hayle River, 1983; Trescowe, 1989, KNAA. Angarrack, 1990-2005; Loggans Moor, 1995 & 2001-2005; Phillack Towans, 1998; Mexico Towans, 2000, ECMH. Steeple Wood & Trelyon Downs, 1998, AS & ECMH.

- SW54 St Ives, AT (1934). Gwithian, 1963, RTB. Upton Towans, 1998-2005, ECMH. Nanterrow, Gwithian, 4.vi.2005, KNAA.
- SW61 Lizard Point, 1989, KNAA. Lower Predannack Cliff, 2000, KNAA. Mullion Cove, 1992, PK. Predannack, 1992, PK.
- SW62 Porthleven, Sargent (1968). Penrose Estate, 1979; Loe Pool, 2003, KNAA. Loe Bar, clifflet at north end, 1992, PK. Mullion Golf Course, 2000, GA Collins & ECMH.
- SW64 Nancekuke, 1964, M Collinson & P Mason. Roscroggan, 1989, E Jackson. Porthtowan, 1996, PAG. Western Hill, 1999, AS & ECMH. Duchy College, Rosewarne, 2004, 2005 & 2006, KNAA.
- SW71 Lizard, CW Dale. Lizard Town, 1951, AM Masee (1953). Housel Bay, 1977; Polbream Cliffs, 1977, 1980, RM Phillips. Poltesco Cove, 1983, BE Jackson. Carleon Cove, sea beet, 1979, KNAA. Gwendreath, 1981, DAS. Cadgwith South & Poltesco East, 1998; Chynhalls South Cliff, 1998, PJH. Kennack Sands, 2002 & 2004, PAG.
- SW72 Croftnoweth Goonhilly, 1973, JA & VS Paton. Mawnan Glebe, 1989, SJG. Trebah, 1991, B & E Jackson. Porthallow, 1992, PK. Frenchman's Creek, 2001, PAG.
- SW73 Enys Woods, 2003, PAG.
- SW74 United Downs, 1998, AS & ECMH.
- SW75 Newdowns Head, 1989, SJG. Holywell Dunes, 1996, ECMH. Ventongimps Moor, 1997, Spalding & Haes (2000). Cubert, 2002, KNAA. Penhale Dunes, 1997 & 2003, PAG.
- SW76 Rushy Green, Crantock, 2000, GAC & ECMH. West Pentire Farm, Crantock, 2006, KNAA.
- SW82 Porthoustock, 1992, PK.
- SW83 St Anthony in Roseland, 1979, KNAA. Pendennis Castle, 1982 B Jackson & JK Williams. Pennance Point, 1995, PAG. Pendower Beach, 11.vii.2001, KNAA.
- SW84 Ruan Laniorne, 1983, AE Stubbs; 1983, KNAA.
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW86 Bre-Pen Farm, 2000, GA Collins. Tregunnel Saltings, 2000, ECMH & GAC.
- SW87 Harlyn Bay, 1986, SB Cull. Park Head, 1996, ECMH. Porthcothan, 1999, PAG.
- SW93 Nare Head, 1989, SJG. Carne Beach, Gerrans Bay, 2003, BSN.
- SW95 Trenoweth, 1973, JA & VS Paton.
- SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
- SW97 Rock and St Minver, 1919, GEH. Hawkers Cove, 2002, KNAA.
- SW98 Port Isaac, 1919, GEH. Portquin, 2006, KNAA. Kellan Head, 1999, AS & ECMH.
- SX03 The Dodman, 1989, SJG.
- SX04 Gribben Head, 1998, PAG.
- SX05 Polmark Park, St Austell, 2000, AS & ECMH.
- SX06 Bodmin, AT (1934). Retire Common, 1997, Spalding & Haes (2000). Lanhydrock, 2001, ECMH.
- SX07 Gaff Wood, Camel Valley, 2001, KNAA.
- SX08 Dannonchapel & Tregardock, 1995, AS & ECMH. Dannonchapel Valley, 2000, KNAA.
- SX15 Pelyne Lanreath, 1973, JA & VS Paton. Lerryn Creek, 1979, KNAA. Lantic Bay, 1999, PK. Hay Point & Lombard Farm, Penpoll Creek, 2000; Castle Field, Fowey, 2000; Pont Pill, 2000; Hall Walk, 2000, GAC. Lansallos East Coombe, 22.viii.2006, KNAA.
- SX16 Lanhydrock, 1979, KNAA.
- SX19 Boscastle, 1983, R Crossley.
- SX25 Hore Point, 1989, coll. SJG, det. PK. Struddicks, St Martin, 1999, AS & ECMH.
- SX26 Menheniot, 1992, B & E Jackson.
- SX35 Trematon, 1972, JA & VS Paton. Hessenford, 1988, MGM.
- SX36 Cadsonbury, 1972, JA & VS Paton.
- SX37 Lezant, 1919, AVM. Luckett Reserve, 1985, B & E Jackson. The Holmbush, Kelly Bray, 1998, AS & ECMH.
- SX38 Beales Meadows Reserve, viii.1998, DM/IK.
- SX39 Boyton, 1972, JA & VS Paton.

- SX45 Millbrook, v.1919, AVM (DA ms). Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Calstock, viii.1917, AVM (DA ms). Cotehele, 1989, KNAA.
 SX47 Clitters Mine, Gunnislake, 1998, AS.
 SS11 Vicarage Cliff, Morwenstow, 30.v.1998, RS Key.
 SS21 Duckpool Coombe, 1989 & 1992, SJG. Stowe Wood, 12.vi.2005, PAG.

Enoplops scapha (Fabricius)

- Coastal, dry, sheltered and sunny situations with mixed but sparse vegetation; mainly in sand dunes and on cliff faces, usually towards the bottom of gently crumbling cliffs. Host plants are chiefly Composites, especially scentless mayweed. Known from Dale onwards, but not found by Thornley (1934); widespread along the rocky south coast, more patchy along north coast.
- SW32 Land's End district, ED Marquand (1884). Porthcurno Valley, 1998, KNAA.
 SW33 Kenidjack Castle, 1995, PAG.
 SW52 Praa Sands, 1992, PK.
 SW54 Godrevy Point, 1999, PAG.
 SW61 Lower Predannack, 1989, KNAA. Predannack Wollas, 2003, PAG. Mullion Cove, 1992, PK. Kynance Cliff, 1993, KNAA. Kynance Cove, 1998, PJH. Poldhu Cove, 21.vi.2001, BSN.
 SW71 Little Cove, Caerleon, on sea beat, 1979, KNAA. Cadgwith, 1992, AS; 1992, PK. Kennack Sands, 1992, PK. Chynhalls Point, 1996, APF. Caerthillian Cove, 1996, PAG. Lizard Head, 1998, PJH.
 SW72 Porthallow, 1992, PK.
 SW75 Newdowns Head, 1989, SJG.
 SW83 Falmouth, Dale (Saunders, 1892). Treluggan Cliff, 1989, KNAA. Towan Beach, 1997, PAG.
 SW84 Tresillian, adult on water butt in garden, 1929, CH Nicholson (1930).
 SW93 Nare Head, 1994, 2004, KNAA. Carne Beach, Gerrans Bay, 2003, SEB.
 SW94 Hemmick Beach, 1998-2002, KP-M.
 SX08 Trebarwith (Butler, 1923).
 SX15 Lansallos, 1985, AS. Lantic Bay, 1999, PK. Lansallos Cove, nymph, 22.viii.2006, KNAA.
 SX19 Chipman Valley, 1989, RS Key.
 SX25 Looe, 1930, DE Kimmins. Hannafore Point, 1992, AS.
 SX35 Whitsand Bay, 1897, JHK; 1998, PAG. Mount Edgcumbe (Clark, 1906). Seaton, 1995, PAG.
 SS11 Tidnacombe, 1989, SJG.
 SS21 Stowe Wood, 1985, PK.

Syromastes rhombeus (L.) - **County Scarce.**

A species of dry sandy habitats, and occurring in all stages of the plant succession - "common on the coastal sand-dunes" (Thomas, 1955a). It is a southern species and feeds on spurreys, sand-worts and other Caryophyllaceae.

- SV Isles of Scilly, of frequent occurrence, ix.1872, F Walker (1872).
 SW53 Lelant Towans, 3.ix.1928 & 27.v.1930, AT (1934).
 SW54 Gwithian, v.1963, RTB.
 SW71 Lizard, 1920, JHK (DA ms). Housel, Lizard (in Thornley, 1934).
 SW75 Penhale Dunes, 13.iv.2004, PAG.
 SW97 Rock Sandhills, 6.ix.1919, GE Hutchinson; vi.1919, JH Keys. Harbour Cove, one, 3.ix.1996, KP-M.
 SX35 Whitsand Bay, JJ Walker (Saunders, 1892).

Arenocoris falleni (Schilling) - **County Scarce.**

The host-plant is thought to be stork's-bill. It is a southern, warmth-loving species and the bug has mostly been associated with coastal sand-dunes and the Brecks of East Anglia. Reported in very large numbers wherever *Erodium* was to be found on the coast around Padstow (Woodroffe, 1956).

- SV91 St Martin's, a few adults under *Erodium cicutarium* on the dunes at Great Bay, 1964/65, GE Woodroffe (1966a). 1964/65, GE Woodroffe (1966a).

- SW32 Whitesand Bay, 19.vi.1987, PK; 24.vi.2003, BSN. Sennen Cove, 20.vi.2001, BSN.
 SW53 Upton Towans, 27.viii.2006, PAG.
 SW54 Upton Towans, Hayle, 25.ix.1928, AT.
 SW71 Lizard, a probable larva, vi.1919, JH Keys. Lizard Town, ix.1951, AM Masee (1953).
 SW75 Penhale Sands, 10.vi.1956, GEW (1956); 13.vii.1995, vi.1999 (det PJ Hodge), 27.v. & 29.v.2004, PAG.
 SW76 Rushy Green, Crantock, vi.vii.2000, ECMH (det. KNAA, ii.2001).
 SW87 St Merryn, vii.1925, KG Blair. Constantine Bay, vi.1956, GEW (1956).
 SW97 Daymer Bay, 9.vi.1956, & Rock, vi.1956, GEW (1956).

Coriomerus denticulatus (Scopoli) syn. *Coriomerus hirticornis*

This bug is mostly associated with disturbed places on well-drained substrates, such as sand- and gravel-pits, and cindery rubbish tips; sheltered sea-cliff sites mainly (Thomas, 1955a). The host-plants are black medick, hare's-foot clover and melilots.

- SV90 St Mary's, colony associated with *Trifolium* spp on Peninnis Head, 1964/65, GE Woodroffe (1966a).
 SV91 St Martin's, colony associated with *Trifolium* spp on cliffs at Pernagie, 1964/65, GE Woodroffe (1966a).
 SW32 Land's End district, ED Marquand (1884).
 SW53 Lelant Towans, 2.ix.1929, 6.vi.1930, 15.vi.1932, AT. St Erth, vi.1963, RTB. Upton Towans, 1.vi.1998, PAG. Hayle Towans, 15.vii.2001, PAG.
 SW61 Lizard, vi.1919 & 1921, JH Keys. Lizard Town, ix.1951, AM Masee (1953). Predannack Wollas, 8.viii.2006, PAG.
 SW62 Porthleven, Sargent (1968).
 SW65 Chapel Porth to St Agnes Head, 7.v.2005, PAG.
 SW71 Kennack Sands, 13.vi.2000 & 4.vi.2003, PAG.
 SW73 Perranarworthal Estuary, 4.vii.1983, KM, det. AES.
 SW75 Holywell Dunes, 2.ix.2002, PAG.
 SW83 Mylor, 1.vi.1985, K Merrifield.
 SW97 Rock sandhills, viii.1919, GEH; 12.vi.2000, PAG.
 SW98 Port Quin, viii.1919, GEH.
 SX15 Polridmouth, 23.vi.2005, KP-M.
 SS21 Stowe Wood, 11.ix.1985, PK.

Family ALYDIDAE

Alydus calcaratus (L.)

A species of the dry sandy heaths of lowland Britain; in Cornwall more often found on derelict metalliferous mine sites. The precise food is not known, but they are generally associated with ant nests and may be scavengers. They are active fliers on hot sunny days but shelter beneath heather, broom, etc, on dull days.

- SW32 Land's End district, ED Marquand (1844).
 SW33 Levant Zawn, 30.viii.1997, PAG. Cot Valley, 14.vii.2006, J. Widgery.
 SW43 Watchcroft, 1993, AS & ECMH.
 SW53 Lelant Towans, viii.1931, Mrs A Thornley. St Erth, 1962, RTB.
 SW54 St Ives, viii.1928, Mrs A Thornley.
 SW64 Red River Trail near Menadarva, 2004, PAG.
 SW71 Lizard, ix.1922, JH Keys. Lizard Town, ix.1951, AM Masee (1953). Treleaver Cliff, mature nymph, 27.vii.2006, PAG.
 SW83 Porthcurnick, frequent on recent land-slipped undercliff, 20.viii.2002, KNAA. St Anthony's Head, 2006, KP-M.
 SW84 Tresillian, 1932, C Nicholson.
 SW87 Porthcothan, young nymphs plentiful on the small patch of sand dunes and on the rocky scree of the cliff, 8.vi.1956, GEW (1956).

- SW97 Pentire Head and Polzeath, 9.ix.1919, GE Hutchinson. Hawkers Cove, 2.ix.2004, KP-M. Little Petherick, 2005, KP-M.
- SX06 Bodmin, SX058659, 9.vii.2003, KP-M. Dunmere Wood, nymphs, 28.vi.2006, PAG.
- SX15 Lansallos Cliff, 22.viii.2006, KNAA.
- SX25 Struddicks, St Martin, 1999, AS.
- SX35 Donderry, viii.1900, JH Keys. Trematon, 1972, JA & VS Paton.
- SX37 Kit Hill, viii.1919, AVM.
- SX44 Penlee Point, nymphs in numbers, 12.viii.1999, KP-M.

Family RHOPALIDAE

Corizus hyoscyamii (L.)

Best known from the sandy coasts of south-west Britain; polyphagous, although most often feeds on stork's-bill and perhaps restharrow. Formerly scarce in the county and never found by Thornley (1934), but increasingly reported from inland areas of Cornwall, Devon and elsewhere in recent years.

- SW32 Land's End, CW Dale. Brew, Sennen, v.1974, RTB. Sennen Cove dunes, 12.vi.1995, PAG. Rospannel Farm, near Chapel Carn Brea hill, 2004, GBH.
- SW53 Lelant sand-dunes, in hundreds on restharrow, CW Bracken (1940). Angarrack, in garden, 1989-2005; Loggans Moor, 1995; Phillack Towans, 1998-2004, ECMH. Upton Towans, large numbers under restharrow & stork's-bill, 27.viii.2006, PAG. Tremorva Hayle, photographed on Fuchsia in garden, 3.vii.2006, P Searle. Lethlean Towans, Phillack, two on rosemary in garden, R Yarwood, seen by S. Scott.
- SW54 St Ives sand-dunes, in hundreds on restharrow, CW Bracken (1940). Gwithian, 1981, APF. Upton Towans, 1998-2005, ECMH. Nanterrow, Gwithian, 4.vi.2005, GB2. Godrevy, 13.vi.2005, PAG.
- SW62 Loe Bar, clifflet at north end, 14.ix.1992, PK. Porthleven to Loe Bar, 18.v.2004, PAG.
- SW64 Porthtowan Dunes, vii.2000, PAG. Duchy College, Rosewarne, in gardens, 25.ix.2004, 3.ix.2005, in cop 9.ix.2006, KNAA.
- SW75 Penhale Sands, 10.vi.1956, GEW (1956); 19.v.2003, PAG; vii.2005, ECMH. Holywell Dunes, 2.ix.2002, PAG.
- SW76 Porth Joke, 22.vi.2005, PAG.
- SW81 Lowland Point, four, 31.v.2006, PAG.
- SW82 Porthoustock, 18.viii.2006, PAG.
- SW87 Constantine Bay, 8.vi.1956, GEW (1956); 1997-98, KP-M. Booby's Bay, 1997-2003, KP-M.
- SW94 Hemmick, 11.viii.2005, KP-M.
- SW97 Rock Sandhills, 18.28.viii.1919, GEH; Rock, 7.vi.1956, GEW (1956). Polzeath, GEH. Daymer Bay, 9.vi.1956, GEW (1956); 9.ix.1985, PK. Harbour Cove, ix.1997, KP-M. Tregirls, 1998-2003, KP-M. Padstow, 1998, KP-M.
- SW98 Port Quin, GEH.
- SX06 Bodmin, feeding at Aquilegia fruits in garden, 1997, KP-M.
- SX19 Boscastle, near the Black Hole, 19.vi.1898, JH Keys.
- SX35 Whitsand Bay, viii.1875, JJ Walker (EMM 1875: 108-9); Whitsands and Gwinear Road, vi.1921, JH Keys.
- SX37 Lezant, 9.viii.1918 (DA ms) & viii.1919, AVM.
- SX44 Penlee Point, vi.1998, PAG.
- SS20 Bude Sandhills, 18.vi. (Thomas, 1955a).
- SS21 Duck Pool, 11.ix.1985, PK.

Liorhysus hyalinus (Fabricius) – **Migrant?**

Reputedly a migrant which occasionally forms transitory colonies, but conceivably an established breeding species. Stork's-bill is the likeliest host.

- SW53 Upton Towans, two under stork's-bill at the sand extraction pit, 2.viii.2006, PAG.
- SW97 Daymer Bay, 9.ix.1985, a pair under stork's-bill, P. Kirby.

Rhopalus parumpunctatus Schilling - **County Rare.**

Largely confined to dry sandy areas, to the margins of sandy or cinder tracks, to evolved dunes and to grassy areas on sandy heaths. Feeds on seeds and buds, often on stork's-bill.

SW87 Constantine Bay, 3.x.1998, PAG.

SW97 Daymer Bay, 9.ix.1985, PK.

SX35 Portwrinkle, vi.1926 (DA ms) & two, v.1929, AVM.

Rhopalus subrufus (Gmelin) - **County Scarce.**

This large bug is most often found on St. John's wort growing in sheltered situations such as woodland rides and clearings, but also occurs on a wide variety of other food-plants. It is a widespread species across southern Britain but apparently rare in the county. Thomas' (1955a) "common...in Devon and Cornwall" is not supported by any evidence. It may be increasing at present.

SX06 Bodmin Beacon, 10.vi.1995, GMS. Bodmin, in garden, 14.vii.2004, KP-M. Kirland Bower & Polbrock, 2006, KP-M.

SX16 Dreasonmoor Wood, 3.v.2006, KP-M.

SX37 Lezant, '*R. capitatus*', viii.1918 (DA ms); four, viii.1919, AVM. Tregonnett Wood, Kerney Bridge, South Hill, 30.v.2006, KNAA.

SX46 Cotehele Quay, 19.vi.1985, LWH.

SS10 Widemouth Bay, 10.ix.1985, PK.

Chorosoma schillingi (Schummel) - **County Scarce.**

Southern coastal sand dunes; amongst grasses. Listed in Clark (1906).

SW53 Phillack Towans, 1998 & viii.2005, ECMH.

SW54 Upton Towans, small colony in one place, 1998 & viii.2005, ECMH.

SW75 Carn Haut, vii.2003, PAG.

SW76 West Pentire Farm, in open area of arable field, 11.vii.2003, KNAA. Porth Joke, nymph on marram, 5.vii.2003, KP-M.

Myrmus miriformis (Fallén)

A widespread bug nationally, of tall, often acid, grasslands, feeding on the leaves or unripe seeds of many grass species. Very few early records from the county, and clearly scarce until relatively recently. Its current improved status may reflect the extensive abandonment of rough grazings seen in the past 50 years. The flightless female does restrict its mobility however.

SW32 Sennen Cove, 20.vi.2001, BSN.

SW32 Rospanel Farm, Crows-an-Wra, 2003, GBH.

SW33 Ballowall, viii.1993, AS. Kenidjack, 1995, AS & ECMH. Pendeen Old Cliff, 21.viii.2002, KNAA.

SW53 Loggans Moor, 1994 & 1995; Phillack Towans, 1998, ECM Haes.

SW44 Carn Naun Point, 27.viii.1996, PAG.

SW52 Rinsey Cliffs, 23.viii.2006, PAG.

SW54 Upton Towans, 1998 & 2005, ECMH.

SW61 Caerthillian Cove, 21.vii.1970, MGM. Kynance Cove, 21.vii.1970, MGM & 24.viii.2006, PAG. Clahar Bridge, 30.vii.1980, & Predannack, 30.vii.1981, DAS. Poldhu Cove, 23.vi.2003, BSN.

SW62 Porthleven, Sargent (1968). Chyvarloe Cliffs, 20.vii.1970, MGM.

SW71 Erisey Barton, 31.vii.1980, DAS.

SW75 Penhale Point, 2.ix.2002, PAG.

SW83 Zone Point, St Anthony Head, 3.vii.1989, KNAA.

SW87 Park Head, 1996, ECMH.

SW93 Nare Head, 4.vii.1989, KNAA.

SW95 Moors near St Austell, GC Bignell (Clark, 1906).

SW97 Pentire Head, St Minver Highlands, 2.viii.2006, KNAA. Harbour Cove, Padstow, 26.viii.2006, PAG.

SW98 Port Isaac, viii.1919, GEH. Pentire Head, 2.viii.2006 & Doyden Point, 3.viii.2006, St Minver Highlands, KNAA.

- SX08 Dannonchapel & Tregardock, 1995, AS & ECMH. Glebe Cliff, Tintagel, 9.vii.2001, KNAA. Bossiney Cliffs, 21.viii.2002, KNAA.
- SX09 Pentargon Cliff, 12.vii.1989, KNAA.
- SX19 Crackington Haven, 11.vii.1989; Chipman Valley, Dizzard, 13.vii.1989, KNAA. High Cliff, 10.ix.1985, PK.
- SX47 Clitters Mine, Gunnislake, 14.viii.1998, AS.
- SS20 Bude, pair, 3.vii.1896, GC Bignell (1901). Northcott Mouth, 12.vii.1989, KNAA. Sandy Mouth, 12.vii.2006, KNAA.
- SS21 Glebe Cliff, Morwenstow, 10.vii.1989; Morwenstow, 12.vii.1989, KNAA.

Super-family PENTATOMOIDEA - Shieldbugs

Family CYDNIDAE

Legnotus limbosus (Geoffroy) syn. *Legnotus albomarginatus* Goeze - **County Scarce.**

A southern warmth-loving species, feeding on the fruits of bedstraws and goosegrass where they grow on well-drained south-facing grassy banks.

- SW61 Mullion Cove village, 20.vi.2001, BSN.
- SW62 Loe Bar, south end, 8.vi.2006, PAG.
- SW75 Penhale Dunes, 13.iv.2004, PAG.
- SW87 Porthcothan, many adults and a few nymphs on and under stones forming a scree on a steep cliff slope with straggling growth of *Galium aparine*, 11.vi.1956, GE Woodroffe (1956); adult amongst debris on rocky ledge, 30.iv.2002, and three, 3.v.2002, KNAA.
- SW97 Rock Sandhills, one dead adult among *Galium verum*, 7.vi.1956, GE Woodroffe (1956).
- SX06 Bodmin, in garden, 24.v.2001, KP-M.
- SX35 Whitsand Bay, JJ Walker (Clark, 1906).

Legnotus picipes (Fallén) – **Nationally Scarce & County Rare.**

Found at the base of lady's and heath bedstraws in dry sandy places; an efficient burrower. Mostly eastern and south-eastern Britain. Tends to replace the commoner *L. limbosus* in very dry, particularly coastal situations. Not found locally by Woodroffe (1956, 1958), despite working Penhale Dunes and neighbouring coastal sites.

- SW75 Perranporth, 1963, RTB; Penhale Dunes, three, 20.iv. & 27.iv.2005, PAG.

Sehirus bicolor (L.) - Pied Shieldbug.

A widespread species in southern Britain, feeding mainly on white dead-nettle and possibly other Labiates. Widespread in the far west of Cornwall, but few records from the east.

- SV Isles of Scilly (P Jenkinson, 1904; OJS Moore, 1925).
- SW32 Land's End district, EDM (1884). Rospannel Farm, Crows-an-Wra, one, 8.v.2003, GB Hocking.
- SW43 Boswednack, 17.vi.1979, KNAA. Newmill, 25.iv.2004, GBH.
- SW53 St Erth, viii.1963, RTB. Goldsithney, vi.1980, R Phillips. Phillack & Mexico Towans, at all sites with white deadnettle, 1998-2005, ECMH.
- SW54 Upton Towans, 1998-2004, ECMH.
- SW61 Clahar Bridge, vi.1981, DAS.
- SW62 Lower Methleigh Farm, Porthleven, Sargent (1968). Cury Cross Lanes, vi.1991, R Walker.
- SW63 Porkellis Moor, 8.vii.1983, KNAA.
- SW71 Lizard, vi.1924, JHK (DA ms); 1960, RTB.
- SX06 Bodmin, 5.iv.1999, KP-M.
- SX37 Trecarrel, 22.v.1991, AS.

Sehirus biguttatus (L.) - **Nationally Scarce & Locally Extinct**

A very local and little known species, feeding on common cow-wheat. Almost certainly a coppiced woodland species which has undergone a severe decline through changing woodland management practices - it favours open canopied areas where the foodplant grows in abundance. Recorded from the county in Clark (1906) with no details, but not since.

