Pseudoscorpions

of Norfolk

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Maps compiled from data provided by Norfolk Biodiversity Information Service (NBIS),
iRecord, the Pseudoscorpion Recording Scheme and records from the County Recorder.
Records compiled from data up to end of 2025 with additional records from county recorder up to May 2026.
Maps produced using QGIS software and the TomBio plugin with OpenStreetMap as a base layer.

Bibliography

Legg, G. and Farr-Cox, F. 2016 *Illustrated key to the British False Scorpions (Pseudoscorpions)*,
Field Studies Council (fold out chart).

Legg, G. and Jones, R.E. 1988 *Pseudoscorpions. Synopses of the British Fauna (New Series) No. 40*,
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Jones, R.E. 1985 *The false scorpions of Norfolk*,
Transactions of the Norfolk and Norwich Naturalists' Society 27 (1) 67-71.

Cover photo: Two *Chthonius ischnocheles* on the underside of a stone.

Revision date: May 2026

Introduction

Pseudoscorpions belong to the class Arachnida, along with spiders, harvestmen, ticks, mites and scorpions. They have four pairs of legs, a pair of pedipalps that end in claws used for catching prey and a pair of chelicerae or jaws.

The claws give them a rather formidable appearance despite their tiny size and has led to the name of False Scorpion or Pseudoscorpion. Although lacking the true scorpion's tail and sting, many species do have a poison gland in their claws. They are fearsome little predators and eat a variety of prey including springtails, mites and insect larvae.

Several species have eyes but these are mostly only sensitive to light levels. Pseudoscorpions 'feel' the world around them through sensitive hairs called trichobothria. A number of these hairs are located on the claws and most species also have them on the rear end of the abdomen. This gives them the ability to move backwards at a rapid rate, knowing exactly what is behind them. Chthoniidae species in particular can move very fast and are highly manoeuvrable, switching into reverse gear and turning on a sixpence to get out of danger.

Left: a *Chernes cimicoides* firmly attached to the hind tarsus of a *Rhagium bifasciatum* longhorn beetle, hitch-hiking its way into the world; close-up below. Photos: Jeremy Bartlett.

Some pseudoscorpions have adopted a simple yet effective tactic for dispersing; they simply grab onto the limb of another invertebrate and hitch hike their way into the wider world, a practice known as phoresy.

Species that exhibit phoresy tend to be those that live in rather transient habitats such as decaying wood and compost heaps - once the food supply is exhausted or the conditions change to less than optimal, they simply grab on to any other creature making an exodus. Phoretic species can turn up in all sorts of places including indoors. Pseudoscorpions have been recorded hitching a ride on various species of fly, beetles and even harvestmen.

Introduction continued

Pseudoscorpions produce silk from a gland in their chelicerae and will often make a silken chamber in which to safely moult in (shed their skin).

Pseudoscorpions mate by the male producing a sperm packet and then placing it for the female to pick up. Depending on species, this doesn't always take place in the presence of the female but in some species the two sexes actively mate by grasping each other with the male guiding the female over the sperm packet. The female can store the sperm inside her body until she is ready to produce eggs so that a single female can arrive in a new habitat and begin to populate it with her offspring.

The female keeps the newly laid eggs attached to the underside of her abdomen before finding somewhere safe for them to hatch, often retreating into a silken chamber. When the eggs hatch, the female pseudoscorpion feeds the young on a milk like secretion produced from her ovaries. The young pseudoscorpion goes through three nymphal stages (called protonymph, deutonymph and tritonymph) before a final moult when the adult emerges. The nymphs resemble the adults but are paler and have fewer setae and trichobothria.

Female *Pselaphochernes scorpioides* carrying eggs on the underside of her abdomen; sieved from garden compost bin.

Different species of pseudoscorpion can be found in the same habitat, e.g. leaf litter but often require different levels of humidity so can exist within separate microhabitats at different levels; for example, the top layer of woodland leaf litter could be dryer and less humid than the deeper layers depending on time of year and weather.

Adult pseudoscorpions can be found throughout the year and they can produce one or two generations a year. They are known to live for between 2 and 5 years depending on species.

Pseudoscorpions in Norfolk

Of the 29 species of pseudoscorpion found in the UK, 22 have been recorded in Norfolk. This guide covers 20 species with notes on an additional two that have only been recorded once in the county (one of which is doubtful). Pseudoscorpions are found in a wide variety of habitats but due to their small size they are rarely happened upon unless deliberately searched for.

Several species can be found by sieving leaf litter and piles of cut vegetation or by looking on the underside of logs and stones. Others are synanthropic and can be found in compost and manure heaps or in debris in barns, chicken coops and pigeon lofts. Pseudoscorpions can also be found in old bird and mammal nests and under loose bark of dead tree branches. Some are associated with coastal habitats and can be found on the seaward edge of sand dunes or on the edge of saltmarshes under driftwood and other debris.

Above: *Dactylochelifer latreillii* at the base of dune vegetation, Horsey.

Left: garden compost bin with assorted sieves and trays. Several *Pselaphochernes scorpioides* were found in this bin.

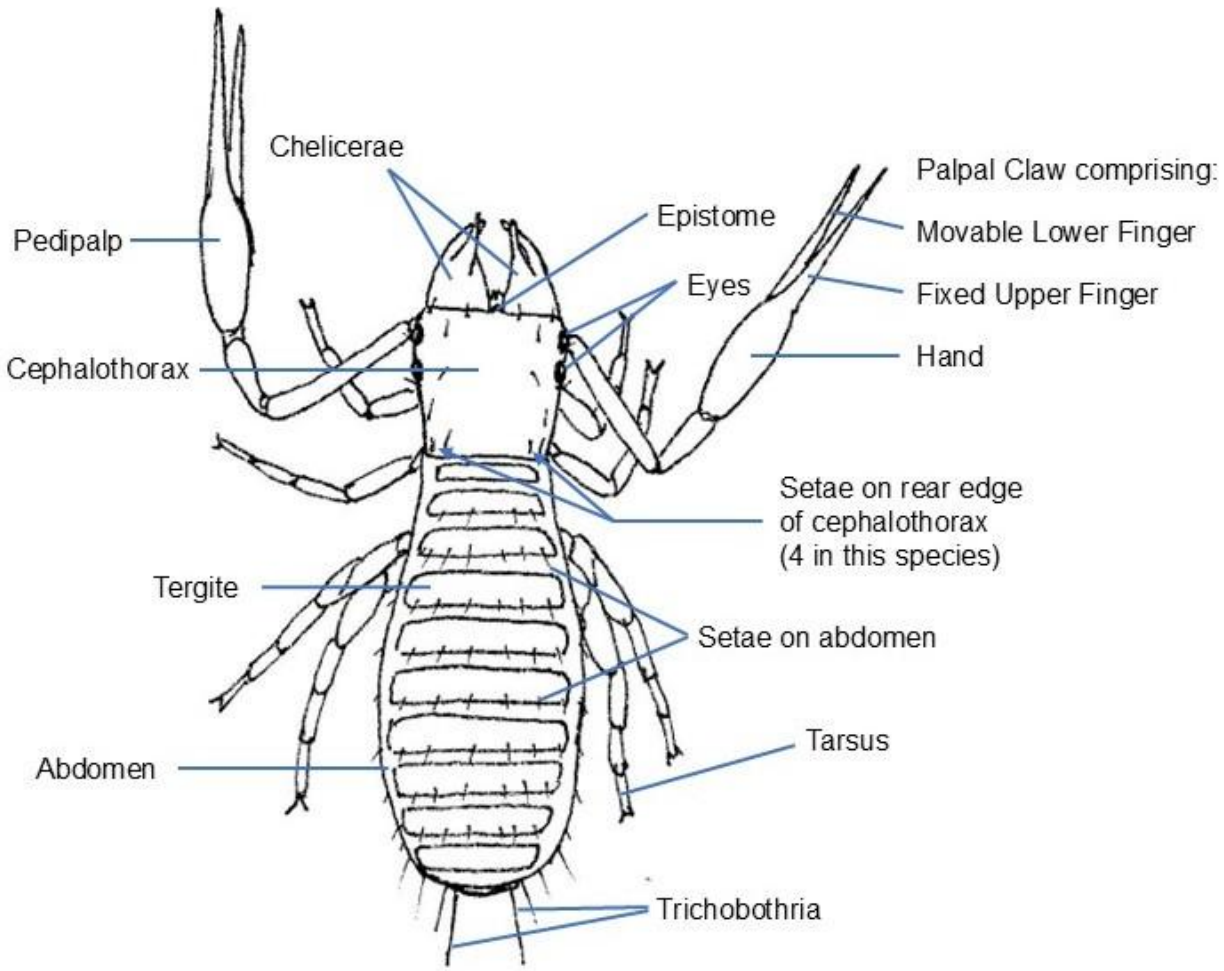
Right: old grass heap on edge of rural churchyard in which *Chthonius ischnocheles* was found by sieving.
Photo: Jeremy Bartlett.

Identification

To enable identification, Pseudoscorpions are first split into two groups based on whether there is a dividing line down the centre of the abdomen; each abdominal segment has a plate (tergite) covering the top, in some species the tergites are entire while in others they are divided in two. Those which have an undivided abdomen (the family Chthoniidae – see diagram right) also all have eyes (usually two pairs but occasionally just one, located either side of the head) and large chelicerae.

Some species are relatively easy to identify based on appearance and habitat but others require microscopic examination. It should be noted that general colour and shape of the abdomen can vary within a species, the abdomen in particular can be very distended in a well fed individual or a gravid (egg carrying) female.

The pedipalps (or palps) of a pseudoscorpion end in formidable claws that are comprised of a hand with a fixed upper finger and a moveable lower finger. In the species with an undivided abdomen, the claw hand is often quite slender with long fingers. The species with a divided abdomen have a rather rounded hand and short fingers so that the claws look quite stout.



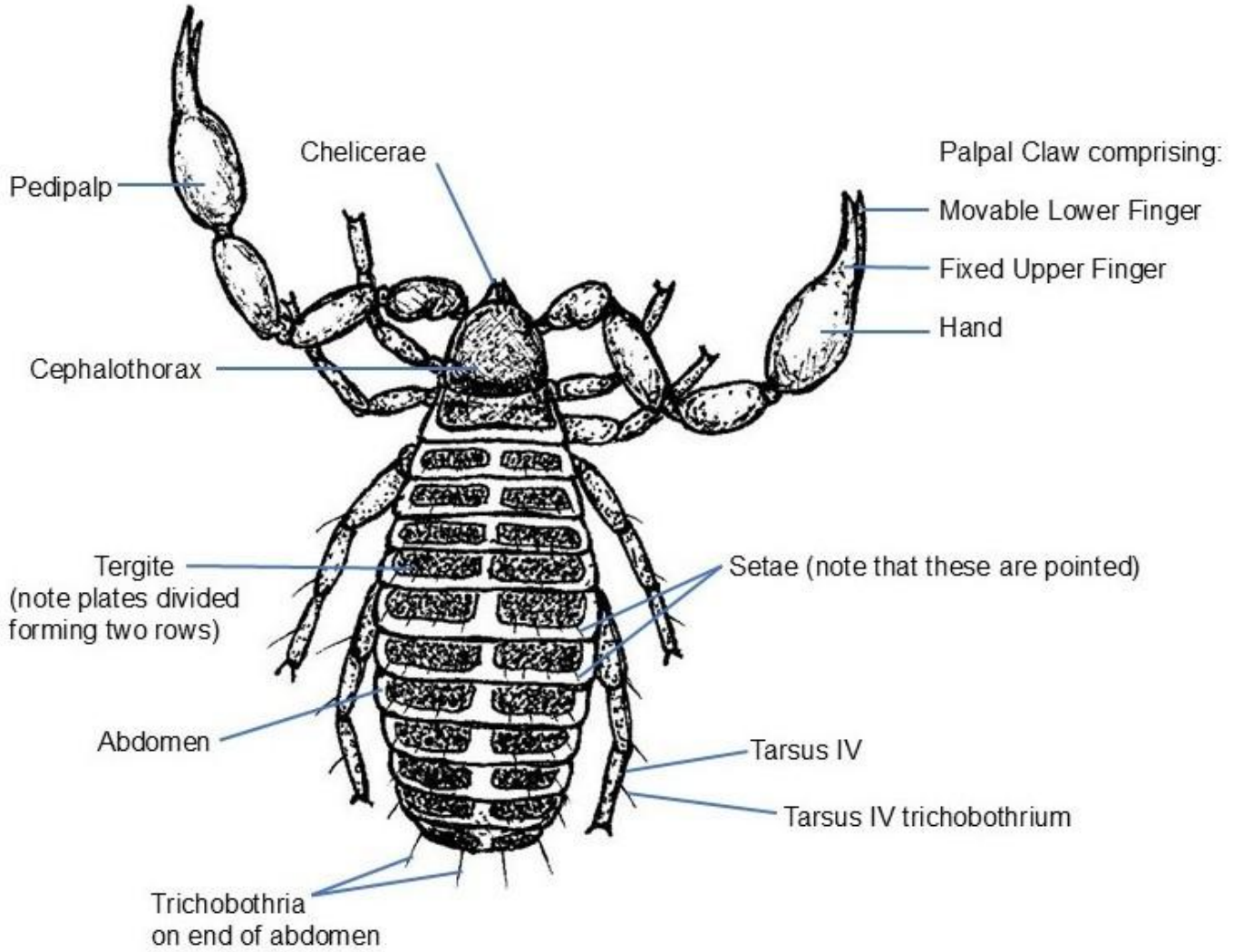
Simplified diagram of *Chthonius ischnocheles* showing principal features used for identification.

