

Orthoptera and allied Insects Recording Scheme of Britain and Ireland

grasshoppers crickets stick-insects earwigs cockroaches mantids

www.orthoptera.org.uk



Newsletter 30, Autumn 2013

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1. Orthopterists' Meeting

Everyone is very welcome to attend the annual Orthopterists' meetings, whether to present research or just to listen and meet others. Talks, posters and other contributions can be presented on grasshoppers, crickets and related groups (cockroaches, earwigs, stick insects, mantids).

Programme

6th November 2013, 1:30 - 8pm
Natural History Museum London

1:30 Arrival and tea

1:45 - 2:30 Exhibition – Denys Ovenden

Original watercolour illustrations for the "Grasshoppers and Allied Insects of Great Britain and Ireland" (Marshall & Haes, 1988). Prints available.

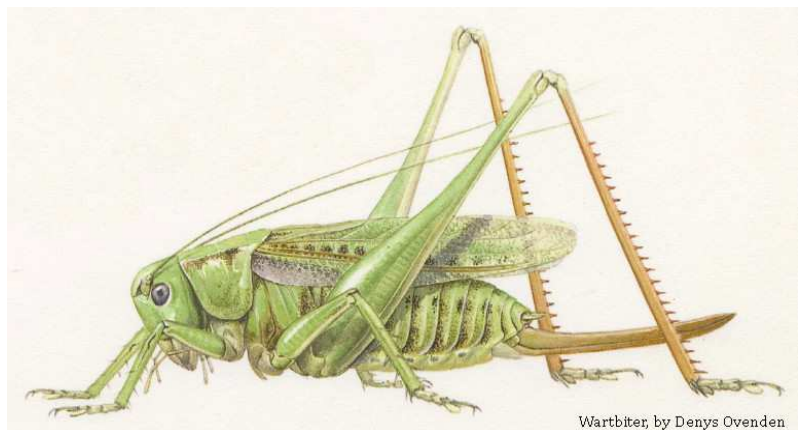
2:30 – 6:00 Talks Session

2:30 Ted Benton (University of Essex, author of the recently published New Naturalist book on Grasshoppers and Crickets)

Alfred Russell Wallace – the co-discoverer of evolution in the centenary year of his death

3:00 David Nicholson (Natural History Museum London)

Evolution of insect diversity



3:25 David Gee (University of Derby)

Is there a trade-off between weapon size and testes size in the Southern field cricket *Gryllus bimaculatus*?

3:50 Break

4:20 Jon Delf (University of Liverpool)

Diapause and Polymorphism in the Long-winged Conehead *Conocephalus discolor*

4:45 Roy Kleukers (European Invertebrate Survey - NL (Leiden)) and Luc Willemse (Naturalis Biodiversity Center (Leiden)), authors of the Dutch Orthoptera Atlas and of www.ortheur.org

Focus on European Orthoptera

5:15 Oliver Cheesman (Consultant) and Sarah Henshall (Buglife)

Status of the Wartbiter *Decticus verrucivorus* in Britain

5:35 Björn Beckmann (Centre for Ecology & Hydrology)

Options for a quantitative recording scheme of grasshoppers and crickets

6:00 Drinks, followed by supper

8:00 Finish

Registration

Please register by sending an email to orthoptera@ceh.ac.uk, or by post to Björn Beckmann, Centre for Ecology & Hydrology, Wallingford OX10 8BB, providing the following details:

- your first name, surname and institution if applicable (for name badge)
- title of talk or poster, if you would like to present something (we could still accommodate one or two further contributions)
- indicate whether you will be staying for the buffet or not, and any special dietary requirements

Cost

- Either a full price of £14.00 to include a cold buffet with wine, and tea and biscuits during the afternoon
- Or a reduced price of £4.00 to include tea and biscuits only, if you are not staying for the buffet.

