Harvestmen

of Norfolk

Maps compiled from data provided in 2023 by Norfolk Biodiversity Information Service (NBIS),
iRecord, the Harvestman Recording Scheme and records from the County Recorder.
Maps produced using QGIS software with OpenStreetMap as a base layer.

Bibliography

Hillyard, P.D. and Sankey, J.H.P. 1989 Harvestmen: keys and notes for the identification of the species, Synopses of the British Fauna (New Series) No. 4 (second edition), The Linnean Society of London.

Richards, P. 2022 Harvestmen of the British Isles, Field Studies Council (fold out chart).

Jones, R.E., Procter, D.A. and Foster, A.P. 1992 The Harvestmen of Norfolk, Transactions of the Norfolk and Norwich Naturalists' Society 29 (3) 237-240.

Wijnhoven, H. and Prieto, C.E. 2015 *Dicranopalpus caudatus* Dresco, 1948: not a synonym of *Dicranoaplpus ramosus* (Simon, 1909) but a valid species after all, Revista Iberica de Arachnologia, No.26 pp 25-34.

Cover photo: *Paroligolophus agrestis* on the underside of a fallen branch.

Revision date: Dec 2023

Introduction

Harvestmen make up the Order Opiliones and belong to the Class Arachnida along with spiders although they are more closely related to the other arachnids, the scorpions and pseudoscorpions. They are superficially similar to spiders but differ in several fundamental ways. The most obvious is the fused oval body of the harvestman compared to the distinct cephalothorax and abdomen of the spider separated by a narrow 'waist'. Although both have eight legs, the second pair of a harvestman are sensory organs and are used as 'feelers' to find food and explore their surroundings. While spiders mate by the male transferring sperm to the female externally via his pedipalps, harvestmen are unique among arachnids in that copulation is internal via a penis. Unlike spiders, harvestmen do not produce silk so lack the spiders' ability to disperse by ballooning. They also lack venom and many are often opportunistic omnivorous scavengers. They have been recorded catching small invertebrates like springtails and aphids, feeding on dead insects and carrion, vegetative material and even bird droppings.

Oligolophus tridens, newly moulted.

Harvestmen are prone to desiccation, especially the immature stages, so are often found in relatively moist areas like leaf litter and under logs and stones. Eggs are laid somewhere moist, into the soil or plant stems. Juveniles of most species stay in the ground layer but often ascend higher up onto walls or into bushes and trees when adult. Most species are adult from late summer into autumn and are more active at night.

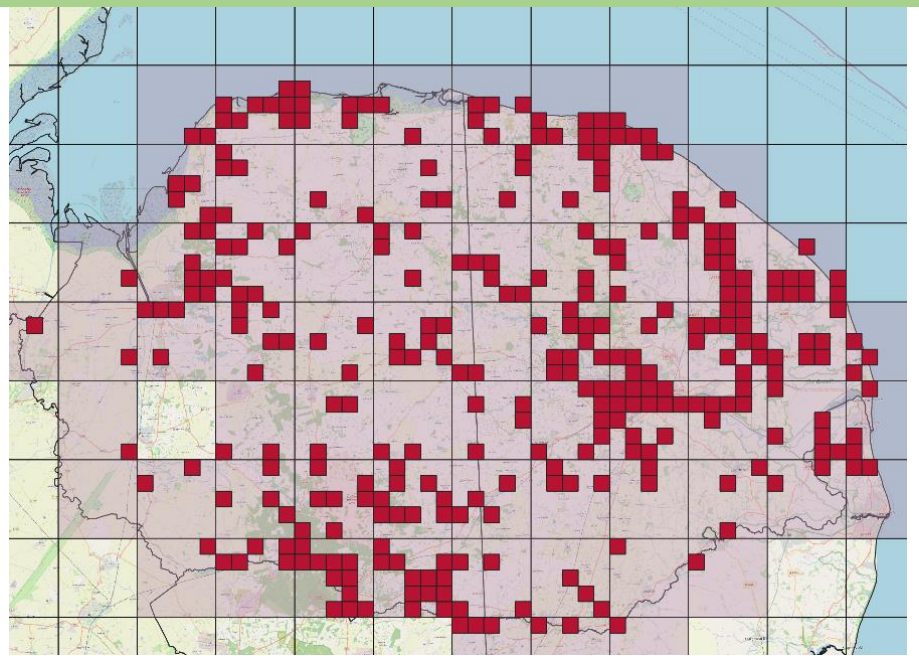
Harvestmen can be found in a variety of habitats, from gardens and allotments to heaths, woodlands and fens. They are also present at coastal sites. They can be found by looking under fallen branches, logs and stones, visually searching vegetation (e.g. patches of Brambles and Stinging Nettles) and by beating trees and shrubs. Pitfall trapping and sieving leaf litter are also useful for finding species.

Harvestmen in Norfolk

There are currently 33 species of harvestmen on the British list, with six of these being added since 2010. Some of the recent additions are thought to have arrived via the horticultural trade and there is potential for others to arrive too. So far, 24 species have been recorded in Norfolk.

The earliest records of harvestmen in Norfolk are from 1894 when eleven species were found to be present. The previous review of Norfolk harvestmen (Jones et al. 1992) listed seventeen species. Many of these records were the result of field work undertaken from 1981 (AG Irwin and RE Jones) and in 1988-89 (AP Foster and DA Procter, East Anglian Fenland Invertebrate Survey).

Dicranopalpus larvatus juvenile and *Paroligolophus agrestis*.



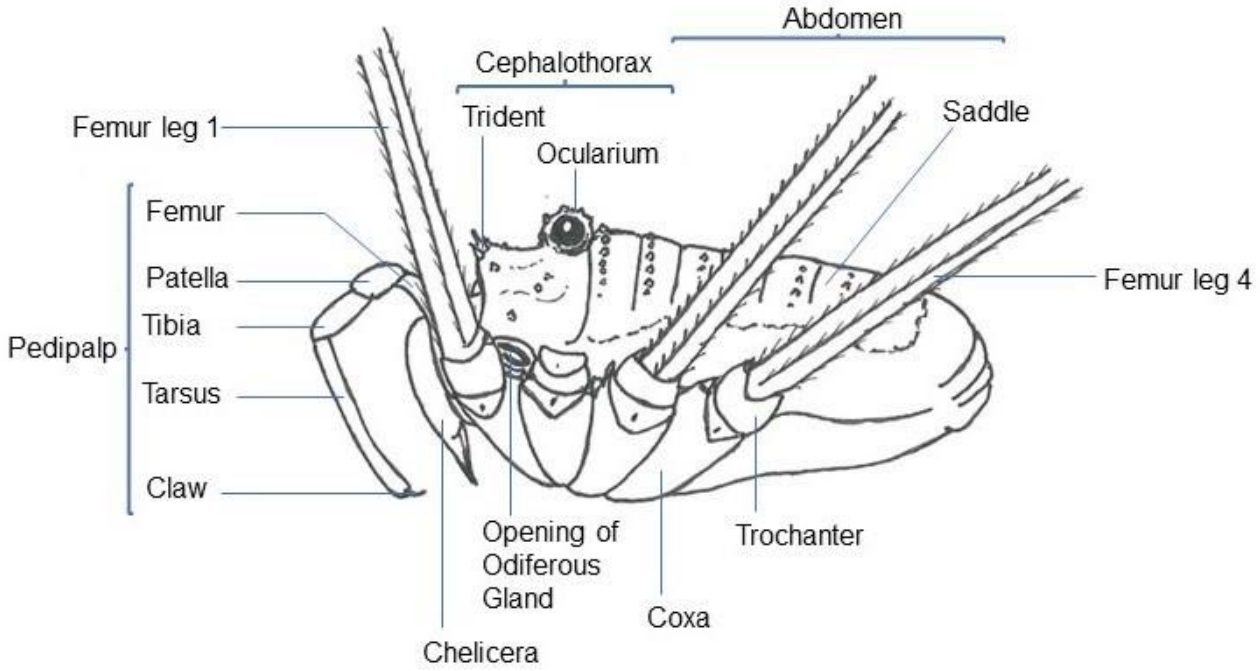
Map showing coverage of harvestmen records in Norfolk highlighting 10 km and 2 km squares.

After discovering *Dicranopalpus larvatus* as new to Norfolk in Earlham Cemetery in 2020, Vanna Bartlett began actively searching for harvestmen. This led her to take on the role of County Recorder for Harvestmen in 2022, a position previously held by Peter Nicholson. Since then, she has been steadily adding records to the database. The individual species maps show records at 2 km squares but as some early records only have a two-figure grid reference, some maps also have 10km squares highlighted. This is to provide a clearer picture of past records of some of the scarcer species.

Identification

Harvestmen have a roughly ovoid fused body consisting of the cephalothorax at the front and the abdomen at the rear. The single pair of eyes are usually mounted on a turret like structure called the ocularium. In many species there is a group of three pointed tubercles (wart-like projections) in front of the ocularium towards the edge of the cephalothorax known as a trident. Also on the cephalothorax are the openings to the odiferous glands, defensive organs that emit a noxious liquid making them unpalatable to some predators.

As well as the eight legs, the underside of the cephalothorax also houses a pair of pedipalps (palps for short) that sit either side of the pincer-like chelicerae. The palps are used to catch prey which is then cut up by the chelicerae. Food is passed to the 'mouth' on the underside of the cephalothorax (located behind the chelicerae) and is then digested internally.



Simplified diagram of a harvestman (a male *Oligolophus tridens*). Note leg 2 has been omitted to show features more clearly.

The pedipalps may have prominent apophyses (bulges) or be armed with tubercles. Some species have rows of blunt tubercles on the abdomen. Most species are soft bodied and their legs easily become detached (aiding escape from predators) so care should be taken when handling them. Although leg length varies, in all species the second pair are the longest and they are used as sensory organs rather than for locomotion. The legs are segmented, much like other arthropods, with the tarsus (foot) of most species being multi-segmented and quite prehensile.

Identification (continued).

Harvestmen are separated into families by a number of characteristics, one of the most important being the presence and form of a claw on the pedipalp (referred to as the palpal claw), something that is difficult to see in the field. Leg length can be a useful character for identification, being given as short, medium, long or very long. Other important features to consider when identifying harvestmen are the form of the trident (if present), ocularium, pedipalps and saddle (the central area of the abdomen which is often darker than the rest). Nearly all species can be identified in the field with the aid of a hand lens or from good photos that show the relevant characters.

Tubercles on pedipalp femur (circled) of *Lophopilio palpinalis*.

Right: apophysis on pedipalp patella (arrowed) of *Rilaena triangularis*, one of the distinctive features to look for in this species.

Some species are strongly sexually dimorphic (e.g. *Leiobunum* spp). In general, males are smaller than females with a shorter abdomen and longer legs. The armature of the pedipalps is more developed in males and can play a role in mating or when competing with other males (for example for a mate).

Note on sizes: these are mostly taken from Hillyard and Sankey (1989). Females are generally larger than males so the lower number indicates the smallest male size while the higher number is the largest female size.

