ORTHOPTERA RECORDING SCHEME

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ATLAS PROGRESS

Future newsletters will be annual and update the Atlas. For various reasons, the production of the Atlas has been delayed for five years. This has in fact been fortunate, though understandably irritating to long-term recorders. During 1988-93, new data received on the distribution of orthopteroids in Britain and Ireland have clearly indicated major changes and some important discoveries which would have rendered an earlier Atlas unacceptably obsolete almost immediately. The now completed text and 10 km maps include records received up to 20 November 1993. The maps will all show at least three periods of distribution: pre 1961, 1961-1980, and post 1980. In certain cases, for example those species undergoing a rapid and recent expansion of range such as Metrioptera roeselii, Conocephalus discolor, C. dorsalis or Chorthippus albomarginatus, it may be possible to indicate post 1990 records on the maps as well. Every effort will be made to avoid symbols which are easily confused.

COUNTY RECORDS (POST 1990)

The list given in Newsletter 19 needs amending and extending.

Arran (VC 100): T. ap Rheinallt has supplied a much-needed list of species recorded on the island in July-December 1992. These are for *Omocestus viridulus*, *Chorthippus brunneus*, *C. parallelus*, and *Forficula auricularia*. See under individual species for details. All major off-shore Scottish islands except Eigg (with D.K. Mc. E. Kevan's records for 1939) now have post 1960 lists of orthopteroids.

Berkshire (VC 22): M.J. Skelton is undertaking a detailed survey of the orthopteroids of this county, on a 1 km basis, which is in the forefront of the recent expansions of the ranges of several species.

Jersey (VC 113): a paper by J. Paul is in press. This paper summarises the results of his visits in 1981 and 1991 and includes important observations, particularly on *Platycleis albopunctata* and *Chorthippus vagans*.

Somerset (VCs 5 and 6): the paper by R.S. Cropper, "Survey of the Distribution of Orthoptera and Allied Insects in South and North Somerset", *The Proceedings of the Somerset Archaeological and Natural History Society for 1991*, 135: 213-216, was published in December 1992. Cropper's subsequent 1993 records for the county include, amongst new sites, important records for *Omocestus rufipes* and *Forficula lesnei*.

Surrey (VC 17): by D.W. Baldock. This comprehensive, key work still awaits publication.

In addition, R.D. Hawkins has provided extensive data from his surveys in 1985-92. This included a list for the last hitherto unmapped 10 km square in central southern England, 41/55 in North

Hampshire (VC 12). Within the square, chalk grassland at White Hill, Kingsclere, 41/514566, in August 1988, produced new sites for *Pholidoptera griseoaptera*, *Stenobothrus lineatus*, *Omocestus viridulus*, *Chorthippus brunneus* and *C. parallelus*. Despite an extremely poor summer S.A. Moran has provided further new Highland records, particularly from VC 96. A.J. Prince has provided post 1980 data for several counties, notably for Northamptonshire (VC 32) and for the Isle of Wight (VC 10), the latter considerably updating D.G. Rand's unpublished survey of 1978. J.P. Widgery undertook a "last minute" survey of the (orthopteroid-wise) seriously underrecorded vice-county of East Suffolk (VC 25), in September last, in the course of which he added *Tetrix subulata* to the species list.

INDIVIDUAL SPECIES

This includes some details previously published in *British Wildlife* during 1993, given here with the editor's permission.

BUSH CRICKETS:

Meconema thalassinum (De Geer), Oak Bush-cricket

Despite the poor summer a substantial number of new 10 km records were made during 1993. A new, isolated site was found in East Cornwall (VC 2), at Port Gaverne, 20/0080, by M. Lee. A further seven sites were added in Somerset, at Comwich, 31/2542 and Windmill Hill, 31/309167, in VC5, and at Ebbor Gorge NNR, 31/5248; Charlton Horethorne, 31/665232; Charlton Mackrell, 31/688461: Kilmerston, 31/6852 and Rode, 31/808527, in VC 6, by R.S. Cropper. In his survey of East Suffolk (VC 25), J.P. Widgery added eight sites, at Ringshall Stocks, 62/0551; near Little Stonham, 62/1059; Brandeston, 62/2459; near Needham, 62/2280; Butley, 62/3849; Iken, 62/ 4056; near Dunwich, 62/4571 and Reydon, Southwold, 62/5077. He also provided a new East Norfolk (VC 27) record, at Rushall, 62/1982. In addition, several important new records, from the second half of the 1980s to 1992 have just been received. Records from R.D Hawkins include the coast at Ringstead, 53/707403, in West Norfolk (VC 28), in 1987; three sites in South Wiltshire (VC 8), at Hare Warren near Wilton, 41/02, Sutton Mandeville, 31/9828 and Fonthill Bishop, 31/ 93, also in 1987; and at two sites in North Hampshire (VC 12) in 1988 - South Warnborough, 41/ 7247 and Hook to Greywell, in 41/75. A new, 1985 record for Derbyshire (VC 57) is from Shiningcliff Woods, 43/35, by P. Brassley, per R.A. Frost. In Gloucestershire (VC 34), J.H. Bratton refound the insect at Upper Wetmoor, 31/742872, in 1992. Another important refind of the bush-cricket was in the Northamptonshire (VC 32) portion of Salcey Forest NR, at 42/813511, by A.J. Prince in 1986. With these extensive additions, the map for this widespread species has been substantially infilled just in time for the Atlas. Thank you to all concerned. For the future, any records for specific sites in Jersey, or any other Channel Island, would be of particular value.

Tettigonia viridissima (L.) Great Green Bush-cricket

A new East Suffolk (VC 25) site was found by J.P. Widgery on coastal heath, at Thorpness, 62/4760, last September. He also noted its continuing presence at Aldeburgh, 62/4555 and 4655.

Any record of its presence in the Scilly Isles (VC 1), on St Agnes, 00/80; Samson, 00/81, or St Martin's, 00/91 would be much appreciated.

Decticus verrucivorus (L.), Wart-biter

As a follow-up of good breeding success in 1991, many were seen at Castle Hill NNR (VC 14) this summer despite the poor weather, per J. Shaughnessy. C.J. Timmins also found six specimens on downland just outside the Reserve in August last, one being the newly recognised var. purple.

Pholidoptera griseoaptera (De Geer), Dark Bush-cricket

A new Welsh county record has just been provided, Breconshire (VC 42); where J.B. Steer located the species at Llangynydyr Bridge, 32/1420, in August 1987, per R.D. Hawkins. There are three important updates near the northern limits of its British range. R. Atkins found the bush-cricket to be numerous at St Bee's Head, 25/9512, in Cumberland (VC 70), in July 1992, per S.M. Hewitt. East of the Pennines, in Lincolnshire (VC 53), J.H. Bratton located it at Bourne Woods, 53/076206, last September and A.S. Lazonby found it at Chamber's Plantation, near Bardney, 53/145741, last July. A very interesting account of this insect in Norfolk is given by D.I. Richmond, in "On the changing Status of Norfolk Orthoptera with Particular Reference to the Distribution of Dark Bush-Cricket Pholidoptera griseoaptera" to be published soon in Trans. Norfolk Norwich Nat. Soc.. In the survey of East Suffolk orthopteroids last September, J.P. Widgery found the insect in seventeen squares, five of them new (62/1059, 1160, 2560, 4056 and 5077). In Northamptonshire (VC 32), A.J. Prince found it in a new and, at present, apparently isolated locality at High Wood NR, 42/593549, in September 1985. A new locality in West Cornwall (VC 1), was Traveal Cliffs NT, 10/469406, last August.

Metrioptera brachyptera (L.) Bog Bush-cricket

K.N.A. Alexander has found this species at a second site on the Lleyn Peninsula, Caernarvonshire (VC 49) at Porthysgo, 23/208266, in July last, and a penultimate instar nymph was collected as a voucher specimen. As with M. Edward's original find there, at Porth Ceriad, 23/3124, in 1991, the site is on slipping sea cliff, clear of heathland; possibly a newly recorded habitat for the species in Britain, and clearly worth detailed investigation. In Lincolnshire (VC 54) last July, A.S. Lazonby recorded the continuing presence of the bush-cricket, in a heathy woodland ride, at its long-isolated locality at Kirby Moor NR, 53/225619.

Metrioptera roeselii (Hagenbach), Roesel's Bush-cricket

This bush-cricket continues its steady progress in the Thames Valley and environs. J.P. Widgery has recorded a new Hertfordshire (VC 20) site on a road verge near Whiteway Bottom, 52/158205, as well as at two new sites in East Suffolk (VC 25) last September, at Stonebridge Marshes, Butley, 62/3848 and Aldeburgh, 62/4555 and 4655.

