

## SOME MYRIAPOD RECORDS FOR NORTH ESSEX (VC 19).

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### INTRODUCTION

Reference to current national atlases (Barber & Keay, 1988 and BMG, 1988) show a rather conspicuous paucity of myriapod records from most of North Essex (Vice County 19). Since Christmas 1991 I have taken the opportunity to collect from the vice-county, albeit in a rather haphazard manner, during sporadic visits to the area. It is hoped that this preliminary survey will provide a base-line for further recording in the county.

### SURVEY TECHNIQUES

Efforts were made to cover as many 10km squares as possible rather than concentrating on one small area. Due to time and transport limitations, collections were mostly made within 10 miles radius of the city of Colchester. I know little about the geology or the location of sites of potential interest. Thus sample sites (mainly deciduous woodland or churchyards) were chosen for their ease of access, using an Ordnance Survey map (1:50,000 series). A few coastal locations were also examined.

As many microsites as possible were examined at each site. This mostly entailed searching the underside of large stones and fallen timber as well as the superficial soil layer beneath. Searches were also made in leaf litter and under the bark of fallen and standing deadwood. Time permitting soil or rubble in 'promising spots' was also hand sorted in the field.

### RECORDS

In four visits 15 10km grid squares have been visited as follows: TL(52)62, TL73, TL81, TL82, TL83, TL91, TL92, TL93, TM(62)01, TM02, TM03, TM11, TM12, TM21 and TM22. 16 species of centipede and 17 species of millipede were collected. A number of species have been added to the county list as given below:

**Centipedes:** *Schendyla nemorensis*, *Brachyscendyla dentata*, *Strigamia acuminata*, *Geophilus carpophagus*, *G. electricus*, *Brachygeophilus truncorum*, *Cryptops hortensis*, *C. parisi*, *Lithobius melanops*, *L. macilentus* and *L. calcaratus*.

**Millipedes:** *Melogona scutellare*, *Julus scandinavicus*, *Brachyiulus pusillus*, *Polydesmus denticulatus*, *P. gallicus* and *Macrosterodesmus palicola*.

All records have been submitted to the Colchester Museum and to the respective national recording schemes. A summary of 10km distribution is given in Table 1. Full details of records (site name, OS grid reference, date of collection) are given below:

Table 1: Distribution of myriapods recorded by 10km square.

\* indicates new vice-county record (VC 19)

	10km square:	62	73	81	82	83	91	92	93	01	02	03	11	12	21	22
CENTIPEDES																
*	<i>Schendyla nemorensis</i>	+	+		+	+		+	+	+	+	+	+	+	+	+
*	<i>Brachyschendyla dentata</i>							+								
*	<i>Strigamia acuminata</i>								+			+				
	<i>Strigamia crassipes</i>							+				+				
*	<i>Geophilus carpophagus</i>	+	+					+			+		+	+	+	+
*	<i>Geophilus electricus</i>					+		+	+							
	<i>Necrophloeophagus flavus</i>	+	+		+	+		+	+	+			+	+		+
*	<i>Brachygeophilus truncorum</i>	+	+					+	+	+	+	+				
*	<i>Cryptops hortensis</i>				+	+	+	+							+	+
*	<i>Cryptops parisi</i>										+					
	<i>Lithobius forficatus</i>	+	+		+	+		+	+	+	+	+	+	+	+	+
*	<i>Lithobius melanops</i>		+	+			+	+			+		+	+	+	+
*	<i>Lithobius macilentus</i>									+						
*	<i>Lithobius calcaratus</i>									+						
	<i>Lithobius crassipes</i>	+	+		+	+		+	+	+	+	+				+
	<i>Lithobius microps</i>		+	+	+	+	+	+	+	+	+	+	+	+	+	+
MILLIPEDES																
	<i>Glomeris marginata</i>	+	+	+	+	+	+	+	+							+
	<i>Nanogona polydesmoides</i>	+	+		+			+	+		+		+	+	+	+
*	<i>Melogona scutellare</i>							+								
	<i>Nemasoma varicorne</i>							+		+						
	<i>Proteroiulus fuscus</i>	+	+				+	+		+						
	<i>Ommatiulus sabulosus</i>															+
	<i>Tachypoiulus niger</i>	+	+			+								+	+	
	<i>Cylindroiulus punctatus</i>	+	+			+				+	+	+				
*	<i>Julus scandinavicus</i>	+	+					+	+		+					
	<i>Ophiulus pilosus</i>	+			+									+	+	
*	<i>Brachyiulus pusillus</i>							+								
	<i>Polydesmus angustus</i>	+	+	+	+	+	+	+	+	+	+	+		+	+	
*	<i>Polydesmus gallicus</i>	+	+	+	+			+					+		+	+
*	<i>Polydesmus denticulatus</i>										+					
	<i>Brachydesmus superus</i>	+	+	+	+	+	+	+	+	+	+	+				+
*	<i>Macrosternodesmus palicola</i>					+		+								
	<i>Stosatea italica</i>										+					