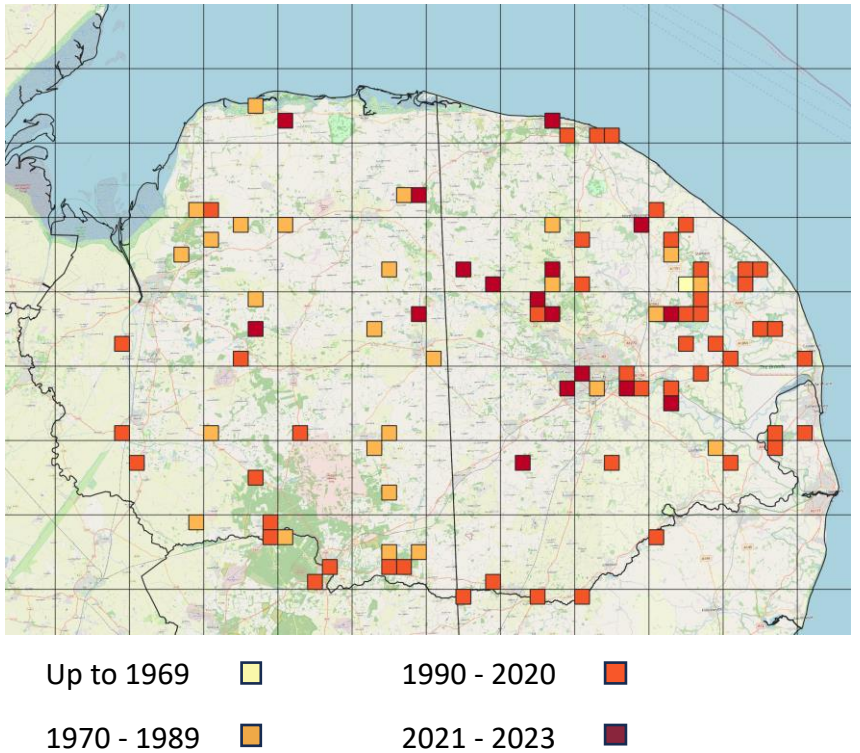
The order of species follows the Field Studies Council fold out chart ‘Harvestmen of the British Isles’ (Richards 2022).

Nemastoma bimaculatum (Fabricius). Length 2 – 2.8 mm, short legs, palpal claw absent.

A very common and widespread species, well recorded across the county. It is typically found under stones and fallen branches in wooded habitats especially where there is a deep layer of leaf litter. They often freeze or scrunch up into a ball when a log is turned over but then quickly rush off.
Season: all year.

A small dark species that should be instantly recognisable. The whole upper surface of the body is sclerotized (hardened) and has a granular texture. It is black except for a pair of silvery patches on the abdomen (these can appear a pale peachy colour in some lights). The shortish legs and the pedipalps are also black. The male is distinguished from the female by the presence of a protrusion on the chelicerae. In gravid females the distended abdomen shows grey between the segments towards the rear of the abdomen.

Confusion species: no other similar species occur in Norfolk. There are two similar species elsewhere in the UK but both of them have spines on the abdomen. There are other species of *Nemastoma* in Europe which are very similar.



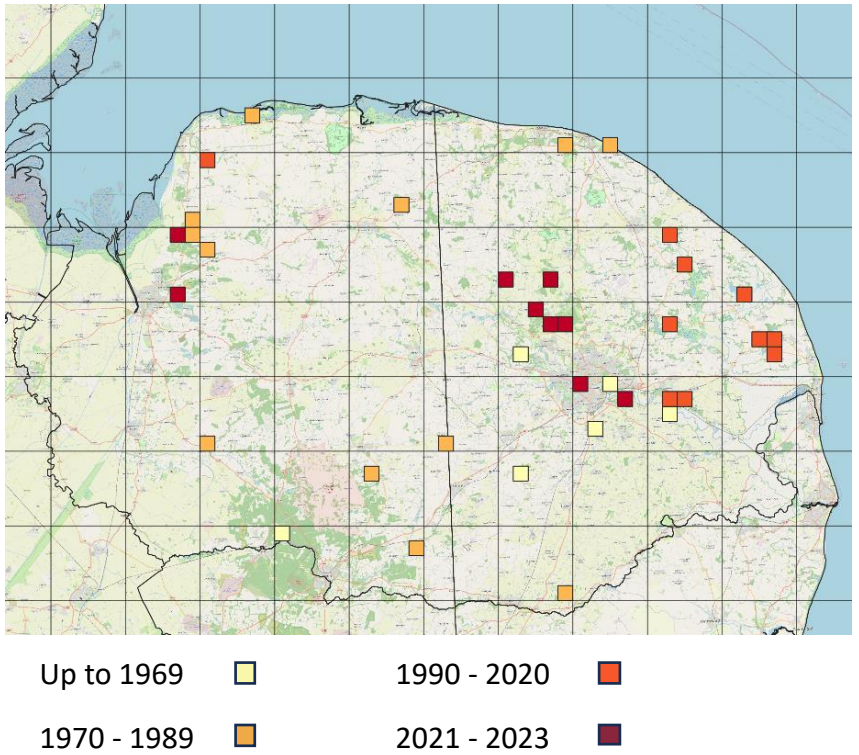
Mitostoma chrysomelas (Hermann). Length 1.5 - 2.5 mm, long legs, palpal claw absent.

A distinctive species that should be readily identifiable. It is small but long-legged and has very long pedipalps that are held folded and in front of the animal in a characteristic way, forming a triangle. The pedipalps are covered in fine knobbed hairs that may aid in the capture of prey. The dorsal surface is covered in bifid tubercles. The body is brownish and, particularly in females, often has paired golden patches towards the rear of the abdomen. Males have a protrusion on top of the chelicerae.

Confusion species: none in the UK.

Fairly common and widespread, inhabiting the ground layer. Most often found under logs and fallen branches amongst leaf litter in wooded habitats. Often in damp woodland.

Season: all year.

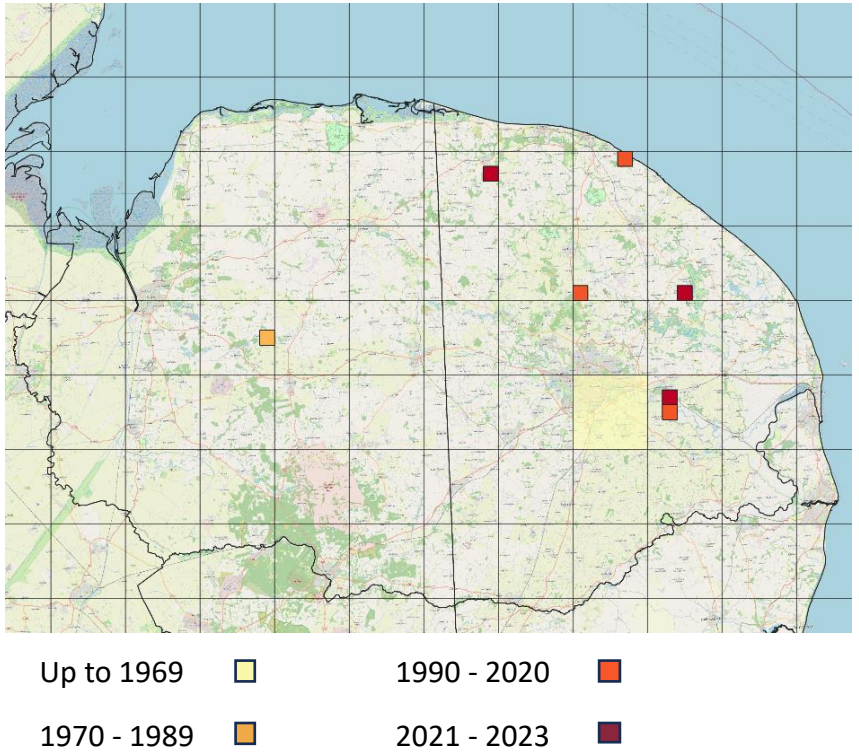


Anelasmocephalus cambridgei (Westwood). Length 2.8 - 4 mm, short legs, palpal claw absent.

An unusual looking small species with short legs. The body is rather flattened and covered in soil particles. The front of the cephalothorax extends in a hood over the chelicerae. There is no ocularium, instead the eyes are set at the base of the hood. Immature specimens are purplish in colour and not covered in soil particles.

Confusion species: none in Norfolk. Elsewhere in Britain is the similar but much larger *Trogulus tricarinatus*.

Photo: Martin Rejzek.



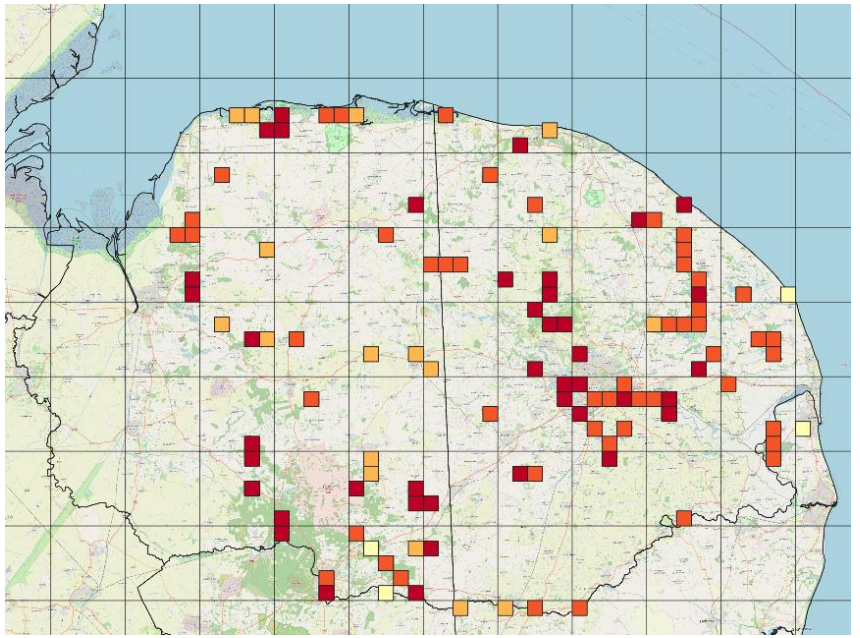
A scarce species in Norfolk with only two early records, the first in 1969, both from pitfall traps. More recently it has been found by sieving leaf litter in woodland and piles of rotting cut vegetation on wetter sites. This small species is difficult to find as it lives in the ground layer and is usually covered in soil particles. It also plays dead when disturbed and remains motionless for quite some time so may easily go unnoticed when sieving or searching for it. Elsewhere in the UK it has a preference for calcareous sites including rough grassland and open woodland.

Season: all year.

