Shropshire Shieldbug Atlas information pack

The Invertebrate Challenge, a 3 year project funded by the Heritage Lottery Fund (HLF) and the Esmée Fairbairn Foundation, is putting together a distribution atlas of Shieldbugs and their allies to be published during 2013. The atlas will be based upon the historical data within the Shropshire Environmental Data Network (SEDN) database, targeted field work, plus volunteer contributions. It will be aimed at amateur naturalists and members of the public with an interest in insects (such as wildlife gardeners etc), and all records will be added to the SEDN database and on the National Biodiversity Network (NBN) Gateway. Maps will be displayed at a 2km x 2km detail (tetrad) for all species and where possible a photograph of each species as an adult will be displayed at alongside the distribution map and observations.



Sloe Bugs Dolycoris baccarum : Pete Boardman

The minimum amount of information needed is;

Species name – either English name or a taxonomic name, i.e. Green Shieldbug or *Palomena prasina*.

Site name - such as Preston Montford Field Centre, with grid reference. Ideally six figure – eg. SJ432144 or four figure eg. SJ4314 is acceptable. If the record is from a private garden a **post code** is acceptable and I can later convert it into a grid reference.

Recorder Name – ie the person who recorded the species eg. Pete Boardman

Determiner Name – where the person who identified the species isn't the person who found it – eg. Where a photo is sent for identification etc **Date** on which you made the sighting - in the following format if sending in excel – 24/10/11 or 24/10/2011.

Optional information;

How many? The default setting assumes a single sighting.Habitat information on any of the uncommon species listed in the table.

If possible please note any plant associations (particularly if egg-laying or eggs are found). Please note any other associations – such as food of predatory species, or behavior noted.

If you wish to send photos of shieldbugs for identification or submit records, please send to **pete@field-studies-council.org** - All recorders will be credited in the finished publication. Please see the map of all current shieldbug locations on the back page.

Taxonomic list of Shropshire species and potential Shropshire species in the recording atlas project (names as per MapMate recording software)

Pentatomoidea - shieldbugs

Acanthosomatidae

Acanthasoma haemorrhoidale (Linnaeus, 1758) Hawthorn Shieldbug Cyphostethus tristiatus (Fabricius, 1787) Juniper Shieldbug Elasmostethus interstinctus (Linnaeus, 1758) Birch Shieldbug Elasmuchea grisea (Linnaeus, 1758) Parent Bug

Scutelleridae

Eurygaster testudinaria (Geoffrey, 1785) Tortoise Bug

Cydnidae

Legnotus limbosus (Geoffrey, 1785) Bordered Shieldbug Sehirus bicolor (Linnaeus, 1758) Pied Shieldbug Sehirus biguttatus (Linnaeus, 1758) Cow-wheat Shieldbug Sehirus luctuosus Mulsant & Rey, 1886 Forget-Me-Not Shieldbug

Pentatomidae

Graphosoma lineatum (Linnaeus, 1758) Striped Shieldbug VAGRANT Aelia acuminata (Linnaeus, 1758) Bishop's Mitre Shieldbug Neottiglossa pusilla (Gmelin, 1789) Small Grass Shieldbug Eysarcoris fabricii (Kirkaldy, 1904) Woundwort Shieldbug Palomena prasina (Linnaeus, 1761) Green Shieldbug Dolycoris baccarum (Linnaeus, 1758) Sloe Bug Piezodorus lituratus (Fabricius, 1789) Gorse Shieldbug Pentatoma rufipes (Linnaeus, 1758) Forest Bug Eurydema oleracea (Linnaeus, 1758) Brassica Bug Picromerus bidens (Linnaeus, 1758) Spiked Shieldbug Troilus luridus (Fabricius, 1775) Bronze Shieldbug Rhacognathus punctatus (Linnaeus, 1758) Heather Shieldbug Zicrona caerulea (Linnaeus, 1758) Blue Bug

Coreoidea – squashbugs, scentless plant bugs, spurge bugs

Coreidae

Coreus marginatus (Linnaeus, 1758) Dock Bug Arenocoris falleni (Schilling, 1829) Fallen's Leatherbug Ceraleptus lividus Stein, 1858 Slender-horned Leatherbug Coriomerus denticulatus (Scopoli, 1763) Denticulate Leatherbug Leptoglossum occidentalis (Heidemann, 1910) Western Conifer Seedbug VAGRANT

Rhopalidae

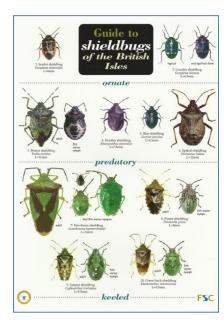
Corizus hyoscyamii (Linnaeus, 1758) Rhopalus subrufus (Gmelin, 1788) Chorosoma schillingi (Schummel, 1829) Myrmus miriformis (Fallén, 1807) Stictopleurus abutilon (Rossi, 1790) Stictopleurus punctatonervosus (Goeze 1778)

Stenocephalidae

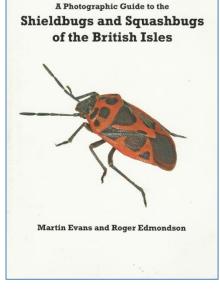
Dicranocephalus medius (Mulsant & Rey, 1870)

Identification Resources

There are a number of good resources to help you identify and learn more about Shieldbugs and their allies. We highly recommend these;



FSC Guide to shieldbugs of the British Isles – included in this information pack



A Photographic Guide to the Shieldbugs and Squashbugs of the British Isles by Martin Evans and Roger Edmondson.

