ORTHOPTERA RECORDING SCHEME

Newsletter No. 18

December 1991

E C M Haes

It was intended to produce the Atlas of British Orthopteroids on data received up to October 1990, but the delay of a further year seemed justified to allow for the completion of the surveys of several key counties. In the event, the delay has also allowed for the inclusion of a number of very important additional records made during the summer of 1991, as detailed under the individual species listed below. The trends in distributions detailed in Newsletter 17 of October '90 have continued, despite the less satisfactory weather conditions of last summer, and have been more widely publicised (Burton 1991). The records of native cockroaches and ground-hoppers from completely new and long lost sites are probably the consequence of especially careful recording during the last two years, while the use of mini bat detectors has proved invaluable in recording bush-crickets which appear to be continuing to spread, particularly in the Thames Valley and Central Southern England. There have also been important discoveries of bush-crickets in Northern England which are more likely to be of hitherto overlooked rather than newly established populations. In many districts the rapid spread of certain orthopterons is obviously linked to increasing areas of new road verge and set-aside land (various observations including John Widgery (Widgery, 1991 (1)).

NOTES ON INDIVIDUAL SPECIES

Meconema thalassinum, Oak Bush-cricket.

Clearly one of the commonest and most widespread of British and Irish bush-crickets, this attractive species still continues to appear in new places. One of the most important new sites was near the western edge of its known range in Britain, in an old garden in Camborne, W. Cornwall, 10/64, by Lynn Rowe, last September. Near its northern limits, the Harrogate and District Naturalists' Society recorded the insect from two further localities on the magnesium limestone, at Ribston Big Wood 44/45 and Lands Lane, Knaresborough, 44/35, in the spring and summer of 1990, Robert Marshall, pers comm. Another important northern record is from Nottingham, V.C. 56, per Sheila Wright: Wollaton Park, 43/53, found by Karen Barrowcliffe, last October. In mid Wales, John Badmin found the bush-cricket in V.C. 42, Brecknock, at Craig Dinas Fach, 22/85 and at Cwm Irfon, 22/84 (the first record for this county), in August last; as well as Machynlleth, V.C. 47, a refind for square 23/70 and in a new square, near Abergwynant, 23/61 in V.C. 48, Merioneth. The species has also been known in V.C. 57, Derbyshire, since 1972 and is now recorded there from 43/24, 43/25, 43/32, 43/56 and 43/57 (Frost, 1991).

Tettigonia viridissima, Great Green Bush-cricket.

The most northerly site confirmed in the post 1960 period is from the rail bridge over the Nene at Peterborough, 52/19, by Simon Grove in August 1990. If anyone can supply positive records from any more northerly locality, at any period, I would be most grateful for the record, for reference in the atlas.

Decticus verrucivorus, The Wart-biter.

Kevin Hughes and Peter leBrocq saw eight adults at the Castle Hill site, E. Sussex, V.C. 14, last September, where the insect is now being closely monitored. I would be very grateful for any post 1989 data of the Wart-biter from any other county, particularly Wiltshire.

Decticus albifrons, White-fronted Wart-biter.

A female in a bag of holiday laundry, accidently brought back live from Minorca, found by Mrs Lin Rogers of Exeter, last August and given to Colin Bath of Paignton Zoo. Data with good photograph in *Western Morning News*, Aug. 17th 1991: a first certain British record.

Pholidoptera griseoaptera, Dark Bush-cricket.

This fine insect vies with the Oak Bush-cricket to be the most widespread and commonest native species. Its noticeably restricted distribution in Norfolk is subject to a recent assessment, (Richmond & Irwin, 1991). It was again seen, as a nymph, in its only recorded Scottish site, Ravenshall Point, 25/55 by J. Mc.Cleary in June 1990. Elsewhere, near the northern limits of its known range, I gather the introduced population at Pleasington Nature Reserve, Darwen, 34/62 survives and there is a hearsay report of it having been heard near Ravenscar, 45/90, where it was discovered in the 1950s (Mc Dermott, 1957). Martin Limbert hopes to investigate next summer.