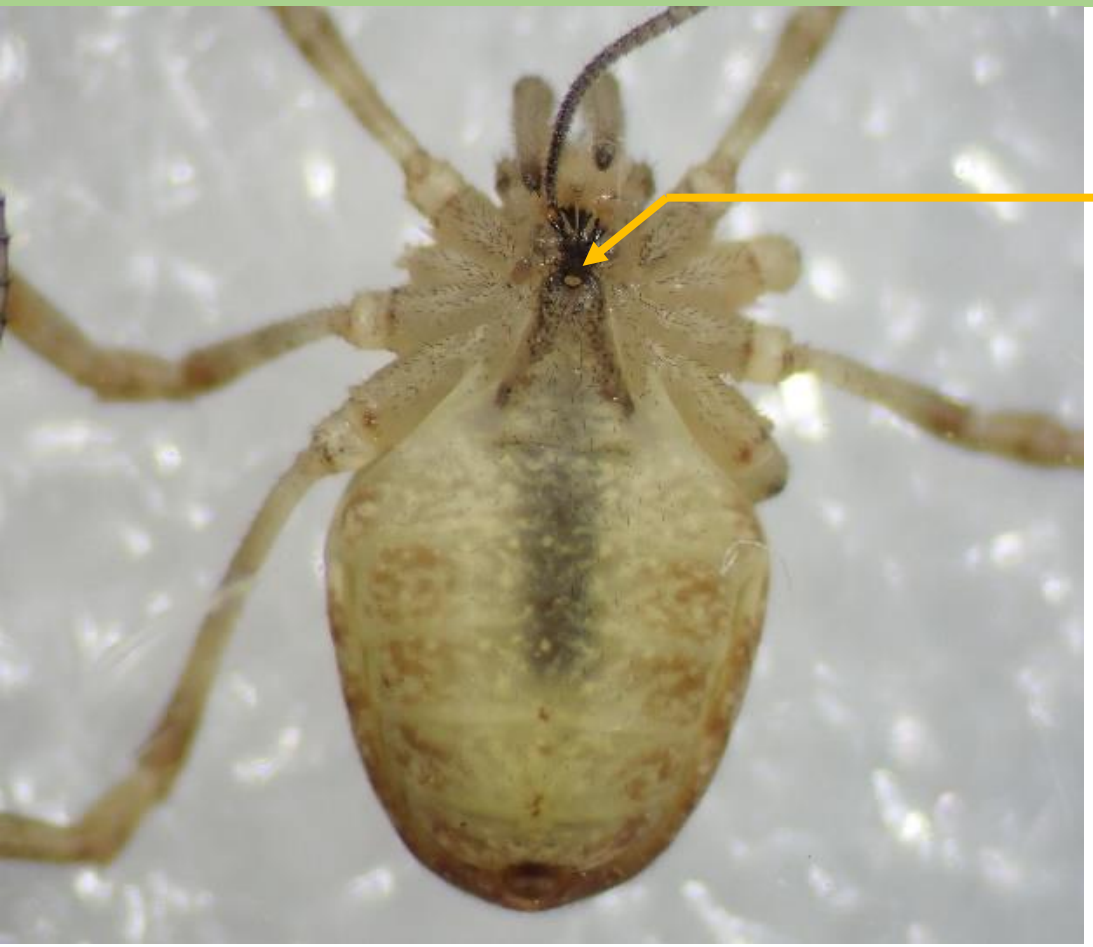
Paroligolophus agrestis (Meade). Length 3 - 5 mm, medium legs, smooth palpal claw.

One of the commonest, most abundant and widespread species in Norfolk. Found in a wide variety of habitats from gardens, parks, woodland and heaths. Can be found under fallen branches, seen on low vegetation, walls and tree trunks. Can be beaten from various trees and shrubs, often abundant on oaks on heathland. Season: summer to winter.

A very variable species that ranges in colour from pale grey to straw coloured or pinkish. There is usually a pale line down the centre of the saddle and often paired dark spots towards the rear of the abdomen. Both sexes are similar. The ocularium is smooth and silvery, topped with a few fine spicules (stiff hairs). The trident comprises a cluster of up to five or six blunt tubercles of which the front three are often longer and more pointed, particularly the middle one. Females are distinguished from all other species by the dark pincer like notch at the front of the genital operculum; in males there is just a dark indentation here that is not always that obvious.



Paroligolophus agrestis (Meade) (continued).



Notch in genital operculum.

The genital operculum is an elongated ‘flap’ on the underside of the body behind which lies the reproductive organ (penis or ovipositor depending on sex). This flap is sealed in immature harvestmen.

Female underside.

Male underside.

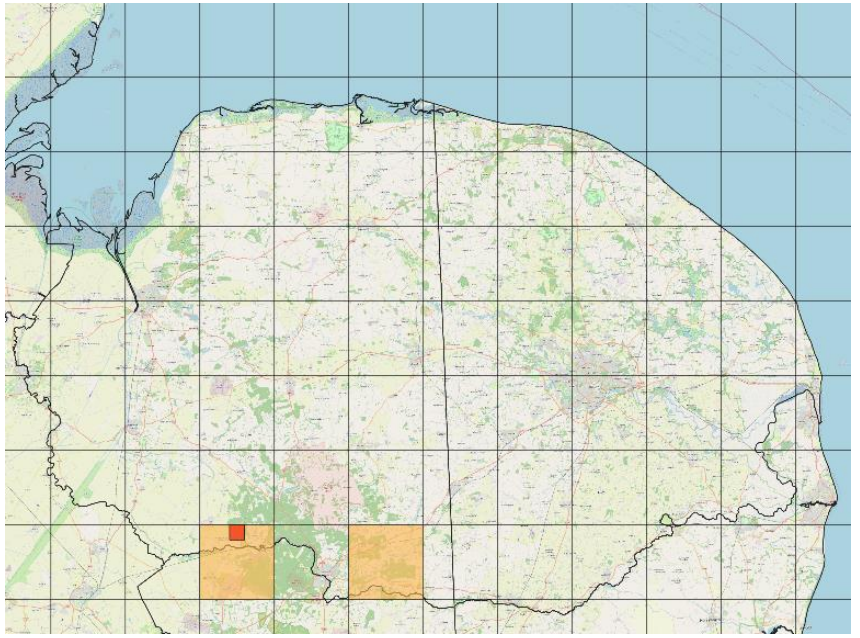
Confusion species: *Oligolophus tridens* and *Oligolophus hanseni* but these have tubercles on the ocularium and more pointed trident members. Also *Paroligolophus meadii* which is much smaller and has rows of prominent tubercles across the abdomen and a distinctive trident. Checking the genital operculum will confirm *P. agrestis*.

Paroligolophus meadii (O.P.-Cambridge). Length 2.3 – 3.8 mm, medium legs, smooth palpal claw.

Photographed by Paul Richards in North Yorkshire.

This is a small species with a distinctive trident, the central member is at least twice the length of the side ones and points forwards. The body is pale, straw coloured or greyish, with paired dark spots outlining the saddle. The abdomen is covered with transverse rows of large pointed tubercles, quite unlike those seen on any other species. The pale ocularium has small tubercles. There are also pointed tubercles on the margins of the cephalothorax.

Confusion species: *Paroligolophus agrestis* is very similar but larger and can easily be ruled out by checking the genital operculum (notched in *P. agrestis*). Juveniles of other species can also cause confusion as they have a proportionately large trident sometimes.

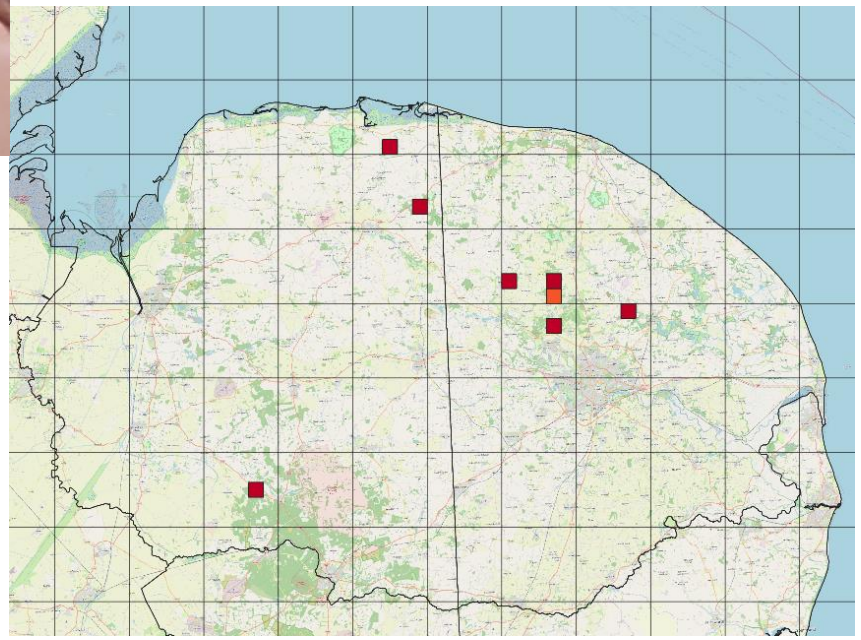


There are only three Norfolk records for this species, all from the Brecks. There has been some confusion with *Paroligolophus agrestis* in the past which has led to the questioning of some early records. Nationally, it is a scarce species said to have a preference for dry calcareous grassland, heaths and sand dunes so Breckland would be a likely habitat. It inhabits the ground layer and past records have often come from pitfall traps.

Season summer and autumn.

Oligolophus hanseni (Kraepelin). Length 3.3 - 5 mm, medium legs, smooth palpal claw.

Scattered records in Norfolk, only first recorded in 2018. It is much commoner in the north of England and Scotland. It has been found by beating pines and oaks on heathland and has also been beaten from oaks beside the edge of mires.
Season: late summer and autumn.



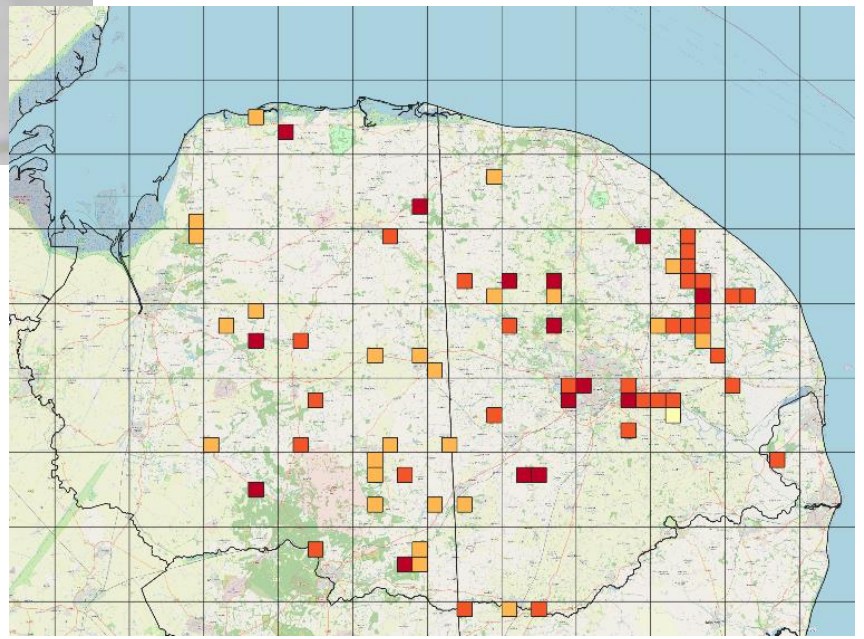
Overall, quite a dark species with rows of white tubercles across the abdomen standing out. The saddle area is usually outlined with white patches. There is also a pale form with reddish brown patches on the abdomen towards the rear. The ocularium is dark with pale tubercles. The trident is quite small with the central spine the longest and there is a cluster of smaller accessory tubercles behind and to the sides.