Identification continued

Species with a divided abdomen (see diagram right) often lack eyes and have rather small chelicerae. When eyes are present, they are often very difficult to discern. Species with a divided abdomen belong to several different families. To separate these into genus and then species, close examination is required when the details of the form of various hairs (setae and trichobothria) need to be looked at which often requires the use of a microscope.

For this guide, I have split the species into two groups based on whether the abdomen is divided or not using colour coded headers. The order of species mostly follows that in the FSC fold out chart (Legg & Farr-Cox, 2016) which I recommend to help confirm any identifications.

The following species accounts give details of features that help with identification in **bold** and general notes on typical habitat with more specific details for where they have been recorded in Norfolk along with distribution maps. Maps show records at 2km square, coloured to show pre and post 2000 records.



Simplified diagram of a *Lamprochernes* species.
Note trichobothria on end of abdomen and one on tarsus IV.

Note that preserved specimens lose their colour; I have used photos of live individuals where possible but also included preserved ones to more clearly show features.

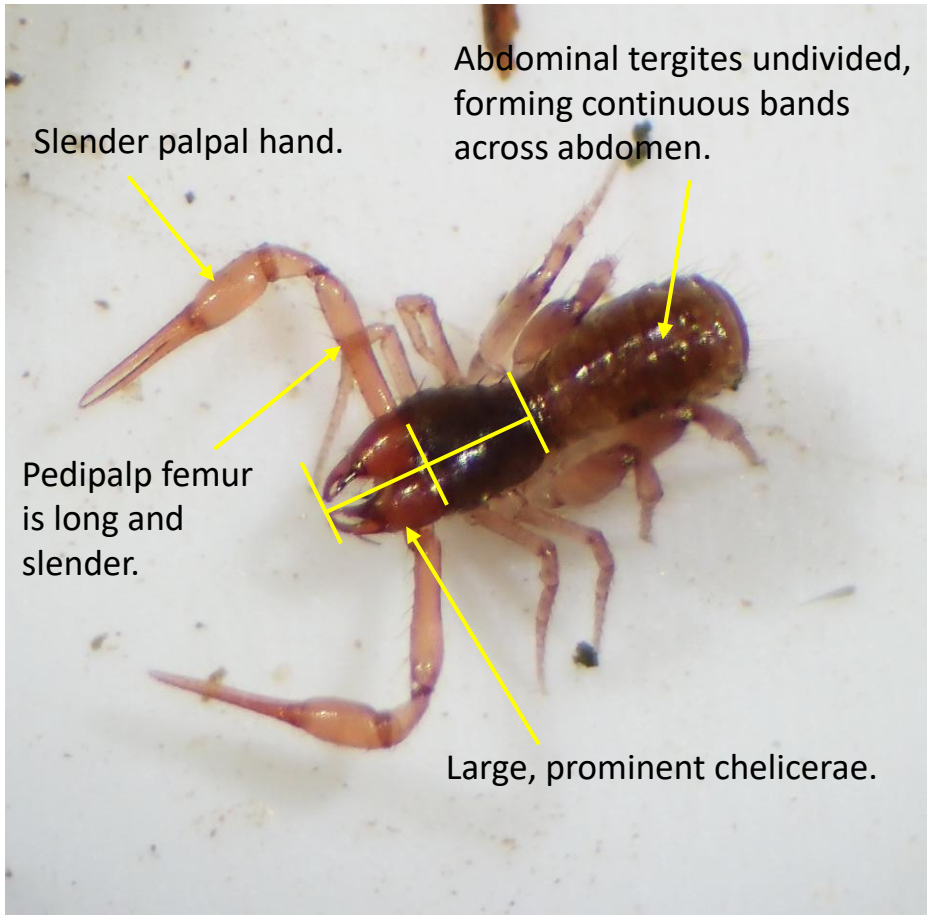
Species with abdomen NOT divided down the middle - Family CHTHONIIDAE and NEOBISCIIDAE: *Ephippiochthonius*, Chthonius*, *Neobisium* and *Roncus* species.

All species in the Chthoniidae have the abdominal tergites undivided and conspicuously large chelicerae and they are rather shiny in appearance. They all have eyes, with most having two pairs while two species have only one pair. The pedipalp femur is long and slender in most species.

Chthonius and ***Ephippiochthonius*** species are recognizable by the greater length of the chelicerae which are nearly equal to the length of the cephalothorax (see photo right). The palpal hand is quite slender, not much thicker than the finger and the fingers are distinctly longer than the hand. They have two pairs of eyes. Species are separated by checking microscopic details. There are six species in the UK, five have been recorded in Norfolk with two being quite commonly found while the other three are rare. *Chthonius ischnocheles* is the commonest.

Neobisium species are similar in general appearance to *Chthonius* but the chelicerae are shorter, clearly less than the length of the cephalothorax, and the palpal hand is noticeably thicker than the finger. They have two pairs of eyes. There are three species in the UK, two have been recorded in Norfolk. *Neobisium carcinoides* is the commonest.

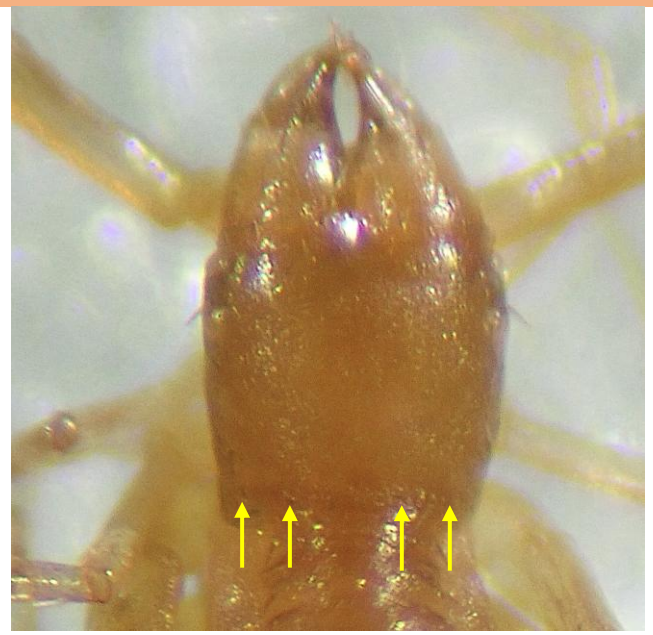
Roncus is similar to *Neobisium* in having relatively short chelicerae and a large palp hand but differs most significantly in having just one pair of eyes. One UK species, recorded in Norfolk.



Chthonius ischnocheles: note the large chelicerae almost equal in length to the cephalothorax and the slender palpal hand.

**Ephippiochthonius* species have been assigned to the genus *Chthonius* in some publications, including the FSC chart.

Ephippiochthonius kewi Gabbutt **Kew's Chthonid** length 1.4 – 1.8 mm Abdomen NOT divided



Left: preserved specimen. Arrows indicate the position of the setae on the rear edge of the cephalothorax.

Left: preserved specimen. Arrows indicate the dimple on the claw hand.

Ephippiochthonius kewi has large chelicerae and a slender palpal hand with long, thin fingers. It is very similar to *E. tetrachelatus* being a relatively pale, uniformly coloured species with a **'dimple' on the claw hand** but there are **four setae** on the rear edge of the cephalothorax (two normal length and two very short) compared to *E. tetrachelatus* which has only two long setae (recent papers from other countries have shed doubt on the constancy of these characters). **Epistome absent**. **Care is required to separate the two species.**

This species is largely restricted to the south-east coast of England where it is found amongst debris along the high tide line and under driftwood although there are other outlying records including some from inland.

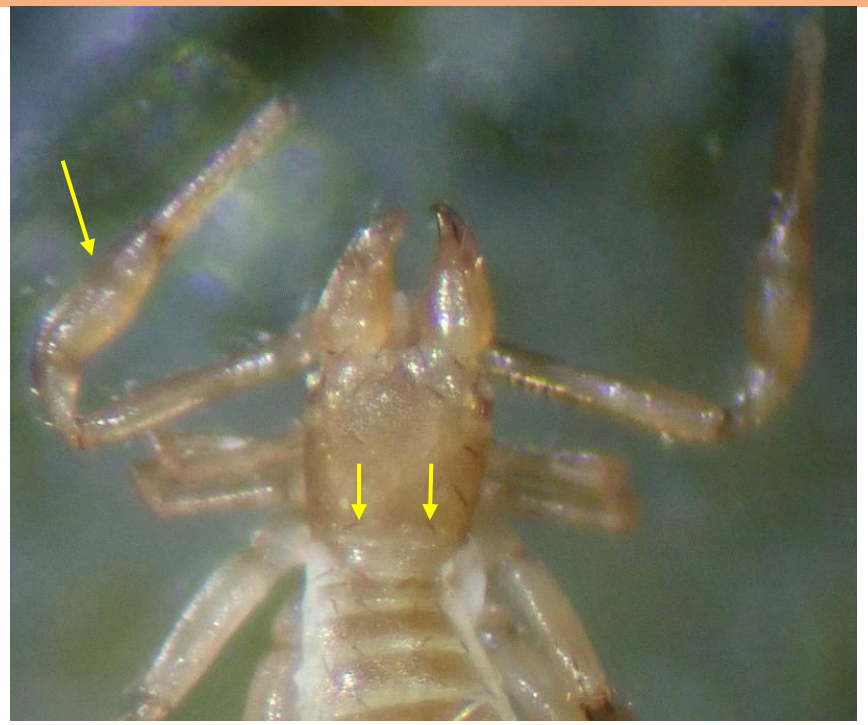
Status and distribution

A scarce species in Norfolk, mostly recorded from coastal locations in the 1980s. Inland records should be examined with care due to close similarity with *Ephippiochthonius tetrachelatus*.

NB Research in Europe has thrown doubt on reliability of the number of setae on rear of cephalothorax as a distinguishing character to separate *E. kewi* and *E. tetrachelatus*.

Records 2000 onwards Records pre 2000

Ephippiochthonius tetrachelatus (Preyssler) **Dimple-clawed Chthonid** length 1.3 – 1.9 mm Abdomen NOT divided



Left: preserved specimen indicating 'dimple' on claw hand and 2 setae on rear edge of cephalothorax. Also note no epistome (compare *Chthonius ischnocheles*). The cephalothorax is almost square and barely tapers to the rear.