Metrioptera brachyptera, Bog Bush-cricket.

A most interesting record is of the rediscovery of this species on the Lleyn Peninsula in N. Wales, in a completely new locality; at Port Ceiriad near Abersoch, 23/32, V.C. 49, by Mike Edwards, whilst searching for Hymenoptera, on July 30th last. In August last Jennifer Newton found a further Lake District population - good numbers at White Moss, Foxfield, 34/28. In August 1990, Andrew Grayson was able to confirm the continuing presence of the species at Fen Bog Nature Reserve, 44/89, currently its most northerly known British locality.

Far less satisfactory is an old Norfolk record, backed by a museum specimen, which Tony Irwin has confirmed. The specimen was found by the well-known entomologist K.C. Durrant in 1952, seemingly at Thornham, 53/74. David Richmond visited the site last summer and found it to be a saltmarsh supporting Short-winged Cone-head and Lesser Marsh Grasshopper, but, not surprisingly there was no sign of Bog Bush-cricket. The Port Ceiriad record is a coastal site, but in a wet seepage below adjacent heathland, and even an account of Scandinavian Saltatoria, (Holst, 1986), does not mention saltmarsh as a known habitat. A labelling slip is a possible explanation.

Metrioptera roeselii, Roesel's Bush-cricket.

Perhaps the most intriguing new Orthoptera record for 1991, supported by a voucher specimen, was the discovery by C.F. & N.T. Steeden of a small colony of Roesel's Bushcricket on the Fylde, V.C. 60, 34/34, on August 11th. This discovery matches that of the Geigers' discovery of the species on th Dovey Estuary in mid Wales in 1970, a colony that has continued to flourish to the present.

An account of the spread of the bush-cricket in Herts in 1990, V.C. 20, has now been published (Widgery, 1991 (2)). During last summer the spread continued both through Herts. and along the Thames Valley, where macropterous individuals, *f. diluta*, were recorded by several observers. Mike Skelton found large colonies in abandoned pasture land at Finchinhampstead and Barkham Hill, both in 41/76, last September, but points out that Roesel's Bush-cricket has shown no ability so far, to move west of Twyford,

41/77, where it was recorded as long ago as 1982. He notes that the Twyford colony consists mainly of very green individuals. Perhaps the species is close to some ecological limit here.

M. roeselii was also found at Devil's Punchbowl, 41/83, v.c. 77, last August by Simon Grove. It may thus be expected to appear in W. Sussex, v.c. 13 by next summer.

Conocephalus discolor, Long-winged Cone-head.

With an annual life-cycle, any spread of cone-heads is more easily monitored than that of other native bush-crickets, and it is clear that both species are continuing to spread steadily, particularly in Surrey and the Thames Valley. In Surrey, last summer, David Baldock was able, with the use of a bat detector, to locate populations of Long-winged Cone-heads right across the County, south of the Downs, to within about a hundred metres of the border with W. Kent, V.C. 16; and it would not be surprising to receive records of the species from that vice-county next summer. In the Thames Valley Mike Skelton now has records of the cone-head at a good number of sites both in north-west Surrey and in Berkshire, V.C. 22, the first for the County. His Berkshire sites include Woolhampton, 41/56; Sulhampstead, 41/66; Finchinhampstead, 41/76 and at Calcot and Reading, 41/67. He also reports seeing a male of this species feeding on a crane-fly, while stridulating, at a Surrey site.

In Dorset, Richard Surry still has no records of the species west of Weymouth and there are as yet no Devon records. The Cornish population is therefore most likely to have originated from wind-borne strays arriving in sufficient numbers to initiate small colonies, probably in the hot summer of 1989. it will be instructive to see if the colonies at Lantic Bay, 20/15 and Kennack Sands, 10/71 have been able to survive the (here) poor and distinctly sunless summer and autumn just past. Only a few specimens could be found at either place last August. I have had no information about the insect in the Scillies this year.