Confusion species: the pale form could be mistaken for *Paroligolophus agrestis* or *Oligolophus tridens* but the dark ocularium rules these out, as does the group of accessory tubercles around the trident.

Oligolophus tridens (C.L. Koch). Length 3.5 - 5.5 mm, medium legs, smooth palpal claw.

Common and widespread throughout Norfolk. Can be found by looking under fallen branches in deciduous and mixed woodland, including small wooded areas. Also swept from patches of Stinging Nettles bordering woods.

Season: summer and autumn.

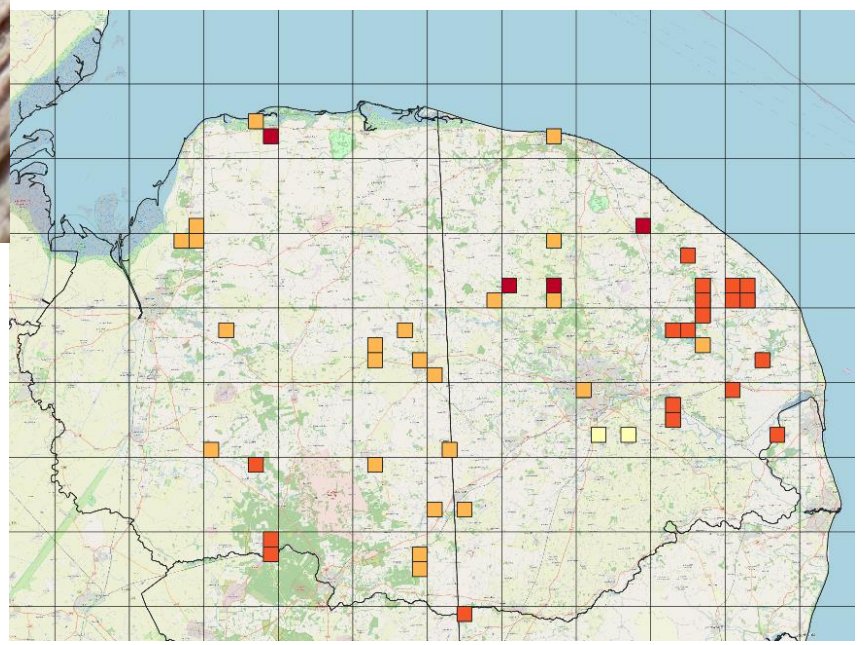


Males have a dark saddle that ends well before the tip of the somewhat pointed abdomen, contrasting with the lighter sides. The females are browner, usually with a slightly darker saddle area. The trident is upright, members equal length in the male but the central one longest in the female. There can be one or two subsidiary tubercles to either side and behind. The ocularium is pale with small tubercles.

Confusion species: similar to *Paroligolophus agrestis*. Males with a very dark saddle with a ‘pinched waist’ could be confused with *Mitopus morio* but have a three-pronged trident (trident absent in *M. morio*).

Lacinius ephippiatus (C.L. Koch). Length 3.5 - 5.5 mm, medium legs, smooth palpal claw.

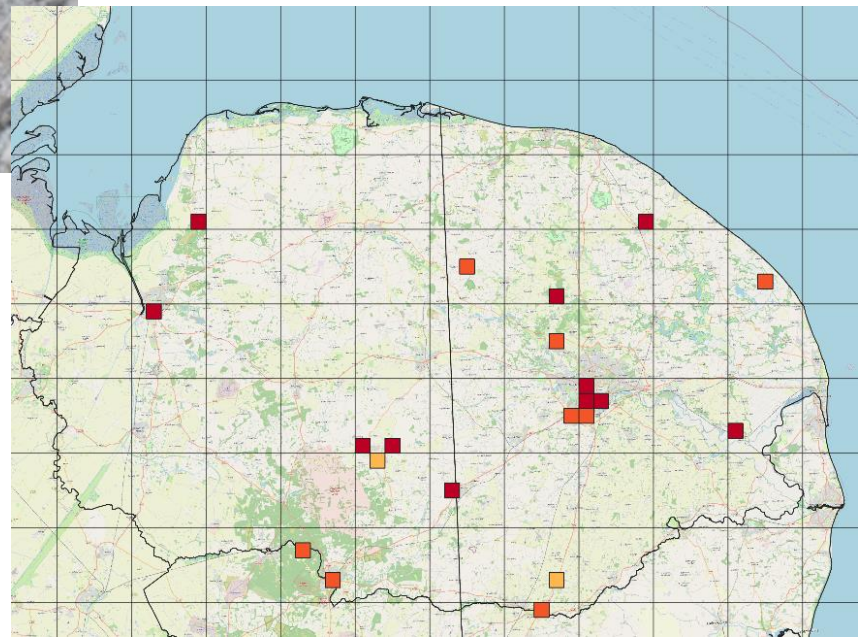
Widespread records across Norfolk but never seemingly that common. It can be found under fallen branches in wet woodland. Earlier records were from the ground layer of marshes and meadows. Possibly under recorded because of early maturity date.
Season: matures relatively early so best looked for June - August.



The conspicuous trident, angled forward with members of equal length, is a good pointer to this species – it is often described as being like a three-pronged handfork. The body is pale yellowy-brown with a dark saddle, sometimes faint in the female but very obvious and rectangular in the male.
Confusion species: *Odiellus spinosus* has a similar trident but it is much more robust and has accessory tubercles; the overall build of *O. spinosus* is much 'chunkier'.

Odiellus spinosus (Bosc). Length 6.5 - 11 mm, medium legs, smooth palpal claw.

Widely scattered records from a largely synanthropic species. It seems to prefer relatively warm, dry and sheltered conditions and can be found in gardens and allotments. Usually found in the ground layer but around buildings is often found higher up under window sills or similar situations.
Season: summer and autumn.



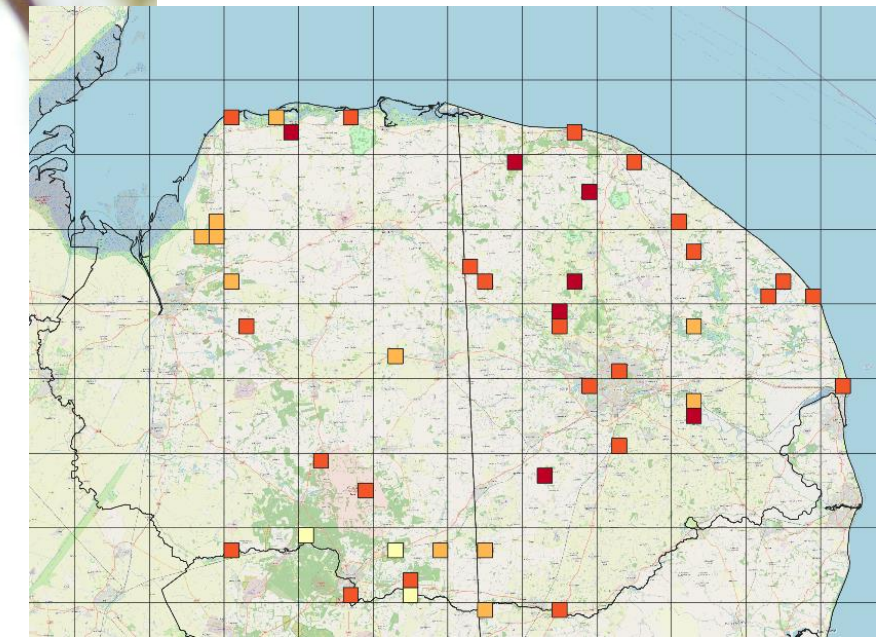
A large body with small ocularium and shortish legs give this, our largest species, a rather squat appearance. The trident is very robust, angled forwards and with accessory tubercles behind it. It appears well armoured with tubercles around the margins of the cephalothorax, prominent tubercles on the coxae and trochanters and three to five tubercles on the ocularium. The pale saddle is edged with black. This species should be straight forward to identify.

Confusion species: *Lacinius ephippiatus* has a similar trident but is a much smaller species with a darker saddle.

Mitopus morio (Fabricius). Length 4 - 8.5 mm, long legs, smooth palpal claw.

Widespread records across Norfolk from a wide variety of habitats. Across Britain, this is one of the most common and widespread species but in Norfolk it doesn't appear to be particularly numerous where found.

Season: summer and autumn.



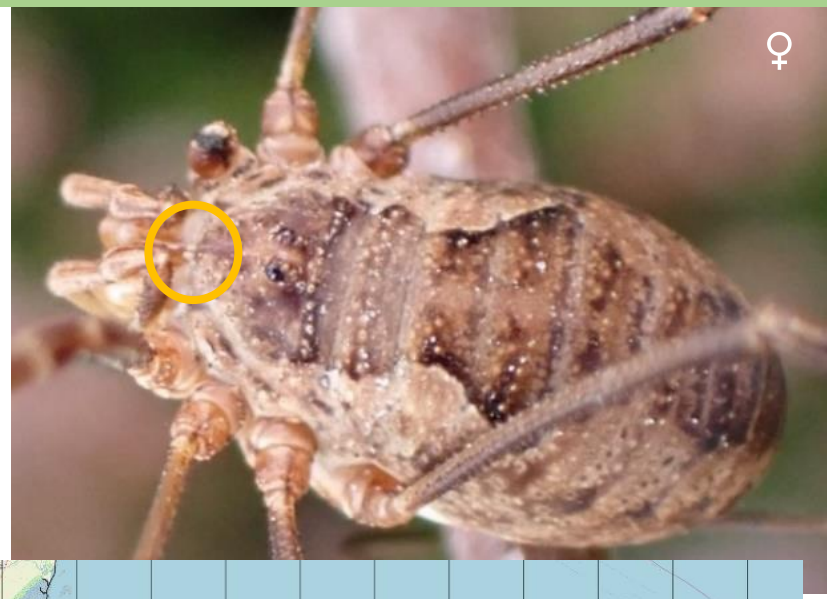
A very variable species, ranging in colour from pale to dark brown, orangey or grey. Saddle can be obvious or absent. Males often have a black saddle with a 'pinched waist' appearance. The saddle in females, when present, is relatively narrow, widest in the centre and with a zig-zag edge towards the rear; it is often edged in black and white. There is no trident but a number of small tubercles are scattered across the front of the cephalothorax with one usually positioned centrally in front of the ocularium.