Payment

- Either send a cheque made payable to the Royal Entomological Society to: Kirsty Whiteford, Senior Administrator, Royal Entomological Society, The Mansion House, Chiswell Green Lane, St Albans, Herts, AL2 3NS.
- Or pay by bank transfer: Royal Entomological Society, sort code 30-97-25, account number 01921533. Please ensure that you include your name and "Orthoptera SIG" for reference.
- Or pay by card over the phone. Please phone Kirsty on +44 (0)1727 899387. There is a 2% admin charge for credit cards, no charge for debit cards.
- Overseas visitors can pay on the day

Directions

The meeting will be held in the Dorothea Bate Room at the London Natural History Museum. Use the Cromwell Road entrance into the Central Hall; walk past *Diplodocus* and turn right (at the tail-end) into the Fossil Marine Reptiles Gallery, and go all the way to the door at the far end. The outer door is unlocked but the inner door is locked, please press the buzzer for access. In the evening, the Cromwell Road entrance is locked at 6pm; if you leave after this time you must be escorted through locked doors, or incur the wrath of Security!

We hope to see you there!



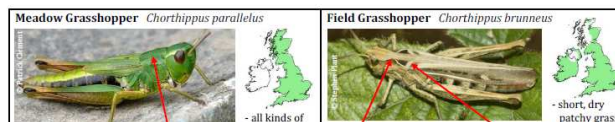
2. Free identification guides to common species

We have put together two identification guides to common species – grasshoppers & crickets, and earwigs, cockroaches & stick insects. These are appended to this newsletter and available for free download at

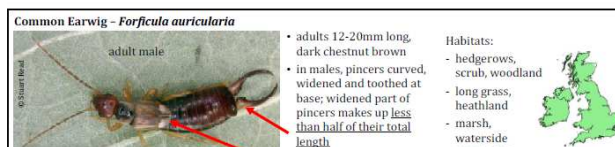
www.orthoptera.org.uk/recording/index.php?q=no&de/1035. Print double-sided A4.

Many thanks to all photographers who allowed use of their excellent images. If you would like multiple printed copies for use in schools etc. please email orthoptera@ceh.ac.uk. Please let us know if you spot any errors.

Common Grasshoppers & Groundhoppers



Native Earwigs



3. Records received in 2013

A big thank you to all who have sent in their observations this year – please continue to do so. We will provide a full update and new draft atlas maps with the next newsletter in Spring 2014. Some highlights are given in the current issue of *British Wildlife* (October 2013).

As many of you will be aware, we are working towards a new atlas of Orthoptera and allied insects in Britain and Ireland. We will collect records for one further season, 2014, with publication envisaged in 2015. A set of working draft maps are appended to the Spring 2013 newsletter, which you can download at [www.orthoptera.org.uk/recording/sites/default/files/Grasshoppers and related insects Newsletter Spring 2013.pdf](http://www.orthoptera.org.uk/recording/sites/default/files/Grasshoppers%20and%20related%20insects%20Newsletter%20Spring%202013.pdf). We hope the maps illustrate some of the dramatic changes affecting Orthoptera and will inspire you to fill gaps in recording.

There are many ways of submitting your records:

- Log your observations online at www.orthoptera.org.uk/recording or www.brc.ac.uk/irecord or http://records.biodiversityireland.ie/standard_form.php?fk=GrasshoppersCricketsEarwigsStandard
- Use your mobile phone to record your observations – see the Spring 2013 newsletter for details
- If you have records in a digital format like Excel, Recorder, or MapMate, please email them to orthoptera@ceh.ac.uk or info@biodiversityireland.ie.
- If you have records on paper recording cards, please send them to one of the following addresses:

Biological Records Centre	National Biodiversity Data Centre
Centre for Ecology & Hydrology	Beechfield House
Wallingford	Carriganore WIT West Campus
OX10 8BB	County Waterford
UK	Ireland
- If you send your records centrally to the scheme in any of the above ways, they will be shared with county recorders and Local Record Centres. Similarly, if you send your records to your county recorder, there is no need to send them in any other way.
- Observations of stick insects can also be submitted to the excellent Phasmid Study Group - <http://phasmid-study-group.org/content/Report-UK-Phasmid-Sightings>, we exchange data.