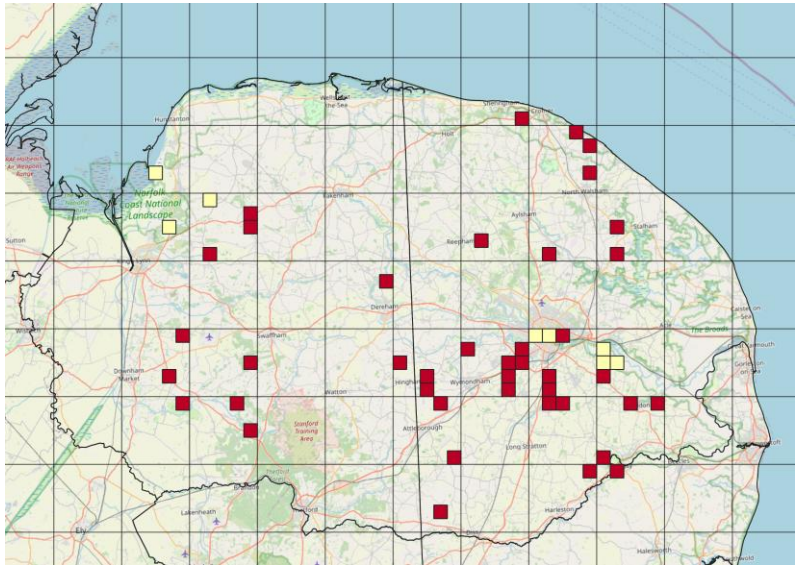
Above: live individual; note overall uniform colour and dimpled claw hand (arrowed).

Status and distribution

Common in Norfolk with records scattered across the county; most recently found inland under stones and old roof tiles in churchyards.

NB Research in Europe has thrown doubt on reliability of the number of setae on rear of cephalothorax as a distinguishing character to separate *E. kewi* and *E. tetrachelatus*.

Records 2000 onwards Records pre 2000



Ephippiochthonius tetrachelatus has large chelicerae and a slender palp hand with long, thin fingers. Individuals vary in colour with some being pale yellowy and others a darker brown but they are always the same **uniform colour** overall (compare *C. ischnocheles* which has a much darker cephalothorax compared to the abdomen). There is a **'dimple' on the hand** (arrowed above), a characteristic shared with *E. kewi* but there are only **two setae** on the rear edge of the cephalothorax (in *E. kewi* there are four setae, two of which are very short). **Epistome absent**. **Care is required to separate the two species.**

Many records for this species are coastal but it has also been found inland under bricks and stones so it may be synanthropic.

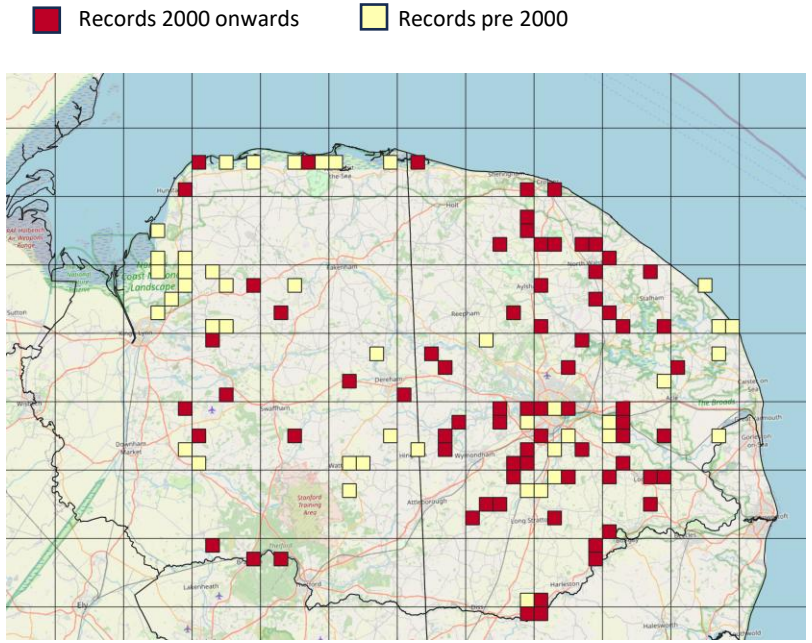
Chthonius ischnocheles (Hermann) **Common Chthonid** male 1.6mm, female 2.5mm Abdomen NOT divided

Above: live individual. Note the very large chelicerae and dark cephalothorax which tapers to the rear.

Left: close-up of preserved specimen showing epistome and four setae on rear edge of cephalothorax. The cephalothorax tapers noticeably to the rear.

Status and distribution
By far the commonest species in Norfolk, found widely across the county and one of the most likely species to come across. Can be found by sieving grass piles and searching under stones.

Chthonius ischnocheles has a **dark, shiny cephalothorax** (generally darker than the abdomen) with very large chelicerae. The pedipalps are fairly pale and reddish with a **slender hand** and **long, thin fingers**. The four eyes are well developed. There are **four setae** on the rear of the cephalothorax, all roughly equal in length. In the middle of the front edge of the cephalothorax there is a **small pointed projection** (the **epistome**) which is virtually absent in other species of *Chthonius*.
Chthonius ischnocheles is one of the two commonest species of pseudoscorpion found in Britain (the other is *Neobisium carcinoides*). It has been found in a wide variety of habitats including from woodland leaf litter, grass heaps and also under logs and stones. It can also be found along the coast and saltmarsh strandlines and sometimes in birds' nests.



Chthonius tenuis L. Koch **Dark-clawed Chthonid** male 1.3 mm, female 2.3 mm Abdomen NOT divided

Photos of live individuals found in Kent showing the typical dark claw hands and cephalothorax. Photos: **Thomas Iwasyszyn**.

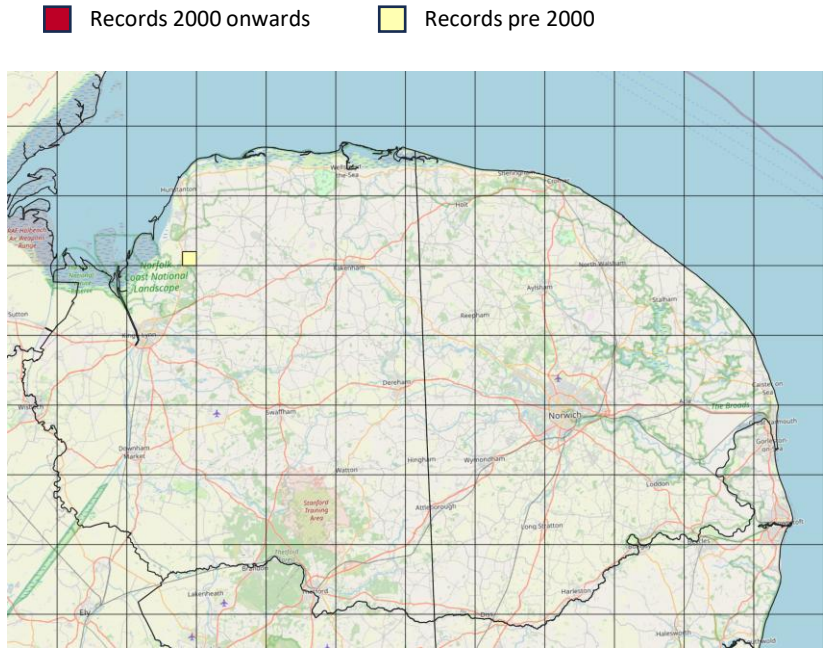
Above: a rather dark individual. Photo: **Thomas Iwasyszyn**.

Chthonius tenuis has large chelicerae and a slender palp hand with long, thin fingers. The eyes are well developed and are separated by approx. 1 diameter; the anterior eyes are quite close to the front edge of the cephalothorax. **Epistome absent**. There are **two setae** on the rear of the cephalothorax. The cephalothorax is quite **dark** as are the **claw hands** which contrast with the pale limbs which should make it easily recognized.

Occurs in leaf litter and under stones, preferring dry habitats often on sandy soils or chalk. This species has a southerly distribution in the UK but it could conceivably be found in Norfolk as a genuine record (see status and distribution).

Status and distribution

One record from a garden in Dersingham in 1981 where it was considered a probable introduction brought in with plants as it was outside the usual geographical range for the species at the time.

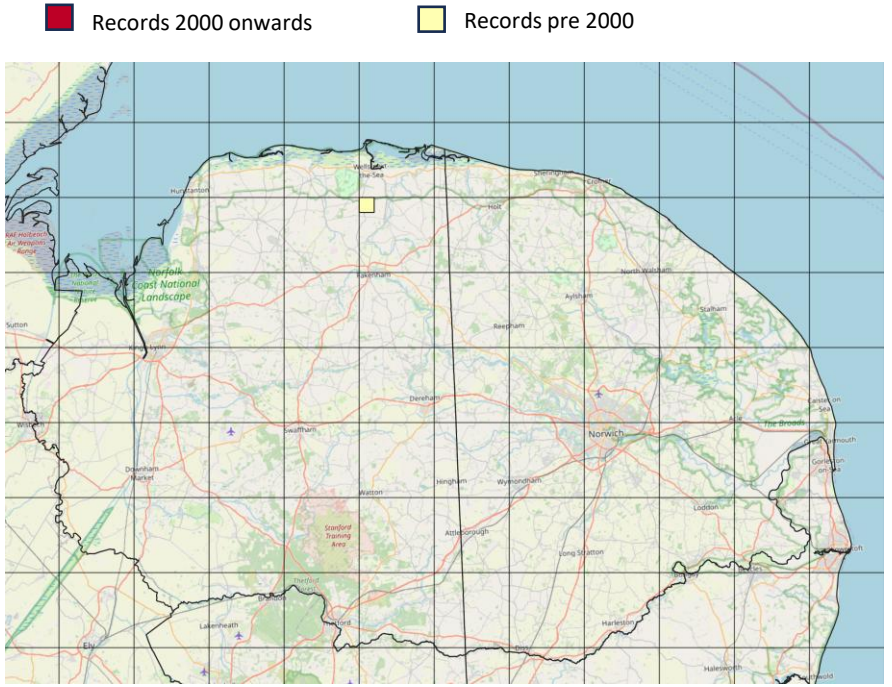


Chthonius orthodactylus (Leach) **Straight-fingered Chthonid** male 1.9 mm, female 3.0 mm Abdomen NOT divided

Above: individual found in Leicestershire.
Photo: **AJ Cann /www.naturespot.org.uk**

Left: preserved specimen showing the 6 setae on rear edge of the cephalothorax (arrowed). Also note no epistome.
Photo: **AJ Cann/www.naturespot.org.uk**

Status and distribution
Nationally, a fairly scarce species. Extremely rare in Norfolk with only one record. Possibly overlooked.



Chthonius orthodactylus has large chelicerae and a slender palp hand with long, thin fingers. The eyes are well developed, set approx. 1.5 diameters apart (compare *C. ischnocheles* which are approx. 2 diameters apart). **Epistome absent**. There are usually **six setae** on the rear edge of the cephalothorax. The teeth on the fixed finger of the hand are large and well separated.

Occurs in amongst dead leaves and grass tussocks, often associated with calcareous soils.

Neobisium carcinoides (Leach) **Moss Neobisid** length 2.2 – 3.0 mm Abdomen NOT divided

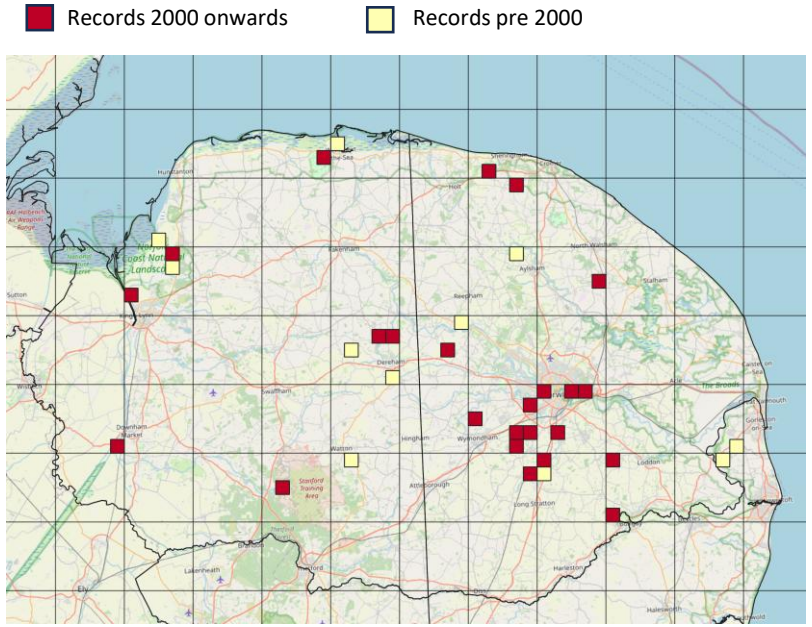
Photographs show live individuals. Note the overall dark colour, moderate length of chelicerae and rounded claw hand (arrowed left).