Conocephalus discolor (Thunberg), Long-winged Cone-head

In West Cornwall (VC 1), A. Spalding found a nymph at Loggans Moor NR, Hayle, 10/5738, in July, which he raised into an extra-macropterous male. A colony is probably here. For Dorset (VC 9), R. Surry reports two new localities found by A. Mahon last September - by the Stour near Blandford at 31/892060, 891059 and 889057, and on a road verge at Stinsford, 30/716925; both peripheral to the main population in the county, where there are still no records west of Weymouth.

Conocephalus dorsalis (Latreille), Short-winged Cone-head

An interesting inland site, newly discovered in East Gloucestershire (VC 33), is at Pit 48, Cotswold Water Park, 41/018935, where a colony was located by A.D. Fox and M. Millet in 1992. Two new East Suffolk sites (VC 25), are Orford, 62/4148, 4249 and Reydon, 62/5077. Data of any kind for the Channel Islands (VC 113) would be welcome.

Leptophyes punctatissima (Bosc), Speckled Bush-cricket

There are two new county records. First to be found in Staffordshire (VC 39), by C.J. Timmins, was a single male in a hedgerow near Enville, 32/831859 on 26 July last. On 29 July 1992, a singleton was found by R. Atkins at the Dark Bush-cricket colony at St Bee's Head, 25/9152, a

first for Cumberland (VC 70). In East Suffolk (VC 25), J.P. Widgery found the species in seventeen sites, ten new 10 km records, at 62/0956; 1160; 1982; 2179; 3749; 4249; 4056; 4571; 5077 and 5187, and a refind at Brandeston, 62/2560. Other 10 km finds, besides that for VC 12 already mentioned, are: in 1993, West Cornwall (VC 1), at 10/353317; South Somerset (VC 5), at 21/894262 and 31/5615, 5612; North Somerset (VC 6), at 31/7139, 827523 and 808527; and in 1987, South Wiltshire (VC 8), in squares 31/93 and 41/02.

CRICKETS

Acheta domesticus (L.), House-cricket

An overlooked, pre 1961, off-shore island record for Ireland is for Clare Island, 02/68 or 02/78 (VC H27): G.H. Carpenter, 1912, "Clare Island Survey Orthoptera", Proc. R. Ir. Acad. 31 (31): 1-4.

Recent, new county records are for West Cornwall (VC 1), St Mary's Scilly Isles, where D. Buckingham found a stridulating male on rubbish at Porthloo, 00/909105 in October 1992. This is a first post 1960 record for the islands and the vice-county. In Cumberland (VC 70), recorded in 1992, on steam pipes at Sellafield, 35/0203, by L.R. Robertson, and at Wigton, 35/2548, by B. Marrs, per S.M. Hewitt. Further 10 km records include "a vast population" at Halesowen swimming baths, 32/967834, in Staffordshire (VC 39), by C.J. Timmins last April (a post 1960 refind); and in Derbyshire (VC 57), an underground colony at Shirebrook Colliery, 43/56, by J. Comins, in 1990-1992, per R.A. Frost. The colonies at Creswell Colliery, in the same square, have apparently gone with the closure of this mine.

Pseudomogoplistes squamiger (Fischer), Scaly Cricket

In a follow-up visit to the colony, 30/67 (VC 9) last April, C.J. Timmins found three nymphs and an adult female, probably the first spring record of an adult here.

Gryllotalpa gryllotalpa (L.), Mole-cricket

A nymph was seen by M. Edwards in the Vale district of Guernsey (VC 113) last October.

GROUND-HOPPERS

Tetrix ceperoi (Bolivar), Cepero's Ground-hopper

A new locality on the Isle of Sheppey, East Kent (VC 15), was on a crumbly sea cliff at Warden Point, 61/012727, found by J. Paul last May. From correspondence between Paul and E.G. Philp, the long-standing record for the Canterbury, MoD area, 61/25, should be deleted.