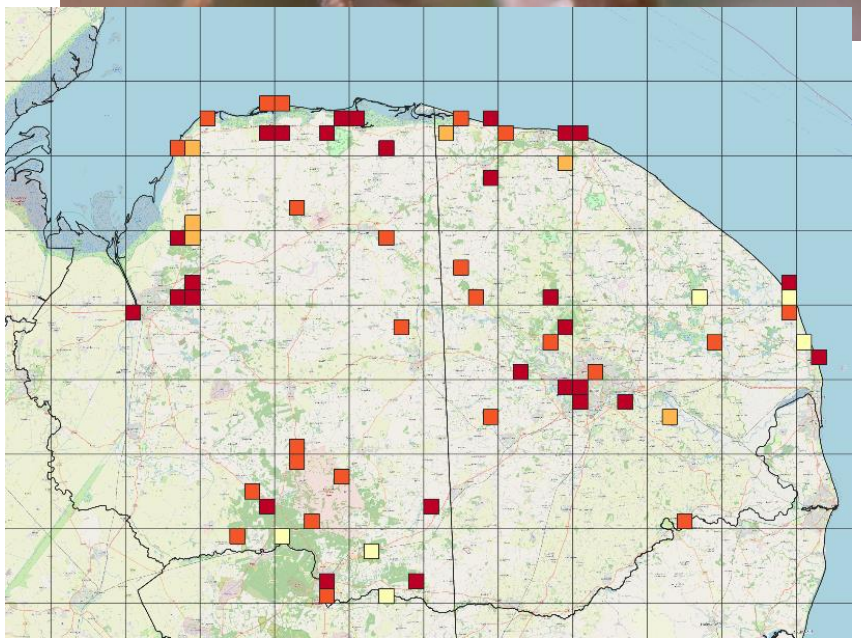
Confusion species: females are readily confused with *Phalangium opilio* which is distinguished by the paired tubercles above the chelicerae. Males could be confused with *Oligolophus tridens* which also has a dark saddle which narrows in the middle but has an obvious trident.

Phalangium opilio Linnaeus. Length 4 - 9 mm, very long legs, smooth palpal claw.

A large species with very long legs. The male is instantly recognisable by the horned projections on the chelicerae although these vary greatly in size between individuals. The pedipalps in the male are very long. Both sexes have a pair of small pointed tubercles above the chelicerae (circled, right). There is no trident but a number of black-tipped tubercles are scattered across the front of the body and on the ocularium. Colour is variable, with the females often having a dark saddle which widens in the middle giving an appearance very similar to *Mitopus morio*.

Confusion species: males are unmistakable but females are very similar to *Mitopus morio* so look for the twin tubercles above the chelicerae that distinguish it.



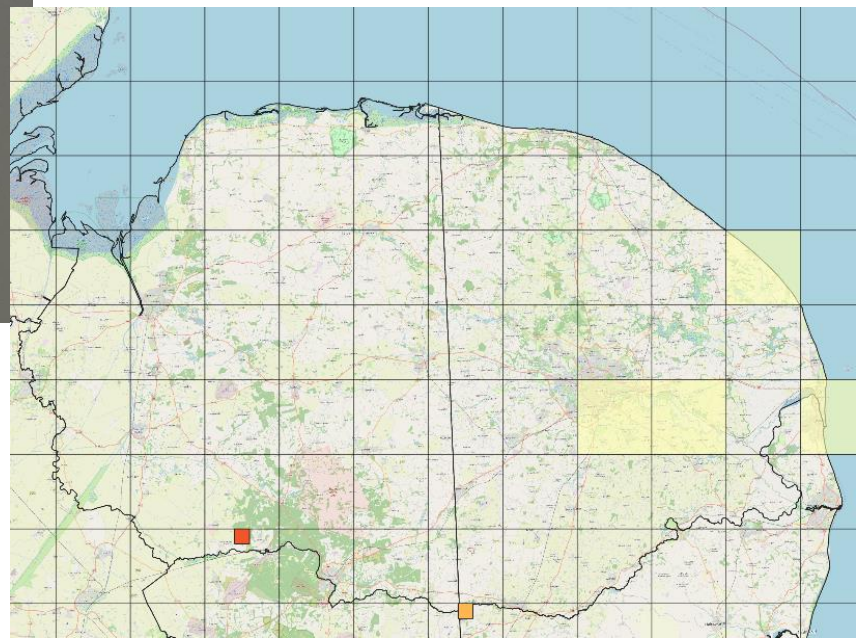


Common and widespread, often found in drier habitats. Occurs in gardens, parks and allotments. Often seen running across paths on heathland or on vegetation. Can be quite numerous. Season: summer to winter.

Opilio parietinus (Degeer). Length 5 - 9 mm, very long legs, smooth palpal claw.

A large greyish-brown species marked with dark bars and pale tubercles. The saddle is either indistinct or absent but there is often a pale median stripe. The underside is pale and there are elongate dark spots on the coxae. Trident absent but there are two inward pointing tubercles. The ocularium has two rows of five or six black-tipped tubercles. Confusion species: very similar to *Opilio saxatilis* but larger and with more tubercles on the ocularium.

Photographed by Ian Beddison in County Durham.



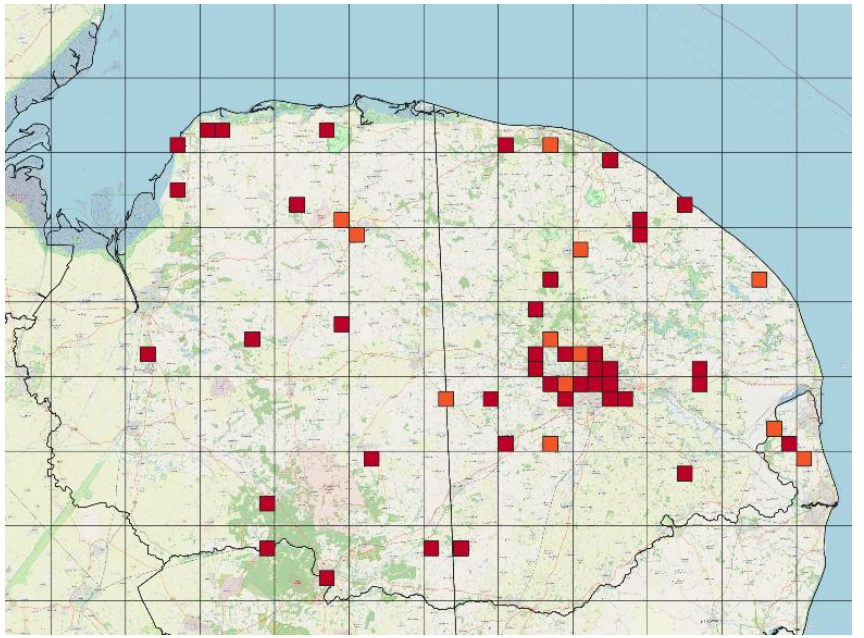
With only a few scattered records in the county and no recent ones, this species is seemingly in decline. In a previous review of harvestmen in Norfolk (Jones et al. 1992), this species was considered synanthropic, being commonly found around houses on walls and fences. It is considered to be extinct in the Netherlands (where it was previously common) due to competition with *Opilio canestrinii*, so perhaps that is the case here too. There is a possible but unconfirmed sighting from the north Norfolk coast from 2023 so it may still be clinging on in the county.
Season: summer to autumn.

Opilio canestrinii (Thorell). Length 4 - 9 mm, very long legs, smooth palpal claw.

A large and pretty distinctive species with long legs. The male is a uniform pale orangey colour while the female is darker and has paired black and white bars on the abdomen. There is no trident but a pair of inward pointing tubercles. The ocularium is pale and has a number of small black-tipped tubercles. The trochanters are pale, coloured similar to the body; in the male they contrast strongly with the very dark legs.

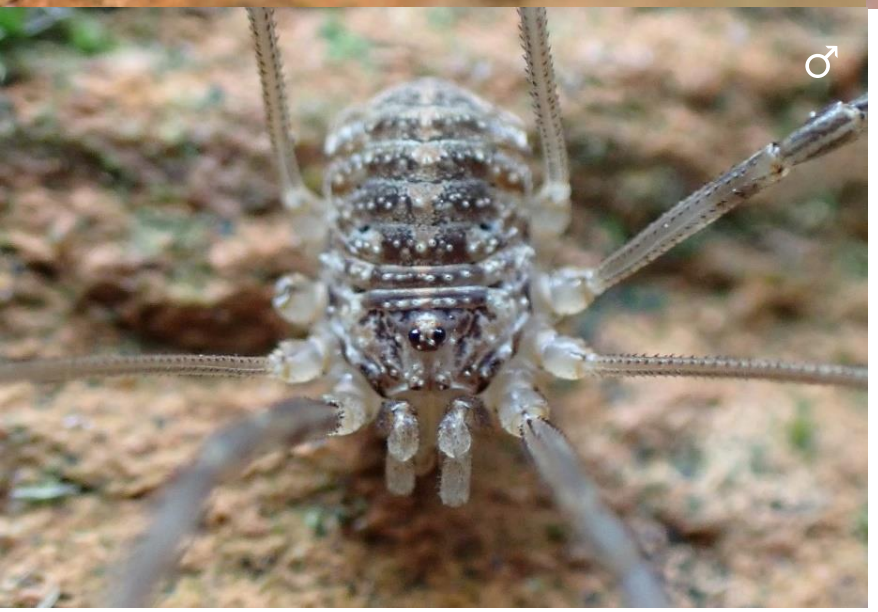
Confusion species: superficially similar to *Leiobunum* species, all but one of which have dark marks on the trochanters.

A recent colonist to first Europe then the UK. First recorded in Norfolk in 2013. A largely synanthropic species (i.e. found in proximity to human habitation) when it arrived but has since begun spreading into the wider countryside. It can be found on walls and tree trunks, various shrubs and on vegetation such as Brambles. It can be very numerous.



Season: summer to autumn, persisting into winter.

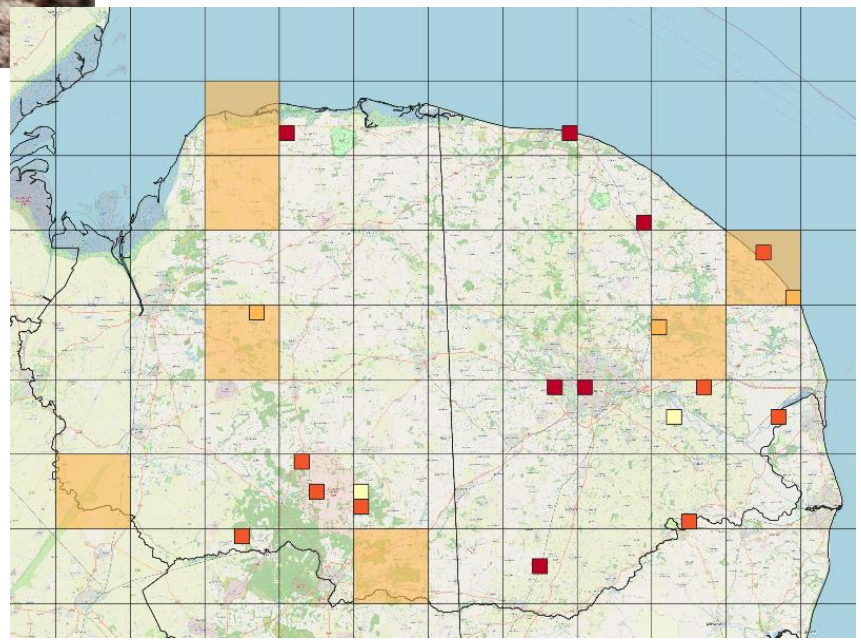
Opilio saxatilis C.L. Koch. Length 3.2 - 6 mm, long legs, smooth palpal claw.



A species of rough grassland with widely scattered records across Norfolk including at coastal sites. Has a preference for relatively dry habitats where it inhabits the ground layer of vegetation.

Season: summer to autumn.

The body is attractively mottled with brown and grey bands, bisected by a pale longitudinal stripe. The legs are relatively long compared to the size of the body. The underside is pale with dark spots on the coxae, a feature shared with *Opilio parietinus*. There is no trident. The ocularium has two rows of three or four black-tipped tubercles.