Status and distribution

Widespread across the county and relatively common but probably under-recorded. Nationally, this is one of the two commonest species so it is surprising that there aren't more records from Norfolk. Usually found in woodland leaf litter and moss but also saltmarsh strandline.

Neobisium carcinoides has relatively short chelicerae compared to the length of the cephalothorax (see photo above right). The **pedipalp hand is rounded**, making it considerably wider than the slender fingers. It has a rather **dark, shiny appearance** with the pedipalps also being fairly dark (compare *Chthonius* species). They have two pairs of eyes. **Epistome** present but **not well developed**. There are large pointed teeth between the rounded ones on the fixed finger of the palp. Similar to other *Neobisium* species, one of which (*N. carpenteri*) has been recorded in Norfolk.

Neobisium carcinoides is one of the two commonest species of pseudoscorpion found in Britain. It inhabits leaf litter in woods and hedgerows, can be found in moss, under stones, on heathland and along the strandline.



Neobisium carpenteri (Kew) **Carpenter's Neobisid** length 3.3 mm Abdomen NOT divided

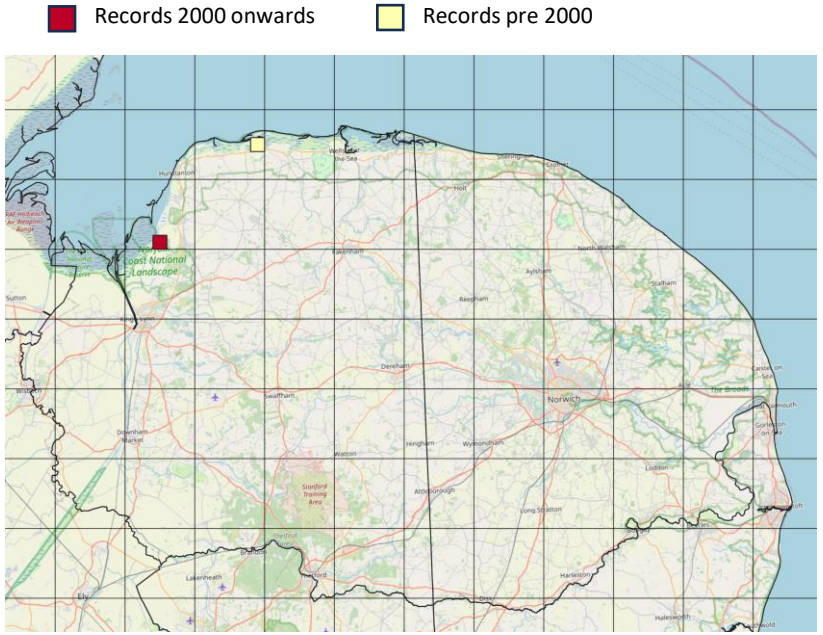
Left: claw showing uniform rounded teeth on fixed (upper) finger of claw.

Above: preserved specimen from Essex coast (saltmarsh).

Status and distribution
Rare in Norfolk with just four records, all from saltmarsh. Worth searching suitable habitat for.
NB *Neobisium carcinoides* can also be found on the edges of saltmarsh so suspected specimens require careful examination.

Neobisium carpenteri is similar in appearance to *N. carcinoides* with relatively short chelicerae compared to the length of the cephalothorax. The fingers are not much longer than the rounded palp hand giving the claws a fairly robust look. They have two pairs of eyes. **Epistome** present, **sharply pointed**. The **teeth on the fixed finger** of the palp are nearly all **low and rounded** (compare with *N. carcinoides* which has large pointed teeth at intervals between the short, rounded ones).

Neobisium carpenteri is a coastal species, found amongst debris on the high tide strandline of saltmarshes and dunes. Most records are from Essex.



Roncus lubricus L. Koch **Reddish Two-eyed Chelifer** length 2.5 – 3.6 mm Abdomen NOT divided

Left: a pale tritonymph showing the distinctive reddish claws and with the position of the single eye on either side of cephalothorax arrowed; most chthonids have two eyes on each side.

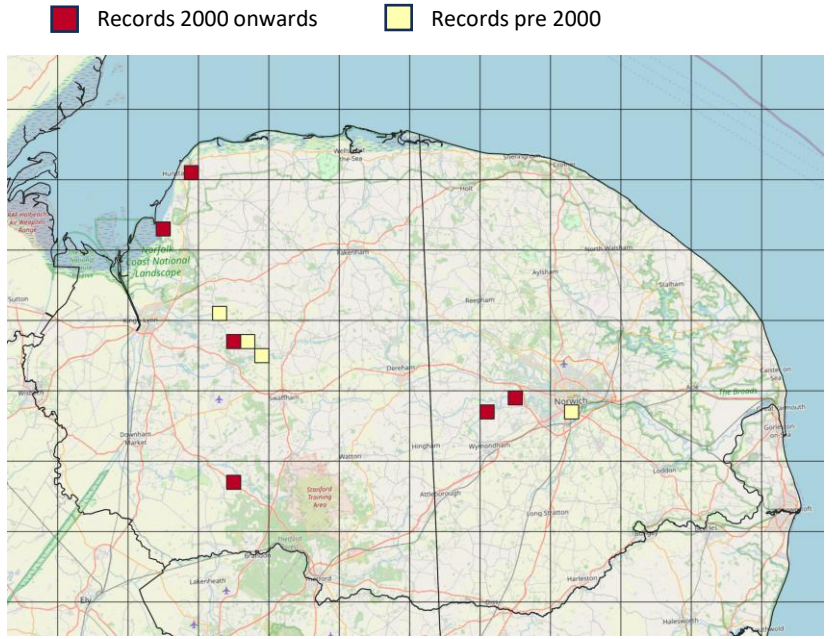
Above left: live individual found under a stone in a churchyard.
Note reddish cephalothorax and pedipalps and the robust, bulbous claws.

Roncus lubricus has a **reddish cephalothorax and pedipalps**. The chelicerae are large but relatively short compared to the length of the cephalothorax. The claws are quite stout with the palpal fingers being slightly longer than the rather bulbous hand. **Epistome** present but quite small. This species has only **one pair of eyes** (see photo above right).

Usually found in quite dry leaf litter, typically Beech and Sycamore, also under stones in woods and under hedges.

Status and distribution

Scarce in Norfolk with nearly all the records coming from the west of the county. It has been found at the coast and also inland in gardens and an old chalk pit. Recent records have come from churchyards.



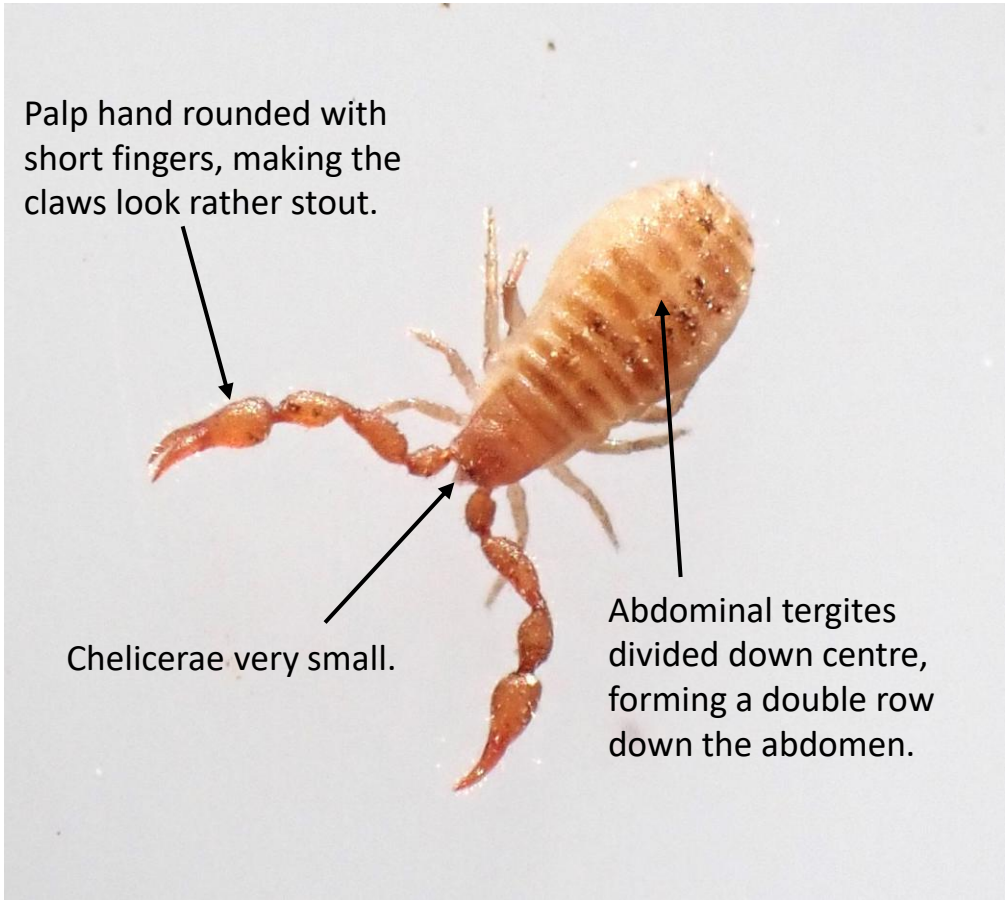
Species with Abdomen DIVIDED down the middle – Family CHEIRIDIIDAE, CHERNETIDAE and CHELIFERIDAE: *Cheiridium, Lamprochernes, Chernes, Dendrochernes, Dinocheirus, Pselaphochernes, Allochernes* and *Dactylochelifer* species.

All these species have the abdominal tergites divided and have small chelicerae. They often have a rather dull/matt or granular appearance. The palpal hand is often rounded with the fingers usually quite short making the claws rather stout. The segments of the pedipalps in a number of species are relatively short and often thickest in the middle. Some species have a pair of eyes (which can be small or indistinct) while in others they are absent.

To identify species, close examination of the body hairs or **setae** is required to see whether they appear **pointed** or **clubbed** at the ends (under a microscope they are rather more complex). Other fine features to look for are **trichobothria** (sensitive hairs) on the **end of the abdomen** and on the **fourth tarsus** (usually written as **tarsus IV**). Some species have accessory teeth on the pedipalp finger. A microscope is often essential to see such details.

The FSC fold out chart (Legg & Farr-Cox, 2016) has keys using these fine details to confirm species.

NB two other species from this group (*Chelifer cancroides* and *Withius piger*) are included at the end of the guide but they have only been recorded once in Norfolk.