Geotomus punctulatus (Costa) syn. *Geotomus nigritus*, Fabricius syn. *laevis* Douglas & Scott - **Red Data Book, Category 1 (Endangered).**

Lives in or on loose sand in coastal situations, often in the vicinity of *Galium verum* which may be its foodplant. Appears to live in small colonies associated with patches of sparsely-vegetated, short sward vegetation with loose surface sand. A southern European species on the edge of its world range in Cornwall where it is confined to the Sennen Cove/Whitesand Bay area – this population has proved to be very resilient and appears to be in no danger. The only other GB record was from Cowbridge (Glamorganshire) in the 19th Century.

SW32 Sennen Cove & Whitesand Bay, under stones and *Erodium*, viii.1864, JC Dale; viii.1871, Power; tolerably plentiful under *Erodium* and stones, in the north-western part”, viii.1871, E Saunders (1871); commonly “in the original locality”, viii.1897, GCC (1897a); vii.1928, JH Keys; x.1932, EC Bedwell; ix.1951, AMM (1953); present on the dunes in considerable numbers, v.1962, GE Woodroffe (1962); MG Morris; ix.1965 and 1966, RTB; 1982-87 in numbers by several entomologists (Kirby, 1992); 19.vi.1987, PK; 8.vii.2001, M Pavett; 20.vi.2001 & 24.vi.2003, BSN; 26.iv.2004, PAG. Trevedra Cliff, in numbers, 5.v.1999, KNAA. Carn Barges, running on path in warm sunshine, 2.v.2000. KNAA.

Family THYREOCORIDAE

Thyreocoris scarabaeoides (L.) - Negro bug. **County Rare.**

A species of warm, dry places, and found in sheltered spots on calcareous or sandy soils in southern Britain. Reported in the county in Clark (1906) with no details.

SW54 Upton Towans, 1998, ECMH.

SW75 Holywell Bay & Penhale Dunes, 1998, PAG.

Family SCUTELLERIDAE

Eurygaster testudinaria (Geoffroy) - A tortoise bug.

This a species of tall grassland in damp situations, across southern Britain. In Cornwall the climate is suitable in open country but it is confined to damp shady woodland situations up-country. The true *Eurygaster maura* is a speciality of the chalk grasslands of the North Downs and heaths in the New Forest. The two species were first distinguished in 1927 (China, 1927) and old records are assumed to be *E. testudinaria* unless voucher material is available.

SW32 Land's End, “*E. maura*”, JC Dale. Porthgwarra, vi.1965, RTB. Maen Dower, 1.viii.2001, PAG. Rospannel Farm, Crows-an-Wra, 2003, GBH.

SW42 Porthguarnon, 28.vi.1994, PAG.

SW44 Trevega Cliff, 24.viii.1999, PAG.

SW53 Loggans Moor, 24.vii.1994, ECMH et al.

SW54 Upton Towans, 1998 & 2004, ECMH; 2006, J. Widgery.

SW61 Kynance, vi.1963, RTB. Mullion Quarry, 30.vii.1981, DAS. Mullion Cliffs, 13.vii.2006, J. Widgery.

SW64 Chapel Porth, 23.v.1990, KNAA. Western Hill, viii.1999, ECMH. Hudder Down, 12.vii.2006, J. Widgery.

SW71 Downas Cove, 1.ix.2002, PAG.

SW72 Goonhilly Downs, 20.ix.1992, PK & 7.vii.2006, J. Widgery. Frenchman's Creek, 13.vi.1995, PAG.

SW75 Holywell Dunes, 28.iv.1996, ECMH. Ventongimps Moor, 1997, Spalding & Haes (2000). Penhale Dunes, 20.viii.2002, PAG. Porth Joke, Cubert, 7.viii.2006; Cubert Common, 9.viii.2006, KNAA.

SW81 Lowland Point, 2000, PAG.

SW86 Tregunnel Saltings, 2000, ECMH & GAC.

SW87 Park Head, 1996, ECMH.

SW97 St Minver, 18.viii.1919, GE Hutchinson.

SW98 Carnweather Point, St Minver Highlands, 3.viii.2006, KNAA.

SX04 Gribbin Head, 26.vii.1998, PAG.

- SX05 Dryers Pit, Roche CP, 2005, JD.
 SX08 Trebarwith, "*E. maura*", EA Butler (1923). Tintagel (China, 1927). St Teath, 1.ix.1919, GE Hutchinson.
 SX16 Cabilla Woods, 26.vi.1999, PAG.
 SX17 South Penquite Farm, Blisland, 2005, KNAA.
 SX19 Millook Valley, 29.v.2000, KNAA.
 SX35 Seaton Valley, 19.vi.1998, PAG.
 SX37 Lezant, two *E. maura*, viii. 1918, AVM (DA ms); viii.1919, AVM.
 SX46 Cotehele Estate, Calstock, marshy pastures, 21.vi.1989 & 18.vii.2006, KNAA.
 SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.
 SS21 Stowe Wood, 12.vi.2005, PAG.

Odontoscelis fuliginosa (L.) - **Red Data Book Category 3 (Rare) & County Rare.**

Coastal sand dunes where it tends to be found in sparsely-vegetated areas under stork's-bill *Erodium* together with *O. lineola (dorsalis)*. A ground-dweller and efficient burrower in loose sand.

- SW75 Perranporth, vi.1964, RTB - record recognised by Kirby (1992).

Odontoscelis lineola Rambur syn. *Odontoscelis dorsalis* (Fabricius) - **Nationally Scarce & County Scarce.**

A southern, largely coastal, warmth-loving species associated with stork's-bill *Erodium cicutarium* and probably sea stork's-bill *E. maritimum* on sandy substrates – it seems to favour rather small stunted plants of stork's-bill growing in fairly firm and stable sand, often where there is growth of moss. A fairly active burrower.

- SW54 Gwithian Towan, 23.vi.2003, BSN.
 SW75 Perranporth, vi.1966, RTB. Penhale Dunes, large numbers of adults and a few nymphs under *Erodium cicutarium*, vi.1956, GEW (1956); numerous under common stork's-bill, 30.vii.2004, PAG. Holywell Dunes, numerous, 29.vii.1999, PAG.
 SW87 Constantine Bay, considerable numbers in one small hollow not more than 3yds in diameter, 8.vi.1956, GEW (1956); in dunes, 22.viii.1998, PAG.
 SW97 Padstow, 1911, CG Lamb (in Zool. Mus., Cambridge). Penhale Sands, large numbers of adults and a few nymphs, 10.vi.1956, GEW (1956) and unlocalised N Cornwall locality, vii.1957, GEW (1958). Rock Sandhills, one nymph, 1.v.2002, KNAA. Harbour Cove, 7.viii.2002, PAG.

Family PENTATOMIDAE

Podops inuncta (Fabricius) - European turtlebug.

A southern species of old dry grasslands on freely-draining soils, where it lives at the roots of plants, sucking the sap and will also feed from rabbit droppings. Widespread in Cornwall wherever suitable locations occur – sand dunes, road banks and railway cuttings (Thomas, 1954). NW Cornwall (Trebilcock, 1965).

- SW52 Prussia Cove to Cudden Point, 12.vi.2004, PAG.
 SW54 Gwithian, vi.1965, RTB. Upton Towans, 18.iv.1984, KNAA.
 SW61 Mullion Quarry, 6.vii.1981, DAS.
 SW71 Downas Valley, vi.1999, PAG.
 SW75 Cubert Common, 25.v.1989, KNAA. Holywell Dunes, 25.v.1989, SJG. Penhale Dunes, 16.vi.1997, PAG.
 SW76 West Pentire Farm, Crantock, grazed field, 31.viii.2006, KNAA.
 SW83 Falmouth, Clark (1906).
 SW87 Constantine Sandhills, Padstow, ix.1919, GE Hutchinson. St Merryn, vii.1925, KG Blair. Porthcothan, 29.vi.1999, PAG.
 SW97 The Rumps, Pentire Head, 21.v.1990, KNAA. New Polzeath, 5.v.2000, KP-M.
 SW98 Port Quin, 10.ix.1985, PK.
 SX19 Pencannow Point, 12.vii.1989, SJG.
 SX35 Whitsand Bay, v.1901 & 1907, JH Keys.

Sciocoris cursitans (Fabricius) - **Nationally Scarce.**

In warm, dry situations on well-drained substrates such as sand or limestone; usually ground-living and amongst fairly low and sparse vegetation. Probably plant-feeding, perhaps on mouse-ear hawkweed, wood sage, plantains, stork's-bill or *Potentilla* spp. Confined to the south of England. Widespread in the county's dune systems and also on the base-rich grasslands of the Lizard coast.

- SW53 Lelant Towans, usually common, AT; 2001-5, ECMH. Phillack Towans, 1982, PK; 1998-2005, ECMH. Mexico Towans, 2000 but site subsequently damaged by development, ECMH. Upton Towans, 2.viii.2006, PAG.
- SW54 Gwithian, v.1963, RTB; Gwithian Towans, 15.vi.2003, PAG. Godrevy Towans, 16.v.1989, SJG. Upton Towans, 27.iv.1991, PJ Hodge; 1998-2005, ECMH.
- SW61 Lizard Point, four, 24.v.1999, PJH.
- SW64 Godrevy & Knavocks, v.1990, SJG.
- SW71 Lizard, vi.1919, JHK (DA ms); 'in great numbers some years', JHK; 1917-18, N Micklewood (1918). Kildown Point, 1990, PK. Beagles Point, 19.v.1995, & Kennack Sands, 28.iv.1998, PAG. Enys Head, 2.v.2001, PAG.
- SW75 Penhale Dunes, 13.iv. & 29.v.2004, PAG.
- SW97 Harbour Cove, 2000, KP-M.

Aelia acuminata (L.) - Bishop's mitre.

Found in tall and rank grassland across southern Britain, and appears to be increasing and spreading in response to climate change. Feeds on a wide range of grasses but is most frequent in base-rich situations. Widespread in Cornwall.

- SW32 Maen Dower, 1.viii.2001, PAG.
- SW33 Kenidjack, 1995, ECMH. Cape Cornwall, 24.vi.2003, BSN.
- SW52 Rinsey East Cliff, swept from *Phragmites*, 20.vi.1979, KNAA; Rinsey Cliffs, 23.viii.2006, PAG. Prussia Cove, 11.vii.2006, PAG.
- SW53 Lelant Towans, sparingly but regularly, AT (1934). Phillack Towans, Hayle, ix.1929, AT, & 1998, ECMH. Marazion, ix.1965, RTB. Angarrack, in garden, v.2004, ECMH. Loggans Moor, 2004/5, ECMH.
- SW54 Gwithian, 1981, APF. Upton Towans, 1998, ECMH; 7.vii.2002, PAG.
- SW61 Predannack, 6.7.vi.2000, KNAA. Kynance Cove, 24.viii.2006, PAG.
- SW62 Loe Bar, 1960, RTB. Porthleven, very common in tall grass (Sargent, 1968).
- SW64 Duchy College, Rosewarne, swept from tall grasses in "wild" area, 2004, 2005 & 2006, KNAA.
- SW71 Treleaver Cliff, large numbers, 14.vi.1998 & 3.vi.2000; Downas Valley, large numbers swept, 1.ix.2002, PAG.
- SW75 Holywell Bay & Cubert Common, 13.vii.1995, PAG. Cross Coombe, 14.v.2000, PAG. Penhale Dunes, 2.ix.2003, PAG.
- SW82 Porthoustock, 18.viii.2006, PAG.
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW87 Park Head, 1996, ECMH.
- SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
- SX08 Port Gaverne, 22.vi.1993, ECMH. Dannonchapel & Tregardock, 1995, AS & ECMH.
- SX25 Struddicks, St Martin, 1999, AS & ECMH.
- SX47 Clitters Mine, Gunnislake, 14.viii.1998, AS.

Carpocoris purpureipennis (DeGeer) syn. *Carpocoris pudicus* (Poda) - **Former Vagrant?**

On extreme north-west fringe of range. Host-plants include Composites, Crucifers and Umbellifers. No modern records from anywhere in Britain.

- SV Isles of Scilly, 1888, JE Mason.
- SW32 Land's End district, JC Dale & Marquand (1884).

Dolycoris baccarum (L.) - Sloebug.

Widely distributed nationally and throughout Cornwall, on Rosaceae and tall vegetation generally; feeds on a wide variety of plants, especially the flowers and occasionally the fruit. Known to the Dales in the mid 19th century, widely known by Thornley (1934), including Scilly, and currently

very common and widespread, especially along the coastal fringe - recorded in almost every 10km square in the county. Noted as of frequent occurrence in Isles of Scilly by Walker (1872).

SV81 Tresco, 1897, GCC (1897). Bryher, Samson & Tresco, 1964/65, GE Woodroffe (1966a).

SV91 St. Mary's & St. Martin's, 1964/65, GE Woodroffe (1966a).

SW32 Land's End district, CW Dale. Polgigga, 1973, PJ Renwick. Whitesand Bay, 1987, PK; 2003, BSN. Rospannel Farm, Crows-an-Wra, 2003, GBH.

SW33 Carn Leskys, 1984, KNAA. Bollowal Common, 1993, AS; 1994, KNAA. Kenidjack Cliff, 1996, KNAA; 1995, ECMH; 2000, PAG. Porth Nanven 2000, PAG. Boscaswell Cliff, 21.viii.2002, KNAA.

SW42 Sancreed Beacon, 1998, AS & ECMH.

SW43 Porthmeor Cliff, 1989; Porthmeor Point, 1999, KNAA. Boswednack, 2000, GA Collins.

SW52 Praa Sands, 1992, PK. Rinsey, 2004, KP-M; 2006, PAG.

SW53 Carbis Bay, Lelant, Hayle, AT (1934). Angarrack, 1989-2005, ECMH. Phillack Towans, 1998, ECM Haes. Marazion Marsh, 1998, PAG. Mexico Towans, 2000, ECMH. Steeple Wood & Trelyon Downs, 1998, AS & ECMH. Loggans Moor & Gwithian Towans, 2000-2005, ECMH.

SW54 Gwithian, 1962, RTB; 2000-5, ECMH. Upton Towans, 1998-2005, ECMH. Navax Point, 2003, BSN. Nanterrow, Gwithian, 4.vi.2005, KNAA.

SW61 Kynance, 1960, RTB. Predannack, 1979, 2000, KNAA; 1980/81, DAS; 1988, B Jackson. Mullion, 1980, DAS. Poldhu Cove, 2001, 2003, BSN.

SW62 Helston, AT (1934). Porthleven (Sargent, 1968). Penrose, 1989; Gunwalloe, 1989, KNAA. Loe Bar, 1989, KNAA; 1991, AS; 1992, PK. Mullion Golf Course, 2000, GA Collins & ECMH.

SW64 Nancekuke, 1964, SMT; 1983, M Collinson et al. Chapel Porth, 1990, KNAA. Tregea & Carvannel, 1990, SJG. Western Hill, 1999, AS & ECMH. Duchy College, Rosewarne, 2004, 2005 & 2006, KNAA. Carn Entral Farm, Brea, 4.viii.2005, J Merrick.

SW71 Lizard, JHK. Lizard Town, ix.1951, AM Masee (1953); 2005, ECMH. Beagles Cliff, 1989, KNAA. Cadgwith, 1992; Kennack Sands, 1992, PK; 2004 & 5, ECMH. Chynhalls Cliff, 18.v.1994, APF. Poltesco East, 1998, PJH. Downas Cove, 1.ix.2002, PAG. Coverack to Black Head, 2004, PAG.

SW72 Trelean Valley, 1984, B & E Jackson. Mawnan Glebe, 1989, SJG. Glendurgan Gardens, 1992, PK. Mawnan Church to Porth Saxon, 29.viii.2006, PAG.

SW73 Halabazack Farm, 2005, KP-M.

SW74 Threemilestone, 1936, C Nicholson. United Downs, 1998, AS & ECMH.

SW75 Holywell Dunes, 1983, KNAA; 1996 & 2005, ECMH. Chapel Porth, 1990, KNAA. Lambourne Mill, 1992, A Robathan et al. Ventongimps Moor, 1997, Spalding & Haes (2000). Cubert Common, 2006, KNAA.

SW76 Rushy Green, Crantock, 2000, GA Collins & ECMH. Porth Joke & West Pentire Farm, Crantock, 2006, KNAA.

SW77 Napkent Downs, 2006, KP-M.

SW82 Porthoustock, 18.viii.2006, PAG.

SW83 Gerrans Bay (Clark, 1906). St Anthony in Roseland, 1979 & 1989, KNAA. Killigerran & Porthmellin Heads, 1989, SJG. Porthbeor Beach, St Anthony, 1989, KNAA. Towan Beach, 3.vii.1989, SJG.

SW84 Truro, 1973, VS & JA Paton.

SW85 Newlyn Downs, 1997, Spalding & Haes (2000). Carland Cross, 2006, KP-M.

SW86 Bre-Pen Farm, 2000, GA Collins. Tregunnel Saltings, 2000, ECMH & GAC.

SW87 Park Head, 1996, ECMH. Gunver Head, 2004, KP-M.

SW94 Portholland, 1996, PAG.

SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).

SW97 Rock sandhills, 1919, GEH. Stepper Point, 1972; Wadebridge, 1974, VS & JA Paton. Daymer Bay, 1985, PK. Lundy Bay, 2004, KP-M. Pentireglaze, St Minver Highlands, 2006, KNAA.

- SW98 Pentire Point to Portquin Bay, St Minver Highlands, 1990 & 2006, KNAA. Kellan Head, 1999, AS & ECMH. Pine Haven, Port Isaac, 2002, KNAA.
- SX03 The Dodman, 1989, SJG & KNAA.
- SX04 The Gribbin, 1989, SJG. Pabyer Point, Gorran Haven, 1995, KNAA. Chapel Point, 1999, PAG.
- SX06 Bodmin, AT (1934); Bodmin Beacon, & in garden, KP-M (pc 2004). Retire Common, 1997, Spalding & Haes (2000). Lanhydrock Great Wood, 2001, ECMH. Park Wood, 2004, KP-M. Criggan Moor, Roche CP, 2005, JD.
- SX08 Trewarmett, 1995, ECMH. Dannonchapel & Trebarwith Strand, 1997, PAG. Bossiney Cliffs, 21.viii.2002, KNAA. Port Gaverne, 2004, KP-M.
- SX09 Forrabury Common, 1965, FAT. Pentargon Cliff, Boscastle, 1989, KNAA.
- SX15 Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000). Sandheap Point, Lanteglos, 26.viii.2006, KNAA. Lansallos East Coombe, 22.viii.2006, KNAA.
- SX16 Polbrock & Cabilla Wood, 2005, KP-M.
- SX17 South Penquite Farm, Blisland, 25.viii.2005, KNAA.
- SX19 St Gennys, 1972, VS & JA Paton. Valency Valley, 1979, RJ Murphy. Crackington Haven, 1990, SJG.
- SX25 Hore Point, 1989, coll. SJG, det. PK.
- SX27 Henwood, 1998, PAG.
- SX35 Tregantle, JHK. Sharrow Point, 2000, KNAA.
- SX37 Luckett Reserve & Greenscombe Wood, 1985, B & E Jackson.
- SX45 Minadew Brakes, 2000, PAG.
- SX46 Haye Farm, St Dominick, 19.vii.2006, KNAA.
- SS11 Tidna Valley, 1985, PK.
- SS20 Northcott Mouth, 1989, KNAA.
- SS21 Welcombe & Marsland Reserve, 1970 (RSNC). Duckpool to Sandymouth, 1989; The Tidna, 1989, SJ Grove. Morwenstow, 1989, KNAA; 1992, SJG. Duck Pool, 1985, PK. Stowe Wood, 2005, PAG. Vicarage Cliff, Morwenstow, 2005, KNAA. Steeple Point, 2006, KNAA.

Eysarcoris aeneus (Scopoli) - **Red Data Book Category 3 (Rare) & County Rarity.**

Feeds on the developing fruits of Slender St John's-wort *Hypericum pulchrum* where it grows in damp heathland, in woodland rides and clearings, and in damp grassland. Known from a very thin scatter of records across southern Britain.

SW42 Bellowal, Paul CP, one swept in rushy meadow, 1975, RTB (Bannister, 1976).

Eysarcoris fabricii (Kirkaldy)

A common bug feeding on hedge woundwort in the south and east of England; it has been spreading westwards for many years and was first detected in the county only in 2004.

SX06 Bodmin Gaol, 29.ix.2004, KP-M.

SX07 St Kew Highway, 27.vii.2006, KP-M.

SX16 Cabilla Wood, 11.vi.2005, KP-M. Station Pond, Bodmin, 14.vi.2006, KP-M.

SX27 2005, KP-M.

SS21 Stowe Wood, in good numbers on hedge woundwort, 12.vi.2005, PAG. Coombe Valley, 12.vi.2005, KP-M.

Neottiglossa pusilla (Gmelin) - **County Scarce.**

In tall poorly-drained grassland across southern Britain. First recorded for the county in Saunders (1892).

SW54 Gwithian, ix.1967, RTB.

SW75 Mount Field, 14.x.2001, PAG.

SX06 Lemar, SX098688, on grass, 6.ix.2001, KP-M. Dunmere Wood, 28.vi.2006, PAG.

SX19 Pencannow Point, Crackington Haven, maritime grassland, 12.vii.1989, SJG.

SX35 Whitsand Bay, JJ Walker (Clark, 1906).

SS21 Stowe Wood, 11.ix.1985, PK.

[*Nezara viridula* (L.) – Green Vegetable Bug, or Southern Green Stinkbug. **Casual introduction.**

A widespread species in southern Europe which has occasionally been shipped into the UK with fruit. Polyphagous, with a preference for legumes and brassicas. It is regarded as an important agricultural pest and is expanding its range northward. A nymph was found in a punnet of Spanish raspberries, 5.vi.2004, by Joan Carr and identified by BS Nau (T. Opie, pers. comm.).]

Palomena prasina (L.) syn. *P. dissimile* - Green shieldbug.

A widespread species found on the foliage of a large variety of broad-leaved trees and shrubs, and appears to be increasing and spreading in response to climate change. Common (Thornley, 1934) and still so – recorded in almost every 10km square in the county.

SV91 St Mary's, 1984, BMS.

SW32 Land's End district, ED Marquand (1884); also Dale. Porthgwarra & Gwynver, 1999, PAG. Rosspanel Farm, Crows-an-Wra, 2003, 2004, GBH.

SW33 Kenidjack, 1995, AS & ECMH.

SW42 Trewoofe Woods, 1989, M & A Common. Logan Rock, Treen, 2.vii.2001, K Merrifield.

SW43 Watchcroft, 1993/94, AS & ECMH.

SW52 Praa Sands, 1992, PK. Pengersick Castle, 1992; Trevurvas, 1994, A Phillips-Smith.

SW53 Carbis Bay & Lelant, AT (1934). Tremelling, 1982, B Jackson et al. Relubbus, 1989, AS. Marazion Marsh, 1990, DS Flumm. Angarrack, 1989-2005, ECMH. Loggans Moor, 1994-2005, ECMH. Phillack Towans, 1998, ECMH. Mexico Towans, 2000, ECMH. Steeple Wood & Trelyon Downs, 1998, AS & ECMH. Gwithian Towans, 2000-5, ECMH.

SW54 St Ives, AT (1934). Gwithian & Upton Towans, 1998-2005, ECMH.

SW61 Mullion Cove, 1992, PK. Predannack, 1992, PK. Kynance Cove, 1998, PJH.

SW62 Helston, AT (1934); 1965, RTB. Penrose, 1996, KNAA. Loe Bar, 1992, PK. Porthleven, 1992, PK. Mullion Golf Course, 2000, GA Collins & ECMH.

SW63 Porkellis Moor, 2000, AS.

SW64 Carn Brea, 1977, B Jackson et al. Nancekuke, 1983, M Collinson et al. Redruth, 1992, 1994, A Williams. South Crofty, 1994, CJ Neil. Duchy College, Rosewarne, 2004, 2005 & 2006, KNAA. Red River Trail near Menadarva, 2004, PAG. Carn Entral Farm, Brea, 3.ii.2006, J Merrick.

SW71 Lizard, JHK; 2005, ECMH. Coverack, 1992; Kennack Sands, 1992, PK; 2004/5, ECMH. Gwendreath Valley, 1998, KNAA. Cadgwith South & Poltesco East, 1998; Chynhalls South Cliff, 1998, PJH. Gwavas Cliff, 2000, AS & R. Howard.

SW72 Rosemullion Head, 1974, APF. Trebah Gardens, 1991, B Jackson et al; 1992, PK. Porthallow, 1992, PK.

SW73 Falmouth, 1993/94, GJ Dixon. Penryn, 2001 & 4, PAG.

SW74 Chapel Porth, 1990, KNAA. Tregarne, 1991; Cusgarne, 1992, AS. United Downs, 1998, AS & ECMH.

SW75 Lambourne Mill, 1992, A Robathan et al. Holywell Dunes, 1996 & 2005, ECMH. Ventongimps Moor, 1997, Spalding & Haes (2000).

SW76 West Pentire Farm, 1997, KNAA. Rushy Green, Crantock, 2000, GA Collins & ECM Haes. Treago Mill, Cubert, 2002, KNAA.

SW82 Porthoustock, 1992, PK; 2006, PAG.

SW83 Falmouth, 1991, N Dixon. Pendower, 2000, PAG.

SW84 Tresillian, 1929, C Nicholson. Dereham Terrace, 1989, SMT. Truro, 1991, SD White & AK Best. Coombe, Fal Estuary, on *Smyrnum*, 1993; Ruan Laniorne, 1995, KNAA.

SW85 Newlyn Downs, 1997, Spalding & Haes (2000).

SW86 St Colan, 1991, BE Jackson et al. Tregunnel Saltings, 2000, ECMH & GAC.

SW87 Park Head, 1996, ECMH.

SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).