Conocephalus dorsalis, Short-winged Cone-head.

This bush-cricket is obviously spreading, in suitable damp habitat over the western side of Surrey, the eastern side of N. Hampshire, V.C. 12 and across the eastern end of Berkshire. It was found to be numerous in Richmond Park 51/27, by Mike Skelton in September, where it had not previously been recorded, and as elsewhere in the region, the distinctive, fully-winged *f. burri* was seen. No evidence of spread has been noted in other parts of Britain, and very few new 10-km squares have been added in 1990 or 1991 away from the vicinity of the Thames Valley.

Leptophyes punctatissima, Speckled Bush-cricket.

The only post-1970 record from Scotland is by J. Mc.Cleary at the Dark Bush-cricket site, Ravenshall Wood, 25/55, V.C. 73, in July 1990. In counties such as Norfolk or Hertfordshire, which have only been surveyed for Orthoptera within the last three or four years, the bush-cricket has been found in a few new squares, but for most of the British Isles the 10-km map has not altered very much over the last decade. One interesting recent record was the discovery of a substantial population at Barrow Hills, 43/69, V.C. 56, where Martin Limbert recorded a substantial population, last August. This is probably the most northerly colony on the English mainland today, as despite searches over the previous twenty years, it has not been refound in any of the old Yorkshire sites. However this is a secretive species which Roger Hawkins was the first to demonstrate could be readily located in the adult stage, with a bat detector, and it may well be worth using this apparatus to check possible areas in The Wolds and elsewhere next summer.

Tachycines asynamorus, Greenhouse Camel-cricket.

The only site currently recorded is for Van Dykes Garden Centre, Clowne, 43/47, V.C. 57, where the insect is tolerated and has been known to the staff for about ten years, (R.A. Frost, *pers. comm*). It would be interesting to know if it still survives at Dublin Zoo.

Acheta domesticus, House-cricket.

Thanks to an investigation by Ieuan Williams, a considerable number of pre-1940, domestic locations for the House-cricket, in mid-Wales have been revealed (Fowles, A.P., 1991). There are still no recent (post-1960) records for Ireland, and only one for Scotland, but new records from many parts of England continue to arrive. The Pet Business almost certainly accounts for most of these records today, as the cricket is now raised in huge numbers to feed a rising population of cherished amphibians, lizards, mantids, scorpions and giant spiders, with the inevitable establishment of colonies of escapees as a consequence. With new technology, rubbish-tip sites are now unusual, but in hot summer weather outdoor colonies continue to be found. It seems possible that many old records of Field-crickets, as listed in *Victoria County Histories*, could in fact have been of uninvestigated populations of feral House-crickets.

Gryllus campestris, Field-cricket.

Sadly it seems that the long-known and appreciated Field-cricket colony by the cricket ground at Arundel Castle, 51/00, V.C. 13 died out in the poor summer of 1988. The native strain of the insect is now known from a single locality in W. Sussex, where there are possibly two separate populations, (M. Edwards, pers. comm). It also appears that at least one Jersey colony, together with other local and interesting species of insects and plants may be threatened by the Golfing Industry; definite information would be welcome.

Gryllus bimaculatus, Southern Field-cricket.

A cricket was captured by Dr. A.J.R. Powell in a house in Wells, V.C. 6, last February and the specimen, a female, was sent for confirmation by Andrew Duff.

Pseudomogoplistes squamiger, Scaly Cricket.

A further female specimen was located in the known site, and photographed in the wild by Kevin Hughes on September 2nd last. It was found under old newspaper, about two metres above upper tide line.

Gryllotalpa gryllotalpa Mole-cricket.