4. Next Issue

The next issue of this newsletter will be sent out in spring 2014. Please send us your contributions – any news items, dates of identification courses, suggested speakers for next year's Orthopterists' meeting, etc. For news in the meantime please visit the website Forum and see the Orthoptera column in *British Wildlife*.

To anyone who did not receive the Spring 2013 newsletter which includes draft maps for the planned new atlas, there is a full archive of present and past newsletters at www.orthoptera.org.uk/recording/index.php?q=newsletters.

Björn Beckmann and Peter Sutton

Biological Records Centre
Centre for Ecology & Hydrology
Wallingford
OX10 8BB
UK

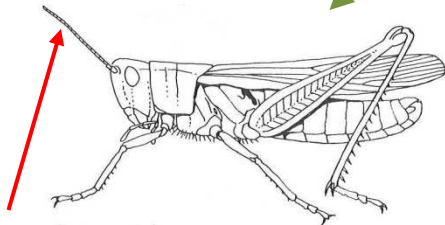
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orthoptera@ceh.ac.uk

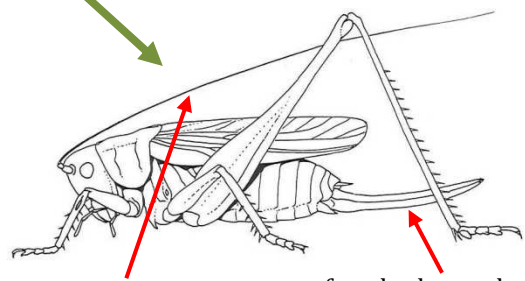


Common Bush-crickets

Grasshopper or Bush-cricket?



short antennae
(shorter than body)
→ see reverse of this sheet

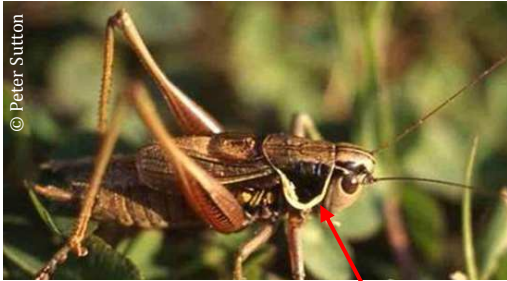


long antennae
(longer than body)

females have a long
egg-laying organ
(ovipositor)

© Denys Ovenden

Roesel's bush-cricket *Metrioptera roeselii*



- cream-coloured crescent on shoulder
- brown colour
- song: a loud, continuous, high buzz like overhead power cables; heard well through a bat detector set to c. 20kHz
- usually short wings
- 2-3cm

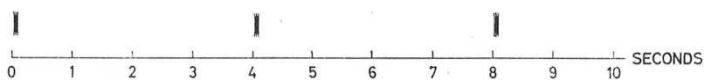


- long grass
- roadsides
- field margins

Dark bush-cricket *Pholidoptera griseoaptera*



- dark brown and black
- very short or no wings
- 2-3cm
- song: short chirps at intervals; set bat detector to c. 22kHz:

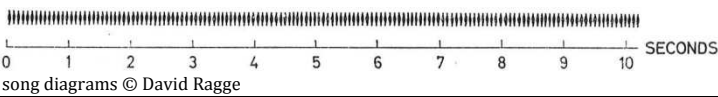


- hedges
- brambles
- woodland

Long-winged conehead *Conocephalus discolor*



- green body
- long brown wings
- 2-3cm
- song: a faint continuous "chuffing", best heard with a bat detector set to about 30kHz:



- long grass
- reeds

Speckled bush-cricket *Leptophyes punctatissima*



- very short wings
- green with fine black speckles
- 1-2.5cm
- female has broad, upcurved ovipositor
- song: very faint ticks every 3-5 seconds; with a bat detector set to 40kHz these are heard as very loud clicks



- hedges
- woodland
- gardens

Oak bush-cricket *Meconema thalassinum*



- long wings
- pale green colour
- 1.5-2cm
- nocturnal and attracted to light, sometimes found indoors
- the related Southern Oak bush-cricket has short wings

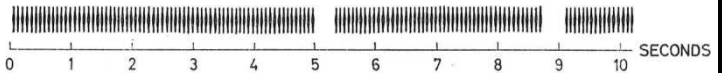


- gardens
- hedges
- woodland

Great Green bush-cricket *Tettigonia viridissima*



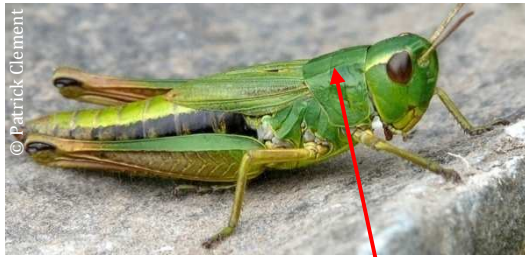
- green with brown stripe on top
- wings longer than body
- song continuous, harsh, loud; late afternoon & into night:



- scrub
- hedges

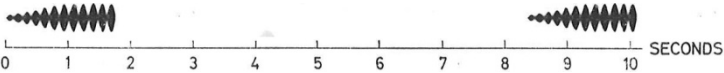
Common Grasshoppers & Groundhoppers

Meadow Grasshopper *Chorthippus parallelus*



- all kinds of rough grass
- 1-2cm
- often green

- female usually short-winged
- lines on shoulders almost straight
- song: scratchy bursts of chirps; set bat detector to c. 10kHz:

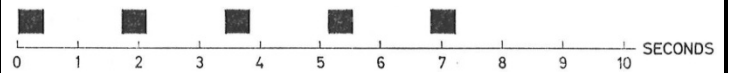


Field Grasshopper *Chorthippus brunneus*

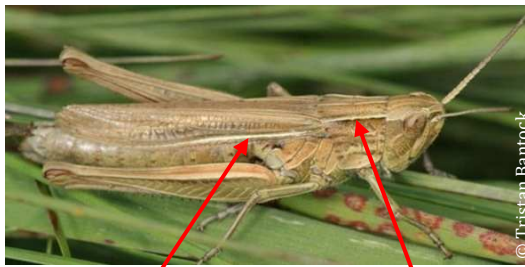


- short, dry patchy grass

- lines on shoulders strongly indented
- hairy underside
- song: a series of short soft buzzes; set detector to c. 10kHz
- rear end of shoulder shield has got pale patches
- 1.5-2.5cm

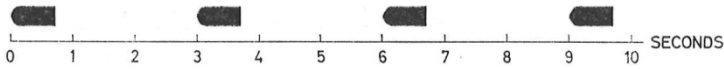


Lesser Marsh Grasshopper *Chorthippus albomarginatus*



- damp grass
- increasingly in drier areas

- usually white line on wing
- often light brown
- song: a series of longer, soft chirps, about 3s apart; c.10kHz
- straight lines on shoulders
- 1.5-2.5cm
- long wings

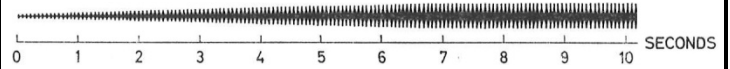


Common Green Grasshopper *Omocestus viridulus*



- damp grass
- meadows & hillsides

- lines on shoulders incurved, marked white or cream
- song a fast ticking of increasing volume, 10+s long; 10kHz
- 1.5-2.5cm
- long wings