SW98 Pentire Head & Portquin Bay, 1979, G Bathe.

SX05 Luxulyan Valley, 1988, SMT. Wheal Martin, 1991, MD Bradford. Polmark Park, St Austell, 2000, AS & ECMH. Dryers Pit, Roche CP, 2005, JD.

- SX06 Bodmin, AT (1934). Bugle, 1981, APF. Polbrock, Camel Valley, 1983; Tredinnickpits, 14.ix.1996, KNAA. Bodmin Beacon, 1995, ECMH. Retire Common, 1997, Spalding & Haes (2000). Criggan, Roche CP, 2005, JD. Lanhydrock Great Wood, 2001, ECMH. Park Wood, 2004, KP-M.
- SX07 Polbrock, 1993, AS. Gaff Wood, Camel Valley, 2001, KNAA.
- SX08 Grammers Chair, St Endellion, & Port Gaverne, 1993, ECMH. Dannonchapel & Tregardock, 1995, AS & ECMH; Tregardock Cliff, 2000, PAG. Trewarmett, 1995, ECMH. Rocky Valley, 1999, PAG.
- SX15 Ethy Wood, 1990, KNAA. Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000). Castle Field, Fowey, 2000, GMC. Penleath Point, 1997, PAG. Lostwithiel, 2001, PAG.
- SX16 Panters Bridge, 1972, VS & JA Paton. Cardinham, 1996, KNAA. Cabilla Woods, 1996, PAG.
- SX18 Bowthick Bog, 2001, PAG.
- SX19 Millook Valley, 2000, KNAA. Dizzard Woods, 2000, PAG.
- SX25 Talland Bay, 1977, PAG. Bodigga Cliff, on nettles of hedgerow, 1979, KNAA. Struddicks, St Martin, 1999, AS & ECMH.
- SX26 Menheniot, 1992, J Gendall et al.
- SX35 Erth Barton, 1979, KNAA.
- SX36 Cadsonbury Woods, 13.vii.2001, KNAA.
- SX37 The Holmbush, Kelly Bray, 1998, AS & ECMH.
- SX38 Beales Meadows Reserve, viii.1998, DM/IK.
- SX39 Boyton, 1972, VS & JA Paton.
- SX19 Millook Valley, 1989, KNAA.
- SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
- SX42 Cotehele Quay, 2000, PAG.
- SX44 Penlee Point & Rame Head, 2000, PAG.
- SX47 Clitters Wood, 1997, PAG.
- SS20 Launcells, 1973, VS & JA Paton.
- SS21 Stowe Wood, 1985, PK; 2005, PAG. Marsland Mouth, 1998, PAG.

Pentatoma rufipes (L.) - Forest bug.

Widespread on the foliage of oak; also on other native broad-leaved trees; mostly in woods and orchards. Regarded as "rather common" by Thornley (1934) and still so.

- SW32 Land's End district, ED Marquand (1884). Rosspanel Farm, Crows-an-Wra, 2003, 2004, GBH.
- SW33 Kenidjack, 1995, AS & ECMH.
- SW42 Paul, 1963, RTB. Trewoofe Wood, 1989, M & A Common.
- SW53 Carbis Bay, Lelant & St Erth, AT (1934). Trencrom Hill, 1980, SMT. Angarrack, in garden, 1990-2004, ECMH. Steeple Wood & Trelyon Downs, 1998, AS & ECMH.
- SW54 St Ives, AT (1934). Porthmear Beach, 1974, PJ Renwick & RTB.
- SW63 Godolphin Estate, 22.vii.2006, PAG.
- SW64 Reskadinnick, 1977, FAT.
- SW71 Erisey Barton, 1981, DAS.
- SW72 St Anthony-in-Meneage, 1960, RTB. Tregaminion, 1991, AS. Glendurgan Gardens, 1992, PK. Rosemerryn Farm, 2000, PAG. Frenchman's Creek & Tremayne Woods, 2001, PAG. Mawnan Smith, 2004, PAG.
- SW74 Cusgarne, 1989, AS.
- SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
- SW83 Trelissick Estate, 1997 & 2004, PAG.
- SW84 Ruan Laniorne, 1983, KNAA. Truro, 1992, PB White.
- SW85 Trerice, 1979, WAE.
- SW87 Porthcothan, 1972, VS & JA Paton.
- SW93 Nare Head, 1989, KNAA.

- SW95 Crowhill Valley, Trenowth, 2001, KNAA.
 SW96 Rosenannon Bog & Downs, 1997, Spalding & Haes (2000).
 SW97 Wadebridge, 1974, VS & JA Paton. Hawkswood Reserve, 1989, AS.
 SX06 Lanhydrock, AT (1934). Lanhydrock Park, 1989, KNAA. L. Great Wood, 2001, ECMH.
 Bodmin, garden, KP-M (pc 2004). Lostwithiel, 2004, KP-M. Dunmere Wood, 2006, PAG.
 SX07 Colquite Wood, 1989, KNAA. Shell Woods, mature nymph, 16.vi.2006, PAG.
 SX08 Portgaverne, 1992, M Lee.
 SX15 Boconnoc Park, 1989, KNAA. Pont Mill, 1991, AS. Polridmouth, 10.ix.2004, KP-M.
 Lansallos East Coombe, 22.viii.2006, KNAA.
 SX16 Deviock Wood, 1996 & Cabilla Woods, 1999, PAG. Lanhydrock Estate, 2006, PAG.
 SX17 Bodmin Airfield, 18.vii.2004, KP-M. South Penquite Farm, 2005, KNAA.
 SX19 Millook Woods, 1998, PAG.
 SX25 Kilminorth Wood, 1983, KNAA. Penzephyr, 1984, AS. Struddicks, St Martin, 1999, AS &
 ECMH.
 SX27 Trebartha Cascade, 1989, KNAA.
 SX35 Erth Barton, 1979, KNAA.
 SX37 Wareham Wood, 1984, AS. Windsor Lane, Kelly Bray, 1998, AS & ECMH.
 SX38 Gordonhill Plantation, 1972, VS & JA Paton.
 SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Cotehele Estate, Calstock & St Dominick, widely, vii.2006, KNAA.
 SX47 Clitters Mine, Gunnislake, 1998, AS.
 SS21 Morwenstow, 1979, G Bathe. Welcombe & Marsland Reserve, 1970, RSNC. Stowe Wood,
 1998, PAG.

Piezodorus lituratus (Fabricius) - Gorse shieldbug.

Widespread on gorse and broom, and occasionally on other related plants, especially *Lotus corniculatus* in the Isles of Scilly. The developing nymphs feed on the seed-pods. Recorded locally in plenty since the 19th century.

- SV Isles of Scilly, ix.1888, JEM (1889b). Also F Jenkinson, no date.
 SV80 Wingletang Downs, St Agnes, with *Lotus corniculatus*, vi.1966, Woodroffe (1967).
 SV81 Tresco, 1878, F Norgate (1880); 1925, OJS Moore & MS Boscawen. Tresco and Castle
 Bryher, 1925-30, OWR. Holyvale Marsh, 1973, VS & JA Paton. St Martins, 1987, PK.
 SV91 St Mary's & St Martin's, 1925-30, OWR; only a few colonies found & on *Lotus corniculatus*
 rather than gorse, 1964/65, GE Woodroffe (1966a).
 SW32 Land's End district, EDM (1884-5). Carn Polpry, 1984, KNAA. Boscregan, 1989, KNAA.
 Porthgwarra & Maen Castle, 1996, PAG. Mayon Cliff, 2000, KNAA. Rosspannel Farm,
 Crows-an-Wra, 2003, 2004, GBH.
 SW33 Kenidjack Cliff, 1995, AS & ECMH; 1996, 2000, KNAA. Cot Valley, on blackthorn, 2000,
 KNAA. Cape Cornwall, 24.vi.2003, BSN. Carn-gloose & Pendeen Light, 2004, GBH.
 SW42 Lamorna Cove, AT (1934). Cribba Head, Penberth, 1979, KNAA. Penberth, 2004, GBH.
 SW43 Rosemergy, 1989, KNAA. Trevean Cliff, 1993, AS & ECMH. Watchcroft, 1993/94, AS &
 ECMH.
 SW44 Trevea Farm, 1996, KNAA.
 SW52 Perranuthnoe, 1962, RTB. Rinsey Cliff, frequent in flight, 20.iv.1984, KNAA;
 23.viii.2006, PAG. Lesceave Cliff, 25.iii.2004, KNAA. Prussia Cove, 2004, GBH.
 SW53 Hayle, JEM (1889b). Carbis Bay & Lelant, AT (1934). Trescowe, 1989, KNAA. Angarrack,
 1990-2004, ECMH. Phillack Towans, 1998, ECMH. Upton Towans, 2006, PAG.
 SW54 St Ives, JEM (1899b). St Ives, AT (1934). Upton Towans, 1998-2005, ECMH.
 SW61 Mullion, 1980, DAS. Lizard Point, 1989, KNAA. Kynance, 1992, PK. Predannack, 1982,
 DAS; 1992, PK. Mullion Cove village, 20.vi.2001, BSN.
 SW62 Porthleven (Sargent, 1968). Loe Bar, 1960, RTB. Penrose, 1989, 1996, KNAA.
 SW64 Nancekuke, 1981, APF; 1983, M Collinson et al. Tywarnhale Mine, 1999, AS & ECMH.
 Carn Brea, 2000, PAG. Duchy College, Rosewarne, on broom in gardens, 9.ix.2006, KNAA.
 Carn Entral Farm, Brea, 3.ii.2006, J Merrick.

- SW71 Lizard Town, ix.1951, AM Masee (1953); 2005, ECMH. Lizard, 1970, RM Phillips. Crousa Paddock; Erisey Barton; Main Dale; 1980/81, DAS. Beagles Point, 1989, KNAA; 1999, PAG. Kennack Sands, 2004/5, ECMH. Black Head, dyer's greenweed, 27.vii.2006, PAG.
- SW72 Rosemullion Head, 1998; Mawnan Church to Porth Saxon, 29.viii.2006, PAG.
- SW74 United Downs, 1998, AS & ECMH. Tywarnhale Mine, 1999, AS & ECMH. St day, 2003, PAG.
- SW75 Penhale, 1979, SMT. Holywell Dunes, 1983, KNAA. Cligga Head, 2000, PAG.
- SW76 Porth Joke, 1998, PAG.
- SW82 Porthoustock, 18.viii.2006, PAG.
- SW83 Treluggan Cliff, 1989, KNAA. Percuil, 1990, KL Spurgin. St Anthony Head, 2000, PAG.
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW87 Park Head, 1996, ECMH; 31.iii.2003, PAG..
- SW93 Nare Head, 1989, KNAA.
- SW96 Tregamere Quarry, 1972, VS & JA Paton.
- SW97 Pentire Haven, 21.v.1990, SJG. Trebetherick Point, 2001, KNAA.
- SW98 Pentire Head & Portquin Bay, 1990 & 2006, KNAA.
- SX04 Black Head, 1985, AS.
- SX05 Wheal Martin, 1991, MD Bradford.
- SX06 Helman Tor, 1973, VS & JA Paton. Retire Common, 1997, Spalding & Haes (2000). Bodmin, garden, KP-M (pc 2004). Breney, 2004, KP-M.
- SX08 Trewarmett, 1995, ECMH. Dannonchapel & Tregardock, 1995, AS & ECMH.
- SX09 Willapark, 2000, PAG.
- SX15 Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000). Lansallos East Coombe, 22.viii.2006, KNAA.
- SX16 Bunny's Hill & Cardinham Downs, 2005, KP-M.
- SW17 Newton, 2006, KP-M.
- SX19 Chipman Valley, Dizzard, 1979 & 1989, KNAA. Rusey Cliff, 2000, PAG.
- SX25 Struddicks, St Martin, 1999, AS & ECMH. Talland Cliff, 2000, KNAA.
- SX26 St Cleer Down, 1990, AS.
- SX35 Tregantle, JHK. Portwrinkle, 1985, AS.
- SX44 Penlee Point, 1998, PAG.
- SX45 St John's, 19.iv.1919, AVM (DA ms); Churchtown Farm, Saltash, 20.vii.2005, KNAA.

Eurydema oleracea (L.) - Brassica bug. **County Scarce.**

A local species across southern England. Main foods are seeds of jack-by-the-hedge, horse radish, wild radish and garlic mustard, but it will also feed on other crucifers. Cornish records all come from the Lizard coast.

- SW61 Kynance Cove, CJ Dale (Saunders, 1892). Lower Predannack Cliff, 7.vi.2000, KNAA. Mullion Cliffs, 21.vi.2001, BSN. Polurrian Cove, 5 in dead flower heads of sea carrot, 2003, PAG.
- SW62 Poldhu Cove, mating pair on black mustard, 3.v.1999, KP-M.
- SW71 Lizard, vii.1917, N Micklewood; ix.1922 & vi.1924, JH Keys; 1967, FAT & H Howard. Lizard Town, ix.1951, AM Masee (1953). Lizard Lighthouse, 29.v.2005, PAG. Polbream Cliffs, Polpeor, plentiful, 12.v.1977, RM Phillips & FAT. Poltesco Cove, several, 12.vi.1983, BE Jackson. Kennack Sands, 24.ix.1992, PK; on sea radish, 1.viii.2002 & 23.v.2004, PAG. Cadgwith, 15.ix.1992, PK.

Picromerus bidens (L.)

A widespread species of lush flowery places – humidity requirements restrict it to woodlands up-country but widely in open situations in Cornwall. It lives at low densities and is predatory on the larvae of Lepidoptera and leaf beetles (Chrysomelidae); also sucks moisture from plants. Fairly common on the north coast (Thornley, 1934). Common in the southern half of Cornwall becoming scarce along the northern coastlines (Thomas, 1954).

- SW32 Land's End district, CW Dale.
- SW33 Woon Gumpus Common, ix.1991, ECMH. Pendeen Old Cliff, 21.viii.2002, KNAA.

- SW53 Hayle district, x.1886, JEM (1889b). Carbis Bay, Lelant & St Erth, AT (1934). Angarrack, 1989 and annually since; Loggans Moor, 1995 & 2005; Phillack Towans, 1998, ECMH.
- SW54 St Ives district, x.1886, JEM (1889b). St Ives, AT (1934). Gwithian, viii.1962, RTB. Upton Towans, 1998 & 2004, ECMH.
- SW61 Mullion, 20.ix.1980, DAS. Caerthillian Cove, viii.2000, PAG.
- SW71 Lizard Town, ix.1951, AM Masee (1953).
- SW72 Goonhilly, 1960, RTB; 22.ix.1980, DAS.
- SW75 Carn Moor, 28.vii.1986, B & E Jackson.
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW87 Park Head, 1996, ECMH.
- SW97 Pennywilgie Point, St Minver Highlands, 3.viii.2006, KNAA.
- SW98 Hendra, near Port Isaac, ix.1919, GEH.
- SX06 Bodmin, AT (1934) & 15.viii.2006, KP-M. Retire Common, 1997, Spalding & Haes (2000).
- SX19 Millook Woods, 1.x.1996, PAG.
- SX37 Lezant, viii.1918 & viii.1919, AVM (DA ms); "Lelant, two, viii.1919, AVM" (Thornley, 1934) - this record is assumed to be a graphical error for SW53 at Lelant.
- SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.
- SS21 Morwenstow, 12.vii.1989, KNAA. Stowe Wood, 19.vii.1999, PAG.

Rhacognathus punctatus (L.) – **County Scarce.**

A heathland speciality, favouring the damper areas where *Sphagnum* is present or the more mixed vegetation of the heath margins. Feeds on the larvae of *Lochmaea* leaf beetles - heather beetle *L. suturalis* as well as *L. capreae* on stunted willows - as well as other insect larvae. Very local in Cornwall and mainly known from West Penwith and the Lizard.

- SW43 Trevean Cliff, 7.viii.1996, PAG.
- SW44 Pen Enys Point, 24.v.1989, SJG.
- SW53 Hayle district, ix.1888, JE Mason (1889b).
- SW54 St Ives district, ix.1888, JE Mason (!889b).
- SW61 Kynance, vii.1966, RTB. Mullion, 6.vii.1981, DAS.
- SW71 Gwendreath, 22.ix.1980; Golgotham, 7.vii.1981; Crousa Downs, 5 & 29.vii.1981, DAS.
- SW72 Goonhilly Downs, 19.v.1999, PAG.
- SX05 Holmbush, Fenn (Douglas & Scott, 1865).

Troilus luridus (Fabricius)

A widespread - albeit localised - species nationally, occurring amongst the foliage of a variety of broad-leaved trees and shrubs. The young larvae feed on plant material but older bugs prey on larvae of Lepidoptera, Hymenoptera and Coleoptera. Uncommon in Cornwall - first reported in Butler (1923); not so much a woodland species in western Britain, and in Cornwall can be found in sheltered scrubby places as well as woods.

- SW33 Wheal Edward, Kenidjack Cliff, on heather, 13.v.1996, KNAA.
- SW43 Porthmeor Valley, on willows, 17.v.1989, KNAA.
- SW53 Carbis Bay, 9.x.1930 & 7.x.1931, AT.
- SW72 St Keverne, v.1964, RTB. Trevassack, 7.vii.1981, DAS. Tremayne Woods, 31.v.1989, KNAA. Mawnan Church to Porth Saxon, off ivy, 29.viii.2006, PAG.
- SW73 Enys Woods, 18.ix.1995, PAG.
- SW74 Five Acres, Allet, mature nymph, 25.vii.2006, S Scott, teste KNAA.
- SW76 Porth Joke, hawthorn, 30.v.1989, KNAA.
- SX06 Bodmin, in garden, KP-M (pc 2004). Polbrock, 2006, KP-M.
- SX15 Carne Farm, Penpoll, 19.vii.2002, JF.
- SX17 Bodmin Airfield, 28.vii.2004, KP-M.
- SX47 Clitters Mine, Gunnislake, 14.viii.1998, AS; nymph, 29.ix.2004, KNAA.
- SS21 Stowe Wood, 12.vi.2005, PAG & KPM.

Zicrona caerulea (L.) - Blue bug.

This is a specialist predator on leaf beetle larvae (Chrysomelidae) and its distribution reflects the distribution of sites and habitats which support abundant populations of the larger leaf beetle species: heathlands, marshlands, calcareous grasslands, and woodland rides. It is also known to feed on Lepidoptera larvae. Apparently formerly scarce in the county - Thornley (1934) never found it but his wife found one, 25.vi.1926 (locality not named), but it has readily been found in recent years.

- SV81 Tresco, two adults and two larvae among *Calluna* on sand dunes in south of island, vi.1966, Woodroffe (1967).
SW32 Land's End district, ED Marquand (1884).
SW33 Kenidjack, 1995, AS & ECMH.
SW43 Watchcroft, viii.1993, AS & ECMH.
SW53 Angarrack and adjacent dunes, viii.1990; Phillack Towans, 1998 & 2005; Mexico Towans, 2000, ECMH.
SW54 Upton Towans, 1998 & 2004, ECMH.
SW61 Kynance, 1960, RTB.
SW75 Perranporth, vi.1963, RTB.
SW87 Park Head, 1996, ECMH.
SX06 Polgeel Wood, 13.vi.2005, PAG.
SX08 Dannonchapel & Tregardock, 1995, AS & ECMH.
SX35 Tregantle, v.1899, JH Keys.
SX37 Luckett Reserve, 30.vi.1985, B & E Jackson.
SX46 Morden Valley, Cotehele, vi.1989, KNAA.

Family ACANTHOSOMATIDAE

Acanthosoma haemorrhoidale (L.) - Hawthorn Shieldbug.

Very widespread nationally on hawthorn, feeding on the berries; may be found on other broad-leaved trees and shrubs when hawthorn berries are not available. Over-winters as adult, generally in dead wood or grass tussocks. Recorded in the county in Clark (1906), but Thornley (1934) only found a few specimens, and there are only a few records from 1960s; the author noted none at all in 1979 despite a considerable amount of activity across the county, but began to find it widely from the mid 1980s - it has clearly become much more widespread in the county in recent years.

- SW32 Rospannel Farm, Crows-an-Wra, 2003, 2004, GBH.
SW33 Kenidjack, 1995, ECMH.
SW42 Chyenhal Moor, 1968, SMT. Sancreed Beacon, 1998, AS & ECMH.
SW43 New Mill, 1962, RTB. Treveffa Farm, 2000, KNAA.
SW53 Carbis Bay & Lelant, a few, AT (1934). Angarrack, 1989-2005, ECMH. Loggans Moor, 1995-2005, ECMH. Phillack Towans, 1998, ECMH. Mexico Towans, 2000, ECMH. Steeple Wood & Trelyon Downs, 1998, AS & ECMH. Marazion Marsh, 2000, PAG.
SW54 St Ives, a few, AT (1934). Upton Towans, 1998 & 2004/5, ECMH.
SW62 Helston, 1960, RTB. Porthleven, 1968, HB Sargent. Penrose Estate, 1989, KNAA. Mullion Golf Course, 2000, GA Collins & ECMH.
SW63 Porkellis Moor, 1977, P Terry et al.
SW64 Reskadinnick, 1977, SMT. Roscroghan, 1989, BE Jackson et al. Redruth, 1992, RJ Williams. Duchy College, Rosewarne, 2004, 2005 & 2006, KNAA.
SW71 Lizard Town, 2004; Kennack sands, 2005, ECMH.
SW72 Rosemullion Head, 1989, SJG. Maenporth, 2004, KP-M.
SW73 Mylor, 2003, PAG.
SW74 United Downs, 1998, ECMH; 2001, PAG. Bissoe Valley, 2000, PAG. Chacewater, 2002, PAG. Carnon Valley, 2004, PAG.
SW75 Ventongimps Moor, 1997, Spalding & Haes (2000). Holywell, 2005, ECMH.
SW76 Rushy Green, Crantock, 2000, GA Collins & ECM Haes.
SW81 Lowland Point, 1997, PAG.
SW83 Trelissick, 1989, KNAA. Pennance Point, 1995 & Killigerran Head, 1996, PAG.

- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
 SW87 Park Head, 1996, ECMH.
 SW96 Rosenannon Bog & Downs, 1997, Spalding & Haes (2000).
 SX05 Wheal Martin, 1992, MD Bradford.
 SX06 Bugle, 1981, APF. Retire Common, 1997, Spalding & Haes (2000). Breney Common, 2000, KNAA. Lanhydrock Great Wood, 2001, ECMH.
 SX08 Port Gaverne, 1992, M Lee. Dannonchapel & Tregardock, 1995, AS & ECMH. Trebarwith Strand, 2001, PAG.
 SX09 Trevalga, 2001, PAG.
 SX15 Boconnoc Park, 1989, 1990; Churchtown Farm, Lanteglos, 1990, KNAA. Hay Point & Lombard Farm, Penpoll Creek, 2000, GA Collins.
 SX16 Glynn Valley, 1989, AS. Cross park, Cardinham, 13.i.2004, B. Bullion, det. N Harrison-White.
 SX25 Penzephyr, 1985, AS. Struddicks, St Martin, 1999, AS & ECMH.
 SX26 Draynes Wood, 1985, KNAA.
 SX44 Penlee Point, 1998 & Rame Head, 2000, PAG.
 SX47 Bithams Wood, Chislworthy, 1989, MGC Atkinson. Clitters Mine, Gunnislake, 1998, AS.
 SS21 Coombe Valley, 2005, KP-M.

Elasmotherus interstinctus (L.) - Birch Shieldbug. **County Scarce.**

Widespread nationally; feeding principally on birch, but also reported from hazel and aspen; overwinter in adult stage. Recorded from the county in Clark (1906), with no details, and only few reports since then. Its status in the county remains enigmatic.

- SW64 Duchy College, Rosewarne, small numbers on stand of exotic alders, 25.ix.2004, KNAA. Red River Trail near Menadarva, on birch, 2004, PAG.
 SW74 Bissoe Valley, 26.ix.1999, PAG.
 SX06 Bodmin, in garden, KP-M (pc 2003).
 SX16 Glynn Valley, 24.ix.1972, VS & JA Paton. Bodmin Parkway, 4.vii.2004, & Redrice Wood, 31.vii.2004, KP-M.

Elasmotherus tristriatus (Fabricius) - Juniper Shieldbug. **Naturalised Introduction.**

Feeds on ripe juniper berries in native situations but also occurs on fruiting Lawson's cypress; widespread across southern Britain, having expanded with the widespread use of the cypress host for hedging. Only reported from gardens in county and presumably introduced incidentally with shrubs, etc.

- SW53 Angarrack, in garden, 1991, 1993, 1994, 2004 & 2005, ECMH.
 SW71 Croft Pascoe Plantation, Goonhilly Downs, 30-40 on Lawson's cypress, 17.x.2004, PAG.
 SW74 Two Burrows, Allet, x.2004, S Scott.
 SX06 Bodmin, garden, 1999-2003, KP-M..
 SX38 Launceston, one in house, 25.xii.2006, I McClenaghan.

Elasmucha grisea (L.) - Parent bug. **County Scarce.**

Common and widespread nationally on birch. Reported from the county in Clark (1906) with no details, and notably few records since.

- SW64 Red River Trail near Menadarva, on birch, 2004, PAG. Duchy College, Rosewarne, in gardens, 9.ix.2006, KNAA.
 SX06 Bodmin, in garden, KP-M (pc 2003). Breney, 2.vi.2004; Dunmere Wood, 8.vi.2004, KP-M.
 SX16 Glynn Valley, 24.ix.1972, VS & JA Paton. Bodmin Parkway, 4.vii.2004, KP-M.
 SX37 Tregonnett Wood, Kerney Bridge, South Hill, 30.v.2006, KNAA.
 SX39 Bridgetown, 19.vii.2004, KP-M.
 SX45 Millbrook, 2005, KP-M.
 SX47 Clitters Mine, Gunnislake, 14.viii.1998, AS.