To orthopterists in Britain this is certainly something of a 'Loch Ness Monster'. Sightings of the insect in the wild continue, but apart from the well publicised and press-photographed specimen near Wareham, V.C. 9, necessary confirmatory evidence for recent reports is lacking. Unfortunately most reports filter through a year or more after the sighting. Nevertheless any reports from outdoors are welcome, but should be supported by photographic evidence. Specimens must not be collected in the wild as the species is now protected. The most recent report of a possible wildling is of one seen, by a botanist, at Alverstone, V.C. 10, on August 18th last. Jonathan Cox of English Nature went to the site the following day, could not find the cricket, but considers the wet meadow a suitable habitat. It would be marvellous if this sighting could be confirmed with the discovery of a colony.

Tetrix subulata, Slender Ground-hopper.

Many new sites have been found in V.C.s 1, 2, 19, 20, 24, 26, 27, 28, 31, 32, 53, 54, 55, 56 and 57 during the last two years. The insect has been found to be widespread in

Herts., where it is now known from more locations than the Common Ground-hopper, John Widgery, 1991,(1). The more northerly records are particularly interesting and include sites in N. Lincs., by John Bratton, Alan Lazenby and others, where it had not been seen since the 1950s. A new county record is Nottingham, V.C. 56, the vicinity of West Burton Power Station, 43/78, 43/88 in 1987, (Whiteley, in prep. a) and subsequently at Bole Ings, 43/88, by Roy Frost, last year. Also of interest was the Leicester, V.C. 55, record from Lockington Marshes SSSI, in April, by Helen Iken; only the third record for the County.

Tetrix undulata, Common Ground-hopper.

A most important record for Scotland is Derek Whiteley's rediscovery of the species on the Isle of Arran V.C. 100, at King's Cross, 16/82 and 83, last June, (Whiteley, in prep. b).

Another interesting Scottish record was by Adrian Spalding, with a specimen in his my trap at East Chia-aig V.C. 97, 27/18 on June 1st last. The ground-hopper was also found last June, in a completely new locality, around Willington Power Station, V.C. 57, 43/32, (Whiteley, 1991).

Acridium aegyptium, Egyptian Grasshopper.

The most interesting of several locusts noted as casual visitors during the last two years, were two live specimens of this species, which turned up at East Midlands Ceramics, Bulwell, V.C. 56, 43/54, the first on 13 November 1990 and the second on 13 March 1991. Both were in containers of ceramic tiles from Italy and were identified by Sheila Wright, Keeper of Biology, Natural History Museum, Wollaton Hall, Nottingham.

Aiolopus strepens, Southern Long-winged Grasshopper. V.C.34.

Another first British record was a very lively adult female of this grasshopper, found on May 21st, by David Haigh (Orthoptera recorder for Gloucestershire) on his garden lawn, where it must have arrived in a tent, put there to dry out the previous month by his son, who had returned from a climbing holiday in southern France. The specimen was sent to The Natural History Museum, where Judith Marshall identified it.

Stethophyma grossum, Large Marsh Grasshopper.

The very last sighting of this splendid insect in East Anglia was of a specimen at Wolferton Marshes, V.C. 28, 53/62, in 1968, by Ken Durrant, (Richmond & Irwin, 1991).

Stenobothrus lineatus, Stripe-winged Grasshopper.

In their article covering the Orthoptera of Norfolk, (Richmond & Irwin, op. cit.), the authors note that there is no supporting evidence for records of Stripe-winged Grasshopper from Blakeney, 63/04 or Winterton Dunes, 63/42, and these records will be omitted from the Atlas. The record for the Lizard V.C.1, 10/61 will also have to be deleted as the finder discovered he had misrecorded a female Mottled Grasshopper for this species. A small and restricted population was, however, refound at a Hertfordshire site this year, V.C.20, 52/33, John Widgery, pers. comm.

Stenobothrus stigmaticus, Lesser Mottled Grasshopper.

I have no further information about the possible threat to the only known British population, in the Isle of Man.

Omocestus rufipes, Woodland Grasshopper.