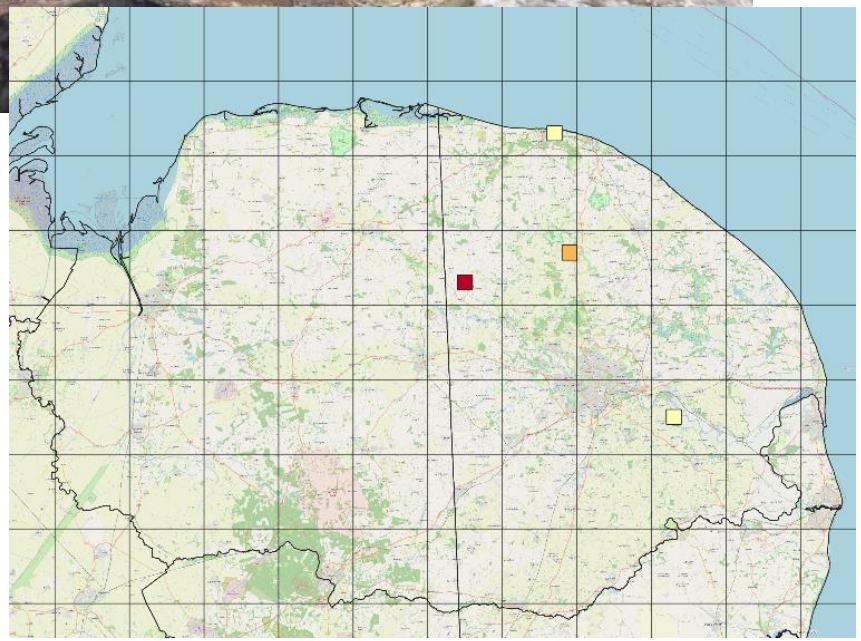
Confusion species: very similar to *Opilio parietinus* but smaller and with fewer tubercles on the ocularium.

Megabunus diadema (Fabricius). Length 2.6 – 4.8 mm, medium legs, smooth palpal claw.


Photo: Rob Yaxley.

Very rare in the county with few records. This species has a mostly western and northern distribution in the UK where it can be found amongst lichen covered rocks and moss on moorland as well as in woodland. The handful of Norfolk records come from disparate sites with the most recent one from woodland. Searching tree trunks in late spring in old established woodland may result in further finds.
Season: all year but most records from April onwards.


Photographed in Cumbria.



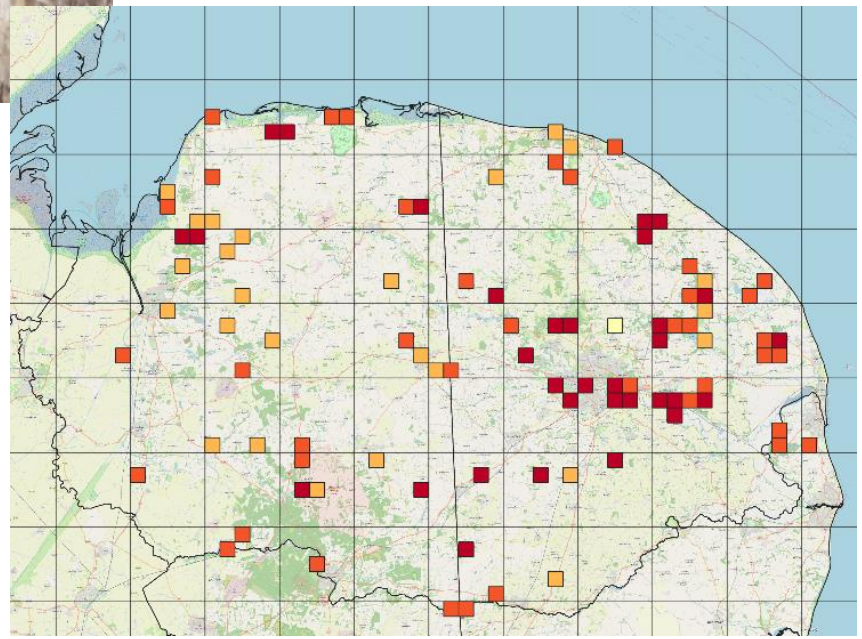
A beautiful little species. Quite unmistakable with its large ocularium set with long, spine-like tubercles. The white body is mottled with darker lines and there is a dark, black-edged saddle, making it extremely well camouflaged. There is no trident. The pedipalps have three apophyses (protrusions or bulges) and are armed with spine-tipped tubercles. There are conspicuous spines on the legs at the ends of the femur and patella.
Confusion species: none in Britain.

Rilaena triangularis (Herbst) (*Platybunus triangularis*). Length 3.7 - 7 mm, long legs, smooth palpal claw.

Very common and widespread in Norfolk. Juveniles inhabit the ground layer and can be found under fallen branches in wooded areas. Adults are often found higher up in the vegetation layer.
Season: immatures can be found during the winter while adults are found from spring into summer.

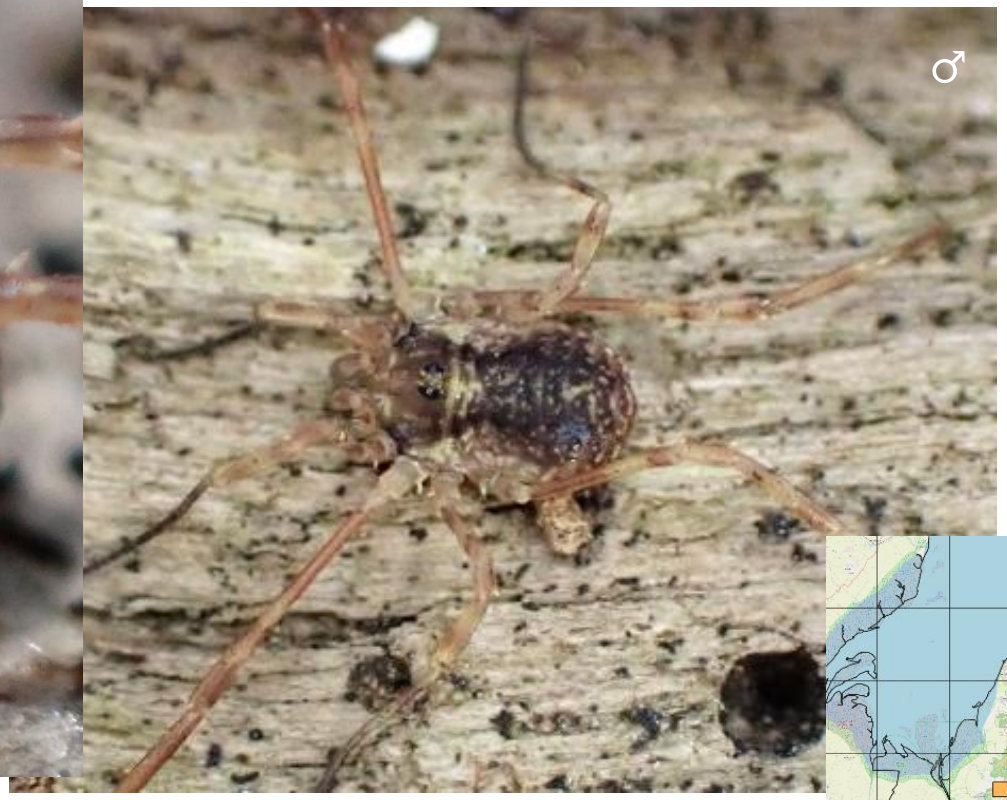
Juvenile

Recognised by the prominent apophysis (bulge) on the palpal patella giving the appearance of a boxing glove and by the relatively large ocularium. The pedipalp femur has spine-tipped tubercles. This is also one of the few species that is adult in the spring. There is no trident but a single tubercle at the front of the cephalothorax with a dark line to either side. The ocularium has sharp tubercles. In juveniles the ocularium is particularly prominent.

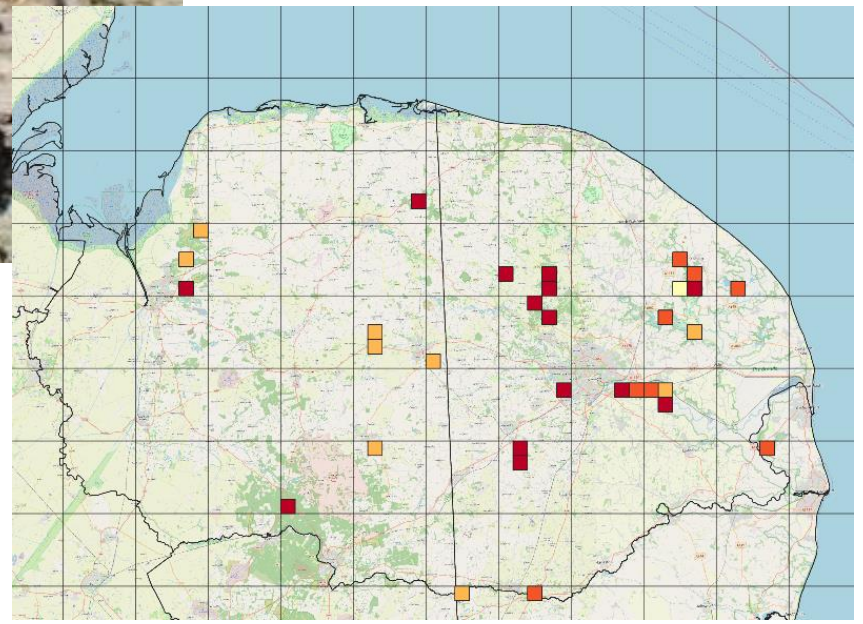


Confusion species: none in Norfolk. Elsewhere, *Platybunus pinetorum* has a similar sized ocularium and pedipalp armature.

Lophopilio palpinalis (Herbst). Length 2.8 - 5 mm, medium legs, smooth palpal claw.



Widely scattered records across Norfolk. This species seems to prefer damp woodland where it can be found under fallen branches amongst deep leaf litter although rarely in great numbers.
Season: summer to autumn/ winter.



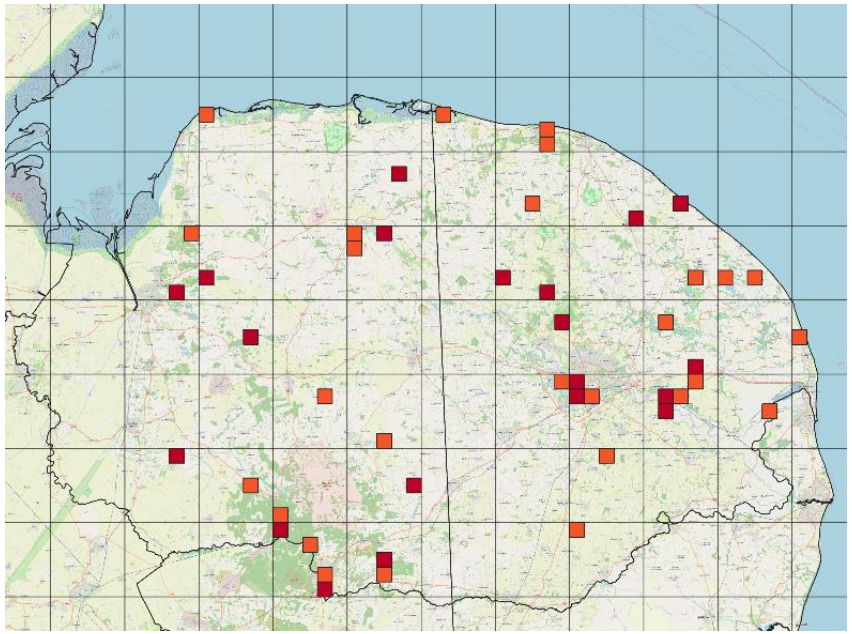
This species should be easily recognized by the combination of long spine-tipped tubercles on the ventral surface of the pedipalp femur, conspicuous forward inclined trident with the central member longest and the obvious tubercles on the ocularium. The legs have tubercles on the apex of the trochanter, femur and patella. Overall, these combined features give it quite a spikey appearance. The body is often a reddish brown colour with the saddle marked out with darker patches. Very dark individuals can be found in late autumn.
Confusion species: none.