Suborder HOMOPTERA
Series AUCHENORHYNCHA

Super-family CICADOMORPHA
Family CERCOPIIDAE Froghoppers
Cercopis vulnerata Illiger

Larvae develop underground, gregariously, in a mass of solidified froth. Usually in or near woods. Widespread in England, although somewhat localised. Only listed for Calstock in Clark (1906) and no records west of Dorset in Edwards (1896). KNAA found none in West Cornwall in 1979; the Auchenorrhyncha Recording Scheme has relatively recent records right across Devon and extending well into East Cornwall, suggesting a westwards spread dating from the 1970s.

- SW96 Demelza, 1978, IJ Bennallick.
SW97 Downhedge Cove, Pentire Head, amongst tall herbs in damp hollow, 22.v.1990, KNAA.
SX05 Bugle, 1981, APF. Treffry Viaduct to Pont's Mill, 18.v.1988, SMT.
SX06 East Hill, Dunmere, 1978, CA Brind. Bugle, 1981, APF.
SX07 Tresarret Bridge, 1970, WE Almond. Hellandbridge, 1984, SMT.
SX08 Dannonchapel Valley, 2.vi.2000, KNAA.
SX17 Wilsey Down Plantation, 8.vi.1975, JA Paton.
SX18 Post-1969, Auchenorrhyncha Recording Scheme Newsletter No.7 (1986).
SX19 Valency Valley, 1970, WE Almond. St Gennys, 24.vi.1973, JA Paton. Crackington Haven, 1970, WE Almond. Millook Valley, 29.v.2000, KNAA.
SX29 Whitstone, 4.vi.1975, JA Paton.
SX46 Calstock (Clark, 1906). Cotehele, 19.vi.1989, SJG.
SS20 Post-1969, Auchenorrhyncha Recording Scheme Newsletter No.7 (1986).
SS21 Welcome & Marsland Reserve, 1970, BSBI. Stowe Wood, 12.vi.2005, PAG.

Aphrophoraalni (Fallén)

Adults widespread on broadleaved trees and shrubs.

- SW42 Sancreed Beacon, 18.vii.1998, AS & ECMH.
SW53 Carbis Bay & Lelant, AT (1934). Angarrack, 1989-95, ECMH. Phillack Towans, 1998 & 2004, ECM Haes. Mexico Towans, 2000, ECMH. Steeple Wood & Trelyon Downs, 21.vii.1998, AS & ECMH.
SW54 Upton Towans, 1998 & 2004, ECMH.
SW61 Clahar Bridge, 1981, DS. Predannack Wollas, 1988, E & BE Jackson.
SW62 Penrose Estate, 6.vi.1989, KNAA. Mullion Golf Course, 2000, GA Collins & ECMH.
SW72 Frenchman's Creek, 31.v.1989, KNAA.
SW75 Ventongimps Moor, 1997, Spalding & Haes (2000). Cubert Common, 9.viii.2006, KNAA.
SW76 Porth Joke valley, on sallows, 31.viii.2006, KNAA.
SW83 St Just in Roseland, 29.vi.1989, KNAA.
SW84 Truro district, AT (1934). Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
SW86 Tregunnel Saltings, 2000, ECMH & GAC.
SW87 Park Head, 1996, ECMH.
SW95 Crowhill Valley, Trenowth, 12.vii.2001, KNAA.
SW96 Rosenannon Bog & Downs, 1997, Spalding & Haes (2000).
SX06 Lanhydrock, 26.vi.1989, KNAA. Retire Common, 1997, Spalding & Haes (2000).
SX08 Dannonchapel & Tregardock, 1995, AS & ECMH. Dannonchapel Valley, 2.vi.2000, KNAA. Prince of Wales Quarry, 17.viii.1995, ECMH.
SX15 Lantivet Bay, 31.vii.1979, G Bathe. Penpoll Creek, 19.viii.2002, KNAA. Carne Farm, Penpoll, 19.vii.2002, JF.
SX17 South Penquite Farm, Blisland, 25.viii.2005, KNAA.
SX19 Valency Valley, 12.vii.2001, K Merrifield.
SX25 Struddicks, St Martin, 1999, AS & ECMH.
SX28 Innside woodland, Penheale, 10.vii.2001, KNAA.

- SX36 Cadsonbury, 22.vi.1989, KNAA.
 SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
 SX46 Cotehele, Calstock, 19.vi.1989 & 17.vii.2006; Haye Farm, St Dominick, 19.vii.2006, KNAA.
 SS20 Maer Cliff, 1979, GB.
 SS21 Kilkhampton Castle, 6.vii.1989, KNAA.

Aphrophora costalis Matsumura syn. *Aphrophora forneri* syn. *Aphrophora maculata* Edw. **Locally Extinct.**
 On *Salix* spp; local.

- SX08 St Teath, 1.ix.1919, GEH.

Philaenus spumarius (L.)

The very common and widespread meadow spittlebug. Common in great variety in all districts (AT, 1934). Virtually ubiquitous in county.

- SV80 Rosvean, KGB & F Jenkinson. St Agnes & Gugh, 1989, PM Brakefield.
 SV81 Tresco, viii.1878, F Norgate (1880); KGB & F Jenkinson; 1925-27, OWR; 1989, PM Brakefield. Bryher, Samson & White Island, 1989, PM Brakefield.
 SV91 St Mary's, KGB & F Jenkinson; 1989, PM Brakefield. Foreman's Island, Great & Little Ganilly, Great & Little Innisvouls, Little Arthur, Great Arthur, Great & Little Ganinick, Menawethan, Newford Island, Nornour, Peashopper Island, Ragged Island, St Helen's, St Martin's, Taylor's Island, Tean, Toll's Island, Trenoweth, 1989, PM Brakefield.
 SW32 Nanjulian, viii.1993, AS. Rospannel Farm, Crows-an-Wra, 2003, GBH.
 SW33 St Just, 1972, JA Paton. Bollowall Common, viii.1993, A Spalding. Kenidjack, 1995, AS & ECMH
 SW42 Chyenthal Moor, 1968, SMT. Trewoofe Woods, 1989, M & A Common. Carn Euny, 1992, E Jackson. Sancreed Beacon, 18.vii.1998, AS & ECMH.
 SW43 Trevean Cliff, 1993. Mounts Bay School, 1994. Watchcroft, 1980; 1994, AS & ECMH. Foage Farm, Zennor, 2006, KNAA.
 SW53 Tremelling Wood, 1977, SMT. Phillack Towans, 1979; 1998, ECM Haes. Angarrack, 1988-92; Loggans Moor, 1994-5; Mexico Towans, 2000; Steeple Wood & Trelyon Downs, 21.vii.1998, ECMH. St Erth Pools, 1987, SMT.
 SW54 Gwithian, 1981, APF. Upton Towans, 1998, ECMH.
 SW61 Caerthillian Cove & Mullion Cliff, 1970, MGM. Clahar Bridge; Mullion; Predannack, 1980/81, DS. Hayle Kimbro Pool, 1983, E Jackson. Predannack Cliff, 19.ix.1998, PJH. Kynance Cove, 1970, MGM; 1998, PJH. Lizard Point, 25.ix.1998, PJH.
 SW62 Chyvarloe Cliffs, 1970, MGM. Goonhilly NNR, 1976, SMT. Gunwalloe, 1970, MGM; 1989, KNAA. Mullion Golf Course, 2000, GA Collins & ECMH.
 SW64 Quarry Pool, 1977; Roscroghan, 1989, E Jackson. Tywarnhale Mine, 1999, AS & ECMH. Western Hill, 1999, AS & ECMH.
 SW71 Poltesco Cove, 12.vi.1983, BE Jackson. Crousa Downs; Erisey Barton; Golgotham; Gwendreath; Main Dale; 1980/81; Brays Cott Pool & Croft Pascoe, 1981, DAS. Cadgwith South & Poltesco East, 20.ix.1998; Chynhalls Cliff & Point, 21.ix.1998, PJH.
 SW72 Rosemullion Head, 1974, APF. Goonhilly & Trevassack, 1980, DAS. Trebah, 1991; Manaccan, 1994, E Jackson.
 SW73 Kennall Valley, 1896, FH Davey. Devoran, 1979, SMT. Penryn, 1986, BE Jackson. Swanpool, 1987, E Jackson.
 SW74 Carn Marth, 1987, E Jackson. Chacewater, 1989, 1994, E Jackson. United Downs, v.1998, AS & ECMH. Tywarnhale Mine, 1999, AS & ECMH.
 SW75 Cubert Common, 6.viii.1979, WAE; 2006, KNAA. Carnkief Pool, 1980; St Agnes Head, 1980; Cligga Head, 1981; Carn Moor, 1986; Perranwell, 1992, E Jackson. Ventongimps Moor, 1997, Spalding & Haes (2000).
 SW76 Crantock Beach, 1979, WAE. Cubert, 1980, 1983, WA Ely. Porth Joke, Crantock, 2006, KNAA. West Pentire Farm, Crantock, 2006, KNAA.
 SW83 Devoran, 1979, SMT. St Just in Roseland, scrubby grassland, 29.vi.1989, KNAA. Porthcurnick, 20.viii.2002, KNAA.

- SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
- SW85 Trerice, 8.viii.1979, WAE. Newlyn Downs, 1997, Spalding & Haes (2000).
- SW86 St Colan Churchyard, 1991, HM Meredith. Gannel Estuary, 1983, MJ Morgan. Tregunnel Saltings, 2000, ECMH & GAC.
- SW87 Park Head, 1992; 1996, ECMH.
- SW93 Nare Head, 4.vii.1989, KNAA.
- SW96 St Wenn, 1982, SMT. Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
- SW97 Pentireglaze, St Minver Highlands, 2.viii.2006, KNAA.
- SW98 Kellan Head, 1999, AS & ECMH. Port Quin, 2006, KNAA.
- SX03 Dodman, 28.vi.1989, KNAA.
- SX05 Wheal Martin, 1991, MD Bradford. Polmark Park, St Austell, viii.2000, AS & ECMH.
- SX06 East Hill, Dunmere, 1978, CA Brind. Bugle, 1981, APF. Bodmin Beacon, 1995, ECMH. Retire Common, 1997, Spalding & Haes (2000); 2001, KNAA..
- SX08 Tintagel, 1908, EAB; 1989, KNAA. Tregragon valley, 1992, SJ Ford. Port Gaverne, 1993, ECMH. Dannonchapel & Tregardock, 1995, AS & ECMH. Trewarmett, 1995. Bossiney Cliffs, 2002, KNAA.
- SX15 Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000). Carne Farm, Lanteglos, 19.vii.2002, JF; 26.viii.2006, KNAA. Lansallos East Coombe, 22.viii.2006, KNAA.
- SX16 Cabilla Wood, 1988, AS.
- SX17 Glynn Valley, 1988, AS. South Penquite Farm, 23.viii.2005, KNAA.
- SX18 Rough Tor, 1992; 1996, ECMH.
- SX19 St Gennys, 1973. Crackington; Pentargon Cliff; Chipman Valley, Dizzard, 1989, KNAA. Valency Valley, 12.vii.2001, KM.
- SX25 Polperro to Talland, vii.1979, BJ Lempke (1980). Struddicks, St Martin, 1999, AS & ECMH.
- SX26 Menheniot, 1992, J Gendall.
- SX28 Laneast Downs, 1994, ECMH.
- SX36 Cadsonbury Camp, 1979, KNAA.
- SX37 Luckett, 1985, E Jackson. Windsor Lane, Kelly Bray, 12.viii.1998, AS & ECMH.
- SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
- SX46 Landulph, 1941, JH Adams. Cotehele, 19.vi.1989, KNAA. Bohetherick, St Dominick, weedy grassland, 19.vii.2006, KNAA.
- SX47 Clitters Mine, Gunnislake, 14.viii.1998, AS.
- SS20 Maer Cliff, 1979, GB. Bude Marshes, 1983, P Truscott. Northcott Mouth, 12.vii.1989, KNAA. Sandy Mouth, cliffs to south, 12.vii.2006, KNAA.
- SS21 Coombe Valley & Kilkhampton Castle, 6.vii.1989; Morwenstow, 12.vii.1989, KNAA. Stowe Barton Farm, 2006, KNAA.

Neophilaenus campestris (Fallén)

Locally abundant on low plants in dry places.

- SW52 Rosudgeon, ix.1931, WE China.
- SW61 The Lizard, CW Dale (Edwards 1896). Mullion & Predannack, 6.vii.1981, DAS.
- SW62 Loe Bar, 19.vi.1979, KNAA.
- SW71 Brays Cott Pool, 29.vii.1981, DAS.
- SW72 Goonhilly, 19.ix.1980, DAS.
- SX04 Kings Wood, Pentewan, 10.vii.2001, KM.
- SX19 Valency Valley, 12.vii.2001, KM.
- SS21 Duckpool to Sandymouth, 13.viii.1979, GB.

Neophilaenus lineatus (L.)

More frequent in tall damper grasslands, but still very common.

- SV91 St Mary's, 1927, OWR.
- SW33 Portheras Cove, viii.1932, WEC. Pendeen Old Cliff, 21.viii.2002, KNAA.
- SW42 Sancreed Beacon, 1998, AS & ECMH.

- SW43 Foage Farm, Zennor, 8.viii.2006, KNAA.
 SW52 Prussia Cove, viii.1931, WE China.
 SW53 Carbis Bay & Lelant, AT (1934). Loggans Moor, 1994, 2004 & 2005; Steeple Wood & Trelyon Downs, 1998, ECMH.
 SW54 St Ives, AT (1934). Gwithian, 1967, RTB. Upton Towans, 1998, 2004 & 2005 ECMH.
 SW61 Caerthillian Cove & Kynance, 1970, MGM. Clahar Bridge, 1980 & 1981; Mullion, 1980/81; Predannack, 1980/81, DAS. Kynance Cove, 1998, PJH.
 SW62 Gunwalloe Towans & Chyvarloe Cliffs, 1970, MGM. Mullion Golf Course, 2000, GA Collins & ECMH.
 SW64 Chapel Porth, AT (1934).
 SW71 Goonhilly Downs, AT (1934). Croft Pascoe Pool, 1980; Crousa Downs, 1980/81; Erisey Barton, 1980/81; Golgotham, 1980 & 1981; Gwendreath; Main Dale, 1980/81; 1980/81, DAS.
 SW72 Goonhilly & Trevassack, 1981, DAS.
 SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
 SW76 Crantock Beach, 6-8.viii.1979, WAE.
 SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
 SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
 SX06 Retire Common, 1997, Spalding & Haes (2000); 2001, KNAA.
 SX08 Tintagel, 1989, SJG. Dannonchapel & Tregardock, 1995, AS & ECMH.
 SX15 Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000).
 SX17 South Penquite Farm, 23.viii.2005, KNAA.
 SX18 Rough Tor, 16.vii.1996, ECMH.
 SX19 Cambeak, Crackington, 11.vii.1989, KNAA.
 SX28 Laneast Downs, 1994, ECMH.
 SX46 Haye Farm, St Dominick, 19.vii.2006, KNAA.
 SX47 Clitters Mine, Gunnislake, 14.viii.1998, AS.
 SS20 Bude, CW Dale (Edwards, 1896).
 SS21 Duckpool to Sandy Mouth, 1979, GB.

Family MEMBRACIDAE Treehoppers

Centrotus cornutus (L.) – **County Scarce**.

Widespread nationally in wooded or shrubby situations; polyphagous on broadleaved herbs, brambles and saplings of woody plants. Cornwall (Clark, 1906) but clearly very localised.

- SW62 Helston, two, 10.17.vi.1926, AT.
 SW72 Frenchman's Creek, on broom, 31.v.1989, KNAA.
 SW95 Crowhill Valley, Trenowth, one on broom, 12.vii.2001, KNAA.
 SX06 East Hill, Dunmere, 1978, CA Brind.
 SX19 Millook Valley, 29.v.2000, KNAA.
 SX25 Struddicks, St Martin, 1999, AS & ECMH.

Family CICADELLIDAE Leafhoppers

Ulopa reticulata (Fabricius)

A common and widespread species on *Erica* and *Calluna*.

- SW32 Lands End, CW Dale (Edwards, 1896). Mayon Cliff, 2.v.2000. KNAA.
 SW33 Kenidjack, 1995, AS & ECMH; 13.v.1996, KNAA. Boscawell Cliff, 20.viii.2002, KNAA.
 SW43 Gurnards Head, 9.iv.1926, AT; 18.v.1989, KNAA. Bosigran, 16.v.1989, 6.v.1999, 1.v.2000; Boswednack, 22.v.1989, KNAA. Rosewall Hill, 5.vi.2000, KNAA.
 SW44 Treveal, 23.v.1989; Trevega Cliff, 18.v.1994, KNAA.
 SW52 Rosudgeon, ix.1931, WEC.
 SW53 Carbis Bay, 19.iv.1929, AT.
 SW54 Upton Towans, in heather at cliff edge, 2005, ECMH.

- SW61 Mullion, 1981, DAS. Lower Predannack Cliff, 14.vi.1989, KNAA.
 SW64 Chapel Porth, 6.vi.1979, KNAA.
 SW71 Crousa Downs, 1981; Gwendreath, 1981; Main Dale, 1980, DAS. Coverack East Cliffs, 18.iv.1998, KNAA.
 SW72 Goonhilly & Trevassack, 1981, DAS.
 SW74 Chapel Porth, 23.v.1990, KNAA.
 SW75 Ventongimps Moor, 1997, Spalding & Haes (2000). Cligga Head, 4.v.2001, KNAA. Penhale Sands, on *Erica* spp and *Calluna*, 2001 & 2003, ECMH.
 SW85 Penhallow Moor, 3.vii.1983, KNAA. Newlyn Downs, 1997, Spalding & Haes (2000).
 SW96 Tregoss Moor, 1997, Spalding & Haes (2000).
 SX06 Walter's Plantation, Lanhydrock, 26.vi.1989, KNAA. Retire Common, 1997, Spalding & Haes (2000).
 SX15 Redlake Meadows & Hogg's Moor, 1997, Spalding & Haes (2000).
 SX19 Bray's Point, Crackington, 11.vii; Pentargon Cliff, 12.vii.1989; Chipman Point, 13.vii.1989, KNAA.
 SX28 Laneast Downs, 1994, ECMH.
 SX47 Clitters Wood, Gunnislake, 29.ix.2004, KNAA.
 SS21 Morwenstow, 12.vii.1989, KNAA.

Ulopa trivia Germar – **Nationally Scarce & County Rare.**

A scarce, largely south-eastern, species associated with calcareous grasslands, possibly feeding on *Plantago lanceolata* and other herbs. Discovered on the Lizard by MG Morris in 1967 during a Nature Conservancy survey.

- SW61 Caerthillian, on medium slope with SSE aspect, 21.vii.1967 & 21.vii.1970, MGM (1972). Kynance Cove, 27.x.1997, PJH.

Megophthalmus scabripennis Edwards

Among grasses, often in sandy places.

- SW32 Logan Rock, 28.x.1997, PJH.
 SW42 Lamorna Cove, 28.x.1997, PJH.
 SW52 Rinsey Head, 26.x.1997, PJH.
 SW54 Godrevy Towans, 3.vii.1983, MJ Morgan.
 SW61 Mullion Cliff, 20.vii.1970, MGM; 23.ix.1980 & 1981, DAS. Caerthillian Cove, 21.vii.1970, MGM. Kynance Cove, 21.vii.1970, MGM; 27.x.1997, PJH. Predannack, 9.vi. & 30.viii.1981, DAS; Predannack North Cliff, 19.ix.1998, PJH.
 SW62 Chyvarloe Cliffs, 20.vii.1970, MGM. Jangye-ryn, 26.x.1997, PJH.
 SW71 Kildown, 20.ix.1998, PJH.
 SW72 Trevassack, 1.viii.1981, DAS.
 SX05 Dryers Pit & Molinnis, Roche CP, 2005, JD.
 SX06 Lockengate, Luxulyan CP, 2005, JD.

Megophthalmus scanicus (Fallén)

Widely distributed and common nationally, at the roots of low plants. Cornwall (Clark, 1906).

- SV81 Illiswilisig, OJS Moore. Tresco, 1927, OWR.
 SV91 St Mary's, Great Innisvovls, 1927, OWR.
 SW33 Portheras Cove, viii.1932, WEC.
 SW53 Carbis Bay, vii.1932, AT.
 SW61 Mullion, 4.vii.1981, DAS. Lower Predannack Cliff, 7.vi.2000, KNAA.
 SW62 Gunwalloe Towans, 20.vii.1970, MGM.
 SW87 St Merryn, vi.1915, KGB.

Ledra aurita (L.) – **County Rare.**

On lichen-covered branches of mature oak trees in ancient woods and wood pastures. Mainly southern Britain, with most records from the south-east.

- SW84 Bishop's Wood, Truro (Clark, 1906). Pencallenick, nymph, 7.vii.1983, K. Merrifield.
 SX19 Bynorth Cliff, East Dizzard, advanced nymph, 8.vi.2000, KNAA.
 SX26 Liskeard (Clark, 1906).

SX38 Launceston (Clark, 1906).

Cicadella viridis (L.)

Almost ubiquitous and very abundant in damp rushy places; oviposits in *Juncus* spp. Cornwall (Clark, 1906).

SW42 Dorminack, Lamorna, 17.ix.1982, SMT.

SW43 Watchcroft, 1993, AS & ECMH. Skimmel Bridge, Sancreed, 1994, F Potts. Foage Farm, Zennor, 8.viii.2006, KNAA.

SW53 St Erth & Trencrom, AT (1934). Marazion Marsh, 1990, DS Flumm. Loggans Moor, 1994-5 & 2004/5, ECMH.

SW54 St Ives, AT (1934). Upton Towans, 1998 & 2004, ECMH.

SW61 Clahar Bridge, 1980, DAS. Hayle Kimbro Pool, 1983, SP Jones.

SW63 Porkellis Moor, 1974, 1977, JA Paton.

SW64 Brea, Red River Valley, 1983; Roscroghan, 1989, SP Jones.

SW71 Erisey Barton, 1980, DAS.

SW72 Lestowder Farm, 1994, E Jackson.

SW73 Tregoniggle, Penryn, 1986. Stithians Reservoir, 1987-8, JE Millett.

SW75 Chyverton, 1978-80. Carn Moor, 1986. Perranwell, 1992. Ventongimps Moor, 1981; 1997, Spalding & Haes (2000).

SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).

SW85 Newlyn Downs, 1997, Spalding & Haes (2000).

SW87 Park Head, 1996, ECMH.

SW96 Rosenannon Bog & Downs, 1997, Spalding & Haes (2000).

SX05 Wheal Martyn, 1991, MD Brodick. Molinnis, Roche CP, 2005, JD.

SX06 Respryn Bridge, Lanhydrock, 6.viii.1979, KNAA. Bugle, 1981, APF. Retire Common, 1997, Spalding & Haes (2000). Lockengate, Luxulyan CP, 2005, JD.

SX08 Tintagel, viii.1908, EA Butler. Port Gaverne, 1992. Dannonchapel & Tregardock, 1995, AS & ECMH.

SX15 Lerryn Creek, 8.viii.1979, KNAA. Lansallos Farm, 22.viii.2006, KNAA.

SX17 South Penquite Farm, 23.viii.2005, KNAA.

SX19 Dizzard, 26.vii.1979, GB; 10.vii.1985, SM Turk et al.

SX28 Laneast Downs, 1994, ECMH.

SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.

SX35 Erth Barton, 15.viii.1979, KNAA.

SX38 Beales Meadows Reserve, viii.1998, DM/IK.

SX39 Boyton, 1972, JA Paton.

SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.

SX46 Cotehele Estate, Calstock, vii.2006; Haye Farm, St Dominick, 19.vii.2006, KNAA.

SS21 Kilkhampton Castle, 6.vii.1989, KNAA.

Graphocephala fennahi Young, syn. *Graphocephala coccinea* (Forster)

This introduction has spread widely on its foodplant, rhododendron, although still very localised in Cornwall.

SW53 Wyevale Nursery, two adults, 11.viii.2004, but none in 2005, ECMH.

SW72 Trelowarren Estate, 20.x.2004, PAG.

SW73 Pelere Woods, near Mylor, large numbers on young rhododendron, 24.x.2004, PAG.

SW74 United Downs, 1995?, A Spalding.

SW75 Chyverton Wood, 18.x.1980, SMT.

SX06 Respryn Bridge, Lanhydrock, 6.viii.1979, KNAA.

SX16 Lanhydrock Estate, 14.viii.2006, PAG.

Evacanthus acuminatus (Fabricius)

Grassy places. Common nationally.

SW52 Rosudgeon, ix.1931; Prussia Cove, ix.1931, WEC.

SW53 Carbis Bay, viii.1929, AT.

Evacanthus interruptus (L.)

Widespread in tall grassy or shrubby places, especially where marshy. Cornwall (Clark, 1906).