In the final season before writing the account of Somerset Orthoptera, (Cropper, *in prep.*), Robert Cropper had the satisfaction of finding a second site for Woodland Grasshopper, to supplement the long-known population in Great Breach Wood, 31/43 and 31/53. The new location is by trees on the edge of an old quarry at Great Elm, 31/74, and was discovered last August.

Omocestus viridulus, Common Green Grasshopper.

There have been a good number of new 10-km records during 1990-1, including a number of Scottish and Irish records from new localities, and I am grateful to those who sent these, some from remote places not easily accessible. A new off-shore island record is Achill Island, V.C.H 27, in July 1989 by Brian Nelson.

Early maturity: In Newsletter No. 17, I regrettably overlooked a pre-1989 May record of stridulating *O. viridulus*. This was at Rosa Shafto Nature Reserve, GR 45/25-35-V.C. 66, by Noel Jackson in 1987, after a fine early Spring and just before the subsequent Summer turned wet and miserable.

Chorthippus parallelus, Meadow Grasshopper.

A new off-shore island record is Ulva, V.C. 103, 17/43, by David Richmond last August. The definite absence of this common grasshopper from much of E. Norfolk, V.C. 27, is discussed by Richmond & Irwin (1991). There are very few old or recent records from the east coasts of England or Scotland, north of the Wash and in Scotland, no specific records from V.C.s 93, 94 or the greater part of 95. Any information would be valuable. Jennifer Newton also found the grasshopper absent from Walney Islnd, V.C. 69, as did John Burton some twenty years earlier.

Chorthippus albomarginatus, Lesser Marsh Grasshopper.

Because of lack of supportive evidence, I propose to drop all Cornish V.C. 1 & 2 records. I suspect all were of fully winged, *f. explicatus*, of the Meadow Grasshopper. Unless any reader can supply convincing data, the records from V.Cs 1, 2, as well as those from 49, 58, 59 and 60 will be deleted. This species has, however, been confirmed for Northants. V.C. 32, at a site east of Warkton, 42/97; west of Bromham, 42/95 and in Barnwell Country Park, by Henry Arnold and Stuart Green, of Monks Wood, last August. The most westerly Berkshire record so far is Woose Hill, 41/76, by Mike Skelton, last September.

Ectobius lapponicus, Dusky Cockroach.

This is the cockroach actually found by Keith Alexander in some numbers, in the Forest of Dean, V.C. 34, at Foxes Bridge, 34/61. The site is not, as previously reported, National Trust land. Another very nice record is the refinding of the insect, a female, in Salcey Forest, Bucks, V.C. 24, 42/85, by Martin Albertini, on August 30th last, under a mv. trap, only two hundred metres short of the Northants. border.

Ectobius pallidus, Tawny Cockroach.

Delete V.C. 34, 34/61, listed in error. A very unexpected find was of a third instar nymph, by C. Felton at Charley Wood, Kirby, V.C. 59, 33/49, in November 1989. The specimen is in Liverpool Museum. I am grateful to Stephen Judd, Keeper of Entomology for the details. It seems probable there is a remote colony on Merseyside.

Ectobius panzeri, Lesser Cockroach

Another important new vice-county record is of a female of this species, beaten from brambles on the edge of a wood at Cleeve Hill, V.C. 4, 31/04, by Robert Cropper, on September 8th last. Two further inland records are at Henbury Woods, V.C. 3, 20/76, by Simon Grove in June 1990, a new locality; and a refinding by B. Jones, confirmed by Tony Irwin, at Rockford Common, V.C. 11, 41/10, last August. Also a second instar nymph was found by the writer, early last June on dunes on Tresco, V.C. 1, 08/81, proving this species breeds on the island.

Forficula lesnei, Lesne's Earwig.

Found at Nicholaston V.C. 41, 21/59, a second locality on the Gower, by P.M. Pavett, confirmed by Ian Morgan, on August 26th last.