**DONYLAND WOODS: 62/015 206, 27/XII/1991**

Deciduous woodland on acidic soils.

**Centipedes**

*Geophilus carpophagus*

*Brachygeophilus truncorum*

*Lithobius forficatus*

*Lithobius crassipes*

*Lithobius microps*

**Millipedes**

*Nanogona polydesmoides*

*Cylindroiulus punctatus*

*Julus scandinavicus*

*Polydesmus angustus*

*Polydesmus denticulatus*

*Brachydesmus superus*

**DONYLAND 'SALTMARSH': 62/038 213, 27/XII/1991**

Grassy area above saltmarsh strandline.

**Centipedes**

*Schendyla nemorensis*

*Lithobius melanops*

*Lithobius calcaratus*

**Millipedes**

*Brachydesmus superus*

**FINGRINGHOE WICK RESERVE: 62/043 196, 27/XII/1991**

Damp deciduous woodland.

**Centipedes**

*Brachygeophilus truncorum*  
*Lithobius forficatus*  
*Lithobius macilentus*  
*Lithobius crassipes*  
*Lithobius microps*

**Millipedes**

*Nemasoma varicorne*  
*Proteroiulus fuscus*  
*Cylindroiulus punctatus*  
*Polydesmus angustus*  
*Brachydesmus superus*

**WEST MERSEA: 62/005 124, 27/XII/1991**

Grassy ground above beach.

**Centipedes**

*Schendyla nemorensis*  
*Lithobius forficatus*

**WOODED STREAM-SIDE SWAMP: 52/958 217, 28/XII/1991**

Adjacent to deciduous woodland.

**Centipedes**

*Necrophloeophagus flavus*  
*Brachygeophilus truncorum*  
*Lithobius forficatus*  
*Lithobius crassipes*

**Millipedes**

*Glomeris marginata*  
*Polydesmus angustus*  
*Brachydesmus superus*

**CHEST WOOD: 52/964 212, 28/XII/1991**

Ancient deciduous woodland.

**Centipedes**

*Strigamia crassipes*  
*Brachygeophilus truncorum*  
*Lithobius forficatus*  
*Lithobius crassipes*  
*Lithobius microps*

**Millipedes**

*Glomeris marginata*  
*Nanogona polydesmoides*  
*Melogona scutellare*  
*Proteroiulus fuscus*  
*Polydesmus angustus*  
*Brachydesmus superus*

**LAYER WOOD: 52/913 185, 28/XII/1991**

Roadside deciduous woodland.

**Centipedes**

*Cryptops hortensis*  
*Lithobius melanops*  
*Lithobius microps*

**Millipedes**

*Glomeris marginata*  
*Proteroiulus fuscus*  
*Polydesmus angustus*  
*Brachydesmus superus*

**PODS WOOD: 52/897 177, 28/XII/1991**

Roadside coniferous plantation.

**Centipedes**

*Lithobius melanops*  
*Lithobius microps*

**Millipedes**

*Glomeris marginata*  
*Polydesmus angustus*  
*Polydesmus gallicus*  
*Brachydesmus superus*

**DOMSEY BROOK: 52/877 190, 28/XII/1991**

Roadside ditch.

**Centipedes**

*Lithobius microps*

**NEAR FEERING: 52/865 212, 28/XII/1991**

Willow scrub beside River Blackwater.

**Millipedes**

*Brachydesmus superus*

**HEATH ROAD, STANWAY: 52/959 235, 25/XII/1992**

Domestic garden.

**Centipedes**

*Schendyla nemorensis*

*Brachyschendyla dentata*

*Geophilus electricus*

*Cryptops hortensis*

*Lithobius microps*

**Millipedes**

*Brachydesmus superus*

*Macrosternodesmus palicola*

**GRYMES DYKE, STANWAY GREEN: 52/961 233, 25/XII/1992**

Oak woodland on ancient earthworks.