Approximately £15.00

Excellent guide to all Shropshire shieldbug and squashbugs with excellent large photographs and full of useful information on life histories.

Shieldbugs of Surrey



ROGER D. HAWKINS

The Shieldbugs of Surrey by Roger D. Hawkins.

Approximately £17.50

Based upon 25 years of the author's experience, a fabulous guide to the shieldbugs, squashbugs, and allies (note – allies are not included in the previous two titles). All Shropshire species are included.



British Bugs

www.britishbugs.org.uk

Brilliant online resource for British shieldbugs, squashbugs, plant bugs, water bugs and leafhoppers.

Downloadable charts of nymphal stages of shieldbugs and squashbugs plus some taxonomic keys for difficult groups

Information on Shropshire shieldbugs, squashbugs and allies (plus see notes on p7)

No. on FSC	Common Name	Taxonomic name	current Shropshire status	habitat
chart		(MapMate)		
2	Crucifer shieldbug / Brassica shieldbug	Eurydema oleracea	rare (one site) Wyre	on crucifers ¹
3	Bronze shieldbug	Troilus luridus	frequent	trees, woodland and hedgerows
4	Heather shieldbug	Rhacognathus punctatus	rare (three sites) Wyre, Whixall & Stiperstones ²	heathland / moor / bog / heathy wood
5	Blue shieldbug	Zicrona caerulea	widespread	damp grassland / heathland / woods
6	Spiked shieldbug	Picromerus bidens	frequent	meadows / heathland / wood edge
7	Hawthorn shieldbug	Acanthosoma haemorrhoidale	common	on hawthorn
8	Parent shieldbug	Elasmucha grisea	common	on birch and alder
9	Juniper shieldbug	Cyphostethus tristriatus	not yet recorded but should be found	Lawson's cypress and related species
10	Birch shieldbug	Elasmostethus interstinctus	common	on birch trees
13	Tortoise shieldbug	Eurygaster testudinaria	recent to Wyre but old specimen in FP collection	damp and dry grassland
16	Cow-wheat shieldbug	Sehirus biguttatus	rare (two sites with Wyre)	cow-wheat - often in litter under plant ³
17	Pied shieldbug	Sehirus bicolor	widespread	on white deadnettle ⁴
18	Forget-me-not shieldbug	Sehirus luctuosus	rare (four sites) Grinshill, Kenley, Snailbeach, Cound	on forget-me-not on sandy or chalk soil
22	Bordered shieldbug	Legnotus limbatus	Frances Pitt collection no data - Bridgnorth area?	bedstraws on dry soils
30	Bishop's mitre shieldbug	Aelia acuminata	widespread but under recorded	dry grasslands
31	Small grass shieldbug	Neottiglossa pusilla	uncommon	grasslands (Poa sp.)
32	Woundwort shieldbug	Eysarcoris fabricii	frequent	on woundwort / nettle / deadnettle⁵
33	Sloe shieldbug / Hairy shieldbug	Dolycoris baccarum	common	on thistles etc
34	Forest shieldbug / Red-legged shieldbug	Pentatoma rufipes	common	on deciduous trees in woods / parks
35	Green shieldbug	Palomena prasina	common	gardens / parks / hedges / nettles etc
36	Gorse shieldbug	Piezodorus lituratus	common	on gorse / broom
39	Dock bug	Coreus marginatus	frequent - most records south Shropshire	on docks
42	Fallen's leatherbug	Arenocoris falleni	not yet recorded - but in Worcs	under storksbill rosettes on sands
45	Denticulate leatherbug	Coriomeris denticulatus	rare (one site) Llanymynech	medicks / trefoils on dry soils
Illustrated below	Western conifer seedbug	Leptoglossus occidentalis	vagrant (one site) Shrewsbury	anywhere - attracted to moth trap light
44	Slender-horned leatherbug	Ceraleptus lividus	not yet recorded – but in Worcs (Stourport)	dry soils where legumes
Illustrated below	a scentless plant bug	Corizus hyoscyamii	uncommon - probably spreading north	sandy areas mostly but not always
Illustrated below	a scentless plant bug	Rhopalus subrufus	uncommon - under-recorded	limestone / chalk / scrub / clearings
Illustrated below	a scentless plant bug	Myrmus miriformis	uncommon - under-recorded	dry and damp grasslands
Illustrated below	a scentless plant bug	Stictopleurus abutilon	rare (one record)	dry grassland
Illustrated below	a scentless plant bug	S. punctatonervosus	not yet recorded – but in Worcs (Stourport)	dry grassland
Illustrated below	a scentless plant bug	Chorosoma schillingi	Frances Pitt collection no data - Bridgnorth area?	dry grassland on sand
Illustrated below	a spurge bug	Dicranocephalus medius	rare (one site) Wyre	on wood spurge
not illustrated	Striped shieldbug	Graphosoma lineatum	Vagrant from imported plants – one site record	
			(garden in Shrewsbury) – colony died out	