Forficula auricularia, Common Earwig.

Records continue to filter in, but the Atlas will indicate that this over-familiar insect remains grossly under-recorded. A new off-shore island record is for Colonsay, V.C. 102, 16/39, by Basil Harley, last June.

Labia minor, Lesser Earwig.

Four additional records were made last summer. R.E. Jones had a specimen to a mv. trap at Holme V.C. 28, 53/74 on August 3rd and a second specimen in the New Forest, at Hampton Ridge, V.C. 11, 41/11, two weeks later. Two, possibly three, were seen by Annette Harley running about on the sorting office counter of Colchester Post Office, V.C. 19, 52/92 on the very warm evening of September 3rd. On September 22nd, Ian Morgan saw one at Cwm Coch Farn, near Carmarthen, V.C. 44, 22/31.

Phasmids

Acanthoxyla inermis, the Unarmed Stick-insect was seen in three separate places in Falmouth, V.C. 1, 10/83, last year where Niel Treseder found two in his waterfront garden, one in April and a second, exceptionally long (c.12cm.) specimen on a shed, in A second stronghold for the Unarmed Stick-insect is at Mawnan Smith, 10/72, v.c.1. Mrs R. Robinson found spineless phasmids in her garden seven years ago, shortly after moving to her house in Shute Road. She has continued to find them there (and they have occurred in neighbours' gardens) up to 8 November last, when she found a specimen on the house. Her garden is kept as a wild garden with brambles, so it is probably one of the main sites for this species in the district. During August nymphs of both A. geisovii and A. prasina were found on bramble, the first example of the latter by David Veevers, in Eve Bysouth's garden in St. Mawes, V.C. 2, 10/83. The following autumn, two adult specimens of the southern European Bacillus rossius, were seen by Eve Bysouth, in the same area. A. geisovii, the Prickly Stick-insect has been feral in the vicinity since 1959, (Brock, 1991; Turk, 1985) but the other two are probably the result of overlooked eggs being dumped recently, when spent culture material was discarded as compost. A. prasina may well become established, as its requirements seem similar to those of its very close relative, but B. rossius is less likely to do so, since, in culture, it seems unable to tolerate excessive moisture.

SUSSEX

Although certain districts such as Hastings, Worthing and Arundel and the heaths around Midhurst have been covered recently for orthopteroids, the County as a whole has not been covered since 1974 (Haes, 1976). If any readers feel they could update the survey, I will be very pleased to supply a substantial quantity of raw data and records.

CHANNEL ISLANDS

The following are post-1980 species lists, I would be very grateful for any additional, authenticated records from this period.

Alderney

Bush-crickets: Tettigonia viridissima, Platycleis albopunctata, Conocephalus discolor.

Grasshopper: Chorthippus brunneus.

Earwig: Forficula auricularia.

Guernsey

Bush-crickets: Tettigonia viridissima, Platycleis albopunctata, Conocephalus discolor,

C. dorsalis, Leptophyes punctatissima.

Crickets: Acheta domesticus, Gryllotalpa.

Grasshoppers: Oedipoda caerulescens, Chorthippus brunneus

Cockroach: Ectobius panzeri.

Earwigs: Labia minor, Forficula auricularia.

Herm

Bush-crickets: Tettigonia viridissima, Platycleis albopunctata, Conocephalus discolor,

Leptophyes punctatissima.

Grasshopper: Chorthippus brunneus.

Earwig: Forficula auricularia.

Jersey

Bush-crickets: Meconema thalassinum, Tettigonia viridissima, Pholidoptera griseoaptera,

Platycleis albopunctata, Conocephalus discolor, Leptophyes punctatissima.

Crickets: Acheta domesticus, Gryllus campestris, Nemobius sylvestris.

Ground-hoppers: Tetrix ceperoi, T. undulata.

Grasshoppers: Oedipoda caerulescens, Chorthippus brunneus, C. vagans, C. parallelus,

Euchorthippus pulvinatus ssp. elegantulus.