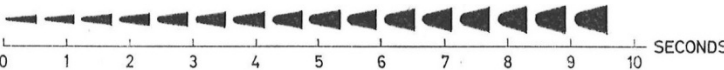


Mottled Grasshopper *Myrmeleotettix maculatus*

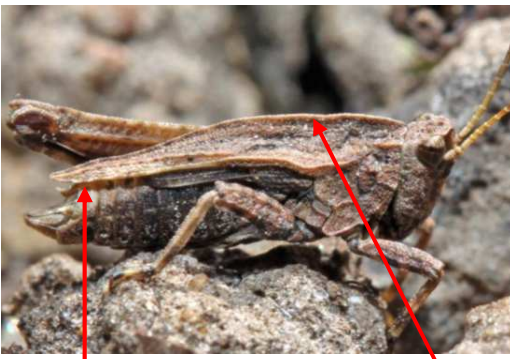


- bare ground, dry, open grass
- heathlands, dunes, quarries

- clubbed antennae, not white-tipped
- song: a crescendo of buzzy chirps, c.10kHz
- 1-2cm
- rounded head



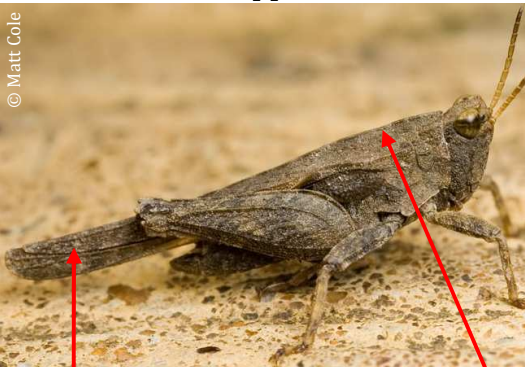
Common Groundhopper *Tetrix undulata*



- damp or dry bare ground with mosses and lichens

- shoulder shield as long as body
- keel on shoulder shield very prominent
- 1cm
- does not sing

Slender Groundhopper *Tetrix subulata*



- damp, bare ground with mud or very short vegetation

- shoulder shield much longer than body
- keel on shoulder shield low, not prominent
- 1cm
- does not sing

Further reading:

A Photographic Guide to the
Grasshoppers & Crickets
of Britain & Ireland



Martin Evans
Roger Edmondson

www.wildguideuk.com

Record your observations online at:

www.orthoptera.org.uk

or

www.brc.ac.uk/irecord

Attach a photo to receive verification

Grasshoppers & Related Insects Recording Scheme



Native Earwigs

Common Earwig – *Forficula auricularia*



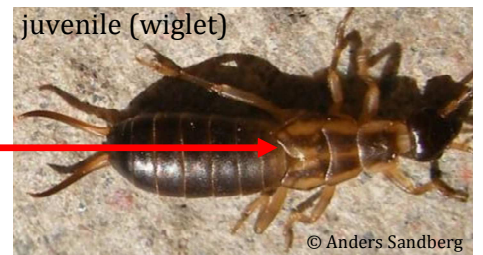
- adults 12-20mm long, dark chestnut brown
- in males, pincers curved, widened and toothed at base; widened part of pincers makes up less than half of their total length

Habitats:

- hedgerows, scrub, woodland
- long grass, heathland
- marsh, waterside vegetation



- ends of the folded wings visible in both sexes
- in females, pincers almost straight
- in juveniles, wing buds form a 'W' shape
- juvenile pincers very slim



Lesne's Earwig – *Forficula lesnei*



- adults 8-10mm long, light brown
- no wings visible in either sex
- barrel-shaped abdomen
- in males, pincers curved, widened and toothed at base; the widened part of the pincers makes up about half their total length
- in females, pincers almost straight

Habitats:

- oak woodland
- chalk scrub
- hedgerows, nettlebeds
- rough herbage on sea cliffs



Short-winged or Hop-garden Earwig – *Apterygida media*



- adults 8-20mm long, reddish brown with light brown wing covers
- no wings visible in either sex
- in males, pincers very long, curved, with 1 or 2 teeth