- SW53 Carbis Bay, vii.1932, AT. Loggans Moor, 1994, 2004 & 2005, ECMH. Phillack Towans, 1998, ECMH.
- SW54 Upton Towans, 1998-2005, ECMH.
- SW61 Mullion, 1981, DAS. Kynance Cove, 22.ix.1998, PJH.
- SW71 Erisey Barton, 1981; Main Dale, 1981; DAS.
- SW75 Ventongimps Moor, 1997, Spalding & Haes (2000). Cubert Common, 9.viii.2006, KNAA.
- SW83 St Just in Roseland, 29.vi.1989; Treluggan Cliff, 5.vii.1989, 11.vii.2001; Porthcurnick, 20.viii.2002, KNAA.
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW93 Pendower Beach, 1983, J Morgan. Nare Head, 4.vii.1989, KNAA. The Straythe, Caragloose, 11.vii.2001, KNAA.
- SW96 Rosenannon Bog & Downs; Tregoss Moor; 1997, Spalding & Haes (2000).
- SX06 Bodmin Beacon, 1995. Retire Common, 1997, Spalding & Haes (2000).
- SX08 Tintagel, 1989. Dannonchapel & Tregardock, 1995, AS & ECMH.
- SX09 Boscastle, 1979, GB.
- SX18 Rough Tor, 16.vii.1996, ECMH.
- SX19 The Dizzard, 1979, GB; 1985, SM Turk et al. Cambeak, Crackington, 11.vii.1989; Chipman Valley, Dizzard, 13.vii.1989, KNAA.
- SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.
- SX46 Comfort Wood, Cotehele, 20.vii.2006, KNAA.
- SS21 Duckpool to Sandymouth, 1979, GB. Morwenstow, 12.vii.1989, KNAA.

Idiocerus albicans Kirschbaum

Feeds on *Populus*. Cornwall (Clark, 1906).

Idiocerus confusus Flor

On sallows; common nationally.

- SW71 Crousa Downs, 5.viii.1980; Erisey Barton, 21.ix.1980; Golgotham, 20.ix.1980; Main Dale, 23.ix.1980; DAS.
- SW72 Goonhilly, 1980/81, DAS.

Idiocerus laminatus Flor

Locally common on *Populus alba* and *P. canescens*. Cornwall (Clark, 1906); not native in county.

Idiocerus lituratus (Fallén)

Common nationally on *Salix* species. Cornwall (Clark, 1906).

- SW71 Golgotham, 20.ix.1980, DAS.

Idiocerus populi (L.)

Not uncommon nationally; on aspen and other *Populus*. Cornwall (Clark, 1906).

Idiocerus similis Kirschbaum

Locally common on *Salix* across southern and eastern Britain. Cornwall (Clark, 1906).

Idiocerus vittifrons Kirschbaum

On maple; local, southern and eastern Britain.

- SW71 Erisey Barton, 2.viii.1981, DAS.
- SW73 Penryn (Clark, 1906).

Iassus lanio (L.)

Common nationally on foliage of oaks and very distinctive. Cornwall (Clark, 1906) but apparently rather under-recorded.

- SW84 Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
- SX05 East Hill, Dunmere, 1978, CA Brind.
- SX06 Bugle, 1981, APF.
- SX15 Ethy Woods, 13.vii.2001, KNAA.
- SX17 South Penquite Farm, 23.viii.2005, KNAA.
- SX19 Dizzard Oakwood, 13.vii.1989; Millook Valley, 10.vii.2001, KNAA.
- SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.

- SX46 Cotehele Estate, Calstock, widely, vii.2006, KNAA.
- Oncopsis alni* (Schrank)
Widespread on alder nationally. Cornwall (Clark, 1906).
- Oncopsis flavicollis* (L.)
Common and widespread nationally on birch. Three species are believed to have been confounded under this name (Le Quesne, 1985). Cornwall (Clark, 1906).
SW61 Predannack, 30.vii.1981, DAS.
SX06 Red Moor, 8.vii.2001, KNAA.
SX19 Bynorth Cliff, 8.vi.2000, KNAA.
- Oncopsis tristis* (Zetterstedt) syn. *Oncopsis rufusculus* Fieber
On birch. Cornwall & Scilly (Clark, 1906).
SW71 Crousa Downs, 27.vii.1981, DAS.
SW72 Goonhilly, 1.viii.1981, DAS.
- Macropsis cerea* (Germar)
On sallows and purple osier. Widespread nationally.
SW72 Goonhilly, 2.viii.1980, DAS.
- Macropsis fuscula* (Zetterstedt) syn. *Macropsis rubi*
On *Rubus*. Widespread nationally.
SX08 Tintagel, viii.1908, EAB.
- Macropsis impura* (Boheman)
Not uncommon nationally on *Salix repens* (Edwards, 1896).
SW61 Predannack, 3.viii.1981, DAS. Mullion Cliff, a probable in malaise trap, 27.vii.-5.viii.1981, DAS.
SW72 Goonhilly, 1.viii.1981, DAS.
- Macropsis marginata* (Herrich-Schäffer)
On *Salix purpurea*.
SW72 Goonhilly, 2.viii.1981, DAS.
- Macropsis prasina* (Boheman) syn. *Macropsis virescens* Fabricius
On sallows, widely across lowland England. Cornwall (Clark, 1906).
SW72 Goonhilly, 2.vii.1981, DAS.
- Macropsis scutellata* (Boheman) syn. *Macropsis tibialis* Scott
On nettles. Cornwall (Clark, 1906).
SW62 Mullion Golf Course, 2000, GA Collins & ECMH.
SW73 Penryn (Clark, 1906).
- Austroagallia sinuata* (Mulsant & Rey) – **Red Data Book Category K (Insufficiently Known)**.
Sole UK record. In the Channel Isles it is ground-dwelling on dunes.
SW71 Lizard district, one off pellitory of the wall, 1896, CW Dale (Edwards, 1896).
- Agallia brachyptera* (Boheman) – **Nationally Scarce**.
Predominantly eastern in Britain – Kirby (1992) lists records from Northumberland to Suffolk, and west to Dorset, but strangely omits Cornwall. Most records are from low or sparse vegetation on dry, often calcareous soils; also in marshy places. Ground dwelling; feeds on *Rumex acetosella*, *Trifolium repens*, *Taraxacum* and *Achillea millefolium*.
SW71 Erisey Barton, 21.ix.1980, DAS.
- Agallia consobrina* Curtis syn. *Agallia puncticeps*
Common among low plants.
SW32 Lands End district, CW Dale (1896).
SW71 Chynhalls South Cliff, 21.ix.1998, PJH.
SW84 Calenick, viii.1932, AT.
SX08 Tintagel, viii.1908, EAB.
- Agallia laevis* Ribaut
Mainly known from maritime grasslands nationally, including sand dunes.
SW54 Upton Towans, 1998, ECMH.
SW61 Caerthillian, 21.vii.1967, MGM (1972). Kynance Cove, 21.vii.1967, 2.ix.1970, MGM.

Agallia venosa (Fallén)

On grass in dry places. Very common at roots of grass, etc.

- SV91 St Mary's, 1927, OWR.
- SW32 Lands End district, CW Dale (1896).
- SW52 Rinsey Head, 26.x.1997, PJH.
- SW61 Caerthillian, 21.vii.1967, MGM. Mullion, vii.-viii.1981, DAS.
- SW62 Chyvarloe Cliffs, 20.vii.1967, MGM. Jangye-ryn, 26.x.1997, PJH.

Eupelix cuspidata (Fabricius)

On grasses, dry places. Not uncommon at the roots of low plants. Cornwall (Clark, 1906); a distinctive species and so well-recorded.

- SW32 Logan Rock, 25.v.1999, PJH.
- SW33 Kenidjack, 1995, AS & ECMH.
- SW42 Lamorna Cove, 28.x.1997, PJH.
- SW43 Carn Gloose, Treen, 3.v.1999, KNAA.
- SW52 Cudden Point, 26.x.1997, PJH. Rinsey Head, 26.x.1997, 24.v.1999, PJH.
- SW53 Phillack Towans, 1998, 2004 & 2005, ECMH.
- SW54 Upton Towans, 2004 & 2005, ECMH.
- SW61 Caerthillian Cove, 21.vii.1970, MGM. Clahar Bridge, 1980; Mullion, 1981; & Predannack; 1981, DAS. Kynance Cove, 27.x.1997, PJH.
- SW62 Chyvarloe Cliffs, 20.vii.1970, MGM.
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
- SW87 Park Head, 1996, ECMH.
- SW96 Tregoss Moor, 1997, Spalding & Haes (2000).
- SX05 Dryers Pit, Roche CP, 2005, JD.
- SX06 Lockengate, Luxulyan CP, 2005, JD.

Aphrodes albifrons (L.)

Common on grasses, usually near ground level. Common at roots of low plants. Clark (1906).

- SV81 Tresco, by sweeping grasses on consolidated dunes, vi.1966, GE Woodroffe (1967).
- SW32 Chapel Carn Brea, 7.vi.2000, KNAA.
- SW33 Portheras Cove, viii.1932, WEC.
- SW43 Rosewall Hill, 5.vi.2000, KNAA.
- SW52 Prussia Cove, viii.1931, WEC.
- SW53 Carbis Bay, vi.1932, AT.
- SW61 Mullion Cliff, 20.vii.1970, MGM. Caerthillian Cove, 21.vii.1970, MGM. Clahar Bridge, vii.1980; Mullion, vi.1981; Mullion Quarry, 6.vii.1981; Predannack, 30.vii.1981, 7.viii.1981, DAS.
- SW62 Gunwalloe Towans, 20.vii.1970, MGM. Chyvarloe Cliffs, 2.ix.1970, MGM.
- SW71 Gwendreath, vi.1981; Main Dale, 3.vii.1981, DAS.
- SW75 Cubert Common, 6.viii.1979, WAE.
- SW76 Cubert, 1983, WAE.
- SW86 The Gannel, 4.vii.1983, MJM.
- SX08 Tintagel, viii.1908, EAB.

Aphrodes bifasciatus (L.)

Occurs in two forms, one on dry hillsides, the other in marshy habitats. At roots of low plants, not very common.

- SW54 Upton Towans, 1998, John Paul; by stream, vii.2004, ECMH.
- SW61 Predannack, 21.ix.1981, DAS.
- SW83 Falmouth (Clark, 1906).
- SW85 Newlyn Downs, 1997, Spalding & Haes (2000).

Aphrodes flavostriatus (Donovan)

On grasses in damp places. Very common nationally, amongst low plants, especially in damp places. Cornwall (Clark, 1906)

- SX08 Tintagel, viii.1908, EAB.

Aphrodes histrionicus (Fabricius)

On grasses.

SW72 Goonhilly, 31.vii.1981, & possible at Predannack, 21.ix.1981, DS.

SW76 Newquay (Clark, 1906).

Aphrodes limicola (Edwards) – **Nationally Scarce.**

Southern British coasts; upper levels of saltmarsh amongst *Puccinellia* and sea purslane.

SW86 Gannel Saltmarsh, 1983, MJ Morgan.

Aphrodes makarovi Zakhvatkin

Common on grasses. Recently split from *A. bicinctus* (Schrank) and the commoner of the two – old records need to be treated with caution but are more likely to be this species. *Acocephalus nervosus* Schrank of Thornley (1934) are assumed to most likely be this species.

SV81 Tresco, 1925, OJ Moore.

SV91 St Mary's & Great Innisvouls, 1927, OWR.

SW33 Portheras Cove, viii.1932, WEC.

SW53 Lelant Towans, AT (1934).

SW61 Caerthillian Cove, 21.vii.1970. Kynance Cove, 2.ix.1970, MGM. Clahar Bridge, 1980; Mullion, 1981; & Predannack; 1981, '*A. bicinctus*', DS. Kynance Cove, 22.ix.1998, PJH.

SW71 Crousa Downs, 1981; Erisey Barton, 1981; Gwendreath, 1980; Main Dale; 1981, '*A. bicinctus*', DS. Poltesco East, 20.ix.1998, PJH.

SW72 Goonhilly, 1980 & 81, '*A. bicinctus*', DAS.

SW75 Cubert Common, '*A. bicinctus*', 6.viii.1979, WAE.

SW76 Crantock Beach, '*A. bicinctus*', 6-8.viii.1979, WAE.

SW84 Calenick, Pencalenick & Idless, AT (1934).

SW87 St Merryn, vii.1925, KGB.

SX08 Tintagel, viii.1908, EAB.

SX15 Carne Farm, Penpoll, 19.vii.2002, JF.

SX25 Polperro to Talland, vii.1979, BJ Lempke (1980).

SX29 Creddacott Meadows Reserve, given as *A. bicinctus* but more likely this species, viii.1998, DM/IK.

SX36 Cadsonbury, 15.viii.1979, KNAA.

SX38 Beales Meadows Reserve, given as *A. bicinctus* but more likely this species, viii.1998, DM/IK.

Stroggylocephalus agrestis (Fallén)

In marshy places.

SW32 Lands End district, CW Dale.

SX08 Tintagel, viii.1908, EAB.

Deltocephalus maculiceps Boheman

Locally common on grasses nationally; mainly acid heaths.

SW61 Clahar Bridge, 1980 & 1981, DAS.

SW71 Erisey Barton, 1980; Gwendreath, 1980; Main Dale, 1980 & 1981; DAS.

SW72 Goonhilly, 1980 & 1981, DAS.

Deltocephalus pulicaris (Fallén)

Common on short grasses nationally, usually in drier localities, such as hillsides (Le Quesne, 1969).

SW43 Bosigran, viii.1930, WEC.

SW52 Prussia Cove, viii.1931, WEC. Rosudgeon, ix.1931, WEC.

SW61 Mullion Cliff, 20.vii.1970; Caerthillian Cove, 21.vii.1970, MGM.

SX08 Tintagel, viii.1908, EAB.

Recilia coronifera (Marshall) syn. *coroniceps*

Local, on short grass in heathy or calcareous situations.

SW52 Rosudgeon, ix.1931, WEC.

Paramesus obtusifrons (Stål)

Marshy places near southern coasts, associated with *Scirpus maritimus* and perhaps *Phragmites*.

Discovered in the Isles of Scilly in 1990.

SV80 St Agnes, 1990, John Badmin.

SV81 Great Pool, Tresco, 1990, John Badmin.

Arocephalus punctum (Flor)

Not uncommon nationally among fine grasses in dry places, but has only ever been found in Cornwall around Mullion on the Lizard.

SW61 Mullion Cliff, 20.vii.1970; Mullion Cove, 21.vii.1970, MGM. Mullion, 17.ix.1980, DAS.

Turrutus socialis (Flor)

On grasses, usually on calcareous soils. Widely distributed nationally, but local.

SW84 St Clement, sparingly in 1905 (Clark, 1906).

Jassargus distinguendus (Flor) syn. *Jassargus pseudocellaris*

Common and widespread on grasses. Cornwall (Clark, 1906).

SX08 Tintagel, viii.1908, EAB.

SW71 Main Dale, 19.ix.1980, DAS.

SW72 Goonhilly, 2.viii.1980, 31.vii.1981, DAS.

Jassargus flori (Fieber)

Locally common on grasses. Amongst long grass in woods.

SW71 Main Dale, 1980, DAS.

Jassargus sursumflexus (Then)

Local; heathy areas, often near pools.

SW71 Main Dale, 1980, DAS.

Arthaldeus pascuellus (Fallén)

Widely distributed nationally and common on grasses, especially in drier situations. Cornwall (Clark, 1906).

Arthaldeus striifrons (Kirschbaum)

Local, on grasses; damp places and calcareous hillsides.

SW83 Falmouth, on *Ononis* (Clark, 1906).

Psammotettix cephalotes (Herrich-Schäffer) syn. *Psammotettix normani* Scott – **County Rarity**.

Locally common nationally; often on short grass on calcareous soils. Cornwall (Clark, 1906).

SW61 Caerthillian Cove, 21.vii.1970, MGM.

SX08 Tintagel, viii.1908, EAB.

Psammotettix confinis (Dahlbom) syn. *Psammotettix theni* Edwards

Common & widespread on grasses.

SV91 St Mary's, 1927, OWR.

SW43 Penzance, CW Dale.

SW52 Prussia Cove, viii.1931; Rosudgeon, ix.1931, WEC.

SW61 Mullion Cliff, 20.vii.1970, MGM. Clahar Bridge, 1.viii.1981; Predannack, 30.vii.1981, DAS.

Psammotettix nodosus (Ribaut)

On grasses, often in woods or on moorland. as *P. striatus* (Linnaeus) (Edwards, 1896).

SW43 Penzance, *P. striatus*, pre 1896, CW Dale.

SW61 Clahar Bridge, 18.ix.1980; Predannack, 30.vii.1981, DAS.

SW71 Main Dale, 3.vii.1981, DAS.

SW72 Goonhilly, 2.viii.1980, DAS.

Psammotettix sabulicola (Curtis)

On coastal sandhills. Cornwall (Clark, 1906).

SV91 St Mary's, 1927, OWR.

SW53 Phillack Towans, 1998, 2004 & 2005; Mexico Towans, 2000, ECMH.

SW54 Upton Towans, 1998, 2004 & 2005, ECMH.

SW62 Mullion Golf Course, 2000, GA Collins & ECMH.

Platymetopius undatus (DeGeer) – **Nationally Scarce.**

Most frequently recorded from woodland margins and clearings; from bracken, sallow and oak; southern England. Possibly extinct nationally – no records for some 40-50 years.

SX05 Luxulyan Valley, on bracken (Clark, 1906).

Rhytistylus proceps (Kirschbaum)

Near bases of taller grasses, especially on calcareous soils.

SW61 Kynance Cove, 27.x.1997, PJH.

SW62 Chyvarloe Cliffs, 20.vii.1970, MGM. Jangye-ryn, 23.ix.1998, PJH.

SW83 Falmouth, CW Dale (Edwards, 1896).

Allygus mixtus (Fabricius)

Common nationally; adult generally on trees, especially oak; larva feeds on grasses. Cornwall (Clark, 1906).

SW84 Playing Place, one, 6.viii.1932, AT.

Allygus modestus Scott

Fairly common nationally; nymphs on grasses.

SX06 Boscarne, 19.vi.2006, KP-M.

Limotettix striola (Fallén)

Locally common across Britain, in marshy places. Cornwall (Clark, 1906).

SW61 Clahar Bridge, 1980, 2.viii.1981; Mullion, 20.ix.1980, 30.vii.1981, DAS.

Conosanus obsoletus (Kirschbaum)

Generally common on grasses in damp places. Cornwall (Clark, 1906); probably under-recorded.

SV91 St Mary's, 1927, OWR.

SW61 Clahar Bridge, 1980 & 2.viii.1981; Mullion, 30.vii.1981, DAS.

SW71 Gwendreath, 22.ix.1980; Main Dale, 29.vii.1981, DAS.

SW72 Goonhilly, 2.viii.1980, DAS.

SW86 Tregunnel Saltings, 2000, ECMH & GAC.

SX08 Tintagel, viii.1908, EAB.

Euscelis incisus (Kirschbaum) syn. *Euscelis plebejus*

Common on grasses nationally. Cornwall (Clark, 1906).

SW43 Bosigran, viii.1930, WEC.

SW52 Prussia Cove, viii.1931, WEC.

SW61 Mullion Cliff, 20.vii.1970; Caerthillian Cove, 21.vii.1970, MGM. Predannack, 6.vii.1981, DAS.

SW62 Gunwalloe Towans & Chyvarloe Cliffs, 20.vii.1970, MGM.

SX08 Tintagel, viii.1908, EAB.

Euscelis lineolatus Brullé

Locally common on grasses in lowland England.

SW61 Clahar Bridge, 30.vii.1980, DAS.

SX25 Polperro to Talland, vii.1979, BJ Lempke (1980).

Euscelidius variegatus (Kirschbaum) – **Nationally Scarce.**

A warmth-loving, southern species, occurring on dry grasslands of a wide variety of types. Foodplant not known.

SW53 Carbis Bay, several, vii, AT (1934).

Streptanus aemulans (Kirschbaum) syn. *Streptanus sahlbergi* Reuter

On grasses, often in damp situations.

SW61 Caerthillian Cove & Kynance Cove, 21.vii.1970, MGM.

SW62 Gunwalloe Towans, 3.ix.1970, MGM.

SX08 Tintagel, viii.1908, EAB.

Streptanus sordidus (Zetterstedt)

Common on grasses. Cornwall (Clark, 1906).

- SW61 Caerthillian Cove, 21.vii.1970, MGM.
- SW62 Chyvarloe Cliffs, 2.ix.1970, MGM.
- SW71 Erisey Barton, 5.viii.1980, DAS.
- SX08 Tintagel, viii.1908, EAB.

Macustus grisescens (Zetterstedt)

Common on grasses nationally.

- SW61 Mullion, vi.-vii.1981, DAS.
- SW71 Crousa Downs, 29.vii.1981; Gwendreath, 5.vi.1981, DAS.
- SW72 Goonhilly, 3.vii.1981, DAS.

Mocydia crocea (Herrich-Schäffer)

Common on grasses nationally. Cornwall (Clark, 1906).

- SW52 Rosudgeon, ix.1931, WEC.
- SW61 Caerthillian Cove, 21.vii.1970, MGM. Clahar Bridge, 29.iv.1981, DAS.

Mocydiopsis attenuata (Germar)

Locally common on grasses nationally, often where calcareous. Cornwall (Clark, 1906), where widespread on the Lizard.

- SW61 Kynance Cove, 2.ix.1970; Caerthillian Cove, 3.ix.1970, MGM.
- SW62 Chyvarloe Cliffs, 2.ix.1970; Gunwalloe, 3.ix.1970, MGM.
- SW71 Gwendreath, 5.iv.1981, DAS. Lizard Head, 25.ix.1998, PJH.
- SX08 Tintagel. viii.1908, EAB.

Mocydiopsis parvicauda Ribaut

Locally common on grasses nationally.

- SW61 Caerthillian Cove, 21.vii.1967, MGM (1972). Kynance Cove, 2.ix.1970, MGM.
- SW62 Chyvarloe Cliffs, 20.vii.1970, MGM.

Thamnotettix confinis (Zetterstedt) syn. *prasina*

Widespread on tree foliage.

- SW33 Portheras Cove, viii.1932, WEC.
- SW52 Rosudgeon, ix.1931, WEC.
- SW53 Carbis Bay, vii.1932, AT.
- SW72 Goonhilly, 2.viii.1980, DAS.
- SW83 Falmouth (Clark, 1906).
- SX05 Par (Clark, 1906).
- SX08 Tintagel, viii.1908, EAB.

Speudotettix subfuscus (Fallén)

Common on trees nationally, especially oak. Cornwall (Clark, 1906).

- SX19 Dizzard Oakwood, 1996, ECMH, det. A Stewart.

Lamprotettix nitidulus (Fab.) syn. *Lamprotettix splendidula* Fabricius

Local, usually on tree foliage (Edwards, 1896). Cornwall (Clark, 1906).

Cicadula aurantipes (Edwards)

Old records for “*Limnotettix nigricornis* (Sahlberg, J.)” and “*Limotettix quinquenotata* (Bohm.)” need to be verified owing to identification difficulties in this genus – they are most likely to have been confused with *C. aurantipes* or even *C. persimilis* (Edwards). Voucher material is needed in order to clarify which of these species occurs in the county. The records are provisionally placed under *C. aurantipes*.

C. aurantipes is found on *Carex* spp in marshy areas at the margins of ponds and is fairly widespread in Britain.

C. persimilis is locally common on *Juncus* or *Carex*, often in marshy places but sometimes in drier grasslands if the plant cover is sufficient.

C. quinquenotata (= *nigricornis*) is a Nationally Scarce species, predominantly of northern and western Britain, but not confirmed from the south-west of England. It is a peatland species, probably associated with *Sphagnum* areas where *Carex* and *Eriophorum* grow.

- SX08 St Teath, '*Limotettix quinquenotata*', ix.1919, GEH.
 SX46 Botus Fleming, '*L. nigricornis*', three (Clark, 1906).
- Cicadula persimilis* (Edwards)
 Locally common on *Juncus* or *Carex*.
 SX08 Tintagel, viii.1908, EAB (Edwards, 1920).
- Cicadula quadrinotata* (Fabricius)
 Widespread, often in damp places, on *Carex*. Cornwall (Clark, 1906).
 SX38 Beales Meadows Reserve, viii.1998, DM/IK.
- Elymana sulphurella* (Zetterstedt)
 Common on grasses, often in drier areas.
 SW33 Kenidjack, 1995, AS & ECMH.
 SW52 Prussia Cove, viii.1931, WEC.
 SW53 Phillack Towans, 1998 & 2004, ECMH.
 SW54 Upton Towans, 1998 & 2005, ECMH.
 SW61 Caerthillian Cove, 3.ix.1970, MGM. Mullion, 17.ix.1980, DAS.
 SW62 Mullion Golf Course, 2000, GA Collins & ECMH.
 SW71 Erisey Barton, 2.viii.1981, DS.
 SW72 Goonhilly, 2.viii.1980, DAS.
 SW87 Park Head, 1996, ECMH.
 SX08 Dannonchapel & Tregardock, 1995, AS & ECMH.
- Macrostes horvathi* (Wagner) syn. *Macrostes warioni*
 Locally common in marshy areas, perhaps associated with *Juncus articulatus*.
 SW61 Clahar Bridge, 30.vii.1980; Mullion, 20.ix.1980, DAS.
 SW72 Goonhilly Downs, ix.1932, AT.
 SX08 Tintagel, viii.1908, EAB.
- Macrostes laevis* (Ribaut)
 On grasses, usually on dry sites.
 SW61 Clahar Bridge, 1.viii.1981, DAS. Lower Predannack Cliff, 7.vi.2000, KNAA.
- Macrostes sexnotatus* (Fallén)
 Common and widespread nationally, on grasses. Cornwall (Clark, 1906).
 SW72 Goonhilly, 2.vii.1981, DAS.
 SX08 Tintagel, viii.1908, EAB.
- [*Macrostes sordidipennis* (Stal) – **Nationally Scarce**.
 Widely but locally distributed around British coasts, on upper saltmarsh with *Puccinellia* spp. Cornwall not recognised as a locality in Kirby (1992) and the following records are not from the usual habitat – P. Kirby (pers. comm.) presumes these records are the result of incorrect identification.
 SW61 Clahar Bridge, 2.vii. & 2.viii.1981, DAS.
 SW71 Erisey Barton, 5.vii.1981, DAS.
 SW72 Goonhilly, 2.viii.1980 & 2.vii.1981, DAS.]
- Macrostes viridigriseus* (Edwards)
 Common and widespread nationally, in marshy situations.
 SW52 Rosudgeon, ix.1931, WEC.
 SW71 Golgotham, 7.vii.1981, DAS.
- Balclutha punctata* (Fabricius)
 Widespread on grasses.
 SW52 Rosudgeon, ix.1931, WEC.
- Balclutha saltuella* (Kirschbaum) – **RDB?**
 Normally found in grass tussocks; widespread in Palaearctic Region; this the first record for GB.
 SV81 Piper's Hole, Tresco, m in granitic cave, ix.1993, Ashmole & Ashmole (1995).