Western Conifer Seed bug



Corizus hyoscyamii



Chorosoma schillingi



Rhopalus subrufus



Myrmus miriformis



Dicranocephalus medius



Stictopleurus. punctatonervosus (see note)



Stictopleurus abutilon (see note)

Note on *Stictopleurus* species – these are very similar and are best separated by the structure of the pronotum. The British Bugs website has illustrations of both species showing the differences, therefore a specimen is needed or at least a good quality image focussed on the pronotum (thorax).

Notes from table

1 – Crucifer shieldbug was recorded on crucifers along woodland edge in the Wyre Forest (John Bingham pers. comm.)

2 – The Wyre Forest record was from 2010 but Whixall Moss & The Stiperstones records were from 1998 & 2002 respectively so need re-finding on these sites. The Long Mynd may also harbour this species. Apparently sheltered heather with scrub but also damper areas of heather with Sphagnum moss are used.

3 – Sometimes found in leaf litter up to a metre from cow-wheat plants. It could occur in Shropshire parts of the Mortimer Forest where sufficient cow-wheat is found.

4 – Can be frustrating to find on white deadnettle – probably choice of soil is important – well drained sandy soils seem best and a warm micro-climate is probably important

5 – Often found on nettle near woundwort.

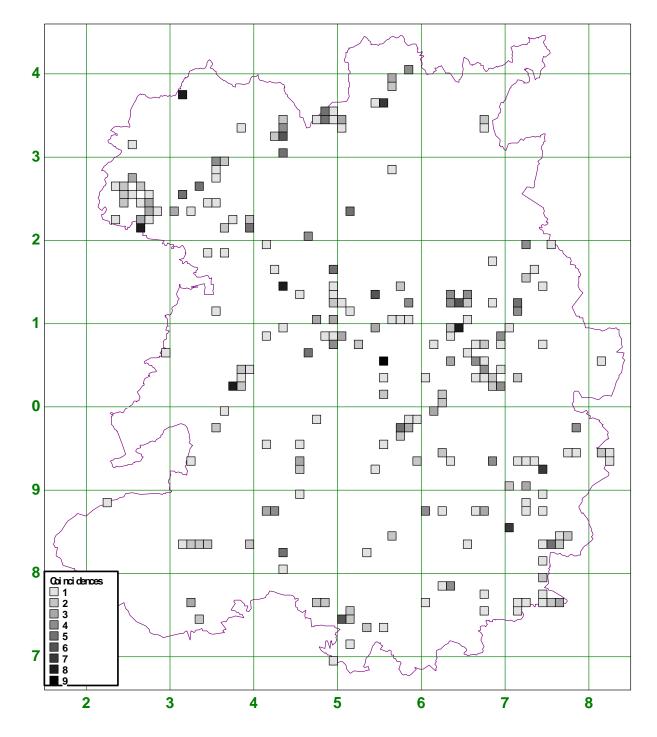
Please note;

The taxonomic species list we are using is as that on MapMate recording software (MapMate Ltd) and differs from the taxonomic list used elsewhere, most notably on the British Bugs website, for a couple of species.

The current status list is based on the SEDN database as it stood in November 2011. This is subject to change.

Photographs used on this page are taken from <u>www.britishbugs.org.uk</u> and are for illustration purposes only. Please refer to the species accounts on the website for more detailed information and more photographs of each of the species.

Compiled by Pete Boardman



This coincidence map shows all species records of shieldbug and allies recorded in SEDN database (up to November 2011) at tetrad (2km x 2 km grid square) level. Wherever there is a white space within the Shropshire county boundary no shieldbugs or allies have been recorded. Currently the largest gaps are the areas to the north and east of Telford, and the area between Telford and Market Drayton, the Market Drayton area up to the extreme north east of the county at Woore, north of Shrewsbury towards Ellesmere, between Ellesmere and St. Martins, Whitchurch area (excluding Whixall Moss), north of Oswestry, between Shrewsbury and Church Stretton and the whole western part of the county south from Llanymynech to the Clun area / Newcastle etc.

Please help us fill the gaps!!!!

To help we are holding the following recording days where we will try and visit several sites in a day to record what we can find.

Shieldbug recording days (part of Invertebrate Challenge programme)

- Oswestry area 02/05/12
- Market Drayton area 09/05/12
- Ludlow area 15/8/12
- south west Shropshire 22/08/12
- Market Drayton area 12/09/12

To book on any of these contact Pete Boardman at pete@field-studies-council.org