Tetrix subulata (L.), Slender Ground-hopper

There are two new county records. J.P. Widgery added the species to the East Suffolk (VC 25) list with finds at Carlton Marshes, Carlton Colville, 62/5091, on 7 September and at Creeting St Mary, 62/0956 on 12 September last. C.J. Timmins added the species to the list for Staffordshire (VC 39), finding two females (one retained as voucher specimen) by a stream near Kinver, 32/834854, on 27 July last. Details of the ground-hopper in Derbyshire (VC 57) have been covered by R.A. Frost in "The Slender Ground-hopper in Derbyshire 1992", Journal Derbyshire Ent. Soc. 109: 10.

Further finds, both by R.D. Hawkins, are a new 10 km record in Warwickshire (VC 38) at Oxhouse Farm, Ettington, 42/299508, in 1988 and a West Norfolk (VC 28) refind, at Syderstone Common, 53/834315, in 1987.

Tetrix undulata (Sowerby), Common Ground-hopper

A considerable number of new and refind 10 km records have been received since the last newsletter. A North Somerset (VC 6) refind, by R.S. Cropper was at Leighton Hanging, 3 1/705444 last August, and a refind in the Isle of Wight (VC 10) was made by A.J. Prince in 1988 at America Wood, 40/563817. An interesting, isolated inshore island record is on Hayling Island, South Hampshire (VC 11), in Tournebury Woods, 40/7499, in August 1992 by P.R. Durnell per J. Walters. Further north, new sites for the ground-hopper have been recorded at Syderstone Common, 53/834315, in West Norfolk (VC 28) by R.D. Hawkins in 1987; at Yardley Chase, 42/840560, in Northamptonshire (VC 32) by A.J. Prince in 1986, and at Bourne Woods, 53/076206, in South Lincolnshire (VC 53) by J.H. Bratton last August. There were five new 10 km records in Cumberland (VC 70), by S.M. Hewitt, in 1992-3, for 25/998067 and 35/016057, 3652, 3856, and 6165, and by Hewitt and S.A. Moran at Drigg, 34/0698, last August. In Scotland, Moran and Hewitt recorded the species in eight sites last June-August, two in new squares: in Kirkcudbrightshire (VC 73) at Cumwhitton Moss, 25/513518, and in Easterness (VC 96) at Lochletter, 28/449298.

GRASSHOPPERS

Locusta migratoria (L.), Migratory Locust

What was almost certainly a migrant and not an escapee was filmed near Melbourne village, 52/401460, in Cambridgeshire (VC 29) by H. Boswell last June.

Stethophyma grossum (L.), Large Marsh Grasshopper

Found by J. Paul at a new Irish site in July 1992 - Tombeola, 02/7145, near Roundstone in VC H16.

Stenobothrus lineatus (Panzar), Stripe-winged Grasshopper

Apart from the White Hill 41/55 record in VC 12, mentioned above, no further sites have been reported. A.J. Prince has provided a post 1980 record for the Isle of Wight (VC 10) at Luccombe Down, 40/575788, in August 1988.

Omocestus rufipes (Zetterstedt), Woodland Grasshopper

Last August, R.S. Cropper located two further small colonies in Somerset (VC 6), both in or near old, partly scrub-covered quarries. The first was at Downhead, 31/688461, and the second at Asham Wood, 31/705445. There was a record from Batheaston, 31/76, early this century, together with Cotswold sites, at Wotton-under-Edge, 31/79 (VC 34) in 1886, and Rodborough, 32/70 (VC 34) and Oddington, 42/22 (VC 33), both in 1937. As the grasshopper can persist in small, discrete populations it is possible it still survives in these localities. A once small and elusive population, known from at least 1964, at Coneyburrow Wood, Brede, 51/8020, in East Sussex (VC 14) was found to be large and flourishing when seen by P. Roper in 1990 and 1992. He also refound it at a pre 1961 site at Pond Wood, 51/8019.

In Berkshire (VC 22), M.J. Skelton found new sites at Inkpen Common NR, 41/382642, and Common Wood, Streatley, 41/584802, in 1992. Last August, J. Paul noted a large population in Witen Green Wood, 42/598149, 599146 and 602145 in Oxfordshire (VC 23), where woodland has been opened up for butterfly conservation. An unexpected, inshore island record was from Hayling Island (VC 11) where the Countryside Warden, P.R. Durnell, found the grasshopper at Tournebury Woods, 40/7499, in August 1992, per J. Walters.