**Centipedes**

*Geophilus carpophagus*

*Brachygeophilus truncorum*

*Lithobius forficatus*

*Lithobius melanops*

*Lithobius microps*

**Millipedes**

*Nanogona polydesmoides*

*Proteroiulus fuscus*

*Polydesmus angustus*

*Brachydesmus superus*

**CUDMORE GROVE COUNTRY PARK: 62/070 148, 27/XII/1992**

Under deadwood, etc near freshwater dyke.

**Centipedes**

*Schendyla nemorensis*

*Necrophloeophagus flavus*

*Lithobius forficatus*

*Lithobius crassipes*

*Lithobius microps*

**Millipedes**

*Proteroiulus fuscus*

*Brachydesmus superus*

**LITTLE TEY CHURCH: 52/892 238, 27/XII/1992**

Under stones and in compost heap in churchyard.

**Centipedes**

*Schendyla nemorensis*

*Lithobius forficatus*

*Lithobius microps*

**Millipedes**

*Polydesmus angustus*

*Brachydesmus superus*

**LITTLE HORKESLEY CHURCH: 52/961 319, 28/XII/1992**

Under stones in churchyard.

**Centipedes**

*Lithobius crassipes*

*Lithobius microps*

**1KM NORTH OF LITTLE HORKESLEY: 52/961 329, 28/XII/1992**

Damp deciduous woodland on north facing slope.

**Centipedes**

*Schendyla nemorensis*

*Strigamia acuminata*

*Necrophloeophagus flavus*

*Brachygeophilus truncorum*

*Lithobius forficatus*

*Lithobius crassipes*

**Millipedes**

*Glomeris marginata*

*Nanogona polydesmoides*

*Julus scandinavicus*

*Polydesmus angustus*

*Brachydesmus superus*

**BOXTED CHURCH: 52/998 333, 28/XII/1992**

Under stones in churchyard.

**Centipedes**

*Geophilus electricus*

**'CHESHUNTS' WEST OF BOXTED: 52/009 335, 28/XII/1992**

Lakeside deciduous woodland.

**Centipedes**

*Schendyla nemorensis*

*Strigamia acuminata*

*Strigamia crassipes*

*Brachygeophilus truncorum*

*Lithobius forficatus*

*Lithobius crassipes*

*Lithobius microps*

**Millipedes**

*Cylindroiulus punctatus*

*Polydesmus angustus*

*Brachydesmus superus*

**COLNE ESTUARY, EAST MERSEA: 62/070 155, 02/I/1994**

Small area of saltmarsh.

**Centipedes**

*Schendyla nemorensis*

*Lithobius forficatus*

*Lithobius crassipes*

*Lithobius microps*

**HILLY FIELDS 'PARK': 52/984 257, 03/I/1994**

Marshy areas around new pond beside main road.

**Centipedes**

*Necrophloeophagus flavus*

*Lithobius forficatus*

*Lithobius crassipes*

*Lithobius microps*

**Millipedes**

*Julus scandinavicus*

*Polydesmus angustus*

*Brachydesmus superus*

**CYMBELINE MEADOWS: 52/985 261, 03/I/1994**

Damp cattle grazed meadow with willow pollard lined ditches.

**Centipedes**

*Strigamia crassipes*  
*Necrophloeophagus flavus*  
*Lithobius forficatus*  
*Lithobius melanops*  
*Lithobius crassipes*  
*Lithobius microps*

**Millipedes**

*Nemasoma varicorne*  
*Proteroiulus fuscus*  
*Brachyiulus pusillus*  
*Polydesmus angustus*  
*Polydesmus gallicus*  
*Brachydesmus superus*

**ST JAMES CHURCH, COLCHESTER: 62/002 253, 03/I/1994**

Under stones in churchyard.

**Centipedes**

*Schendyla nemorensis*  
*Cryptops parisi*  
*Lithobius forficatus*  
*Lithobius microps*

**Millipedes**

*Stosatea italica*

**GREAT BENTLEY CHURCHYARD: 62/109 217, 25/II/1994**

Mostly under stones in churchyard.

**Centipedes**

*Schendyla nemorensis*  
*Geophilus carpophagus*  
*Cryptops hortensis*  
*Lithobius forficatus*  
*Lithobius microps*

**THORPE-LE-SOKEN CHURCHYARD: 62/179 224, 26/II/1994**

Mostly under stones in churchyard.

