

Orthoptera of Cornwall & the Isles of Scilly: Native Species

(A) **BUSH-CRICKETS:** There are eight native Cornish bush-crickets, given below in the order of frequency of occurrence here (*by number of tetrads*).

1) **Speckled Bush-cricket** *Leptophyes punctatissima*



body length[†] c15mm

Our most commonly recorded bush-cricket, from over 300 tetrads throughout the county. However, it is surprisingly well camouflaged, and not easy to spot. Most records have come from the use of bat detectors to pick up its distinctive ‘tick’ call, which is virtually inaudible by ear. Found in a wide variety of habitats, including gardens, particularly in bramble thickets. Recently established on St Marys in the Isles of Scilly.

2) **Dark Bush-cricket** *Pholidoptera griseoptera*



body length[†] c17mm

Recorded from over 250 tetrads, in scrub, herbage, and lightly managed Cornish hedges. It has an easily heard call, typically a brief ‘chip’, but there is a longer aggression call when males meet. Much easier to pick up on a bat detector. Not resident in the Isles of Scilly.

3) **Great Green Bush-cricket** *Tettigonia viridissima*



body length[†] c40mm

Found in over 150 tetrads, mainly in scrub and tall herbage, this is our largest bush-cricket. It has a preference for the coast, although less so in the far south west of the county. Its very loud call may be heard from many tens of metres away, although older recorders

may be unable to pick up its high pitched call, when a bat detector can be a useful aid. Only resident on Tresco and St Marys in the Isles of Scilly.

4) **Grey Bush-cricket** *Platycleis albopunctata*



body length[†] c22mm

Recorded from some 70 tetrads. Strictly coastal, and found in the warmest micro-climates. It is much more common on the south coast. On the north coast there is a large population at Penhale dune complex, but just small scattered populations elsewhere. Its stridulation is almost inaudible, but easily picked up on a bat detector. Final instar nymphs may be partly green, and can be confused with our rarest bush-cricket, the Bog B-c. Only known from Bryher in the Isles of Scilly.

5) **Oak Bush-cricket** *Meconema thalassinum*



body length[†] c15mm

Found in just over 40 tetrads, in trees and shrubs, particularly in sheltered valleys. No stridulation, but males drum on leaves to produce a faint sound which is not easy to hear, and inaudible at more than a few metres. It comes freely to light, and moth recorders may be the first to detect its presence. A check around outside lights in August may be fruitful. Not resident in the Isles of Scilly.

6) **Long-winged Cone-head** *Conocephalus discolor*



body length[†] c17mm

A very recent arrival to south Cornwall, probably from France. It was first recorded in 1990 by S. P. Jones near Devoran. It is now found in more than 30 tetrads, all still around the south of the county. A northward spread

may be expected over the coming years. It could be found in any area of coarse herbage. The continuous stridulation is best heard with a bat detector. Resident on several islands in the Isles of Scilly, since 1990.

7) Short-winged Cone-head *Conocephalus dorsalis*



body length[†] c17mm

Only found in 15 tetrads, but populations can be extensive where it occurs. It has a specific habitat requirement in Cornwall, being found in salt marshes and grassy margins of some of our tidal rivers (Gannel and Fowey, as well as the Tamar river complex). A similar call to the Long-winged, also best heard on a bat detector. There is a rare fully winged form of this species, which has yet to be recorded in Cornwall. Female fully winged forms can be readily separated from the Long-winged Cone-head by the shape of the ovipositor – almost straight in the Long-winged Cone-head, whereas that of the Short-winged Cone-head is distinctly up-curved (as in above pictures). A fully winged male would not be easy to separate. Resident on several islands in the Isles of Scilly, since 1989.

8) Bog Bush-cricket *Metrioptera brachyptera*



body length[†] c17mm

Our rarest bush-cricket, with just five known extant colonies within the county, all in wet heathland. It has a ‘chuffing’ call, akin to the sound of a steam train, and best heard with a bat detector. As a distinctive, partly green, apterous bush-cricket, it is unlikely to be confused with any other species, apart from a final instar nymph of the Grey Bush-cricket. However, the habitat alone should be a sufficient guide to avoid confusion here. Not recorded in the Isles of Scilly.

Crickets & Mole-crickets: See 2004 Cornwall Orthoptera Atlas. House Crickets are sporadic pet trade escapees, and the RDB1 Mole-cricket has not been seen for 40 years, being almost certainly extinct in Cornwall.