Omocestus viridulus (L.), Common Green Grasshopper

Found on the island of Arran (VC 100) in July 1992: at Benan, 16/998201, Machrie, 16/893331, 905325 and Kildonian, 26/010211. Another new Scottish square was for Burn Meadow NR, Keltney, 27/770495, (VC 88), discovered by A.J. Prince in 1990. He also added new squares for the species in VC 4, at East Putford Common, 21/373181 and Kismeldon Meadows, 21/353173, in 1989, and in VC 32, at Sutton Heath NR, 53/087004, in 1986. Other new sites, found last summer, were in the Lake District (VC 70) at Drigg, 34/0698 and Birdoswald, 35/6165, and in the far west of Cornwall (VC 1) at Treveal Cliff NT, 10/469406. In 1992-3 A.S. Lazonby added new Staffordshire (VC 39) sites at 33/845419 and 9309; a new Lincolnshire (VC 54) site at 53/145741 and a Lincolnshire refind at 43/982438; and a new Derbyshire (VC 57) site at 43/0078. A new Welsh locality is Strumble Head, 12/895413 (VC 45), made by R.D. Hawkins in 1990.

Interestingly, in the East Suffolk (VC 25) survey, the grasshopper was only found at Walberswick, 62/4874 and 4875, and is seemingly restricted to the coast in this vice-county.

Chorthippus brunneus (Thunberg), Field Grasshopper

Found in fifteen sites in VC 25 last September, including four new 10 km squares, at 62/0956; 2179; 4249 and 5178, and a refind at 62/3849. Besides the White Hill, 41/55 (VC 12) record, additional records made recently are for VC 1, at 10/469406; a refind at 21/714498 in VC 4; VC 32, at 42/798616 and 954850; VC 70, at Drigg, 34/0698; and a Scottish site at Lunan, 37/690508, in VC 90. Found on Arran (VC 100) at Benan, 16/998201 and Machrie, 893331.

Chorthippus parallelus (Zetterstedt), Meadow Grasshopper

Found in nine sites in the VC 25 survey last September, eight new, at 62/094560, 108597, 111602, 181775, 247603, 305790, 409497 and 409773. Other recent new or post 1960 refind records are VC 1 at 10/469406; VC 4 at 21/373181; VC 12 at 41/514566; VC 32 at 42/721646, 806627, 997777, 624563 and 782421 in 1985-6; and two Highland (VC 96) records for moorland, at 28/496324 last July by S.A. Moran, and at 28/891074 by A.J. Prince in 1990. Refound on Arran (VC 100) at Lochan a Mhill, 16/913477 by A.R. Church.

Chorthippus albomarginatus (DeGeer), Lesser Marsh Grasshopper

Of eleven East Suffolk sites, the one at Orford, 62/4249, was new, with two refinds at 62/4976 and 5077. Two important new records, both of substantial colonies, are for South Somerset (VC 5), at Lilstock, 31/17645, by R.S. Cropper, and Surrey (VC 17), at Copthorne, 51/327399, by R.D. Hawkins.

Gomphocerippus rufus (L.), Rufous Grasshopper

Another important find by Cropper in Somerset last summer was a substantial population of this grasshopper on the vice-county border, at Langport, 31/425289 and 419283.

Myrmeleotettix maculatus (Thunberg), Mottled Grasshopper

Refound in Hertfordshire (VC 20), at Normansland Common, 52/173124, by J.P. Widgery, last July. R.A. Frost has provided four new records, made in 1992: at Shirebrook, 43/56 and Whitwell, 43/57 in Derbyshire (VC 57), and Clipsham Forest, 43/66 and Spalford Warren, 43/86 in Nottingham (VC 56). A new Highland (VC 96) record was by Moran, last July, from a boggy meadow at Lochletter, 28/449298. In the west of Ireland, in July 1992, J. Paul located four new sites in VC H16, two mainland, at Tombeola, 02/7145, and Cashel, 02/8540, and two offshore, on Aran More: a colony on dunes at Portmurry, 02/8210, and a probable male, stridulating but not seen, on a limestone cliff, 02/8109; the first orthoptera records for this island.

COCKROACHES

Periplaneta australasiae (Fab.), Australian Cockroach

Several found in Birmingham Botanic Garden, 42/049855 (VC 38) last July, per C.J. Timmins. Specimen found in Jamaican bananas at Ecclesall Road, Sheffield, 43/328850 (VC 63), last April, per A.S. Lazonby.