Cockroach: Blatta orientalis, Ectobius pallidus, E. panzeri.

Earwig: Forficula auricularia.

Sark

Bush-crickets: Tettigonia viridissima, Platycleis albopunctata, Conocephalus discolor,

Leptophyes punctatissima.

Grasshopper: Chorthippus brunneus.

Cockroach: Ectobius panzeri. Earwig: Forficula auricularia.

FRANCE

Before leaving to take up a 1-2 year appointment in Kenya, John Paul visited Brittany and Normandy and made some interesting Orthoptera records, which will be forwarded to the French Survey. These included refinding a good population of *Clonopsis gallica* at the Parc-er-Lann campsite, Quiberon, where I had seen it ten years earlier; *Ephippiger* on a superb heathland on Cap Frehel, on the north coast of Brittany, near Paimpol and the discovery of a colony of *Oecanthus pellucens*, near le Havre, in chalk scrub north of the A15-EO5 roads, 4km. west of P. de Tancarville; surely a remarkably northerly location for this species.

HOLLAND

An Orthoptera recording scheme is now operating as part of the European Invertebrate Survey. Any reader who can help please contact Roy Kleukers, Rijkmuseum van Natuurlijke Historie, Postbus 9517, 2300RA LEIDEN.

REFERENCES

Brock, P., 1991. Stick-Insects of Britain, Europe and the Mediterranean. 50pp. Illust., Fitzgerald Pub. London, ISBN 0951093983.

Burton, J.F., 1991. British grasshoppers and bush-crickets may be responding to the 'Greenhouse' warming. *Country-side*, Summer 1991, 29-31.

Cropper, R.S., in prep. A Survey of Orthoptera and Allied Orders in South and North Somerset. Somerset Arch. and Nat. Hist. Soc.

Fowles, A.P., 1991. Grasshoppers and Bush-crickets in Ceredigion, 1990 Dyfed Invertebrate Group Newsletter No. 20, p.4.

Frost, R.A., 1991. The Status of Grasshoppers and Crickets in Derbyshire. *The Derbyshire Entomological Society Journal*, Autumn 1991. pp 12-21. 8 maps.

Haes, E.C.M., 1976. Orthoptera in Sussex. Entomologist's Gaz. 27: 181-202.

Holst, K. Th. 1986. *The Saltatoria of northern Europe*. E.J. Brill/Scandinavia Science Press Ltd. 127pp., 89 figures.

McDermott, C., 1957. Pholidoptera griseoaptera (Degeer) in Yorkshire. Entomologist's Rec. J. Var. 69: 287.

Morgan, I.K. 1991. Orthoptera in Carmarthenshire, 1990. Dyfed Invertebrate Group Newsletter No. 20, p.3.

Richmond, D.I. & Irwin, A.G. 1991. The Grasshoppers and Crickets of Norfolk. *Trans. Norfolk Norwich Nat. Soc.* 1991(1). 53-70, 16 figs.

Turk, S.M. 1985. Two New Zealand stick-insects naturalised in mainland Cornwall. *Entomologist's Rec. J. Var.* 97: 129-130.

Whiteley, D. 1991. Notes on the Common Ground-hopper in Derbyshire. Q.J. Derbys. Ent. Soc., in press.

-----, in prep. (a). The Slender Ground-hopper in North Nottinghamshire. *Sorby Record*, Sheffield.

-----, in prep. (b). The Common Ground-hopper rediscovered on Arran. Arran Naturalist.

Widgery, J. 1991(1). A Provisional Commentary on the Status of Crickets, Grasshoppers and Related insects (Orthopteroids) in Hertfordshire. *Trans. Herts. Nat. Hist. Soc.* 1991: 18-24, ten maps.

-----, 1991(2). The Northward Spread of Roesel's Bush-cricket (*Metrioptera roeselii*) in Hertfordshire. *Ibid*, 39.

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