**Centipedes**

*Schendyla nemorensis*  
*Geophilus carpophagus*  
*Necrophloeophagus flavus*  
*Lithobius forficatus*  
*Lithobius melanops*  
*Lithobius microps*

**Millipedes**

*Nanogona polydesmoides*  
*Tachypodoiulus niger*  
*Ophiulus pilosus*  
*Polydesmus angustus*

**THE NAZE, WALTON: 62/26- 24-, 26/II/1994**

Around 'storm drift line' and also landward side of seawalls.

**Centipedes**

*Necrophloeophagus flavus*  
*Lithobius forficatus*  
*Lithobius melanops*  
*Lithobius crassipes*  
*Lithobius microps*

**Millipedes**

*Nanogona polydesmoides*  
*Ommatiulus sabulosus*  
*Polydesmus gallicus*

**ST. OSYTH BEACH: 62/127 127, 26/II/1994**

Around and above 'storm drift line' at edge of saltmarsh.

**Centipedes**

*Necrophloeophagus flavus*

*Lithobius forficatus*

*Lithobius melanops*

*Lithobius microps*

**Millipedes**

*Polydesmus gallicus*

**ST. OSYTH CHURCHYARD: 62/123 155, 26/II/1994**

Mostly under stones in churchyard.

**Centipedes**

*Schendyla nemorensis*

*Geophilus carpophagus*

*Lithobius forficatus*

*Lithobius microps*

**Millipedes**

*Nanogona polydesmoides*

**GREAT HOLLAND CHURCHYARD: 62/219 194, 26/II/1994**

Mostly in rubbly compost heap in churchyard.

**Centipedes**

*Schendyla nemorensis*

*Geophilus carpophagus*

*Cryptops hortensis*

*Lithobius forficatus*

*Lithobius melanops*

*Lithobius microps*

**Millipedes**

*Glomeris marginata*

*Nanogona polydesmoides*

*Ommatiulus sabulosus*

*Tachypodoiulus niger*

*Ophiulus pilosus*

*Polydesmus angustus*

*Polydesmus gallicus*

*Brachydesmus superus*

**CHAPPEL: 52/894 285, 27/II/1994**

Under large logs in grassy area beside River Colne.

**Centipedes**

*Schendyla nemorensis*

*Necrophloeophagus flavus*

*Cryptops hortensis*

*Lithobius forficatus*

*Lithobius microps*

**Millipedes**

*Glomeris marginata*

*Nanogona polydesmoides*

*Ophiulus pilosus*

*Polydesmus gallicus*

**DISMANTLED RAILWAY CUTTING, Near HALSTEAD: 52/803 319, 27/II/1994**

Under stones and deadwood (and in soil beneath).

**Centipedes**

*Schendyla nemorensis*

*Geophilus electricus*

*Necrophloeophagus flavus*

*Cryptops hortensis*

*Lithobius forficatus*

*Lithobius crassipes*

*Lithobius microps*

**Millipedes**

*Glomeris marginata*

*Tachypodoiulus niger*

*Cylindroiulus punctatus*

*Polydesmus angustus*

*Brachydesmus superus*

*Macrosterodesmus palicola*

**BROAKS WOOD: 52/785 317, 27/II/1994**

Under deadwood and in rotten stumps near ditch in mixed woodland.

**Centipedes**

*Schendyla nemorensis*

*Geophilus carpophagus*

*Necrophloeophagus flavus*

*Brachygeophilus truncorum*

*Lithobius forficatus*

*Lithobius melanops*

*Lithobius crassipes*

*Lithobius microps*

**Millipedes**

*Glomeris marginata*

*Nanogona polydesmoides*

*Proteroiulus fuscus*

*Tachypodoiulus niger*

*Cylindroiulus punctatus*

*Julus scandinavicus*

*Polydesmus angustus*

*Polydesmus gallicus*

*Brachydesmus superus*

**HIGH WOODS, Near GT.DUMNOW: 52/617 207, 27/II/1994**

Under and in deadwood in swampy deciduous woodland

**Centipedes**

*Schendyla nemorensis*

*Geophilus carpophagus*

*Necrophloeophagus flavus*

*Brachygeophilus truncorum*

*Lithobius forficatus*

*Lithobius crassipes*

**Millipedes**

*Glomeris marginata*

*Nanogona polydesmoides*

*Proteroiulus fuscus*

*Tachypodoiulus niger*

*Cylindroiulus punctatus*

*Julus scandinavicus*

*Ophiulus pilosus*

*Polydesmus angustus*

*Polydesmus gallicus*

*Brachydesmus superus*

**DISCUSSION**

The centipede species were very much as expected for eastern Britain, most noticeably in the absence of *Lithobius variegatus* from the samples. Species such as *S. nemorensis*, *N. flavus*, *L. forficatus*, *L. melanops* and *L. microps* were equally common in both rural and urban locations.