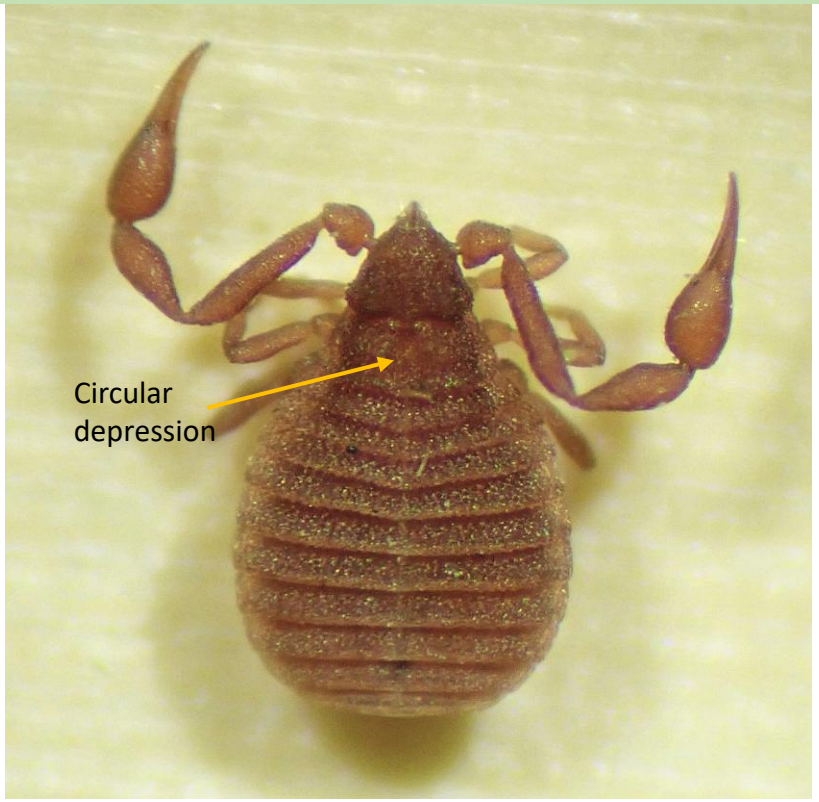


Pselaphochernes scorpioides: note divided abdomen, small chelicerae and rather stout pedipalps with 'boxing glove' claws.

Cheiridium museorum (Leach) **Book Scorpion** length 1.3 – 1.4 mm

Abdomen DIVIDED

Above: live individual found in old thatch.
Note rather rounded ‘teardrop’ shaped body.

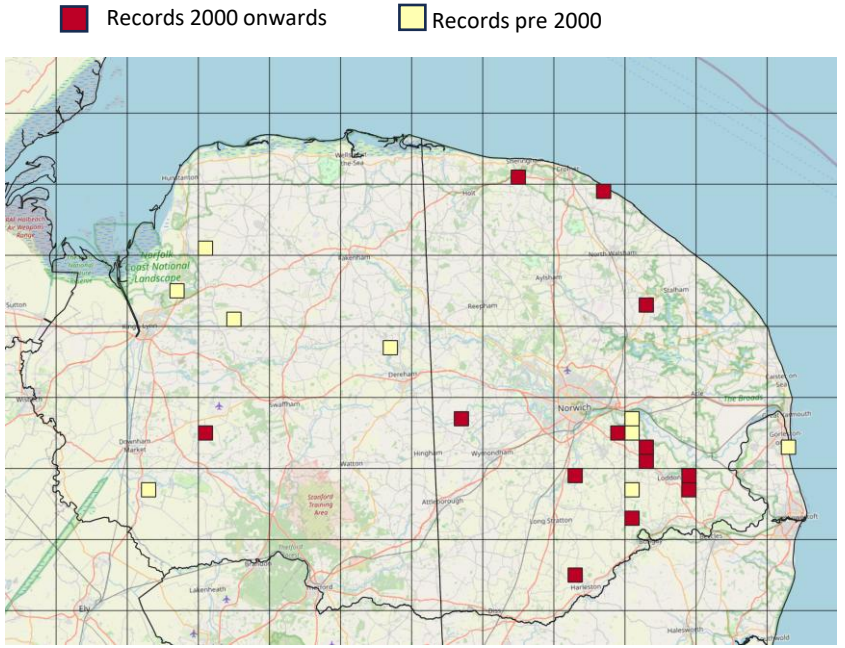


Left: preserved specimen.

Cheiridium museorum has a divided abdomen and small chelicerae. The palp hand is rounded with the fingers quite short and slender and the palpal femur is rather long (arrowed above left). Eyes present, one pair, rather small. Distinguished by its **small size**, rather round flattened body and a **circular depression** in the centre of the cephalothorax (arrowed above right). This is our smallest species and is easily overlooked.

A widespread species found in very dry habitats such as debris in old barns, pigeon lofts and nests as well as old thatch. Also found in old book stores and warehouses.

Status and distribution
Relatively scarce in Norfolk with records widely scattered across the county including several from straw in barns. Recent records have come from searching inside churches by looking for dead specimens snagged in cobwebs with a few live ones also being found.



There are three species of *Lamprochernes* found in the UK, all of which occur in Norfolk. They are characterized by having pointed body setae, rather shiny pedipalps and trichobothria on the end of the abdomen as well as one on tarsus IV.

The position of the trichobothrium on tarsus IV separates *L. savignyi* from *L. nodosus* and *L. chyzeri* but it can be a difficult character to judge, depending on the angle of view. In *L. savignyi* it is almost half way along while in the other two species it is closer to a third from the base (see photos top right).

Although there is a size range for each species, *L. savignyi* is always appreciably smaller than the other two. *L. savignyi* is most often found in rich dung and compost, a habitat it shares with the other two species. It is not uncommon to find more than one species together when the size difference will be apparent.

Above: *Lamprochernes savignyi*: trichobothria approx. in middle.

Left and below: relative positions of trichobothrium on tarsus IV (arrowed).

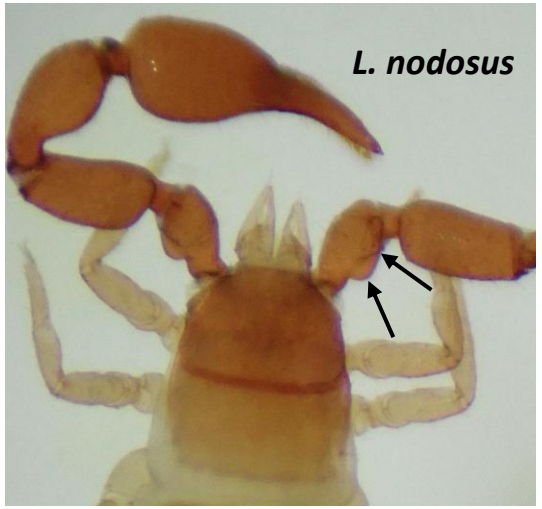
Above: *Lamprochernes chyzeri/nodosus*: trichobothria approx. 1/3 from base.

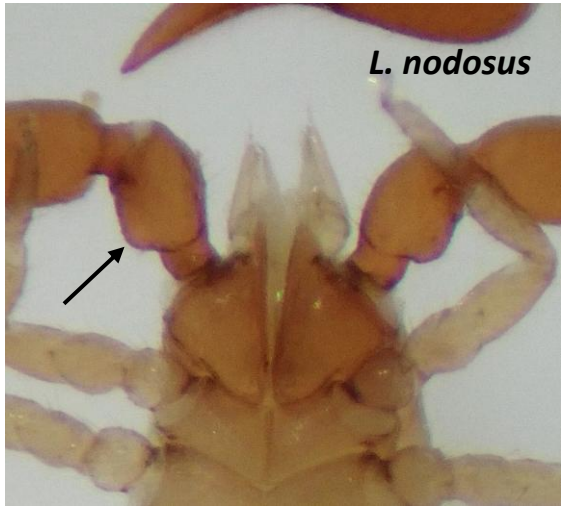
Left: size comparison of *Lamprochernes savignyi* on the left and *Lamprochernes chyzeri* on the right.
Note the rather shiny claws and pedipalps.

L. nodosus and *L. chyzeri* are roughly the same in size and share the position of the trichobothrium on tarsus IV (about one third from the base) which makes them more difficult to separate. They are distinguished from one another on the shape of the pedipalp trochanter, a character that is difficult to determine and requires the correct angle of view. *L. chyzeri* generally has much more robust pedipalps than *L. nodosus*.

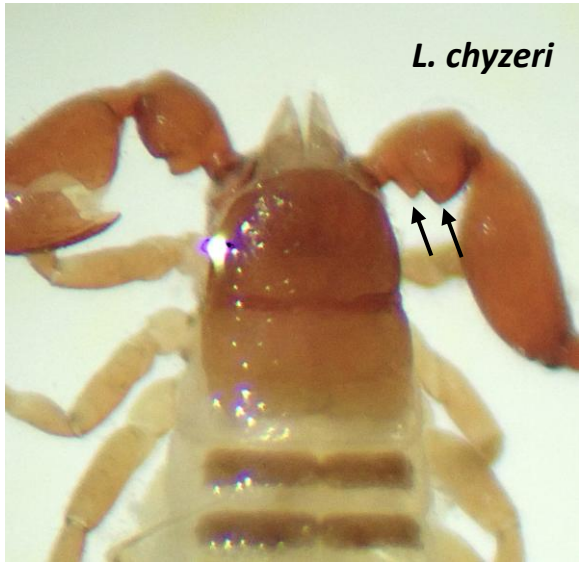
Left:
two *L. chyzeri* and one *L. savignyi* (bottom left, smaller individual) sieved from the same dung heap.

Comparison of pedipalp trochanter for *Lamprochernes nodosus* & *Lamprochernes chyzeri*.





Left:
L. nodosus showing rounded pedipalp trochanter from above and below (arrowed).



Left:
L. chyzeri showing ‘pointy’ pedipalp trochanter from above and below (arrowed).

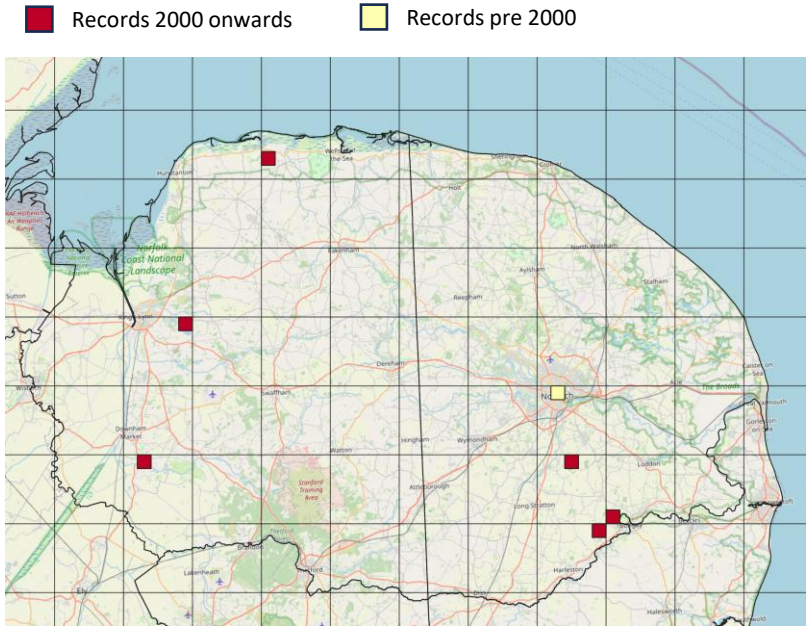
Some literature suggests that *L. chyzeri* is largely found under tree bark unlike *L. nodosus* which is most often found in grass heaps, compost and dung piles. In Norfolk both species have often been recorded from dung heaps and grass piles with *L. chyzeri* seemingly being the commoner of the two species (Jones 1985).

Lamprochernes savignyi (Simon) **Saviny's Shining Claw** length 1.5 – 1.7 mm Abdomen DIVIDED

Left: trichobothrium on tarsus IV (arrowed) positioned more centrally (compare *L. chyzeri/nodosus)*.

Status and distribution
Scarce in Norfolk with few records, mostly from rich compost or manure heaps where it can be numerous. Probably under-recorded.

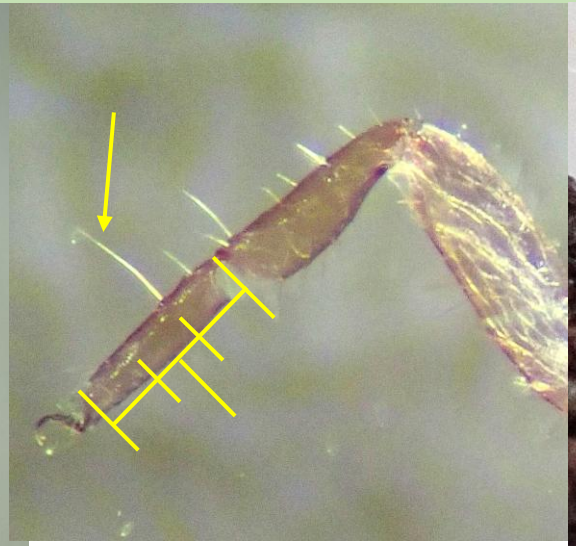
Above: individual sieved from dung/straw in farmyard (where it was found with *L. chyzeri*).