Subfamily Typhlocybinæ

Alebra albostriella (Fallén)

Common on oak nationally. Cornwall (Clark, 1906).

SW52 Rosudgeon, ix.1931, WEC.

Notus flavipennis (Zetterstedt)

Locally common nationally in base-rich habitats, on *Carex*, including *C. flacca*.

SW72 Trevassack, 1980/81, DS.

Forcipata citrinella (Zetterstedt)

On *Carex* and grasses in damp places; locally common. *Dikraneura citrinella* in Thornley (1934).

Widely on Lizard.

SW61 Caerthillian Cove, 21.vii.1970, MGM. Clahar Bridge, 22.ix.1980; Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981; Predannack, 30.vii.1981, DAS.

SW71 Crousa Downs, 29.vii.1981; Erisey Barton, 2.viii.1981; Gwendreath, 22.ix.1980, 2.vii.1981; Main Dale, 29.vii.1981, DAS.

SW72 Goonhilly, 31.vii.1981, DAS.

Forcipata forcipata (Flor)

In damp areas, presumably associated with sedges or grasses; usually in woodland nationally but more open situations in Cornwall; local.

SW72 Goonhilly, 1.viii.1981, DAS.

Dikraneura variata Hardy

On grass often in heathy areas.

SW53 Lelant Towans, v.1932, AT.

SW61 Mullion Cliff, 20.vii.1970, MGM.

SX08 Tintagel, ix.1908, EAB.

Emelyanoviana mollicula (Boheman)

On calcareous soils; has been reared from betony, and associated with *Primula*, *Plantago*, *Calamintha* and *Verbascum*, and perhaps *Origanum*. *Dikraneura mollicula* in Thornley (1934).

SW52 Prussia Cove, viii.1931, WEC.

Empoasca decipiens Paoli

Common nationally, on nettle, raspberry and other tall vegetation.

SX08 Tintagel, viii.1908, EAB.

[*Empoasca pteridis* (Dahlbom)]

“Only recorded from Britain with certainty from Chelsea Physic Garden, London; also from Jersey.” (Le Quesne & Payne, 1981). The record for Cornwall (Clark, 1906) therefore needs verification.]

Empoasca vitis (Göthe)

Common nationally, especially on trees and shrubs. *E. aurantiaca* in Thornley (1934) and *E. flavescens* also in older literature.

SV80 Rosvear, *E. aurantiaca*, 1927, OWR.

SV81 Illiswilsig, Rosvear & Bryher, *E. aurantiaca*, 1927, OWR.

SW71 Main Dale, 1980/81, DAS.

Kybos smaragdula (Fallén)

On alder, birch and *Salix*. Cornwall (Clark, 1906).

SW61 Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981, DAS.

Eurhadina pulchella (Fallén)

Mainly on oak foliage. Cornwall (Clark, 1906).

Eupteryx aurata (L.)

Common on nettle, later in year also on labiates & other plants. “Recorded as swarming in some fields in the county” (Seale Hayne Agr. Coll. Rept. No.16, 1924).

SW53 St Erth and Carbis Bay, AT (1934). Phillack Towans, 1998 & 2004; Mexico Towans, 2000, ECMH.

SW54 Upton Towans, vii.2004, ECMH.

SW61 Clahar Bridge, 1980; Mullion, 1981; Predannack, 1980, DAS.

SW71 Croft Pascoe Pool, 6.vii.1983, MJ Morgan.

- SW84 Truro, 1902 (Clark, 1906).
 SW86 Newquay (Clark, 1906).
 SX06 Retire Common, 1997, Spalding & Haes (2000).
 SX08 Tintagel, 1908, EAB.

Eupteryx filicum (Newman)

On ferns, including polypody; local, most frequently recorded in the south west. West Cornwall (Le Quesne & Payne, 1981).

- SV91 Holy Vale, 16.viii.1990, J Badmin.
 SW61 Auchenorrhyncha Recording Scheme Newsletter No.5 (1985).
 SW71 Gwendreath, 30.vi.1981, DAS.
 SX08 Tintagel, viii.1908, EAB.
 SX19 “on *Athyrium femina* near Millook” (Clark, 1906).

Eupteryx melissae Curtis

On labiates, tree mallow, etc. “Exceedingly abundant on sage” (Seale Hayne Agr. Coll. Rept., No.16, 1924).

- SV Scilly, on tree mallow, Dale.
 SV80 Rosvear, 1903, Price (Clark, 1906); 1927, OWR.
 SV81 Bryher, 1927, OWR.
 SW53 Carbis Bay, *in cop.*, 9.vi.1932, AT.
 SW72 Goonhilly, 31.vii.1981, DAS.
 SX08 Tintagel, viii.1908, EAB.

Eupteryx notata Curtis – **County Scarce.**

On low calcareous vegetation, probably associated with *Prunella*, *Thymus* and various Compositae. Only known in Cornwall from the Lizard and Tintagel areas.

- SW61 Caerthillian Cove, 21.vii.1970, MGM.
 SW62 Gunwalloe, 3.ix.1970, MGM.
 SX08 Tintagel, viii.1908, EAB.

Eupteryx signatipennis (Boheman)

Locally common nationally on meadow-sweet.

- SW71 Main Dale, 1980/81, DAS.

Eupteryx stachydearum (Hardy)

Common on labiates nationally, especially *Stachys sylvatica*, *Teucrium* and *Lamium*.

- SX35 Mount Edgcumbe, 1896 (Clark, 1906).

Eupteryx urticae (Fabricius)

On nettle, often in damper and upland situations nationally. Cornwall (Clark, 1906).

- SW53 Carbis Bay, vii.1932, AT.
 SW71 Lizard Head, 25.ix.1998, PJH.
 SX08 Tintagel, viii.1908, EAB.

Eupteryx vittata (L.)

Occasional, but widespread nationally, on ground-ivy, *Mentha*, *Ranunculus repens*, *Plantago major* and nettle. Cornwall (Clark, 1906).

- SW52 Prussia Cove, viii.1931, WEC.
 SW53 Carbis Bay, vii.1932, AT.

Ribautiana tenerrima (Herrich-Schäffer)

Often common nationally on bramble, dewberry and loganberry. Cornwall (Clark, 1906).

- SW61 Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981, DAS.
 SW71 Gwendreath, 30.vi.1981, DAS.

Ribautiana ulmi (L.)

Normally on elm, but also reported from other trees and shrubs. Cornwall (Clark, 1906).

- SV91 Hugh Town, St Mary, abundant, ix.1871, F Walker (1872).

Linnavuoriana sexmaculata (Hardy)

On *Salix*, especially sallows. Cornwall (Clark, 1906).

SW71 Crousa Downs, 1980, DAS.

SX08 Tintagel, viii.1908, EAB.

Typhlocyba quercus (Fabricius)

On oak and various other trees and shrubs. Cornwall (Clark, 1906).

SW61 Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981, DAS.

SW71 Crousa Paddock, 1980/81, DAS.

Lindbergina aurovittata (Douglas) = *Typhlocyba aurovittata*.

On oak, bramble & other trees and shrubs. Cornwall (Clark, 1906).

SW53 Carbis Bay, vii.1932, AT.

Fagocyba cruenta (Herrich-Schäffer) syn. *Fagocyba douglasi* syn. *Fagocyba gratiosa*

Often abundant on beech nationally, but also on other trees. Cornwall (Clark, 1906).

SV91 St Mary's, 1927, OWR.

Edwardsiana geometrica (Schrank)

On alder. Cornwall (Clark, 1906).

Edwardsiana rosae (L.)

On wild and cultivated rose, apple, rowan, cherry, hawthorn and whitebeam. Cornwall (Clark, 1906).

SW61 Clahar Bridge, 5.vii.1981, DAS.

SW71 Golgotham, *Edwardsiana* sp., 20.ix.1980, DAS.

Zyginidia scutellaris (Herrich-Schäffer)

Common in grass, mainly associated with *Dactylis glomerata* and *Festuca rubra*.

SW52 Prussia Cove, viii.1931, WEC.

SW61 Caerthillian, 21.vii.1967, MGM (1972); 21.vii.1970, MGM. Mullion Cliff, 20.vii.1970, MGM; Mullion, 20.ix.1980; Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981, DAS. Predannack, 1981, DAS. Kynance Cove, 21.vii.1970, MGM; 27.x.1997, PJH.

SW62 Chyvarloe Cliffs & Gunwalloe Towans, 20.vii.1970, MGM.

SW71 Gwendreath, 5.iv.1981, DAS.

SX08 Tintagel, viii.1908, EAB.

Hauptidia maroccana (Melichar) syn. *Hauptidia pallidifrons* Edwards

On foxglove and red campion; also on cultivated plants. East Cornwall (Le Quesne & Payne, 1981).

SX08 Tintagel, m on foxglove and further specimens, viii.1908, EAB – the male is the type specimen (China, 1929).

Arboridia parvula (Boheman)

Found on low plants on calcareous soils and fenland, possibly associated with rock-rose on the former. Cornwall (Clark, 1906). "Reported as damaging young plants of tomato under glass in both Devon and the Scillies" (Seale Hayne Agr. Coll. Rept., No.19, 1925).

Zygina flammigera (Geoffroy)

On various trees and bushes, especially oak, hawthorn and *Prunus*. Cornwall (Clark, 1906).

Super-family FULGOROMORPHA

Family CIXIIDAE

Oliarus leporinus (L.) – **Nationally Scarce.**

A saltmarsh species.

SX46 Cotehele Quay, Calstock, 9.vii.2001, J Kramer, det. KNAA. Bohetherick, St Dominick, small numbers amongst reed beds along river, 19.vii.2006, KNAA.

Tachycixius pilosus (Olivier)

Mostly in unshaded dry grassy situations, but also in dense woodlands; widespread. Cornwall (Clark, 1906)).

SW43 Zennor, viii.1924, OWR. Bosigran, 16.v.1979; Rosemergy & Trevean Cliffs, 24.v.1979; Boswednack, 22.v.1989; Rosewall Hill, 5.vi.2000, KNAA.

SW53 Carbis Bay, off *Salix* and *Crataegus*, AT (1934).

SW54 St Ives, off *Salix* and *Crataegus*, AT (1934).

- SW61 Clahar Bridge, 28.iv. & 6.vi.1981; Mullion, 27.vii.1981, DAS. Holestrow, 18.v.1994, APF.
 SW64 Chapel Porth, swept streamside, 6.vi.1979, KNAA. Nanterrow Farm, off shallows, Gwithian, 4.vi.2005, KNAA.
- SW71 Crousa Paddock, 2.vi.1981; Erisey Barton, 1.v.1981; Gwendreath, 5.vi.1981; Main Dale, 23.ix.1980 & 7.vi.1981, DAS. Coverack Cliffs, 18.iv.1998, KNAA.
- SW72 Goonhilly, 1981, DAS. Tremayne Woods, 31.v.1989, KNAA.
- SW83 The Straythe, Nare, 11.vii.2001, KNAA.
- SW94 Tregenna, 17.v.1996, KNAA.
- SX06 Red Moor, 8.vii.2001, KNAA. Lanhydrock Park, 9.v.2003, KNAA.
- SX07 Gaff Wood, Camel Valley, 3.v.2001, KNAA.
- SX08 Tregardock Cliff, 2.vi.2000, KNAA.
- SX15 Ethy Woods, 30.v.2000, 13.vii.2001, KNAA.
- SX16 Boconnoc Estate, St Winnow, off sallow, 30.v.2006, KNAA.
- SX17 South Penquite Farm, Blisland, wooded riverside, 22.vi.2005, KNAA.
- SX19 Dizzard Oakwood, 1996, ECMH, det. AJA Stewart. Peter's Wood, Boscastle, 29.v.2000; Bynorth Cliff, 8.vi.2000, KNAA.
- SX25 Kilminorth Wood & Talland Cliff, 1.vi.2000, KNAA.
- SX29 Hilton Wood, 31.v.2000, KNAA.
- SX36 Cadsonbury, 28.v.2000, AES.

Cixius cunicularius (L.) – **County Rarity.**

Usually near streams. Rather local nationally. Cornwall (Clark, 1906).

- SW93 Nare Head, 14.vii.2004, KNAA.
 SX08 Tintagel, viii.1908, EAB.
 SX26 Draynes Wood, 30.v.2000, KNAA.

Cixius distinguendus Kirschbaum syn. *Cixius brachycranus* Fieber – **County Rarity.**

A woodland species over much of GB, but in more open situations on the Cornish coast. Cornwall (Clark, 1906).

- SW43 Penzance, Saunders (Edwards, 1896).
 SW53 Lelant Towans, x.1931, AT (1934).
 SW71 Cadgwith South, 20.ix. & Chynhalls South Cliff, 21.ix.1998, PJH.

Cixius nervosus (L.)

A woodland species over much of GB, but much more widespread in the county. Common in most districts (Thornley, 1934).

- SV91 Auchenorrhyncha Recording Scheme Newsletter No.7 (1986).
 SW33 Portheras Cove, viii.1932, WEC.
 SW52 Auchenorrhyncha Recording Scheme Newsletter No.7 (1986).
 SW53 Loggans Moor, 1994 & 2004, ECMH. Mexico Towans, 2000, ECMH.
 SW54 Upton Towans, 1998 & 2004, ECMH.
 SW61 Clahar Bridge, 1981; Mullion, 1981, DAS.
 SW63 Porkellis Moor, 1983.
 SW71 Crousa Downs & Paddock, 1981; Golgotham, 1981; Gwendreath, 1981; Main Dale, 1980 & 1981, DAS.
 SW72 Gillan Creek, 25.vi.1979; Glendurgan, 26.vi.1979, KNAA. Trevassack, 1981, DAS.
 SW75 Ventongimps Moor, 1997, Spalding & Haes (2000).
 SW81 Lowland Point, elmwood, 13.vi.1979, KNAA.
 SW85 Newlyn Downs, 1997, Spalding & Haes (2000).
 SW87 Park Head, 1996, ECMH.
 SW96 Tregoss Moor, 1997, Spalding & Haes (2000).
 SW98 Port Isaac, viii.1919, GEH.
 SW99 Goss Moor, 29.v.2000, K. Merrifield.
 SX04 Kings Wood, Pentewen, 10.vii.2001, K Merrifield. Ropehaven Cliffs, 12.vii.2001, KNAA.
 SX05 Wheal Martyn, 1991, MD Bradford.
 SX06 East Hill, Dunmere, 1978, CA Brind. Retire Common, 8.vii.2001, KNAA.

- SX08 Tintagel, viii.1908, EAB. Rocky Valley, 16.vii.1996, ECMH. Backways Cove, 9.vii.2001, KNAA.
 SX09 Boscastle, 1979, GB.
 SX15 Ethy Wood, 30.v.2000; Hoggs Moor, 12.vii.2001, KNAA. Carne Farm, Penpoll, 19.vii.2002, JF. Polruan, 29.viii.2006, KNAA.
 SX16 Boconnoc Estate, St Winnow, off sallow, 30.v.2006, KNAA.
 SX19 Crackington, 11.vii.1989, KNAA.
 SX25 Kilminorth Wood, 1.vi.2000, KNAA.
 SX36 Cadsonbury Woods, 13.vii.2001, KNAA.

Cixius remotus Edwards – **Nationally Scarce & County Rare.**

Southern coasts; shingle or soft-rock cliffs with an abundance of bare and partly vegetated ground, loose scree and rubble. Cornwall (Le Quesne, 1960).

- SW43 Foage Farm, Zennor, amongst *Sphagnum* between *Molinia* tussocks, 8.viii.2006, KNAA.
 SW61 Lizard, specimen in Natural History Museum, London.
 SX08 Glebe Cliff, Tintagel, 9.vii.2001, KNAA.
 SX15 Frogmore Farm, Lanteglos, 26.viii.2006, KNAA.
 SS20 Sandy Mouth, 12.vii.2006, KNAA.

Cixius similis Kirschbaum – **County Rare.**

An uncommon species although widespread in Britain; most often found on boggy heaths.

- SX17 South Penquite Farm, 23.viii.2005, KNAA.

Cixius simplex (Herrich-Schäffer) syn. *Cixius scotti*

Particularly in saltmarshes or woods.

- SW43 Penzance, Saunders (Edwards, 1888 & 1896).

Family DELPHACIDAE

Kelisia guttula (Germar)

Widespread, on sedges on calcareous hillsides and in marshes.

- SW61 Kynance Cove, 21.vii.1970, 2.ix.1970; Caerthillian Cove, 3.ix.1970, MGM.
 SW62 Chyvarloe Cliffs, 2.ix.1970; Gunwalloe Towans, 3.ix.1970, MGM.
 SW71 Golgotham, 20.ix.1980, DAS.
 SW75 Cubert Common, 6.viii.1979, WAE. Cubert, 1983.

Kelisia pallidula (Boheman)

Local; marshy places; at base of sedges.

- SW71 Main Dale, 1980/81, DAS.

Kelisia vittipennis (Sahlberg)

Widespread nationally on sedges on dry hillsides or in peat-bogs. Feed exclusively on sedges and cottongrass. Cornwall (Clark, 1906).

- SW62 Gunwalloe Towans, 2.ix.1970, MGM.
 SW72 Goonhilly Downs, ix.1931, WEC; ix.1932, AT (1934).

Stenocranus fuscovittatus (Stål) – **Nationally Scarce.**

Probably associated with sedges *Carex* spp in both wet and dry situations; widely scattered across southern Britain.

- SX38 Launceston (Clark, 1906).

Stenocranus longipennis (Curtis)

Locally common in marshy places.

- SV91 Higher Moors, St Mary's, 16.viii.1990, J Badmin.
 SX08 St Teath, ix.1919, GEH.

Stenocranus minutus (Fabricius)

Common among grasses in woods and meadows. Only feeds on cocksfoot grass.

- SW53 Carbis Bay, one, 4.iii.1932, AT.
 SW61 Kynance Cove, 2.ix.1970; Caerthillian Cove, 3.ix.1970, MGM. Mullion, 20.ix.1980 & 6.vii.1981, DAS. Predannack Cliff, 19.ix.1998, PJH.
 SW62 Chyvarloe Cliffs, 2.ix.1970; Gunwalloe, 3.ix.1970, MGM.

- SW71 Poltesco East, 20.ix.1998; Chynhalls South Cliff, 21.ix.1998, PJH.
SX45 Mount Edgcumbe, CW Dale (Clark, 1906).

Euconomelus lepidus (Boheman)

On low species of *Juncus*.

- SV91 St Mary's, 1927, OWR.
SW61 Clahar Bridge, 30.vii.1980; Mullion, 30.vii.1980 & 6.vii.1981; Predannack, 20.ix.1980, DAS.
SX25 Looe (Clark, 1906).

Conomelus anceps (Germar) syn. *Conomelus limbata* Fabricius

Widespread and common on rushes nationally. Cornwall (Clark, 1906), but very under-recorded.

- SV Scilly, 1927, OWR.
SW43 Foage Farm, Zennor, 8.viii.2006, KNAA.
SW61 Clahar Bridge, 1980; Predannack, 1981, DAS.
SW71 Brays Cot Pool, 29.vii.1981; Erisey Barton, 2.viii.1981, DAS.
SW72 Goonhilly Downs, ix.1931, WEC; ix.1932, AT.
SW84 Playing Place, viii.1932, AT.
SX17 South Penquite Farm, 23.viii.2005, KNAA.
SX29 Creddacott Meadows Reserve, viii.1998, DM/IK.
SX45 Churchtown Farm, Saltash, 20.vii.2005, KNAA.

Delphax pulchellus (Curtis)

Locally common on common reed *Phragmites* across southern and central England.

- SW53 Loggans Moor, 1995, ECMH.
SW54 Upton Towans, 1998, ECMH.
SW96 Rosenannon Bog & Downs, *Molinia* mire, 1997, Spalding & Haes (2000).
SX08 Dannonchapel & Tregardock, 1995, AS & ECMH.

Delphacinus mesomelas (Boheman)

Local; on grasses; dry heaths and wood edges.

- SW32 Logan Rock, 25.v.1999, PJH.
SW61 Mullion Cliff, 20.vii.1970, MGM; vi.-vii.1981, DAS. Kynance Cove, 21.vii.1970, MGM. Predannack, 6.vii.1981, DAS; Lower Predannack Cliff, 7.vi.2000, KNAA.
SW76 Newquay (Clark, 1906).

Eurysa lineata (Perris)

Amongst open grasses on dry well-drained soils; widespread in southern and eastern England.

- SX25 Talland Bay, 1.vi.2000, KNAA, det P Kirby.
SX35 Whitesand Bay, 1.vi.2000, KNAA, det P Kirby.

Ditropis pteridis (Spinola)

Common & widespread nationally, on bracken, usually in woods. Cornwall (Clark, 1906).

- SX17 South Penquite Farm, Blisland, 22.vi.2005, KNAA.

Criomorpus albomarginatus Curtis

Common and widespread nationally on grass in woods and on open hillsides.

- SW53 Carbis Bay, several, vi.1932, AT.
SW61 Mullion, vi.-vii.1981, DAS. Lower Predannack Cliff, 7.vi.2000, KNAA.
SW62 Gunwalloe Towans, 20.vii.1970, MGM.

Dicranotropis hamata (Boheman)

Generally common on grasses.

- SW53 Carbis Bay, several, vi.vii.1932, AT.
SW61 Caerthillian Cove, 21.vii.1970, MGM.
SX05 Molinnis, Roche CP, 2005, JD.
SX06 Criggan Moors, Roche CP, 2005, JD.
SX08 Tintagel, viii.1908, EAB.

Megamelus notula (Germar)

Locally common nationally, in low marshy vegetation. Feed on sedges.

- SX08 Tintagel, viii.1908, EAB.

Megamelodes quadrimaculatus (Signoret) syn. *Megamelodes fieberi* Scott

Local, in marshy places. Cornwall (Clark, 1906).

SV91 St Mary's, 1927, OWR.

SW61 Lizard, CW Dale (Edwards, 1896).

SX08 Tintagel, viii.1908, EAB.

Delphacodes capnodes (Scott) – **Nationally Scarce.**

A southern peatland species, possibly associated with cotton-grasses. Ground-dwelling and often found amongst *Sphagnum*.

SW53 Marazion, pre-1960, Hope Dept., Oxford.

SW71 Golgotham, 1981, DAS.

Muellerianella fairmairei (Perris)

Widely distributed in damp places. On *Holcus lanatus*. *Muellerianella extrusa* (Scott) is recently separated from *M. fairmairei* in this complex of two species – one on *Molinia caerulea*, the other on *Arrhenatherum elatius* in fairly dry calcareous areas.

SV91 St Mary's, 1927, OWR.

SW53 Carbis Bay, vii.1932, AT.

SW61 Mullion Cliff, 20.vii.1970, MGM; 3.viii.1981, DAS. Caerthillian Cove, 21.vii.1970, MGM. Clahar Bridge, 22.ix.1980, DAS.

SW71 Erisey Barton, 2.viii.1981, DAS.

SW72 Goonhilly, 2.viii.1980, DAS.

SW83 Falmouth, CW Dale (Edwards, 1896).

SX08 Tintagel, viii.1908, EAB.

Laodelphax striatellus (Fallén) – **Nationally Scarce.**

On grasses in damp places.

SW32 Land's End, CW Dale.

Hyledelphax elegantulus (Boheman)

Common among grasses, usually in rather dry places.

SW71 Main Dale, 1980/81, DAS.

Javesella discolor (Boheman)

Widely distributed nationally, on long grasses, usually in or near woods up country but in open country in the humid west.

SW61 Holestrow, 18.v.1994, APF det. PK.

SX08 Tintagel, viii.1908, EAB.

Javesella dubia (Kirschbaum) syn. *Javesella difficilis* Edwards

Common and widespread on grasses, especially in woods up country but in open country in the humid west.

SW43 Rosewall Hill, 5.vi.2000, KNAA.

SW52 Rosudgeon, ix.1931, WEC.

SW53 Carbis Bay, vii.1932, AT.

SW61 Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981, DAS. Holestrow, *Juncus* marsh, 18.v.1994, APF, det PK.

SW72 Goonhilly Downs, ix.1931, WEC.

SX08 Tintagel, viii.1908, EAB.

SX19 Bynorth Cliff, 8.vi.2000, KNAA.

Javesella forcipata (Boheman)

Local, on grass, often in or near woods up-country.

SW71 Golgotham, 7.vii.1981, DAS.

Javesella obscurella (Boheman)

On grasses in damp places, usually near ponds.

SW61 Clahar Bridge, 3.vi.1981, DAS.

Javesella pellucida (Fabricius)

Common and widespread on grasses.

SW32 Land's End, CW Dale (Edwards 1896).