Blatella germanica (L.), German Cockroach

Recorded in Mansfield, 43/56 (VC 56) by sanitory inspectors in 1992, per R.A. Frost.

Supella longipalpa (Fab.), Brown-banded Cockroach

Final instar nymph found in modern house at Yeadon, 44/24 (VC 64), by R. Oates last September. A new county record; specimen to British Museum.

Ectobius lapponicus (L.), Dusky Cockroach

Found in a second site in West Gloucestershire (VC 34) at 32/609107, by D.J.R. Haigh last July. A single female was found by J.P. Widgery in the extreme south of VC 20, in a cemetry at Southgate, 51/29, last July. Possibly the most easterly British record so far is for two specimens found at Hindleap, Ashdown Forest, 51/405322 (VC 14), found by J. Paul last August.

Ectobius panzeri (Stephens), Lesser Cockroach

The record for South Somerset (VC 5), at Cleeve Hill, Watchet, 31/04, should be **deleted**, on R.S. Cropper's advice. Only the Dusky Cockroach has certainly been found here so far.

EARWIGS

Thanks to the continuing response of readers of British Wildlife, a further thirty-six 10 km squares on the map of the Common Earwig, Forficula auricularia L., were filled in last year, even as far afield as St. Kilda (a refind) and the Shetlands. A new offshore island record was Skye (VC 104), at Portree, 18/44, by W. Clynes, who also located the earwig on nine of the Farne Islands, 46/23 (VC 68). On Arran, found at Pirnmill, 16/871433. As a result of special searches by R.S. Cropper, J. Paul and C.J. Timmins, important new records have been added for Lesser, Lesne's and Shortwinged Earwigs.

Labia minor (L.), Lesser Earwig

Two new North Somerset (VC 6) records are at 31/618434 in 1992, and 31/574447 this summer, both by A. Duff, per R.S. Cropper.

Apterygida media (Hagenbach), Short-winged Earwig

Two new East Suffolk (VC 25) sites found by J.P. Widgery (specimens confirmed by J. Paul) last September, are Little Stonham, 62/111602, and Syleham, 62/224795.

Forficula lesnei Finot, Lesne's Earwig

Found by Timmins in the Scilly Islands (VC 1) last autumn. His records are for Periglis, St. Agnes, 00/877084; Pool, Bryher, 00/876150 and Samson Hill, Bryher, 00/880143, and near Hugh Town, St. Mary's, 00/905104. All were from coarse herbage by coastal paths and there were substantial

colonies at Periglis, Samson Hill and Hugh Town. The only previous record for the islands was by C.W. Dale in the c. 1880s as F. pubescens. Timmins also provided the first post 1960 record for East Sussex (VC 14), by finding a large population on wasteland at Newhaven Docks, 51/455005, last August.

Several additional sites, including some substantial populations, were also found in Somerset, by Cropper, last summer, supplementing the original find at Watchet. In VC 5, these were at Donyatt, 31/345139, 345140 and Lilstock, 31/171453; in VC 6 at Burrow Bridge, 31/359306, 360306; Loxton Hill, 31/368556 and Crook Peak, 31/391551, and on the vice-county boundary at Langport, 31/419283, 425289.

PHASMIDS

Acanthoxyla prasina inermis Salmon, Unarmed Stick-insect

P. Brock is now able to confirm that this phasmid is present in south west Ireland (M. Keep, in prep). Thanks to M. Lee's on-going survey of phasmids in Cornwall this stick-insect is now known from new localities at Feock, 10/8138 (VC 1) and Mevagissey, 20/0144 (VC 2). It has also been found in the latter vice-county, at St. Mawes, 10/8532, by E.S. Bysouth.

CONTINENTAL NOTES

A spectral portion of north east France haunts the Ray Society's 10 km map. This comprises most of the French overlap of the British grid squares 60 (TW) and 61 (TR). The perpetual blankness can prove slightly irritating. In case it helps a little, Orthoptera-wise the outlined area is known to be occupied by Meconema thalassinum, Tettigonia viridissima, Pholidoptera griseoaptera, Metrioptera roeselii, Conocephalus discolor, Stenobothrus lineatus, [S. stigmaticus, at Wimereux, pre 1950], Omocestus rufipes, Chorthippus biguttulus, C. brunneus, C. parallelus, and Myrmeleotettix maculatus. Data, various, including pers. obs. Any further information welcome.

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