Lamprochernes savignyi has a divided abdomen and small chelicerae. The palp hand is rounded with the fingers quite short making the claws look rather stout. The **pedipalps** appear **smooth and rather shiny**. Eyes present, one pair although indistinct. **Body setae pointed**. The **trichobothrium** on the dorsal surface of **tarsus IV** is positioned more towards the **middle** (described as **submedial**) (compare *L. chyzeri/nodosus*). **Noticeably small compared to the other two species of *Lamprochernes*.**

A sparsely distributed species, synanthropic being found in rich compost and manure heaps where it often occurs with *L. chyzeri/nodosus*. Phoretic, recorded on flies.

Lamprochernes nodosus (Schrank) **Knotty Shining Claw** length 1.8 – 2.2 mm Abdomen DIVIDED

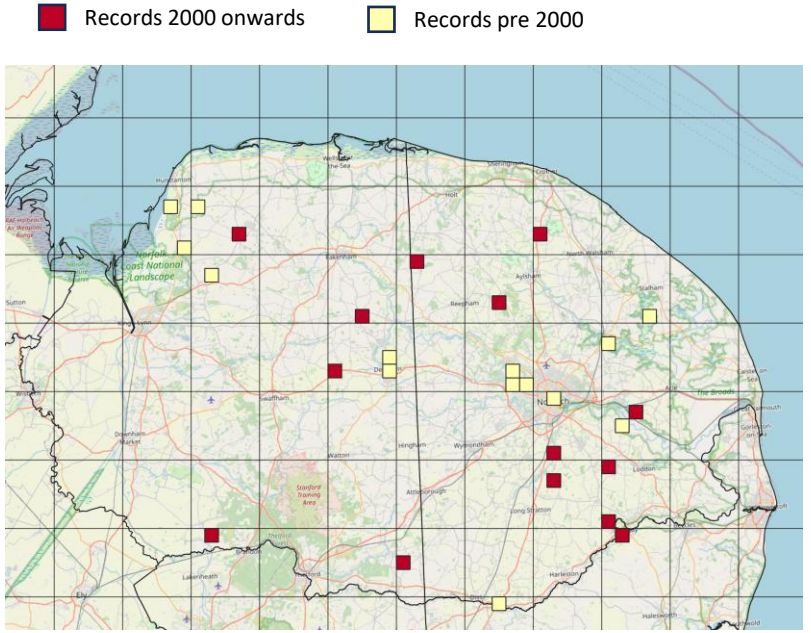


Above: trichobothrium on tarsus IV (arrowed) positioned more towards base (compare *Lamprochernes savignyi*).

Above: preserved specimen; note more rounded projection on palp trochanter (arrowed).

Left: live individual sieved from muck heap. Note rather shiny claws.

Status and distribution
Quite frequent in Norfolk with widespread records. Often found in grass piles, compost and dung heaps where it can be very numerous.



Lamprochernes nodosus has a divided abdomen and small chelicerae. The palp hand is rounded and the fingers are quite short making the claws rather stout. The **pedipalps** look **smooth and shiny**. Eyes present, one pair, rather indistinct. **Body setae pointed**. There is a **trichobothrium** on the dorsal surface of **tarsus IV** positioned about **a third from the base** (rather than towards the centre as in *L. savignyi*). Can be very difficult to separate from *L. chyzeri* (see introduction to *Lamprochernes* for more details). Widespread, found in rich compost, dung heaps, grass piles, etc.; usually synanthropic. Sometimes found in rotting wood. A phoretic species, recorded on flies.

Lamprochernes chyzeri (Tömösvary) **Chyzer's Shining Claw** length 1.8 – 2.0 mm Abdomen DIVIDED

Above: preserved specimen showing the robust claws; note pointed body setae (arrowed).

Left: preserved specimen showing the conical pointed projection on the pedipalp trochanter (arrowed).

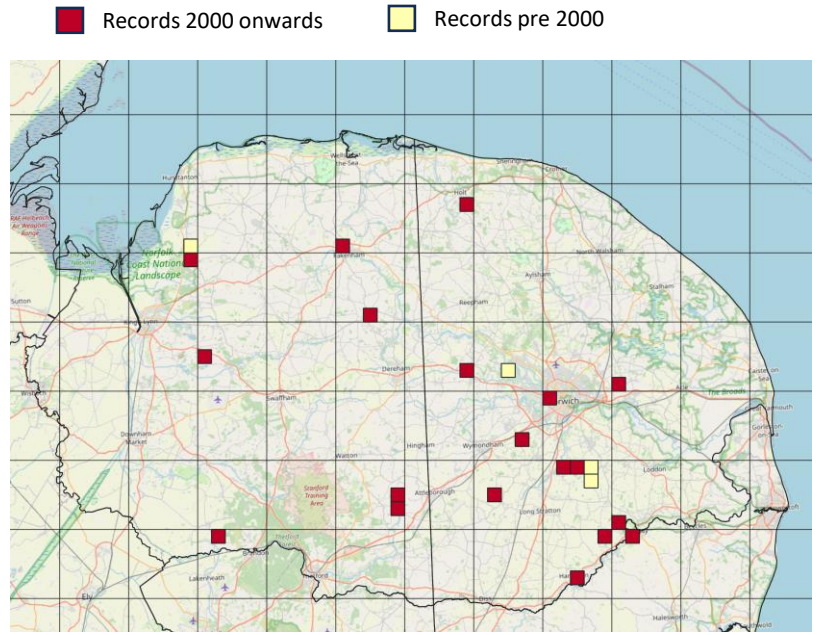
Lamprochernes chyzeri has a divided abdomen and small chelicerae. The palp hand is rounded with short fingers giving the claws a stout look. **Pedipalps** appear **smooth and quite shiny**. Eyes present, one pair, rather indistinct. **Body setae pointed**, **trichobothrium** on dorsal surface of **tarsus IV** positioned about **a third from the base** (see photo of *L. nodosus*). Difficult to differentiate from *L. nodosus*; the shape of the palp trochanter needs to be checked, angle critical (see above).

A sparsely distributed species usually found under bark of old and dying trees. Has occasionally been found in dung heaps, compost and woodchip piles.

Phoretic, recorded on flies.

Status and distribution

Quite frequent in Norfolk with records scattered across the county. Has been found in woodchip piles but also straw/dung and grass piles, a habitat normally associated with *Lamprochernes nodosus* which it is very difficult to separate from.

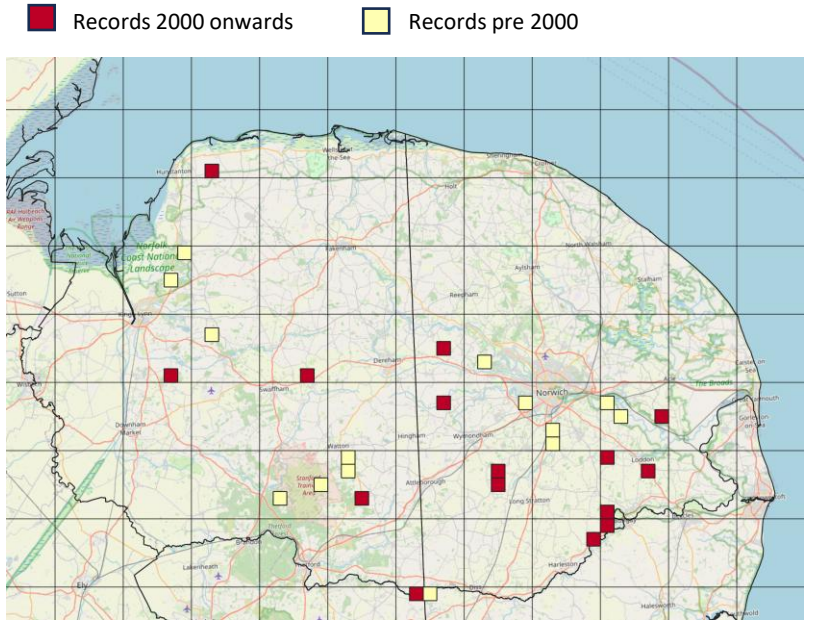


Chernes cimicoides (Fabricius) **Common Tree Chernes** length 2.2 – 2.3 mm Abdomen DIVIDED

Above: preserved specimen found under tree bark. Note clubbed setae and trichobothria on end of abdomen (arrowed).

Left: live individual found on underside of loose bark on dead tree branch. Note dark, granular appearance.

Status and distribution.
Widespread and relatively common but probably under recorded. Hard to find as it is generally under the bark of old, dead and dying trees, a habitat that is difficult to search without destroying it.



Chernes cimicoides has a divided abdomen and relatively small chelicerae. It is **dark reddish brown** and has a **rather dull, granular appearance**. The palp hand is quite broad with fairly short fingers, making the claws look rather stout. The pedipalps including the claws are covered in **clubbed setae**. The **body setae** are also **clubbed** (see photo above left). Eyes absent. **Trichobothria** present on **end of abdomen** (see photo above left) but not on tarsus IV.
Widespread in England, found under bark of old and dead deciduous trees, sometimes in dry rotten wood. Phoretic, recorded on beetles.

Dendrochernes cyrneus (L. Koch) **Large Tree Chernes** length 3.5 – 4.2 mm Abdomen DIVIDED

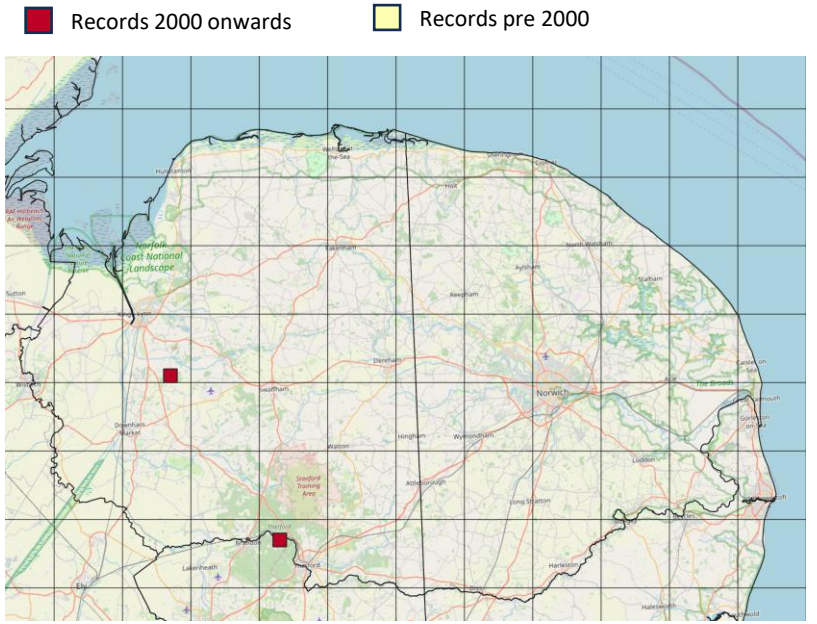
Left: tritonymph; note paler colour compared to adult but still has dark, robust, rather shiny claws.

Above: live adult found under bark of fallen tree.
Note dark, extremely robust claws and clubbed setae.

Dendrochernes cyrneus is our largest pseudoscorpion. This is quite a **dark species** with **robust dark reddish brown pedipalps** that end in **large powerful claws** that are almost black. The tergites have short **clubbed setae**. **Trichobothria** are present on the **end of the abdomen**. **Tarsus IV** has a **trichobothrium** positioned **towards the claw**.

Nationally this is a very rare species usually associated with ancient woodland or very old mature trees. It is usually found under bark of very dry, dead or decaying wood where it is exposed to the sun; host tree species in UK have included Oak, Elm and Beech. Phoretic on beetles and ichneumons.