- SW33 Portheras Cove, viii.1932, WEC.
 SW53 Carbis Bay and Lelant Towans, AT (1934). Loggans Moor, 1995, ECMH.
 SW61 Mullion Cliff, 20.vii.1970. Clahar Bridge, 3.vi.1981, DAS.
 SW62 Gunwalloe, 21.vii.1970, MGM.
 SW71 Erisey Barton, 8.vi.1981; Gwendreath, 5.iv.1981; Main Dale, 29.vii.1981; Brays Cott Pool, 29.vii.1981, DAS.
 SW72 Goonhilly Downs, ix.1931, WEC.
 SW84 Idless, AT (1934). Ruan Laniorne Marsh, vi.1966, RE Stebbings (1971).
 SX06 Lanhydrock Park, 9.v.2003, KNAA, det. MR Wilson.
 SX08 Tintagel, viii.1908, EAB. Dannonchapel & Tregardock, 1995, AS & ECMH.

Xanthodelphax flaveolus (Flor) – **Nationally Scarce.**

Single records from counties from Dorset to Suffolk – Kirby (1992) does not recognise the earlier Cornish record. Warm, dry, acid grasslands.

- SW61 Clahar Bridge, 1.viii.1981, DAS.
 SX05 Biscovey Parr, 1992, D Evans.
 SX25 Polperro, 1992, D Evans.

Paradelphacodes paludosus (Flor) – **Nationally Scarce.**

A wetland species, most commonly found in *Sphagnum* bogs and other acid peat situations. Lives very low down in the vegetation.

- SW71 Crousa Downs, 29.vii.1981, DA Sheppard.

Muirodelphax aubei (Perris)

On grass in dry places; especially coastal grasslands and often sand dunes.

- SW53 Lelant Towans, viii.1932, AT.
 SW61 Caerthillian, 21.vii.1967, MGM (1972); 21.vii.1970, MGM. Kynance Cove, 21.vii.1970, MGM.
 SW62 Chyvarloe Cliffs, 20.vii.1970, MGM.
 SW76 Crantock Beach, 6-8.viii.1979, WAE.

Kosswigianella exigua (Boheman)

On short grass in dry, open places; local.

- SX08 Tintagel, *Liburnia e.*, viii.1908, EAB.

Acanthodelphax denticauda (Boheman)

Woods, glades, damp places; local.

- SW61 Predannack, vi.-vii.1981, DAS.

Florodelphax leptosoma (Flor)

Long herbage in swampy places.

- SW71 Main Dale, 1980/81, DAS.

Family ISSIDAE

Issus coleoptratus (Fabricius) – **County Rare.**

Widespread in lowland southern Britain. Lives on trees and shrubs, often evergreens such as ivy and yew. One old county record; rediscovered in 2001.

- SW84 Pencalenick, Clark (1906).
 SX15 Ethy Woods, 13.vii.2001, KNAA.

Family TETTIGOMETRIDAE

Tettigometra impressopunctata Dufour] – **Nationally Scarce; Unconfirmed Species.**

A scarce insect, confined to southern counties. Well-drained chalky or sandy soils – most likely to be found in the county on the more extensive dune systems. The following record is not recognised by Kirby (1992): Valley of the Lynher, Cornwall (Clark, 1906).]

Super-family PSYLLOIDEA

Family LIVIIDAE

Livia juncorum (Latreille)

Induces the formation of tassel-galls of clustered leaves on its host-plants, which include most of the commoner species of rushes.

SW32 Boscregan, 1995, CN French.

SW42 Trungle Moor, 1983, SMT.

SW43 Boswednack Cliff, galls, 22.v.1989, KNAA. Lanyon Farm, 1990, RJ Murphy. Pendour, 2000, CJ Neil.

SW53 Angarrack to Hayle, 1982, BE Jackson. Marazion Marsh, 1980, 1990, SMT.

SW54 St Ives, 1975, PJ Renwick.

SW61 Kynance Downs, 1965. Lizard NNR, 1978. Clahar Bridge, 1980; Mullion, 1980, 1981, DAS. Predannack, 1979. Lower Predannack Cliff, galls, 14.vi.1989, KNAA.

SW64 Porthtowan, 1905, FHDavey. Bellake, 1977, E Jackson. Nancekuke, 1981, APF. Roscroghan, 14.viii.1989, SP Jones.

SW71 Brays Cott to Gwendreath, 1979, RM Phillips.

SW72 Goonhilly Downs, 1994, CN French.

SW75 Ventongimps Moor, 1981, SMT. Perranwell, 1992, P Bayly.

SX08 Tintagel, viii.1908, EAB. Treknow Cliff, Tintagel, 10.vii.1989, KNAA.

SX17 Fernacre Farm Mire, Bodmin Moor, 29.v.2000, KNAA.

SX19 The Dizzard, 10.vii.1985, SM Turk et al.

SX27 Bodmin Moor, 1982, E Jackson.

Family PSYLLIDAE

Strophingia cinereae Hodkinson

Local; on heathers.

SW61 Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981, DAS.

SW71 Crousa Downs, 5.vii.1981; Erisey Barton, 2.viii.1981, DAS.

Strophingia ericae (Curtis)

Common and widespread on ling.

SW61 Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981; Predannack, v.vi.1981, DAS.

SW71 Crousa Downs, 5.vii.1981; Erisey Barton, 5.vii.1981, DAS.

SW72 Goonhilly, 3.vii.1981, DAS.

Aphalara pauli Loginova syn. *Aphalara exilis sensu auct.* Brit. nec Weber & Mohr.

Feeds on *Rumex*.

SX35 Mount Edgcumbe, CW Dale (Edwards, 1896).

Psyllopsis fraxini (L.)

Common on ash (Edwards, 1896) but not distinguished from *P. distinguenda* Edwards at that time. *P. fraxini* has been widely reported in the county by a single recorder, RM Phillips.

SV81 Abbey Grounds, Tresco, 28.vi.1984, JP Bowdrey.

SW42 Paul, 1980, RMP.

SW43 Trengwainton, 1977; Zennor, 1979; Madron Well, 1980; Tolver, 1979, RMP.

SW52 Perranuthnoe, 1979, RMP.

SW53 Carbis Bay, vii.1932, AT. St Hilary, 1975, 1979, 1980 & 1985; Goldsithney, 1969, 1976, 1977, 1982, 1984 & 1985; Trencrom, 1982; Perran Downs, 1984, RMP.

SW62 Helston, 1975; Penrose, 1976; Cober Valley, 1974, RMP.

SW63 Praze and Beeble, 1973; Clowance, 1979, RMP.

SW64 Tehidy, 1980; Redruth, 1974 & 1978, RMP.

SW71 Ruan Major, 1975, RMP.

SW72 Mawgan-in-Meneage, 8.viii.1976, 4.vi.1977; Trelowarren, 1984, RMP.

SW73 Mylor Bridge, 28.vii.1976; Budock, 1984, RMP.

- SW82 Rosenithon, 1976, RMP.
 SW83 Trelassick, 1976, RMP.
 SW84 Come to Good, 1976, 1981 & 1984; Malpas, 1983, RMP.
 SW86 St Colan, 1991, E Jackson.
 SW87 Porthcothan, 1972, RMP.
 SW96 Retallack, 1973, RMP.
 SX04 Mevagissey, 1981, RMP. Ropehaven Cliffs, 12.vii.2001, KNAA.
 SX06 Lanhydrock, 1979; Trebyan, 1979; Respryn, 1983; Dunmere Woods, 23.ix.1983, RMP. Red Moor, 8.vii.2001, KNAA.
 SX08 Portgaverne, 1992, RMP.
 SX09 Boscastle, 1972, RMP.
 SX16 St Neot Valley, 1983, RMP.
 SX27 Coombshead, 1973, RMP.
 SX28 Week St Mary, 25.vi.1979, RMP.
 SX29 Penfound, 1972, RMP.
 SX35 River Seaton, 1972, RMP.
 SX38 Gordonhill Plantation, 1972, RMP.
 SX39 Boyton, 1972, RMP.
 SX46 Landulph, 1947, CP Hurst. Cotehele, 1973 & 1980, RPM.
 SS20 Launcels, 25.vi.1979, RPM.

Arytaina genistae Latreille

On broom & *Genista*.

SV91 St Mary's, 1925, OW Richards.

SW84 "Was common for several weeks in 1904 in a great bank of furze near Kae, Truro Dist."
 (Clark, 1906).

Psylla alni (L.)

Common on alder nationally.

SX09 Boscastle, viii.1908, EAB.

Psylla ambigua Forster

Locally common on *Salix*.

SW61 Clahar Bridge, 29.iv.1981, DAS.

SW71 Crousa Paddock, 2.vi.1981; Erisey Barton, 1.v. & 8.vi.1981, DAS.

Psylla brunneipennis Edwards

Locally common on *Salix*.

SW61 Clahar Bridge, 2.vii.1981, DAS.

SW71 Erisey Barton, 8.vi.1981, DAS.

Psylla buxi (L.) – **Naturalised Introduction.**

Locally common on box; widely introduced along with its host.

SW43 Penzance, 1979, GB Miller.

SW53 Goldsithney, 1975 & 1976, RMP.

SW83 St Mawes, 1975, RMP.

SW84 Malpas, 1983, RMP.

Psylla mali Schmidberger – Apple Sucker.

Common and widespread on *Malus*. Recorded as causing damage to fruit trees in the county (Seale Hayne Agr. Coll. Repts, 1924 & 1930).

SX46 Cotehele House orchards, 18.vii.2006, KNAA.

Psylla melanoneura Förster syn. *lowi* Scott

Very common on hawthorn.

SW52 Rosudgeon, ix.1931, WEC.

SW61 Clahar Bridge, 1981, DAS.

SW71 Crousa Downs & Erisey Barton, 1981, DAS.

SW72 Goonhilly, 1980 & 1981; Trevassack, 1981, DAS.

Psylla peregrina Förster

Very common on hawthorn. Cornwall (Clark, 1906).

Psylla pulchra (Zetterstedt) syn. *pineti* Flor

Common on *Salix* (Edwards, 1896).

SW61 Clahar Bridge, 1.vii.1981, DAS.

Psylla pyricola Förster syn. *Psylla simulans* Förster – Pear Sucker.

Common in southern England on *Pyrus*. Cornwall (Clark, 1906).

Psylla saliceti Förster

On *Salix*.

SW61 Clahar Bridge, 18.ix.1980, DAS.

SW71 Crousa Paddock, 2.vi.1981, DAS.

Psylla subferruginea Edwards

On birch & hawthorn.

SW61 Mullion, 20.ix.1980, DAS.

Cacopsylla fulguralis (Kuwayama) – **Introduction.**

Native to eastern Asia, where it feeds exclusively on *Elaeagnus* spp, but now widespread in north-west and central France, and reported along the coast of SE England in 2002 (Malumphy & Halstead, 2003).

SV81 New Grimsby, Tresco, two from a patch of *Elaeagnus x ebbingei*, JS Badmin (2006).

Family TRIOZIDAE

Trioza munda Förster or *Trioza abdominalis* Flor

SW61 Predannack, 1980/81, DAS.

Trioza alacris Flor – **Naturalised Introduction.**

On *Laurus nobilis*. Not native to county.

SW43 Polmennor House, Heamoor, 22.x.1984, RM Phillips.

SW53 Treloyhan Manor, St Ives, 3.xi.1984, RM Phillips.

SX05 St Austell, 12.vi.1982, RM Phillips.

Trioza albiventris Förster

Common on narrow-leaved willows. Cornwall (Clark, 1906).

Trioza crithmi Löw

An uncommon coastal species, on *Crithmum maritimum*, mainly southern Britain.

SW35 Whitsand Bay East, plentiful, 1905 (Clark, 1906).

Trioza curvatinervis Förster

On *Salix*.

SW62 Cury, 2.viii.1981, DAS.

Trioza galii Förster

Locally common on *Galium*.

SS20 Bude, CW Dale (Clark, 1906).

Trioza urticae (L.)

Very common on *Urtica*. Cornwall (Clark, 1906).

SW52 Trevean Cliff, 1978, RMP.

SW53 St Hilary, 22.ix.1977; Goldsithney, 1983, RMP.

SW61 Mullion, 1977, RMP. Clahar Bridge, 1981; Mullion Cliff, in malaise trap, 27.vii.-5.viii.1981, DAS.

SW71 Gwendreath, 1981, DAS.

Trioza vitreoradiata (Maskell) – **Naturalised Introduction.** *Pittosporum* psyllid.

A native of New Zealand, established in Cornwall and Isles of Scilly.

SW52 Trevean Farm, Rosudgeon, 1993, AA Tompsett.

Super-family ALEYRODOIDEA

Family ALEYRODIDAE

Bemisia afer (Priesner & Hosny) – **Casual Introduction.**

Accidentally introduced into the UK on imported ornamental sweet bay *Laurus nobilis*; occasionally found outdoors in SE England. Has been found at a nursery in Cornwall on sweet bay plants grown outdoors, imported from Italy, March- June 2002 (Malumphy, 2003).

Trialeurodes vaporariorum (Westwood) – **Naturalised Introduction.** Greenhouse Whitefly.

Breeds on many different plants in glasshouses and in heated houses.

SW64 Reskadinnick, 1973, E Jackson.

Super-family ADELGOIDEA

Family ADELGIDAE – Aphid like insects which are confined to conifers.

Pineus strobi (Hartig) – **Naturalised Introduction.**

Cornwall (Clark, 1906).

SX05 Wheal Martyn, 3.vi.1991, MD Bradford.

Adelges abietis (L.) – **Naturalised Introduction.** Forms galls on spruce.

Cornwall (Clark, 1906).

SW42 Penzance, 1970, A Pool.

SW62 Penrose, 28.v.1981, RMP.

SW84 Come to Good, 4.iv.1981, RMP.

Adelges cooleyi (Gillette) – **Naturalised Introduction.**

The nymphs of this species overwinter on spruce *Picea* spp and the secondary host is *Pseudotsuga* spp.

SW84 Truro, 8.viii.1967, HG Morgan.

Adelges laricis Vallot – **Naturalised Introduction.**

Feeds on spruce and larch. Cornwall (Clark, 1906).

SW73 Kennall Vale, 1896, F H Davey.

Family PHYLLOXERIDAE

Phylloxera glabra (von Heyden)

A common species nationally, living on the leaves of oak and occasionally other broadleaved trees.

Cornwall (Clark, 1906).

[*Phylloxera quercus* Fonscolombe

The primary host is *Quercus coccifera* and so the record in Clark (1906) needs verification.]

Viteus vitifolii (Fitch) – **Naturalised Introduction.** Vine Phylloxera.

A serious pest of vines, on roots and causing purse-galls. Cornwall (Clark, 1906).

Super-family APHIDOIDEA

Family LACHNIDAE

Subfamily Lachninae – associated with woody angiosperms.

Lachnus roboris (L.)

Large brown, long-legged aphids living on the twigs of oak, where they are often tended by ants.

Widespread in Europe.

SV81 Abbey Grounds, Tresco, ix.1871 (Walker, 1872).

Tuberolachnus salignus (Gmelin, J.F.)

A large brown hairy species which forms large colonies on willow twigs. Almost cosmopolitan.

SW53 Goldsithney, 1995, G Finch.

SX05 Par Moor Plant Centre, 1996, JL Gregory.

Subfamily Cinarinae – On conifers.

Eulachnus agilis (Kaltenbach) – **Naturalised Introduction.**

On needles of pines *Pinus* spp; widespread in Europe.

SW84 Truro (Clark, 1906).

Eulachnus rileyi (Williams) syn. *Eulachnus bluncki* (Börner, C.) – **Naturalised Introduction.**

On the needles of pines *Pinus* spp, especially *P. nigra*. Widespread in Europe.

SW53 Hayle, 1991, C Green.

Cinara confinis (Koch) – **Casual Introduction**

On trunks of *Abies*, often on young trees. Widespread in Europe.

SX05 Par Moor Plant Centre, 1996, JL Gregory.

Cinara cupressi (Buckton) – **Naturalised Introduction.**

On *Thuja*, *Chamaecyparis*, *Cupressus* and *Juniperus* spp. Very widespread.

SW84 Lamorran, 1879 (Clark, 1906).

Cinara pini (L.) – **Naturalised Introduction.**

On the bark of young pine shoots in early summer, later on older branches or on the trunk. Very widespread.

SW84 Truro, Clark (1906).

Cinara pinicola (Kaltenbach) - **Naturalised Introduction.**

SX05 North Hill Wood, Clark (1906).

Cinara schimitscheki Börner, C. - **Naturalised Introduction.**

SW53 Hayle, 1991, 1994, C Green.

Subfamily Traminae – associated with roots of herbaceous angiosperms.

Protrama radialis (Kaltenbach)

Lives on the roots of various large herbs such as *Arctium*, *Carduus*, *Centaurea* and *Cirsium*; southern Europe.

SW97 Stepper Point, the scale *Ripersia europaea* numerous in a nest of *Lasius niger* “in company with the aphid *Trama radialis*”, 8.vii.1920, H Donisthorpe (1921c).

Trama troglodytes von Heyden, C.H.G. – Artichoke Tuber Aphid.

Occurs on the roots of various composites, attended by ants. Widespread in Europe.

SW53 Carbis Bay, 1976, R Nance.

SW64 Reskadinnick, 1979, SMT.

SW84 Bishop’s Wood (Clark, 1906).

SX15 Beam’s End, Fowey, 6.iii.1994, GC Matthews.

Family DREPANOSIPHIDAE

Subfamily Drepanosiphidinae

Drepanosiphum platanoidis (Schrank) – Sycamore Aphid.

The abundant jumping green sycamore aphid. Large colonies generate a profusion of honeydew.

Widespread in Europe; Cornwall (Clark, 1906).

SW53 St Gwinear, 23.vi.1990, E Jackson.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

Subfamily Phyllaphidinae – Mostly on broadleaved trees

Phyllaphis fagi (L.) – Beech Aphid.

Lives on the undersides of beech leaves where it produces large amounts of white woolly wax.

Widespread in Europe; Cornwall (Clark, 1906).

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS. Trewirgie, Redruth, 16.vi.1978, ERCCIS.

Callipterinella tuberculata (von Heyden, C.H.G.)

On *Betula pendula*; attended by ants; local and uncommon nationally.

SX38 Launceston (Clark, 1906).

Calaphis betulicola (Kaltenbach) and *Calaphis flava* Mordvilko

Until 1957 *betulicola* was used for both *betulicola* and *flava* (Heie, 1982), and so it is unclear which species has been reported in Cornwall. Both occur on the underside of young leaves of birch; both are widespread in Britain, and *C. flava* is widespread across Europe, although *C. betulicola* is not very common elsewhere in Europe.

SX38 Launceston, “*betulicola*” (Clark, 1906).

Myzocallis coryli (Goeze)

On the undersides of the leaves of hazel, widespread in Europe. Cornwall (Clark, 1906).

Tuberculatus annulatus (Hartig, T.)

Mainly on the undersides of leaves of pedunculate oak, but also on sessile oak; widespread throughout Europe. Cornwall (Clark, 1906).

SV81 Abbey Grounds, Tresco, *Callipterus annulatus* on oak, ix.1871, F Walker (1872).

SX35 St Germans (Clark, 1906).

Eucallipterus tiliae (L.) – Lime aphid.

A black and yellow aphid with the wing veins broadly and darkly pigmented. Large colonies on the undersides of the leaves of lime trees, generating a profusion of honeydew. Very common in Britain; Cornwall (Clark, 1906).

Subfamily Chaitophorinae – Live on trees, *Chaetophorus* spp on willow, willow, poplar and aspen.

Periphyllus aceris (L.)

On the undersides of leaves, leaf stems, and young shoots of sycamore. Uncommon in Britain; *Chaetophorus aceris* in Cornwall (Clark, 1906).

Chaetophorus capreae (Mosley, O.)

On willows *Salix caprea*, *S. aurita* and *S. cinerea*; locally common in Britain. *Tranaphis salicivora* in Walker (1872).

SV81 Tresco, ix.1871 (Walker, 1872).

SV91 St Mary's, ix.1871 (Walker, 1872).

Chaetophorus populeti (Panzer)

On *Populus alba* and *P. canescens*, but mostly *P. tremula*; in colonies on young shoots and branches; attended by ants. Uncommon in Britain, but widespread over the rest of Europe.

SW84 Truro (Clark, 1906).

Family APHIDIDAE

Subfamily Pterocommatinae – On willow, willow, poplar or aspen; in colonies on the bark of branches; attended by ants.

Pterocomma salicis (L.)

In dense colonies on wands and twigs of many *Salix*, especially on two year old twigs; with ants. Widespread in Europe.

SX27 Valley of River Lynher (Clark, 1906).

Subfamily Aphidinae

Tribe Aphidini

Subtribe Rhopalosiphina

Hyalopterus amygdali (Blanchard, M.E.) – **Naturalised Introduction.** Peach Aphid.

Host alternation between Amygdalaceae [Rosaceae] and grasses. Cornwall (Clark, 1906).

Hyalopterus pruni (Geoffroy) – Mealy Plum Aphid.

Primary hosts are *Prunus* spp, especially plum and blackthorn, in numbers on the underside of the leaves; in the beginning of summer, migrate to secondary host *Phragmites communis*. All over Europe; Cornwall (Clark, 1906).

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SX46 Landulph, 11.vi.1947, JH Adams.

Rhopalosiphum insertum (Walker) – Oat-apple Aphid.

Curles the young leaves of the primary hosts – Rosaceous trees such as apple, hawthorn and rowan - before migrating to the roots and tillers of oat and other grasses; attended by ants. Common and widespread across Europe.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SX27 Witheybrook Valley & near Clitters, *crataegellum* (Theobald), 26.v.1973, JA Paton.

Rhopalosiphum maidis (Fitch) – Maize Aphid.

On various grasses, including barley and wheat; a pest of maize and sugar cane in warmer climates. Widespread across southern Europe.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

Rhopalosiphum nymphaeae (L.)

Primary hosts are plum and blackthorn, attended by ants; migrating to various water plants and marsh plants in the summer, including water-lilies. Widespread in Europe; Cornwall (Clark, 1906).

Rhopalosiphum padi (L.) – Bird Cherry-oat Aphid.

Rolls the leaves of bird cherry in the spring before migrating onto various grasses, including cereals. Widespread in Europe.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

Melanaphis pyrararia (Passerini)

Alternates between pear and various grasses; localised within Europe.

SW84 Truro, 1905 (Clark, 1906).

Subtribe Aphidina

Two species - *Aphis instabilis* and *Aphis pennicillata* - are reported from Cornwall (Clark, 1906) but the names are no longer in general use and not recognisable.

Aphis confusa Walker

On *Knautia arvensis*; colonies on upper parts of stems and inflorescences, also on undersides of lower leaves; attended by ants. Widespread in Europe; Cornwall (Clark, 1906).

Aphis cytisorum Hartig, T. – **Naturalised Introduction.**

On young shoots and petioles of *Laburnum*. Cornwall (Clark, 1906).

Aphis fabae Scopoli – Black Bean Aphid.

Primary hosts are spindle, but also guelder rose and other small trees or shrubs; a large number of broadleaved herbs may be used as secondary hosts; an often devastating pest of broad bean. Widespread in Europe; Cornwall (Clark, 1906).

SV91 St Mary's, 25.vi.1984, JP Bowdrey.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SX05 Wheal Martyn, 15.iv.1991, MD Bradford.

SX08 Port Gaverne, 1992, M. Lee.

Aphis hederæ Kaltenbach

On young shoots and leaves of ivy. Widespread in Europe; Cornwall (Clark, 1906).

Aphis jacobaeae Schrank

On *Senecio jacobaea*; feeding on stems, inflorescences and undersides of leaves, attended by ants. W & C Europe; Cornwall (Clark, 1906).

Aphis nasturtii Kaltenbach

Primary host is *Rhamnus*, causing leaf down-curling; alternate hosts *Polygonum aviculare*, *P. persicaria*, *Rumex*, *Solanum*, etc, first in inflorescences, later on petioles and underside of leaves. Widespread in Europe.

SW64 Duchy College, Rosewarne, 28.vii.1969, ERCCIS.

[*Aphis pilosellae* (Börner) – *Aphis hieracii* Schrank

Reported in Cornwall (Clark, 1906), but Heie (1986) says this species does not occur in Britain; it lives on the stems and leaves of *Hieracium*, mostly *H. umbellatum*. The record may therefore refer to *A. pilosellae* = *Cerosipha hieracii* Börner, which lives on the underside of basal leaves and on subterranean runners of *Hieracium pilosella*.]

Aphis pomi DeGeer – Green Apple Aphid.

On various Rosaceous trees: hawthorn, apple, etc, the colonies covering young shoots and causing leaf curl. Widespread in Europe; Cornwall (Clark, 1906).

SV91 Holy Vale, St Mary's, 24.vi.1984, BM Spooner.

SW43 Penzance, 1901, 1902 (Clark, 1906).

SX36 Callington, 1904 (Clark, 1906).

SX38 Launceston, 1904 (Clark, 1906).

Aphis rumicis L.

On dock and, sometimes, rhubarb. Widespread in Europe; Cornwall (Clark, 1906).

SV91 St Mary's, thriving on *Mesembryanthemum* here, ix.1871, FA Walker (1872).

SW97 Wadebridge, 1901 (Clark, 1906).

Aphis sambuci L.

Primary host is elder, forming dense colonies on young stems in spring; secondary hosts may be several broadleaved herbs where feeds on roots. Widespread in Europe; Cornwall (Clark, 1906).

Aphis umbrella (Börner, C.)

Causes puckering and umbrella-like leaf-curl on *Malva*. Widespread in Europe; Cornwall (Clark, 1906).

Aphis urticata Gmelin

Forms dense colonies on upper parts of nettle stems; widespread in Europe; Cornwall (Clark, 1906).