Several species were mainly collected from rural habitats. The commonest of these was *L. crassipes*. Both *Strigamia* species were found in woodland or riverside meadows, typically in rotten wood. Several *L. macilentus* were found under logs in a deciduous woodland. A single male *L. calcaratus* was sorted from a grass clump above a salt marsh in a river estuary. The rural form of *G. carpophagus* was not widely recorded but it was always found in the superficial soil layers beneath deadwood (cf urban form, below).

Despite searching suitable urban habitats *Haplophilus subterraneus* was not collected. However the similarly sized *G. electricus* was encountered instead. A single *B. dentata* was found coiled between soil crumbs beneath a seedtray resting on recently cultivated soil in a domestic garden. *C. parisi* was found under a large stone in a churchyard. Both may prove widespread in gardens and churchyards in the



county. The urban form of *G. carpophagus* was readily collected from under loose bark on the trunks of every churchyard pine tree examined (cf rural form).

The most frequently encountered millipedes, *G. marginata*, *N. polydesmoides*, *P. angustus*, *P. gallicus* and *B. superus*, were found in a variety of habitats. The normally ubiquitous *T. niger* and *C. punctatus* seem to be unusually thin on the ground, but this could be a consequence of collecting in mid winter.

Single specimens of *M. scutellare* (in leaf-litter) and *P. denticulatus* (on underside of deadwood) were found in deciduous woodland. The former appears to be scarce in eastern England (BMG, 1988) and the latter typically elusive (unless pit-falled, pers obsv). *B. pusillus* was numerous under deadwood on a meadow beside the River Colne. It may prove common in such riverine locations.

Two typical urban species are worth noting. *M. palicola* was found at two sites, one a domestic garden the other a disused railway cutting. At both it was found under large stones partly embedded into a friable soil. *S. italica* was found to be numerous under large stones in one churchyard visited (Gregory 1994). Both species may be more widespread in the county.

Jones (1993) and Keay (1993) list several additional species which have previously been recorded from North Essex but were not collected during the current survey. These are the centipedes; *Strigamia maritima*, *Geophilus oligopus*, *Cryptops anomalans* and the millipedes; *Polyxenus lagurus*, *Blaniulus guttulatus*, *Cylindroiulus caeruleocinctus*, *C. latestriatus*, *Polydesmus inconstans*, *P. testaceus*. Many species such as the common *B. guttulatus* have probably been overlooked. In other cases, eg *C. latestriatus*, appropriate microsites were not examined.

## FUTURE SURVEYS

Many areas of the county still remain untouched by myriapodologists. The actual distribution of many species recorded is still unknown even at a 10km survey level. Effort needs to be spent on updating old records from past collections for species which were not found during this current survey. The uncommon flatback *Polydesmus testaceus* was first recorded as British from North Essex in 1903 (Blower, 1985). It would be interesting to know if this species, recently only known from the extreme south east of Kent, is still present in the county.

Many additional species must still await discovery in the county. Rural sites could produce several further lithobiomorphs, including *Lithobius borealis* or *L. curtipes*, and millipedes such as *Leptoiulus* spp. The chordematidans could prove most interesting. *Craspedesoma rawlinsi* should be present somewhere. It is possible that *Cordeuma proximum* may also occur in acidic woodlands. Will both *Brachychaeteuma bradeae* and *B. melanops* be found and if so will they show distinct habitat preferences, as observed in Oxfordshire (Gregory, 1993)? Coastal sites could harbour species such as *Geophilus fucorum* or *Lithobius lapidicola*.

Synanthropic sites, such as old churchyards, would also repay further study. Geophilomorphs such as *Hemia brevis* and *Clinopodes linearis* or the polydesmid *Ophiodesmus albonanus* may be found.

In conclusion it can be said that there is much still to do in North Essex. Gaps in species distributions need plugging and the county list is by no means exhaustive.

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