***Dicranopalpus ramosus* agg.** (Simon). Length 3 - 6 mm, very long legs, toothed palpal claw.

Working out the distribution of the two species that make up the *Dicranopalpus ramosus* aggregate has been hampered by the lack of specimens to back up the records. Pre 2015 there are numerous scattered records from across the county that cannot be assigned to a specific species so have been recorded as sensu lato.

Season: summer to winter.

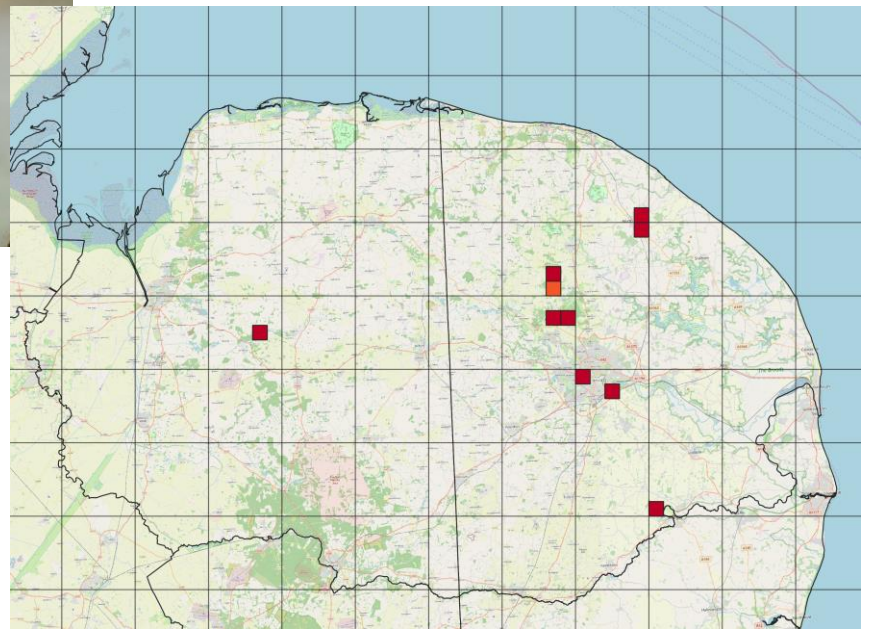
Dicranopalpus ramosus was first recorded in Britain in 1957 with the first records for Norfolk in 1992. It was instantly recognisable by the 'forked' pedipalps and the way the long legs were characteristically held out together to either side of the body. However, there were inconsistences in the description of the species and research led to it being split with a second species, *Dicranopalpus caudatus*, being recognized as a distinct species and not a synonym of *D. ramosus* (Wijnhoven and Prieto 2015). Examination of specimens showed that *D. caudatus* had also been in the UK since 1957.



Dicranopalpus ramosus (sensu stricto) (Simon). Length 3 - 6 mm, very long legs, toothed palpal claw.

Adults can be found on walls, tree trunks and beaten from trees, particularly oak. Immature stages frequent the ground layer. There are currently few confirmed records of this species in Norfolk due to confusion with the extremely similar *Dicranopalpus caudatus*.
Season: summer to winter.

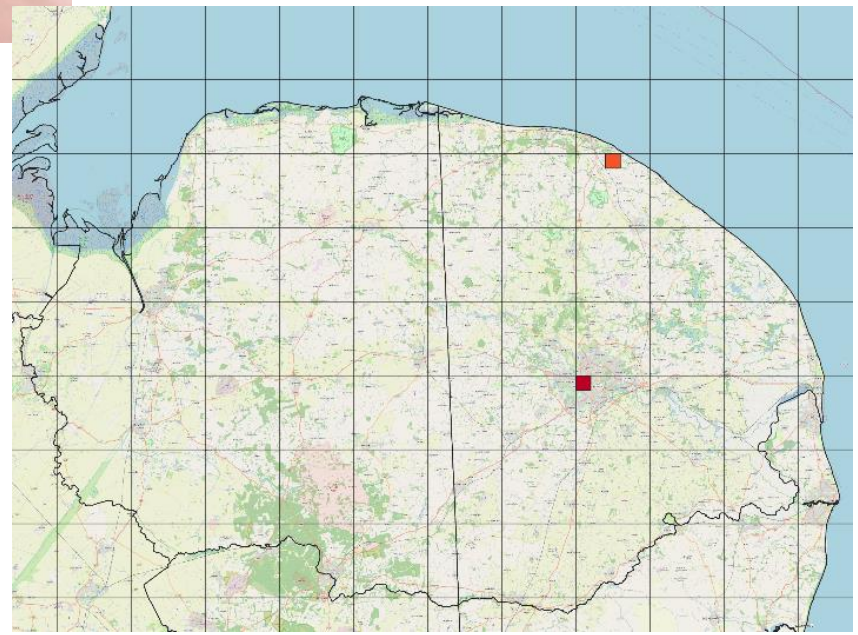
A very long-legged species with an elongate apophysis on the pedipalp patella giving a ‘tuning fork’ appearance. The pedipalps are thickened and covered in hairs in the female and smooth and slender in the male. Males often have a broad, dark ‘Zorro mask’ across the eyes. Trident absent, ocularium smooth. Colour varies from grey to brown often with light and dark transverse spots across the abdomen.
Confusion species: Difficult to separate from *Dicranopalpus caudatus*. Males require careful examination under magnification or dissection. Female has glossy black band on chelicerae which distinguishes it from *D. caudatus*. *D. larvatus* shares the same ‘tuning fork’ pedipalp but is otherwise quite different.



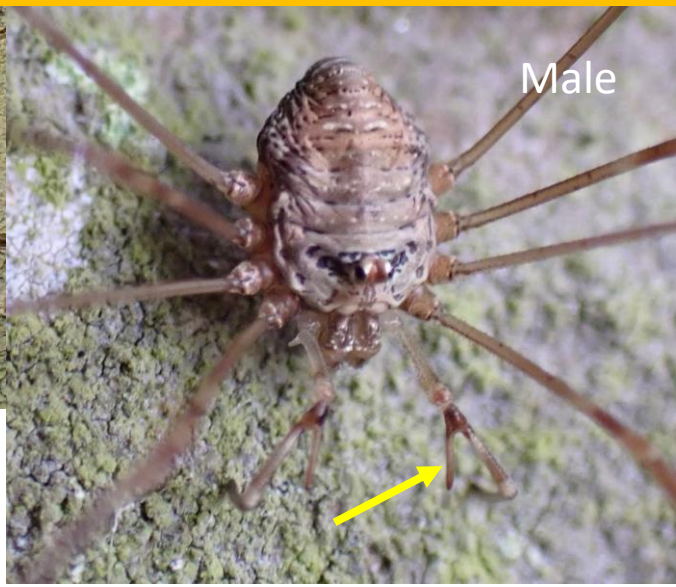
Dicranopalpus caudatus Dresco. Length 4 mm, very long legs, toothed palpal claw.

Found in similar situations to *D. ramosus* with adults on walls, trees and shrubs and immatures at ground level amongst leaf litter. There are currently few confirmed records of this species in Norfolk due to confusion with the extremely similar *Dicranopalpus ramosus*.
Season: summer to winter.

This species is very like *Dicranopalpus ramosus*, having the same 'forked' pedipalps and long legs held out together in the same manner when at rest. *D. caudatus* is generally smaller though and is a more silvery-grey colour. In males, the dark 'Zorro mask' is usually absent or very poorly marked. There are other subtle features on the chelicerae but these are best seen with the aid of a microscope. Females have a rather pot-bellied appearance in side view and have only a slightly darker band on the chelicerae compared to the glossy black band on *D. ramosus* so they can be distinguished in the field.
Confusion species: Difficult to separate from *Dicranopalpus ramosus*. Males require careful examination under magnification or dissection. Female lacks the glossy black band on the chelicerae that is present in *D. ramosus*. *D. larvatus* shares the same 'tuning fork' pedipalp but is otherwise quite different.



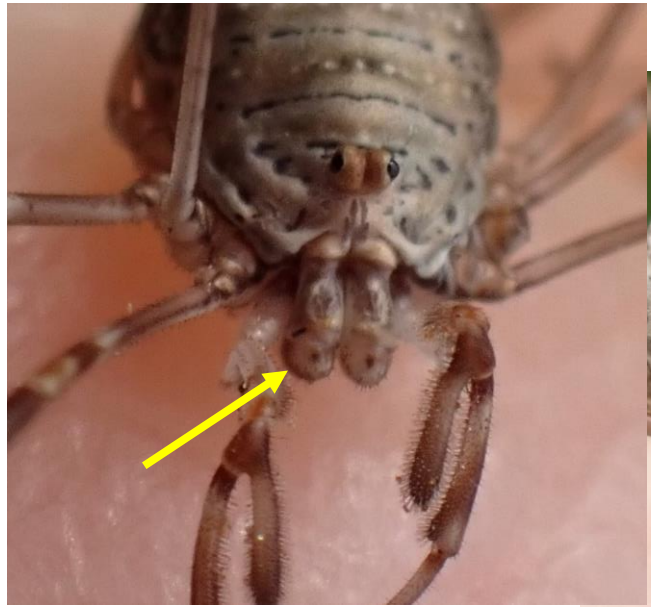
***Dicranopalpus ramosus* agg.** Identification Tips



Male or female?
Female has thickened pedipalp apophysis covered in fine setae (arrowed, left). Male has much thinner, smoother apophysis (arrowed, right).

Male *Dicranopalpus* spp. require microscopic examination.

Above: female *D. ramosus* glossy black bands on chelicerae seen from below and from the side (arrowed).



Above: female *D. caudatus* faint dark band on chelicerae seen from front and side (arrowed).

Dicranopalpus larvatus (Canestrini). Length 3 mm, medium legs, toothed palpal claw.

A recent arrival in the UK, first found on Guernsey then the Isle of Wight in 2019 with a few widely scattered records following in mainland Britain. So far only found at one site in Norfolk (from 2020) although here it can be very plentiful. Usually found in the ground layer, under fallen branches amongst leaf litter. Season: late autumn/winter to spring.