[†] Body Length: From the front of the head to the end of the abdomen, excluding ovipositor/cerci, or wings. All the measurements are approximate lengths for a typical adult specimen. Females are generally slightly larger than males.

(B) GROUND-HOPPERS: All three UK species occur in Cornwall, with Cornish populations of Cepero’s Ground-hopper being of national importance. These are the species, in order of frequency of occurrence here (*by number of tetrads*).

1) Common Ground-hopper *Tetrix undulata*

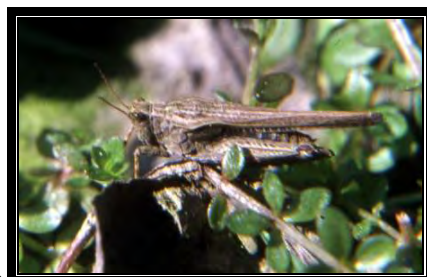


body length[†] c10mm

(Photo Bryan Thomas)

The commonest species, found in over 150 tetrads. A wide range of habitats, both damp and dry, in woodland rides, grassy fields, heath and moorland, and mine sites. Identified by the shorter pronotum, which does not reach the end of the abdomen, and ‘chunky’ appearance. This is the only resident ground-hopper in the Isles of Scilly, but on Tresco only - probably introduced.

2) Slender Ground-hopper *Tetrix subulata*



body length[†] c10mm

Not quite as frequent as the Common G-h, found in just under a hundred tetrads. This species is normally found in wetter habitats than the Common, alongside streams, ponds and marshes. In late summer it appears to move uphill onto drier ground. In this, and the next, species the pronotum extends well beyond the end of the abdomen. Not recorded in the Isles of Scilly.

2) Cepero’s Ground-hopper *Tetrix ceperoi*



body length[†] c10mm

Just 16 tetrads for this ground-hopper, but it is not readily separated from the above in the field, and may be under-recorded. Generally a more colourful species than the Slender G-h. Outside of the Lizard, where there are strong populations, most records are right on the coast. Not recorded in the Isles of Scilly.

(C) GRASSHOPPERS: There are only five confirmed resident Cornish grasshoppers, plus two other former residents, at least one of which might still persist. The species are given below in order of frequency of occurrence here (*by number of tetrads*).

1) Meadow Grasshopper: *Chorthippus parallelus*



body length† c20mm

The most common grasshopper, and our most common orthopteran, being recorded from over 350 tetrads. Readily identified as our only flightless grasshopper (*in hot summers, overcrowded colonies may give rise to fully winged individuals*). There are a variety of colour forms. It can be found in just about any grassy area, including moorland, road verges and set aside. Its stridulation is a series of short ‘chuckles’, easily heard by ear, although a bat detector will increase the range. Not resident in the Isles of Scilly.

2) Field Grasshopper: *Chorthippus brunneus*



body length† c20mm

Not quite as common as the Meadow, being recorded in just over 300 tetrads. It is usually brown, but can be variable in colour. A distinguishing feature is its ‘hairy chest’ on the underside of the thorax. It requires a warmer habitat than the Meadow, found on short, sparse, grassy areas and sunny slopes, including footpaths and roadside verges. Its call is a brief ‘zip’, repeated each second. It is barely heard on a bat detector. Several surveys have confirmed that this is the only resident grasshopper in the Isles of Scilly.

3) Mottled Grasshopper: *Myrmeleotettix maculatus*

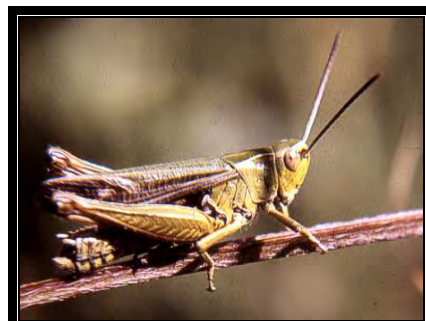


body length† c15mm

Considerably less common than the two species above, being recorded from about 120 tetrads. It is smaller than

the above two species, and a key feature is the clubbed antennae, bent at the tip. There are a variety of colour forms and mottled markings. This species will be found in sunny, short turf habitats, being recorded on many derelict mine sites. Its stridulation is a series of buzzes, rising in volume, and then stopping abruptly. It is heard on a bat detector. Not resident in the Isles of Scilly.