Habitats:

- hedges, thickets, woodland-edge scrub in warm localities



- females very similar to female Lesne's Earwig, but larger and darker in colour



Lesser Earwig – *Labia minor*



Habitats:

- dung heaps, compost, rubbish tips
- needs warmth and humidity



- very small, not much bigger than an ant: adults 5-7mm long, dull yellow-brown
- ends of folded wings visible in both sexes
- pincers slender in both sexes, gently curved in male

www.orthoptera.org.uk

or www.brc.ac.uk/irecord

*** Please record your observations online ***

*** Attach a photo to receive verification ***

Grasshoppers & Related Insects Recording Scheme



Native Cockroaches and Naturalised Stick-insects

Tawny Cockroach – *Ectobius pallidus*



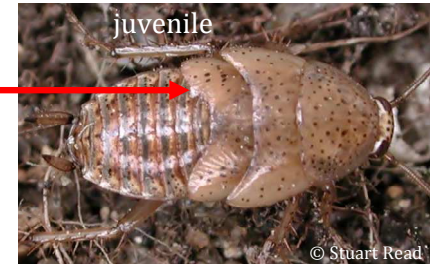
- adults 8-9.5mm long, golden-yellowish brown all over; only in females a bit of dark brown on underside of abdomen
- both sexes fully winged
- partly nocturnal, may come to light traps

For juveniles of all cockroach species:

- wing buds visible in late instar juveniles; they are shorter and appear thicker than adult wings
- left and right wing buds do not overlap (adult wings overlap left over right wing)

Habitats:

- woodland rides and clearings
- heathland
- dunes



Dusky Cockroach – *Ectobius lapponicus*



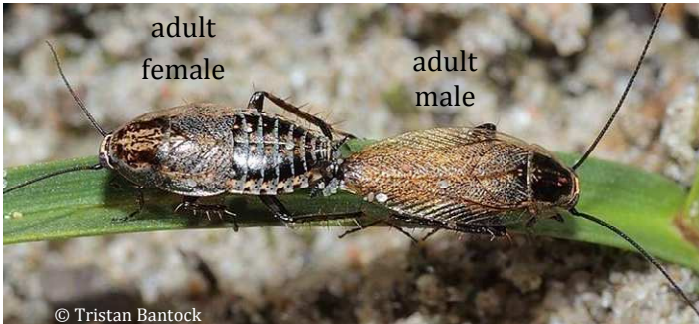
- adults 7-11mm long, light brown colour
- usually a dark brown shoulder shield (pronotum) in males
- underside of females is mainly dark brown
- wings in males reach end of abdomen or beyond, wings in females a bit shorter

Habitats:

- scrub, coarse herbage, clearings
- scrubby heathland



Lesser Cockroach – *Ectobius panzeri*



- adults 5-8mm long, smallest native cockroach
- darkish brown with speckled patterning on pronotum of both sexes, and on abdomen of female
- males fully winged
- females short-winged, wings covering less than half the abdomen

Habitats:

- scrub on coastal cliffs and rocks
- sand dunes
- vegetated shingle
- dry heathland



Prickly Stick-insect – *Acanthoxyla geisovii*



- adults 80-100mm long; usually green but occasionally brown
- head and thorax always covered with many black spines, often also parts of the abdomen
- lateral lobes on abdominal segments (4 and) 5 and 6
- males not known here or in its native New Zealand; females reproduce by parthenogenesis

Habitats:

- only in public or private gardens in very mild, moist areas



Unarmed Stick-insect – *Acanthoxyla inermis*



- lateral lobes on abdominal segments 4-6 absent or very small
- males not known here or in its native New Zealand

- adults 95-115mm long; green or brown
- there may be a few scattered, small spines on head and thorax – but these are not black as in the Prickly Stick-insect

Habitats:

- only in public or private gardens in very mild, moist areas