As with the other *Dicranopalpus* species, this harvestman has distinctive 'tuning fork' pedipalps. Males have a dark blackish patch around the ocularium and a dark abdomen with a pale whitish area between the two giving a pied appearance. The pedipalp femur, patella and base of the tibia in males is dark. Females are more uniform in colour, being purplish-brown with pale creamy marks. There is no trident and both sexes have a smooth, black ocularium. At rest, the legs are held fairly evenly spread out to the sides with the rear two pairs angled backwards (i.e. not held together like the other two *Dicranopalpus* spp).

Confusion species: the 'tuning fork' pedipalps are present in the other two *Dicranopalpus* species but *D. larvatus* should be easily distinguished by appearance, the way the legs are held at rest and the time of year when adult.

Homalenotus quadridentatus (Cuvier). Length 3.5 - 5 mm, short legs, toothed palpal claw.

Photo: Martin Rejzek.

A rare species in Norfolk with few records, the first being in 2016. It is a ground dwelling species and can sometimes be covered in soil particles. It has been found in pitfall traps and by sieving cut vegetation. Elsewhere in the UK it is found in open woodlands (especially Beech) and calcareous grassland.

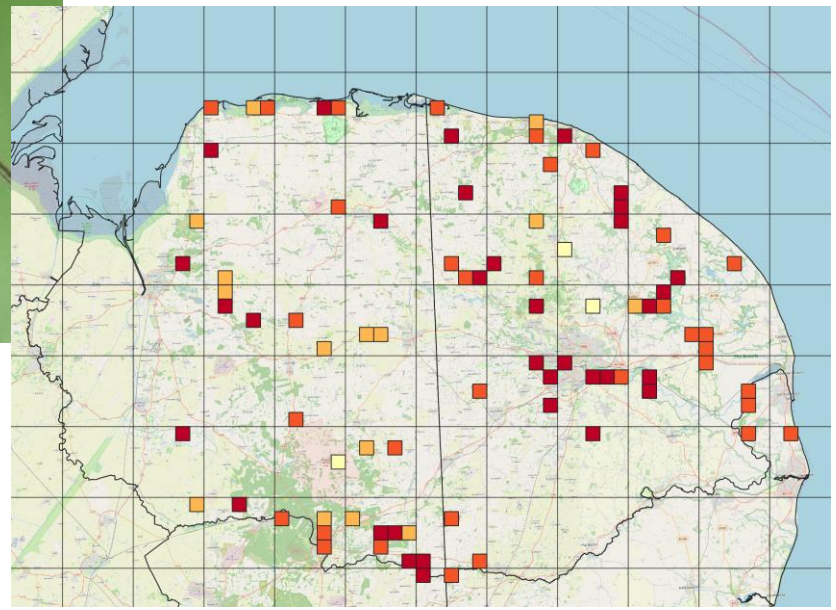
Season: all year.

A distinctive, broad, flattened species with shortish legs. The trident consists of a single long horizontal pointed tubercle. The body is pale brownish with darker markings. There are paired blunt tubercles on the top of the abdomen and a further four tubercles projecting from the end of the abdomen. There are prominent pointed tubercles on the coxae, trochanters and femora.

Confusion species: none in the UK.

Leiobunum rotundum (Latreille). Length 3 – 6.5 mm, very long legs, toothed palpal claw.

Common and widespread in Norfolk. By far the commoner of the two *Leiobunum* species found in Norfolk. Arboreal, inhabiting the 'shrub layer'. Seen on walls, tree trunks, brambles. Beaten from various trees and shrubs. Can be quite abundant.
Season: summer and autumn.

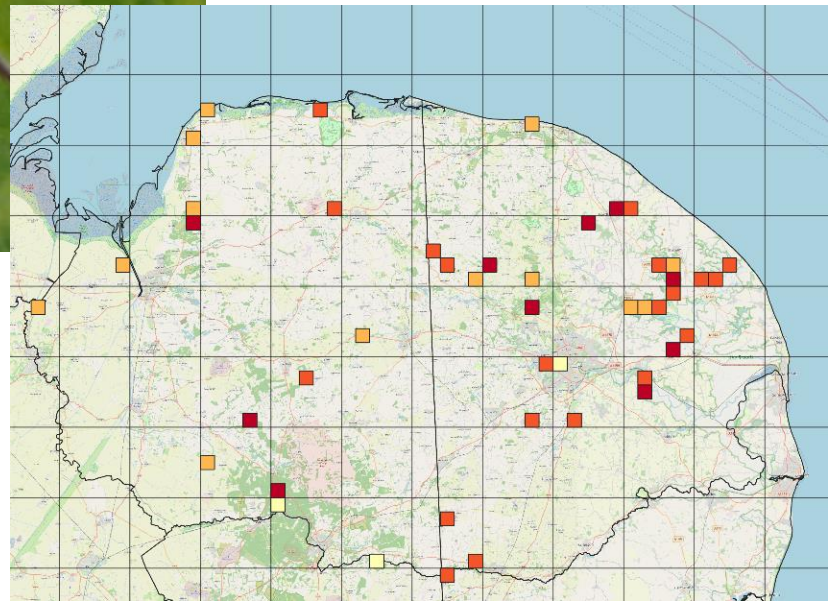


A very long-legged, sexually dimorphic species. *Leiobunum* species are characterized by their smooth bodies and very long legs. The small bodied male is plain orangey brown while the larger female has a dark rectangular saddle. Females have a dark patch in front of the ocularium. Trident absent but there is a pair of blunt projections above the chelicerae. The ocularium is smooth with dark rings around the eyes separated by a thin pale line (sometimes indistinct). The trochanters have dark markings. Confusion species: other *Leiobunum* spp. Separated from *Leiobunum blackwalli* by the dark eye rings. Three other species of *Leiobunum* occur elsewhere in the UK.

Leiobunum blackwalli Meade. Length 2.6 - 6 mm, very long legs, toothed palpal claw.

Widespread records from across the county but less common than the similar *Leiobunum rotundum*. Can be beaten from trees and shrubs or observed on vegetation.

Season: summer and autumn.



A very long-legged, sexually dimorphic species. *Leiobunum* species are characterized by their smooth bodies and very long legs. The small bodied male is plain orangey brown. The larger female has a wide dark saddle area that broadens towards the rear and a dark band across the front encompassing the ocularium, contrasting strongly with the pale eye rings. Trident absent but there is a pair of blunt projections above the chelicerae. The ocularium is smooth with pale rings around the eyes separated by a dark line. The trochanters have dark markings.

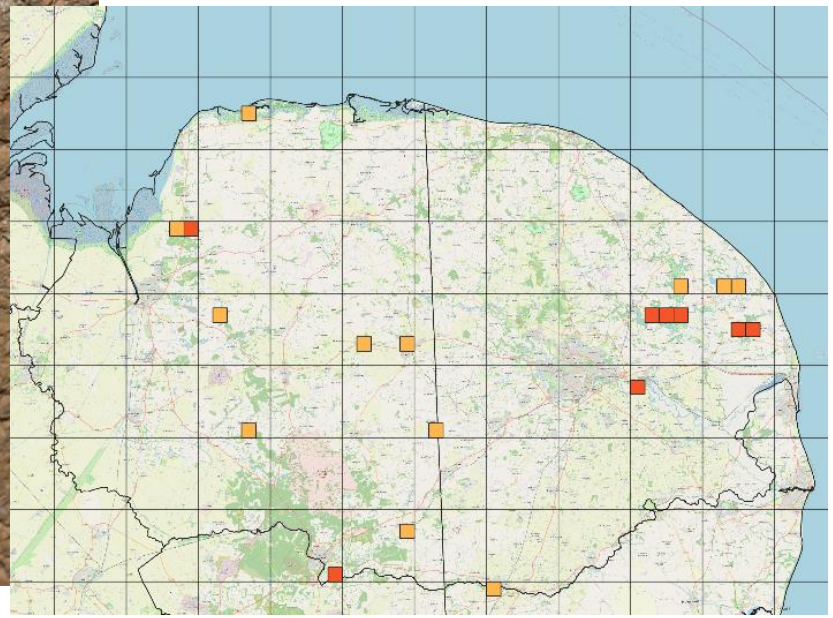
Confusion species: other *Leiobunum* spp. Separated from *Leiobunum rotundum* by the pale eye rings. Three other species of *Leiobunum* occur elsewhere in the UK.

Nelima gothica Lohmander. Length 2.5 - 4.5 mm, long legs, toothed palpal claw.

A long-legged, fairly non-descript species, although attractively marked with pale spots on a brown background. Females may have an indistinct saddle. There is no trident and the pale ocularium is almost smooth, bearing a few spicules and short spines. The trochanters are pale while the legs are dark with pale ends to each section giving a ‘white-kneed’ appearance. The lack of any really obvious distinctive features should point towards this species.
Confusion species: superficially similar to *Leiobunum* spp. Could be mistaken for a juvenile *Leiobunum* spp.

Photographed by Ian Beddison in County Durham.

First found in Norfolk in 1988; this species was found to be widespread across the county when it was collected from fens and marshes as part of the East Anglian Fenland Invertebrate Survey. These form the bulk of Norfolk records. Elsewhere in the UK, this species is usually found in rough grassland, with a seeming preference for coastal habitats in some regions. Nowhere is it particularly common.
Season: summer and autumn.



Harvestmen: Checklist of British Species

Family	Subfamily	Species	Norfolk Record		Family	Subfamily	Species	Norfolk Record
Nemastomatidae	Nemastomatinae	*Histricostoma argenteolunulatum*	×		Phalangiidae	Gyantinae	*Dicranopalpus ramosus* sensu stricto	✓
		Nemastoma bimaculatum	✓				*Dicranopalpus caudatus*	✓
		Mitostoma chrysomelas	✓				*Dicranopalpus larvatus*	✓
		Nemastomella bacillifera	×		Sclerosomatidae	Sclerosomatinae	*Homalenotus quadridentatus*	✓
Trogulidae	Trogulinae	*Trogulus tricarinatus*	×			Leiobuninae	*Leiobunum rotundum*	✓
		Anelasmocephalus cambridgei	✓				*Leiobunum blackwalli*	✓
Sabaconidae		*Sabacon viscayanum ramblaianum*	×				*Leiobunum gracile*	×
Phalangodidae		*Scotolemon doriae*	×				*Leiobunum limbatum*	×
Phalangiidae	Oligolophinae	*Paroligolophus agrestis*	✓				*Leiobunum* species A	×
		Paroligolophus meadii	✓				*Nelima gothica*	✓
		Oligolophus hanseni	✓					
		Oligolophus tridens	✓					
		Lacinius ephippiatus	✓					
		Odiellus spinosus	✓					
		Mitopus morio	✓					
	Phalanginae	*Phalangium opilio*	✓					
		Opilio parietinus	✓					
		Opilio canestrinii	✓					
		Opilio saxatilis	✓					
		Megabunus diadema	✓					
		Rilaena triangularis	✓					
		Platybunus pinetorum	×					
		Lophopilio palpinalis	✓					

The checklist follows Paul Richards' FSC chart (2022). The taxonomy of the Opiliones is currently under revision which is partly why *Leiobunum* species A remains undescribed and as yet has no specific name.

HARVESTMEN RECORDS

Harvestmen 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.

Norfolk & Norwich Naturalists' Society