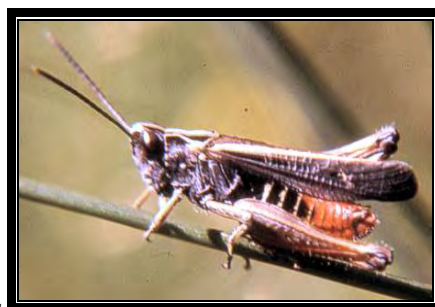
4) Common Green Grasshopper: *Omocestus viridulus*



body length† c20mm

Almost as frequent as the Mottled, being found in around 110 tetrads. Its habitat is almost exclusively unimproved grassland, where it tolerates cooler conditions than our other species. This is our loudest grasshopper, having a persistent call lasting 20 seconds or more, which can be heard on a bat detector. Not resident in the Isles of Scilly.

5) Woodland Grasshopper: *Omocestus rufipes*



body length† c17mm

An uncommon species, with just over 20 tetrads, virtually confined to coastal heathland on the Lizard and Penwith. A small population in North Cornwall at Tidna Valley, Morwenstow, has not been seen in recent years. It is a small grasshopper, with a very colourful underside, and white palps, as in the picture below. Its stridulation is similar to the Common Green, but quieter and of shorter length, typically 10 seconds or less. Not recorded in the Isles of Scilly.



Note: Any record of this species must include unambiguous confirmation of sight of the white palps.

The following species may no longer be resident here.

Stripe-winged Grasshopper: *Stenobothrus lineatus*



body length[†] c20mm

A colony persisted on Penhale dunes from the 19th century, but has not been seen or heard since 1996. It may still be present on the restricted MoD areas. The key identification feature is the wing (see inset), with its bright white stigma, the white stripe on the wing, and an enlarged medial area with many veins running across it.

Rufous Grasshopper: *Gomphocerippus rufus*



body length[†] c20mm

The last Cornish record of this species was in 1973 on Brae Hill, Daymer Bay, but several recent searches have failed to detect it there. There are a handful of very old records for coastal areas. The key identification feature is the white tipped, and clubbed, antennae

(D) COCKROACHES: Only two species of native cockroaches have been recorded in recent years.

Lesser Cockroach: *Ectobius panzeri*



body length[†] c7mm

This is the only common species, being recorded from around 70 tetrads, including the Isles of Scilly. Mostly coastal. The adults are not easy to find, and nymphs are more visible on yellow flowers in June, as below



nymph length[†] c4mm

Tawny Cockroach: *Ectobius pallidus*



body length[†] c8mm

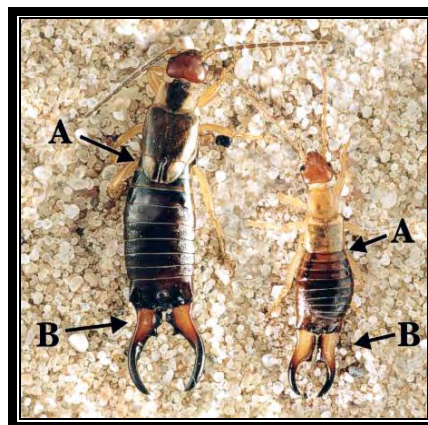
Recent records are from Pencarrow Head (SX1550) in 1979 and Nare Head (SW9137), last seen in 1995.

(E) EARWIGS: Only three native earwigs.

Apart from the ubiquitous Common Earwig *Forficula auricularia*, now found in every Cornish 10km square, these other two resident earwigs may be under-recorded.

Lesne's Earwig: *Forficula lesnei*

Although long known on Scilly, there are just a handful of mainland sightings since the first modern record in 1993, and all are coastal. Only specific searching is likely to come across this insect. The best method is to split open dry umbellifer stems, particularly Hogweed, in autumn or winter, where earwigs will be hibernating.



**Common (left) and Lesne's (right)
Key differences in males**

Size: Lesne's about two thirds length of Common
(Common c12mm, Lesne's c8mm)

A: Common – wings protrude from elytra.
Lesne's – no wings to protrude

B: Common – Basal plate less than a third of pincers
Lesne's – Basal plate about half of pincers

Lesser Earwig: *Labia minor*



body length[†] c4mm

A minuscule species, little bigger than an ant. Formerly common in dung heaps, but, with the demise of horse transport, rarely recorded now. Recently found in numbers in an enclosed garden compost bin, a habitat worth searching on a hot day, when the free flying tiny earwigs may be seen.