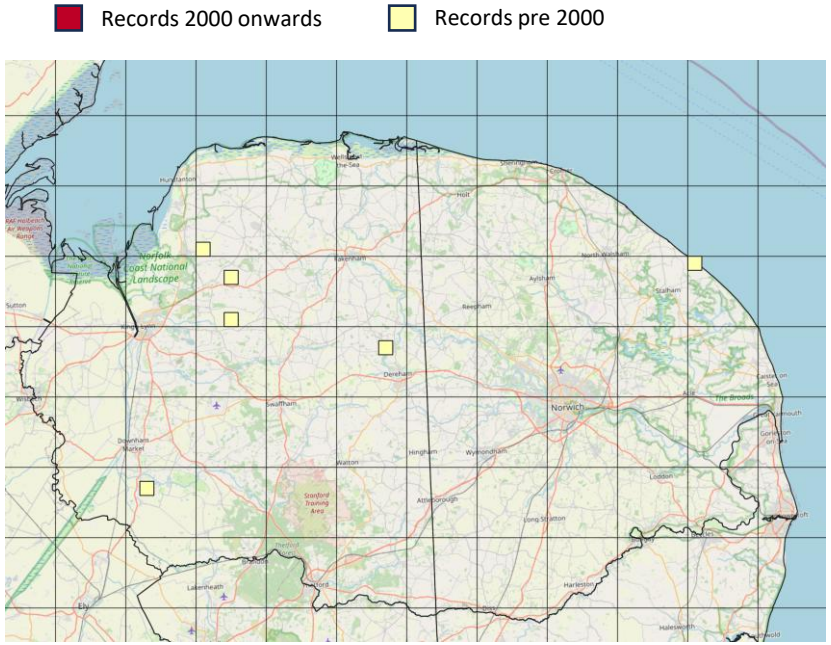
Status and distribution
A very rare species.
So far only 2 known sites in Norfolk.
First record was from the Brecks in 2023 when five were discovered by Steve Lane under the bark of a felled tree lying in an open sunny position.



Dinocheirus panzeri (C.L. Koch) **Terrible-clawed Chernes** length 2.1 – 2.6 mm Abdomen DIVIDED

Left: museum specimen preserved in alcohol.

Status and distribution
A rare species in Norfolk with few records, none of them recent. Recorded from grain debris and straw in barns, i.e. sites that tend to have restricted access.



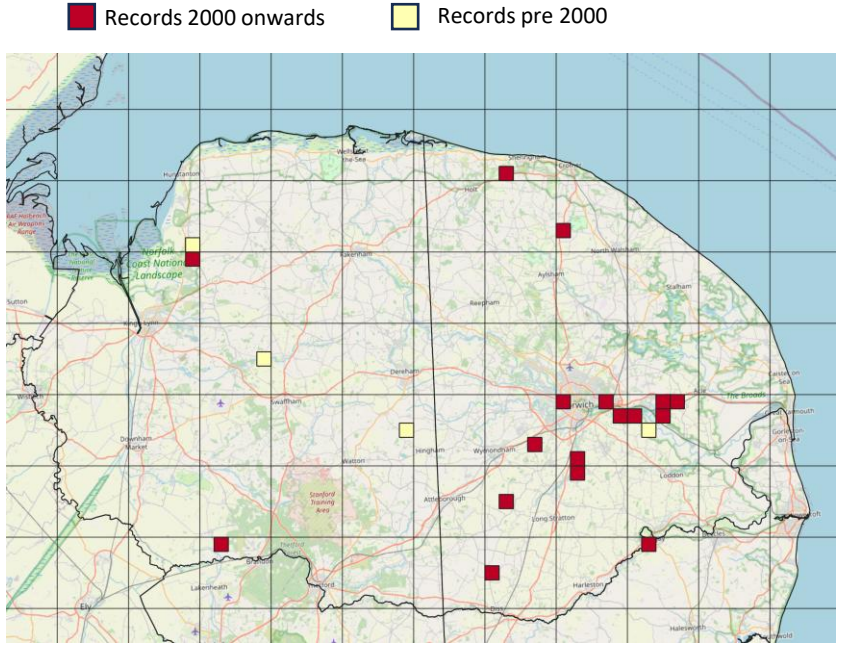
Dinocheirus panzeri has a divided abdomen and relatively small chelicerae. The palp hand is rounded with the fingers roughly the same length making the claws rather robust. The pedipalps including the claw are covered in **clubbed setae**. The **body setae** are also **clubbed**. Eyes absent. **Trichobothria** present on **end of abdomen** and one on **tarsus IV**, close to the claw. Similar to *Allochernes powelli* (which lacks trichobothria on the rear of the abdomen) which is found in the same habitat.

Synanthropic, generally found in straw, hay, etc. in barns and pigeon lofts; sometimes found in birds' nests. Believed to be phoretic on birds.

Pselaphochernes scorpioides (Hermann) **Compost Chernes** length 1.5 – 2.0 mm Abdomen DIVIDED

Photos show live individuals sieved from garden compost from a plastic bin. Note that the pedipalps and claws are rather dull and the setae are clubbed.

Status and distribution
Scattered records in Norfolk but can be quite numerous in compost and old grass heaps and decaying straw. Perhaps on the increase as most records are recent.



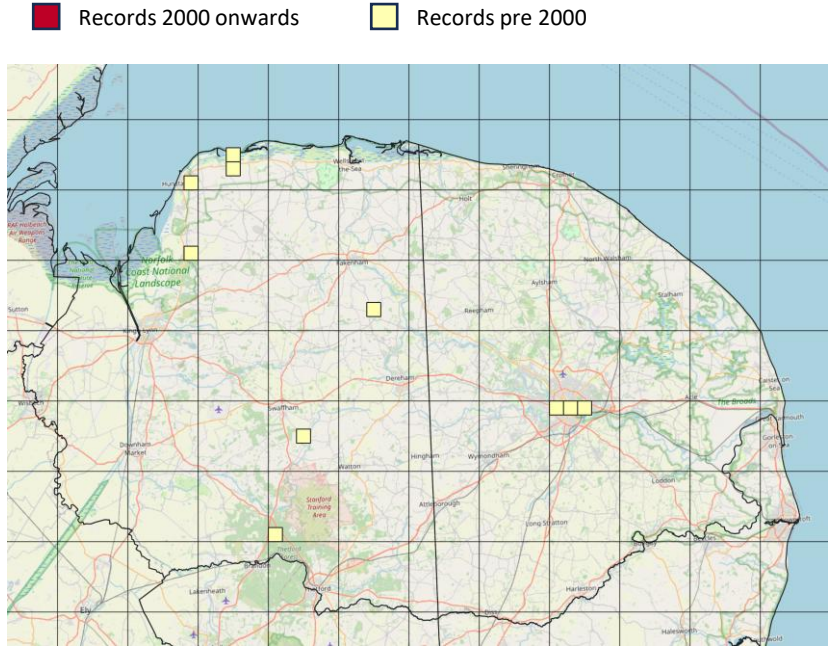
Pselaphochernes scorpioides has a divided abdomen and rather small chelicerae. The palp hand is rounded and the fingers are rather short. The pedipalps including the claws are covered in **clubbed setae** (arrowed above left) and they have a **rather dull appearance**. The **body setae are clubbed** (arrowed above right). Eyes absent. **Trichobothria** present on the **end of the abdomen** and one on **tarsus IV**, situated in the centre (compare *P. dubius* which lacks the trichobothrium on tarsus IV).

Found in rich decaying matter. Often synanthropic being found in compost heaps and also rotting manure and piles of straw. Can be found alongside *Lamprochernes* species.
Phoretic, recorded on flies.

Pselaphochernes dubius (O. P.-Cambridge) **Small Chernes** length 1.5 – 1.7 mm Abdomen DIVIDED

Photos of live individual found in Kent showing the clubbed body setae and trichobothria on end of abdomen. Note absence of trichobothrium on tarsus IV. Photos: **Thomas Iwasyszyn**.

Status and distribution
A very scarce species in Norfolk with few records, none recent. Found in leaf litter but also on strandline under driftwood. A small species so easily overlooked.



Pselaphochernes dubius has a divided abdomen and rather small chelicerae. The palp hand is rounded with short fingers. The pedipalps including the claws are covered in **clubbed setae**. The **body setae** are also **clubbed**. Has a rather dull/matt appearance. Eyes absent. **Trichobothria** present on the **end of the abdomen** but **absent** from tarsus IV.
Very similar to *P. scorpioides* but lacks a trichobothrium on tarsus IV and also found in different habitat (most often in woodland leaf litter).
Found in woodland litter on calcareous sites, also in calcareous grassland, sometimes under stones.

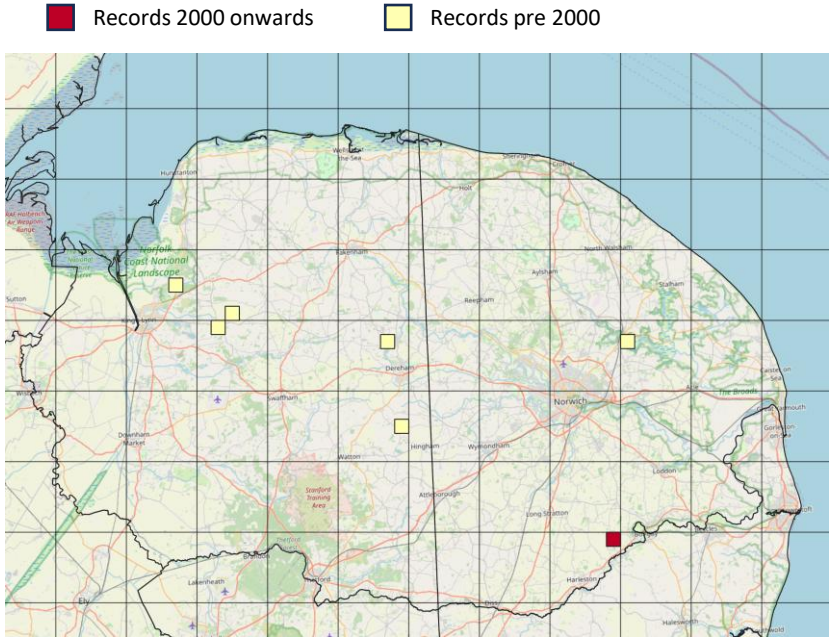
Allochernes powelli (Kew) **Powell's Chernes** length 2.2 – 2.3 mm Abdomen DIVIDED

Left: two individuals sieved from deep layer of straw stored in a barn.

Above left: live individual showing clubbed setae; note absence of trichobothria on end of abdomen.

Status and distribution
Scarce in Norfolk with few records.
Usually found in straw debris in stables and barns, i.e. sites that tend to have restricted access.
One recent record.

Allochernes powelli has a divided abdomen and rather small chelicerae. The palp hand is relatively wide with shortish fingers giving the claws a robust look. The pedipalps are covered in **clubbed setae**. Eyes absent. The **body setae** are **clubbed** and there are **no trichobothria** on the end of the abdomen. **Tarsus IV** without trichobothrium but there is a **distal obtuse seta**. It has a matt, granular appearance and the cephalothorax is clearly divided into three sections by transverse grooves. Similar to *Dinocheirus panzeri* which occurs in the same habitat but distinguished by the absence of trichobothria on the rear of the abdomen.
Synanthropic, found in refuse in barns and stables.