SW84 Truro, 1903 (Clark, 1906).

Aphis viburni Scopoli

On guelder rose, curling the leaves into narrow pseudo-galls. Widespread in Europe; Cornwall (Clark, 1906).

Tribe Macrosiphini

Brachycaudus (Brachycaudus) helichrysi (Kaltenbach)

The commonest aphid on plum and blackthorn, the primary hosts; spends the summer on various broadleaved herbs, especially Compositae, and including chrysanthemum; leaves are rolled in from the sides. Widespread in Europe.

SW64 Duchy College, Rosewarne, 1969-83, ERCCIS.

Brachycaudus (Acaudus) cardui (L.)

Primary hosts are *Prunus* spp, on which the leaves become curled in spring; alternating with various broadleaved herbs, primarily Compositae and Boraginaceae. Widespread in Europe; Cornwall (Clark, 1906).

Brachycaudus (Acaudus) lychnidis (L.)

On stems, leaves and flowers of *Melandrium album*. Widespread in Europe; Cornwall (Clark, 1906).

SV91 St Mary's, *Aphis lychnidis* on the *Lychnis*, ix.1871, FA Walker (1872).

Brachycaudus (Appelia) schwartzi Börner, C. – **Naturalised Introduction.** Brown Peach or Almond Aphid.

Lives in leaf-nests on peach.

SW64 Reskadinnick, 1942, FAT.

Dysaphis (Dysaphis) crataegi (Kaltenbach)

Galls groups of hawthorn leaves in spring; on Umbelliferae in summer. Widespread in Europe; Cornwall (Clark, 1906).

Dysaphis (Pomaphis) plantaginea (Passerini) – Rosy Apple Aphid.

Primary host is apple, causing curled and yellowing leaves to early July, then on *Plantago*.

Widespread in Europe.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

Dysaphis (Pomaphis) sorbi (Kaltenbach)

Galls leaves of rowan in spring; on *Jasione* and *Campanula rotundifolia* in summer. Widespread in Europe; Cornwall (Clark, 1906).

[*Ceruraphis eriophori* (Walker) – **Unconfirmed Species.**

Alternate hosts are *Viburnum* and certain monocots such as *Eriophorum*, *Carex*, *Typha* and *Luzula*. Widespread in Europe; only known in Britain from Scotland, Wales & Ireland (Robbins, 1997).

SX15 Ethy, Lerryn, 1984, E Jackson.]

Hayhurstia atriplicis (L.)

Causes upwards in-rolling of yellowed, thickened leaves on *Chenopodium*, *Atriplex* and occasionally on *Beta* or *Spinacia*. Widespread in Europe.

SW52 Perranuthnoe, 26.vii.1979; Treknow, 31.vii.1979, RMP.

SW53 Trevabyn, 4.viii. & 30.viii.1977; Hallamanning, 20.ix.1977; Phillack Towans, 7.vii.1980; Henvor, 26.viii.1982, RMP.

- SW61 Mullion, 14.x.1982, RMP.
 SW62 Porthleven, 5.viii.1997, PAG.
 SW64 Trewirgie House, Redruth, 7.x.1977, RMP.
 SW76 Porth Joke, 14.ix.1990, S Bates.
 SW86 Mawgan Porth to Griffin's Point, 1.ix.1990, KL Spurgin.

Brachycolus stellariae (Hardy, J.)

On *Stellaria holostea*, causing upwards in-curling of the leaves; galling most apparent in autumn. Widespread in Europe.

- SW73 Ponsanooth, 26.ix.1902, F Hamilton Davey.

Brevicoryne brassicae (L.)

Widespread on cabbage and related plants like swede and mustard. Cornwall (Clark, 1906).

- SW42 St Buryan, 1899 (Clark, 1906).
 SW62 Helston, 5.x.1966, HC Woodville.
 SW64 Duchy College, Rosewarne, 1967-1988, ERCCIS.

Hyadaphis foeniculi (Passerini)

Primary hosts are *Lonicera* spp, where the leaves are folded towards the upper sides in spring; secondary hosts are various Umbellifers, where occurs on stems, leaves and inflorescences. Widespread in Europe.

- SW73 Penryn (Clark, 1906).
 SW83 Falmouth (Clark, 1906).
 SX45 Saltash (Clark, 1906).

Coloradoa tanacetina (Walker)

On tansy, feeding on the edges of the leaves; widespread in Europe.

- SW84 Truro, 1904 (Clark, 1906).

Myzaphis rosarum (Kaltenbach)

On the shoots, flowers and undersides of leaves of *Rosa*. Widespread in Europe; Cornwall (Clark, 1906).

Elatobium abietinum (Walker) – **Naturalised Introduction.** Green Spruce Aphid.

Feeds on the needles of shoots from the previous year. Widespread in northern Europe.

- SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.
 SW72 Croft Pascoe, Goonhilly Downs, 15.viii.1988, JM Walters.

Liosomaphis berberidis (Kaltenbach)

Causes deformation of the leaves of *Berberis*; also on *Mahonia*; widespread in Europe.

- SW84 Truro (Clark, 1906).

Cavariella aegopodii (Scopoli) – Willow-carrot aphid.

Salix spp are the primary hosts; later on Umbelliferae such as *Aegopodium* & *Foeniculum*; can be a pest of carrot.

- SW64 Duchy College, Rosewarne, 1969-87, ERCCIS.
 SW73 Perranworthal, 1968, HG Morgan.

Cavariella pastinacae (L.)

Primary hosts are willows, especially *Salix caprea*; later on certain umbellifers such as *Angelica*, *Anthriscus*, and *Heracleum*. Widespread in Europe; Cornwall (Clark, 1906).

- SW43 Penzance, 1905 (Clark, 1906).
 SW84 Truro, 1901 (Clark, 1906).

Phorodon humuli (Schrank) – Hop Damson Aphid.

Host alternation between *Prunus* spp and hop. Widespread in Europe.

- SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.
 SW84 Truro, Clark (1906).

Myzus (Myzus) cerasi (Fabricius)

A glossy black aphid that crumples the leaves of cherry, migrating to speedwell and bedstraw in the summer. Widespread in Europe.

- SW84 Truro (Clark, 1906).
 SX06 Bodmin, 1905 (Clark, 1906).

- Myzus (Myzus) ornatus* Laing – Violet Aphid.
Causes galls on violets and many other broadleaved herbs; chiefly in gardens and glasshouses.
SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.
- Myzus (Nectarosiphon) ascalonicus* Doncaster – Shallot Aphid.
Widespread, indoors and outdoors, and polyphagous; a pest of shallots and strawberries. Widespread in Europe.
SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.
- Myzus (Nectarosiphon) certus* (Walker) – Violet-Dianthus Aphid.
The hosts are various Caryophyllaceae and Violaceae. Widespread in Europe.
SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.
- Myzus (Nectarosiphon) persicae* (Sulzer) – **Naturalised Introduction**. Green Peach Aphid.
Primary host is *Prunus persica*; then on a wide variety of herbs. Cosmopolitan.
SW43 Penzance, 1904 (Clark, 1906).
SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.
SW84 Truro, 1905 (Clark, 1906).
- Rhopalosiphoninus latysiphon* (Davidson, W.M.) – Bulb-potato Aphid.
Feeds on the subterranean parts of many monocots and dicots, especially potato. Cosmopolitan.
SX16 Boconnoc, 5.iv.1967, HG Morgan.
- Mizosiphon ribesinum* (van der Goot) – **Rare**.
Lives mainly on old branches of *Ribes rubrum*, close to the ground on humid and shady places. A rare species in Europe. Cornwall (Clark, 1906).
SX06 Bodmin, 1904 (Clark, 1906).
- Nasonovia compositellae* (Theobald)
On *Hieraceum* spp. Widespread in Europe; Cornwall (Clark, 1906).
- Nasonovia ribisnigri* (Mosley, O.) – Lettuce Aphid.
On various *Ribes* in spring, feeding on the shoots; then on various broadleaved herbs, and can be a pest of lettuce. Widespread in Europe.
SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.
SW76 Newquay, 1902 (Clark, 1906).
- Hyperomyzus lactucae* (L.) – Currant Aphid.
On *Ribes nigrum* in spring; then on *Sonchus* spp. Widespread in Europe.
SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.
SW86 Mawgan-in-Pydar (Clark, 1906).
- Chaetosiphon fragaefolii* (Cockerell) – Strawberry Aphid.
Lives on strawberries. Almost cosmopolitan. Also known as *Pentatrachopus fragaefolii*
SW53 Angarrack, 1990, ECMH.
SW64 Duchy College, Rosewarne, 1972-88, ERCCIS.
- Cryptomyzus galeopsidis* (Kaltenbach)
Primary host is *Ribes nigrum* and other *Ribes* spp., living on the underside of leaves; secondary hosts are various Labiatae, mainly *Galeopsis* and *Lamium* spp, feeding on undersides of leaves. Widespread in Europe; Cornwall (Clark, 1906).
SW84 Truro, 1904 (Clark, 1906).
SX26 Liskeard (Clark, 1906).
- Cryptomyzus ribis* (L.) – Hairy Currant Aphid.
A pale yellow aphid which causes blisters to red currant *Ribes rubrum* leaves in the spring; on woundwort *Stachys* during the summer. Widespread in Europe; Cornwall (Clark, 1906).
SW61 Mullion, 6.vii.1978, RMP.
SW64 Redruth, 26.vi.1979, RMP.
- Acyrtosiphon chelidonii* (Kaltenbach)
Forms colonies on the upper parts of the stems and young leaves of greater celandine *Chelidonium majus*. Widespread in Europe.
SW84 Truro district (Clark, 1906).

Acyrtosiphon pelargonii (Kaltenbach) syn. *Acyrtosiphon geranii*

Lives on many different plants, predominantly broadleaved herbs. Cosmopolitan.

SW61 Higher Predannack Cliff, 23.vii.1974, RMP.

SW84 Truro (Clark, 1906).

Acyrtosiphon pisum (Harris) – Pea Aphid.

On a wide variety of pea family. Cosmopolitan.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SX06 Bodmin, 1901 (Clark, 1906).

Microlophium carnosum (Buckton)

On nettle *Urtica dioica* and more rarely on other *Urtica* spp. Widespread in Europe. *M. carnosum* and *M. evansi* are now regarded as the same species.

SW84 St Clement, *M. carnosum*, 1902 (Clark, 1906).

SW84 Truro, *M. evansi*, 1902 (Clark, 1906).

Aulacorthum (Aulacorthum) solani (Kaltenbach)

Glasshouse Potato Aphid. On a wide range of both native and cultivated plants; across southern Britain.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SW84 Miramar, Truro (Clark, 1906).

Aulacorthum (Neomyzus) circumflexum (Buckton) – Mottled Arum Aphid.

In greenhouses, on the leaves of lily, crocus and other “bulbs” forced under glass, but also in sheltered places outdoors.

SV81 Tresco, Clark (1906).

SW64 Duchy College, Rosewarne, 19.ii.1975, ERCCIS.

Metopolophium dirhodum (Walker) – Rose-grain Aphid.

Alternates between rose and cereals or grasses, usually annual ones. Cosmopolitan.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SW83 Falmouth Docks, 1901 (Clark, 1906).

Metopolophium festucae (Theobald) – Grass Aphid.

Lives on many species of grasses, including cereals. Widespread in Europe.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

Sitobion avenae (Fabricius) – English Grain Aphid.

Mainly on grasses; living within the sheaths and often on the growing inflorescence. Almost cosmopolitan.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SX38 Launceston, Clark (1906).

Sitobion fragariae (Walker) – Blackberry-grass Aphid.

Alternates between bramble and grasses. Widespread in Europe.

SW43 Penzance, 1900 (Clark, 1906).

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SW83 Falmouth, 1900 (Clark, 1906).

SW84 Truro, 1900 (Clark, 1906).

Macrosiphum albifrons – Lupin Aphid.

Lives on all parts of lupin plants, but mainly on leaves, stems and flower spikes. A recent introduction, discovered first in England in 1981, but probably present since the early 1970s.

SV91 St Mary's, 3.vi.1991, ECMH.

SW53 Angarrack, 1989-94, ECMH.

SX05 St Austell, 1985, J Humphreys.

Macrosiphum euphorbiae (Thomas, C.A.) – **Naturalised Introduction.** Potato Aphid.

A North American species, polyphagous on native and cultivated plants, including potato, lettuce and beet. Now one of the commonest species all over the world.

SW53 Angarrack, 1989-94, ECMH.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

Macrosiphum rosae (L.) – Rose Aphid.

Often the most abundant greenfly on roses; migrates to scabious or teasel in summer. Cosmopolitan.

SW53 Angarrack, 1988, ECMH.

SW83 Falmouth (Clark, 1906).

SX08 Port Gaverne, 1992, M Lee.

Corylobium avellanae (Schrank)

On petioles and shoot tips of hazel. Widespread in Europe.

SW84 Truro district (Clark, 1906).

Macrosiphoniella artemisiae (Boyer de Fonscolombe)

On the upper parts of *Artemisia vulgaris*, occasionally on *A. absinthium*. Widespread in Europe.

SW54 St Ives (Clark, 1906).

Macrosiphoniella millefolii (DeGeer)

On yarrow *Achillea millefolium* and occasionally other *Achillea* and ox-eye *Chrysanthemum leucanthemum*. Widespread in Europe; Cornwall (Clark, 1906).

Uroleucon (Uroleucon) cichorii (Koch, C.L.)

On *Cichorium intybus*, mainly known in Britain from Kent.

SW53 Marazion (Clark, 1906).

SW83 Falmouth (Clark, 1906).

SW84 Kea (Clark, 1906).

Uroleucon (Uroleucon) cirsii (L.)

Cirsium arvense preferred host, but also on other thistles. Widespread in Europe.

SX45 Saltash (Clark, 1906).

Uroleucon (Uroleucon) sonchi (L.)

On *Sonchus*. Cosmopolitan; Cornwall (Clark, 1906).

Uroleucon (Uroleucon) tanacetii (L.)

On tansy and cultivated Chrysanthemums; widespread in Europe.

SW84 Truro (Clark, 1906).

SX25 Looe Valley (Clark, 1906).

Uroleucon (Uroleucon) tussilaginis (Walker)

On leaves of *Tussilago* and *Petasites*. Widespread in Europe; Cornwall (Clark, 1906).

Uroleucon (Uromelan) jaceae (L.)

Usually on *Centaurea nigra*; on stems. Widespread in Europe; Cornwall (Clark, 1906).

Uroleucon (Uromelan) solidaginis (Fabricius)

On *Solidago virgaurea*; widespread in Europe.

SW84 Bishop's Wood, Truro, 1902 (Clark, 1906).

SX19 Millook, 1902 (Clark, 1906).

Amphorophora rubi (Kaltenbach)

On various blackberry *Rubus* spp. Widespread in Europe; Cornwall (Clark, 1906).

SW64 Duchy College, Rosewarne, 1971-88, ERCCIS.

Megoura viciae Buckton – Vetch Aphid.

On apical shoots of Leguminosae, especially *Lathyrus pratensis* and *Vicia* spp. Widespread in Europe.

SW64 Duchy College, Rosewarne, 1969-87, ERCCIS.

Family THELAXIDAE

Thelaxes dryophila (Schrank)

On oak, attended by ants; colonies on shoot tips, young stems, petioles and undersides of leaves; a widespread species throughout much of Europe.

SS21 Kilhampton, 1900 (Clark, 1906).

Family PEMPHIGIDAE

Most species have two alternating host plants, producing leaf galls or leaf-curling on the primary hosts. Some species migrate to roots of woody secondary hosts, others to roots or aerial parts of herbaceous secondary hosts. A few have a single host plant and live on trees.

Subfamily Eriosomatinae – Primary hosts are elms, causing characteristic leaf-rolls or leaf-galls.

Eriosoma lanigerum (Hausmann) – Woolly Apple Aphid or American Blight.

Lives on the roots, trunks and branches of apple, but also known from pear and *Cotoneaster*. Very widespread across Europe.

SW43 Zennor Head, 30.viii.1994, PE Tompsett.

SW53 Goldsithney, 15.vii.1973, RMP.

SW64 Reskadinnick, 1960 & 1980, E Jackson. Rosewarne Downs, 1982, EC Stacey.

SW71 Gweal Crease, 16.vi.1975, RMP.

SW73 Kennall Vale, 1896, FH Davey.

SW83 King Harry Ferry, 1972, JA Paton.

Schizoneura lanuginosum Hartig, T.

Forms closed blister-shaped galls on the foliage of elms; winged aphids later migrate to the fine roots of secondary hosts - apple, pear and quince.

SW84 Truro (Clark, 1906).

Schizoneura ulmi (L.) – Currant Root Aphid.

Forms a leaf-roll type gall on elm foliage, later migrating to the roots of various currants. Widespread in Europe.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

SW84 Truro, 1901 (Clark, 1906).

Subfamily Pemphiginae

Mimeuria ulmiphila (Del Guercio)

Alternates between the leaves of field maple, the primary host, and the roots of elm. Causes leaf-nest galls on maple, and produces mycorrhizal cysts on elm roots. Widespread in Europe.

SW53 Goldsithney, 15.v.1978 & 10.ii.1981, RMP.

SW62 Nancemerrin, 8.ix.1979, RMP.

SW71 Kennack, 2.ix.1980, RMP.

SX19 Anderton Ford, 21.iv.1963, FA Turk.

Pemphigus – Most species have two alternating hosts, and form solid galls on the leaves, petioles and branches of the primary hosts, *Populus* spp of the *nigra* group, in spring and early summer.

Pemphigus populi Courcelet – Poplar Root Aphid.

Alternate hosts are poplars and certain herbs of the pea family, such as *Melilotus*, *Lathyrus* and *Medicago*. The aphid causes a blister-shaped gall on the midrib at the base of poplar leaves.

SW64 Duchy College, Rosewarne, 1969-88, ERCCIS.

Pemphigus bursarius (L.) – Lettuce Root Aphid.

Causes pouch-galls in poplar leaf petioles, later migrating to the roots of various herbs, especially Compositae, including lettuce. Common and widespread throughout Europe. Cornwall (Clark, 1906).

[“*Pemphigus fuscifrons*” – This name is not currently recognised and it is unclear which species is referred to.

SW76 Gannel, 1903 (Clark, 1906).]

Pemphigus trehernei Foster

Host alternating between *Populus italica* and *Aster tripolium*, but the majority of the aphids overwinter on the roots of the latter in salt-marsh habitats; very local – only relatively recently described as new to science from tidal salt-marshes in England and Ireland; also on the Atlantic coast of France; aphids assumed to be this species have been found on *Aster tripolium* in salt marshes in Cornwall (Foster, 1975).

SW71 Coverack, aphids assumed to be this species on a cliff *Aster tripolium* community (Foster, 1975).

Subfamily Fordinae – Reproduce exclusively by parthenogenesis on roots of herbs, mostly grasses, or on mosses.

Forda formicaria von Heyden, C.H.G.

Lives on the roots of a wide variety of grasses, attended by ants, especially in nests of yellow meadow ant *Lasius flavus*. Widespread throughout Europe.

SW84 Bishop's Wood, Idless (Clark, 1906).

Smynthurodes betae Westwood

Lives on the roots of a wide variety of broad-leaved herbs. Widespread in Europe.

SW84 Truro, 1902 (Clark, 1906).

Super-family COCCOIDEA

Family PSEUDOCOCCIDAE Mealybugs – Most are associated with grasses.

Chnaurococcus subterraneus (Newstead) = *Ripersia formicarii* Newstead

Invariably found within ant nests. Coastal counties from Norfolk to Bristol; East Lothian.

Euripersia europaea (Newstead) syn. *Ripersia tomlinii* Newstead

Found under stones in ants' nests, presumably feeding on fine rootlets. Isle of Wight, Kent, Somerset, Dorset & Cornwall.

SW97 Stepper Point: Pudstone, *Ripersia europaea* numerous in a nest of *Lasius niger*, 8.vii.1920, H Donisthorpe (1921b & c).

Pseudococcus calceolariae (Maskell) - **Naturalised Introduction.**

An Australian native; a pest of citrus in USA.

SV81 Abbey Gardens, Tresco, on *Citrus medica* (Rutaceae) imported from Asia and growing in open, 18.ix.1975, DJ Williams (1985).

Trionymus diminitus (Leonardi) - **Naturalised Introduction.**

A native of New Zealand. Plants recently imported from New Zealand, growing in Cornwall and other localities in England were found by the Plant Health and Seeds Inspectorate to be infested with the mealybug (Williams, 1985).

SV81 Abbey Gardens, Tresco, on *Phormium tenax* (Agavaceae) imported from NZ and growing in open, 17.ix.1975, DJ Williams (1985).

Family ERIOCOCCIDAE Felted Scales

Noteococcus hoheriae (Maskell) - **Naturalised Introduction.**

A native of New Zealand.

SV81 Abbey Gardens, Tresco, on *Hoheria populnea* (Malvaceae) imported from NZ but growing in open, iii.1924, JCF Fryer (Green, 1925; Williams, 1985a & b).

Family COCCIDAE Scale Insects

Coccus hesperidum L. – Soft Scale.

A common species in British greenhouses, but often survives out of doors in sheltered parts of England on the leaves of *Laurus nobilis*, *Ilex aquifolium*, etc.

SV81 Abbey Gardens, Tresco, on *Citrus* (Rutaceae) in a greenhouse, 16.ix.1975, DJ Williams (1985).

Lichtensia (Filippia) viburni (Lichtenstein, MS. Signoret)

On leaves or young stems of ivy.

SX46 Landulph, 1947, JH Adams.

Pulvinaria vitis (L.) – Woolly Currant Scale.

A pest of grape vine, peach, currants, gooseberry and *Pyracantha*. Common on birch, hawthorn, etc.

SW84 Truro, 1983, SD Johns.

Pulvinariella mesembryanthemi (Vallot) - **Naturalised Introduction.**

Common on *Carpobrotus* and related plants in many parts of the world with a Mediterranean-type climate, where the plant is used to bind the soil.

SV Abbey Gardens, Tresco, numerous in open, 6.vii.1940, G Fox-Wilson; on *Carpobrotus edulis* (Aizoaceae) growing in open just outside the Gardens, 16.ix.1975, DJ Williams (1985).

Saissetia oleae (Olivier) – **Naturalised Introduction.**

In heated greenhouses.

SV Abbey Gardens, Tresco, on *Aloë* (Liliaceae) growing in open, 17.ix.1975, & on *Azara* (Flacourtiaceae) in conservatory, 18.ix.1975, DJ Williams (1985).

Family ASTEROLECANIIDAE Pit Scales

Asterodiaspis (*Asterolecanium*) *massa longoianum* Podsiadlo

Cause shallow pits on the twigs of oak.

SW62 Nancemerrin, 26.x.1973, RMP.

Family DIASPIDIDAE

Aspidiotus nerii Bouché syn. *Aspidiotus hederæ* (Vallot) - **Naturalised Introduction.**

Common in greenhouses in Britain and may survive outside in sheltered areas.

SV St Mary's, on *Euonymus japonicus* (Celastraceae) and *Vitis vinifera* (Vitaceae) growing outdoors. Abbey Gardens, Tresco, on *Veronica x cranleighensis* (Scrophulariaceae), 17.ix.1975; *Hoheria sextylosa* bark (Malvaceae), 18.ix.1975; *Cordyline australis* (Agavaceae), 18.ix.1975; alder bark (Betulaceae), 18.ix.1975; all growing in the open, DJ Williams (1985).

SW42 Lariggan Crescent & Mount Lidden, Penzance, 23.vi.1991, SMT.

Chionaspis salicis (L.) Willow or Oyster Scale

Abundant on alder, willow & ash; also on other trees and shrubs. This is the principal food of the ladybird *Chilocorus renipustulatus*.

SV Abbey Gardens, Tresco, on alder bark, 18.ix.1975; on *Salix* outside the Gardens, 16.ix.1975, DJ Williams (1985).

SW71 Croft Pascoe Plantation, 10.i.1988, PE Tompsett.

SX46 Landulph & environs, 1930, ERCCIS.

Eulepidosaphes pyriformis (Maskell) syn. *Eulepidosaphes marshalli* - **Naturalised Introduction.**

A native of New Zealand. Polyphagous.

SV Abbey Gardens, Tresco, on bark of *Pittosporum crassifolium*, *P. bicolor* and *P. tenuifolium* (Pittosporaceae), 18.ix.1975; and *Phormium tenax* (Agavaceae), 17.ix.1975, DJ Williams (1985) and *Trachycarpus fortunei* (Arecaceae), 18.ix.1975, JM Noyes (Williams, 1985).

Leucaspis podocarpi Green - **Naturalised Introduction.**

A native of New Zealand.

SV81 Abbey Gardens, Tresco, on *Podocarpus totara* from NZ and *P. andinus* from Chile, 18.ix.1975, DJ Williams (1985).

ACKNOWLEDGEMENTS

I would like to record my thanks to: Sarah Board and the ERCCIS team for making available all Hemiptera records held by the Centre; CISFBR and ERCCIS for their help in carrying this project through to publication; the resident recorders who have so freely made their data available, notably Graham Blow, Paul Gainey, Bernard Hocking, Ken & Rod Preston-Mafham, and Adrian Spalding; visiting recorders, namely Sheila Brooke, Andy Foster, Steve Judd (Curator of Entomology, National Museums & Galleries on Merseyside, Liverpool Museum); Pete Kirby; Ken & Rita Merrifield, and Bernard Nau; and Dave Sheppard for access to the data from his Lizard surveys for the Nature Conservancy Council.

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Calocoris roseomaculatus



Oncotylus viridiflavus



Phytocoris varipes



Dolycoris baccarum



Syromastus rhombeus