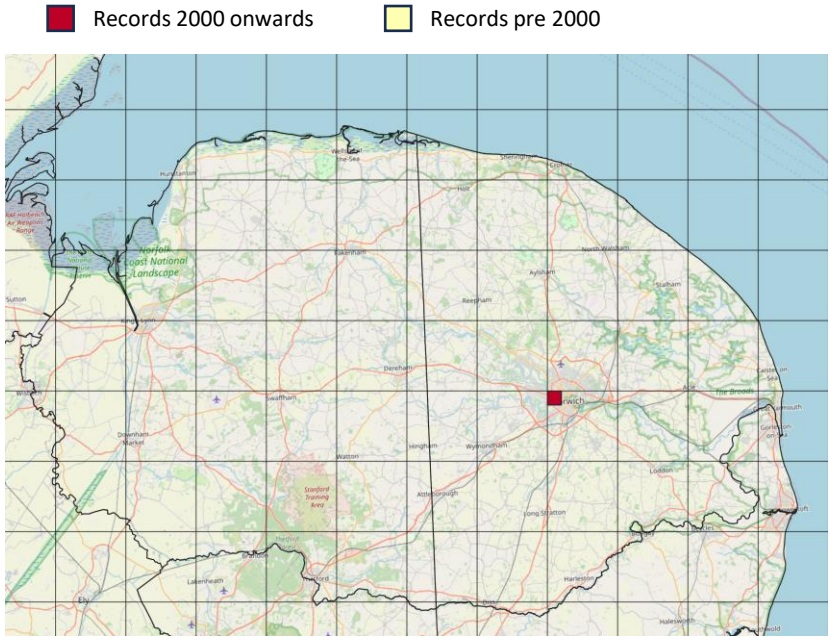


Allochernes wideri (C.L. Koch) **Wider's Tree Chernes** length 2.2 – 2.5 mm Abdomen DIVIDED

Left: two individuals sieved from fairly dry, rotten wood from large Oak tree.

Status and distribution
Reported new to Norfolk in 2025 when Martin Collier found several in dry decaying wood of a mature Oak tree at NWT Sweet Briar Marshes while conducting surveys for beetles. A second record in 2026, also from the Norwich area.

Above left: live individual photographed down a microscope showing clubbed setae; note absence of trichobothria on end of abdomen.



Allochernes wideri has a divided abdomen and rather small chelicerae. The palp hand is relatively wide with shortish fingers giving the claws a robust look. The pedipalps are covered in **clubbed setae**. Eyes absent. The **body setae** are **clubbed** and there are **no trichobothria** on the end of the abdomen (compare *Chernes cimicoides* which occurs in similar habitat). **Tarsus IV without trichobothrium**. It has a matt, granular appearance and the cephalothorax is clearly divided into three sections by transverse grooves. Similar to *Allochernes powelli* but generally found in different habitat. Found under bark or in fairly dry rotten wood, often in cavities, of dead and dying deciduous trees, particularly oak.

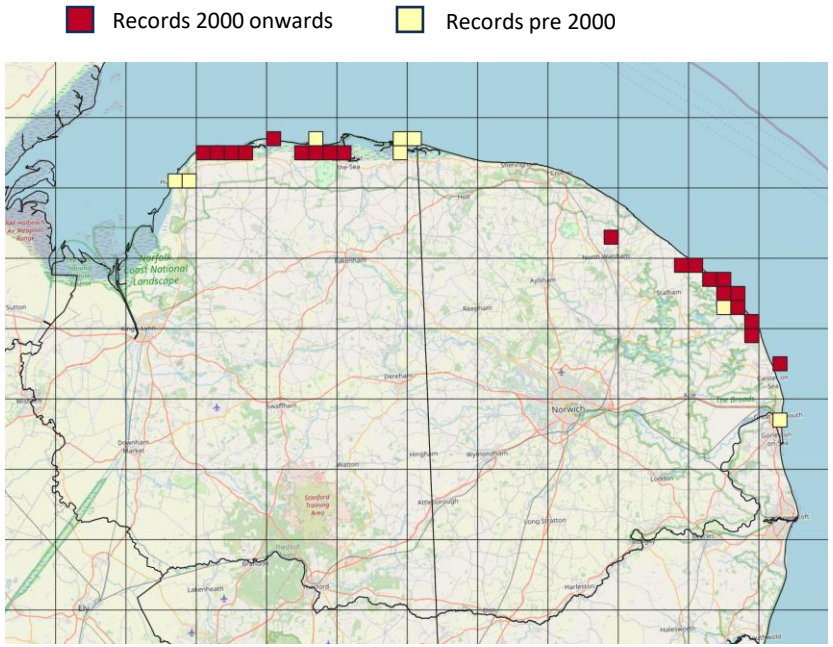
Dactylochelifer latreillii (Leach) **Marram Grass Chelifer** length 2.3 – 3.1 mm Abdomen DIVIDED

Photos show live individuals found in sand dunes. Note the dark cephalothorax and claws.

Dactylochelifer latreillii has a divided abdomen and rather small chelicerae. The palp hand is slightly rounded with the fingers roughly equal length making the claws appear rather slender. Eyes present, one pair. A quite distinctive species having a **dark chocolate brown coloured thorax and pedipalps**; size and habitat are also good pointers to this species.

Mostly associated with sand dunes, being found in amongst tussocks of Marram and other grasses along the seaward edge of dunes or under driftwood. Can also be found on the edges of saltmarsh under strandline debris.

Status and distribution
The second most commonly recorded species of pseudoscorpion in Norfolk. A coastal species that should be present wherever there is suitable habitat (i.e. dunes with Marram Grass and saltmarshes). Relatively easy to find for a pseudoscorpion. Can be numerous where found.



Species with only one Norfolk record that are not otherwise covered in this Guide

The following two species have previously been included on the Norfolk list on the basis of single records.

Chelifer cancroides (Linnaeus) **House Scorpion**

There is one record for this species, noted in NNNS Transactions 1933 – 34 under Miscellaneous Observations (p 507) compiled by E. A. Ellis when it was described as being 'abundant in a wood at Dunston' and it was noted as being new to Norfolk. Jones (1985) noted that it may have been misidentified and as there were no specimens available then it should be removed from the Norfolk list.

A nationally rare species which is usually synanthropic having generally been found in barns, stables, grain stores, factories and houses.

Withius piger (Simon) **Lazy Chelifer**

Only one record for this species from 1959, recorded at Blakeney Point, reported via an article in Entomologist's Monthly Magazine but no further details given. No specimens for this species were found in the collection in the Castle Museum.

Nationally a very rare species. Usually synanthropic being found in stored food products particularly grain and warehouse debris; probably introduced into the UK in ships' cargo.

Acknowledgements

I am particularly indebted to Martin Collier who has kept a lookout for pseudoscorpions while carrying out beetle surveys around the county and has supplied me with a number of important specimens. Further specimens have been donated by Andy Musgrove and Steve Lane. Without them, the guide would not be as comprehensive as it is. Steve Lane provided further records of species including the first *Dendrochernes cyrneus* for Norfolk. Thanks to the photographers who kindly allowed the use of their photos: Alan Cann (www.naturespot.org.uk) and Thomas Iwasyszyn.

Thanks to Jeremy Bartlett for the photo of a *Chernes cimicoides* on the leg of a longhorn beetle illustrating their phoretic behaviour. Many thanks to Nicholas Meade for access to Earsham Estate to look for pseudoscorpions. Thanks to Tony Irwin for helping me with identifications of the more difficult species and organising access to museum specimens. I am most grateful to have been allowed to look at and photograph the specimens held by Norwich Castle Museum. Thanks also to Liam Andrews and Gerald Legg.

Pseudoscorpions: Checklist of British Species (after Legg, 2019*, based on Harvey, 2013)

Family	Species	Common Name	Norfolk Record		Family	Species	Common Name	Norfolk Record
Chthoniidae	*Ephippiochthonius tetrachelatus*	Dimple-clawed Chthonid	✓		Chernetidae	*Allochernes powelli*	Powell's Chernes	✓
	Ephippiochthonius kewi	Kew's Chthonid	✓			*Allochernes wideri*	Wider's Tree Chernes	✓
	Chthonius halberti	Halbert's Chthonid	×			*Dinocheirus panzeri*	Terrible-clawed Chernes	✓
	Chthonius ischnocheles	Common Chthonid	✓			*Chernes cimicoides*	Tree Chernes	✓
	Chthonius tenuis	Dark-clawed Chthonid	✓			*Dendrochernes cyrneus*	Large Tree Chernes	✓
	Chthonius orthodactylus	Straight-clawed Chthonid	✓			*Americhernes oblongus*	American Chernes	×
Neobisiidae	*Neobisium maritimum*	Shore Neobisid	×		Withiidae	*Withius piger*	Lazy Chelifer	?
	Neobisium carpenteri	Carpenter's Neobisid	✓		Cheliferidae	*Chelifer cancroides*	House Scorpion	?
	Neobisium carcinoides	Moss Neobisid	✓			*Dactylochelifer latreillii*	Marram Grass Chelifer	✓
	Neobisium simile	Quarry Neobisid	×		Larcidae	*Larca lata*	Oak Tree Chelifer	×
	Roncus lubricus	Reddish Two-eyed Chelifer	✓					
	Roncocreagris cambridgei	Cambridge's Two-eyed Chelifer	×					
	Microbisium brevifemoratum	Bog Neobisid	×					
Cheiridiidae	*Cheiridium museorum*	Book Scorpion	✓					
Chernetidae	*Lamprochernes savignyi*	Savigny's Shining Claw	✓					
	Lamprochernes nodosus	Knotty Shining Claw	✓					
	Lamprochernes chyzeri	Chyzer's Shining Claw	✓					
	Pselaphochernes scorpioides	Compost Chernes	✓					
	Pselaphochernes dubius	Small Chernes	✓					

Notes: as detailed at the end of the Norfolk species accounts, *Withius piger* and *Chelifer cancroides* have both been recorded once in Norfolk but the reliability of the records are in doubt. *Americhernes oblongus* was discovered as an import in Dover in 1991 but hasn't established a viable population but may conceivably turn up elsewhere. A viable population of *Neobisium simile* was discovered in a quarry in Wales where it is believed to have been accidentally introduced from the Pyrenees along with imported materials.

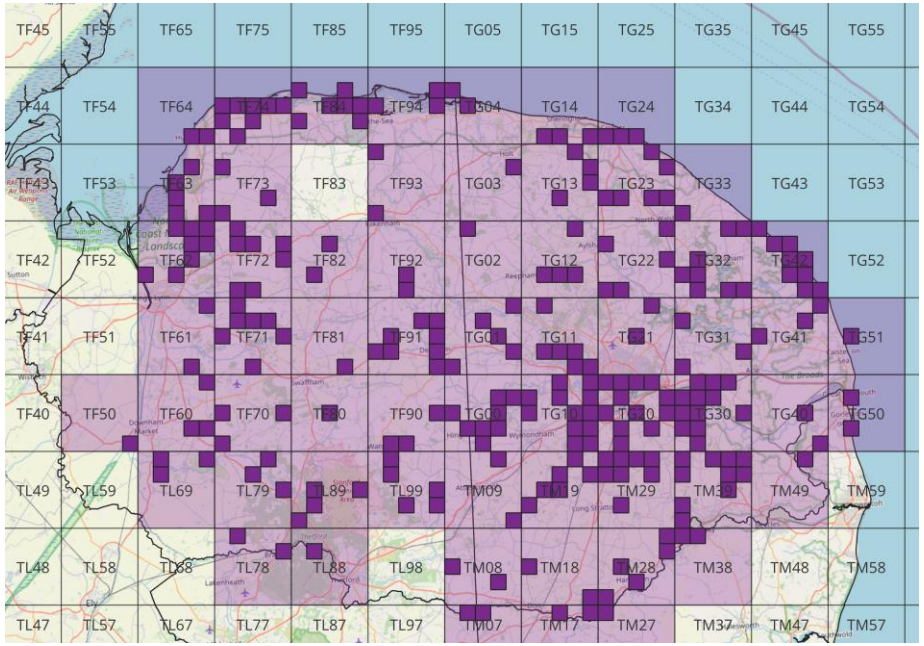
* Legg, G. 2019 *Changes in the British pseudoscorpion fauna over the last 50 years* Arachnology 18(3), 189-195

Pseudoscorpion records are quite patchy across Norfolk so it is hoped that this guide will stimulate greater interest in this little-studied group.
All records are welcome.

Records can be submitted via iRecord or sent to the county recorder (contact details in the 'recording' section of this website).
Please give: species name, grid reference, location, comments, date, name of recorder.
Photographs for possible confirmation are also welcome.

A Black-headed Cardinal Beetle (*Pyrochroa coccinea*) with two hitch-hiking *Chernes cimicoides* attached to its legs.

Norfolk & Norwich Naturalists' Society



Map showing coverage of pseudoscorpion records in Norfolk highlighting 10 km and 2 km squares.