

## John Lewis, a celebration of fifty years of centipede studies

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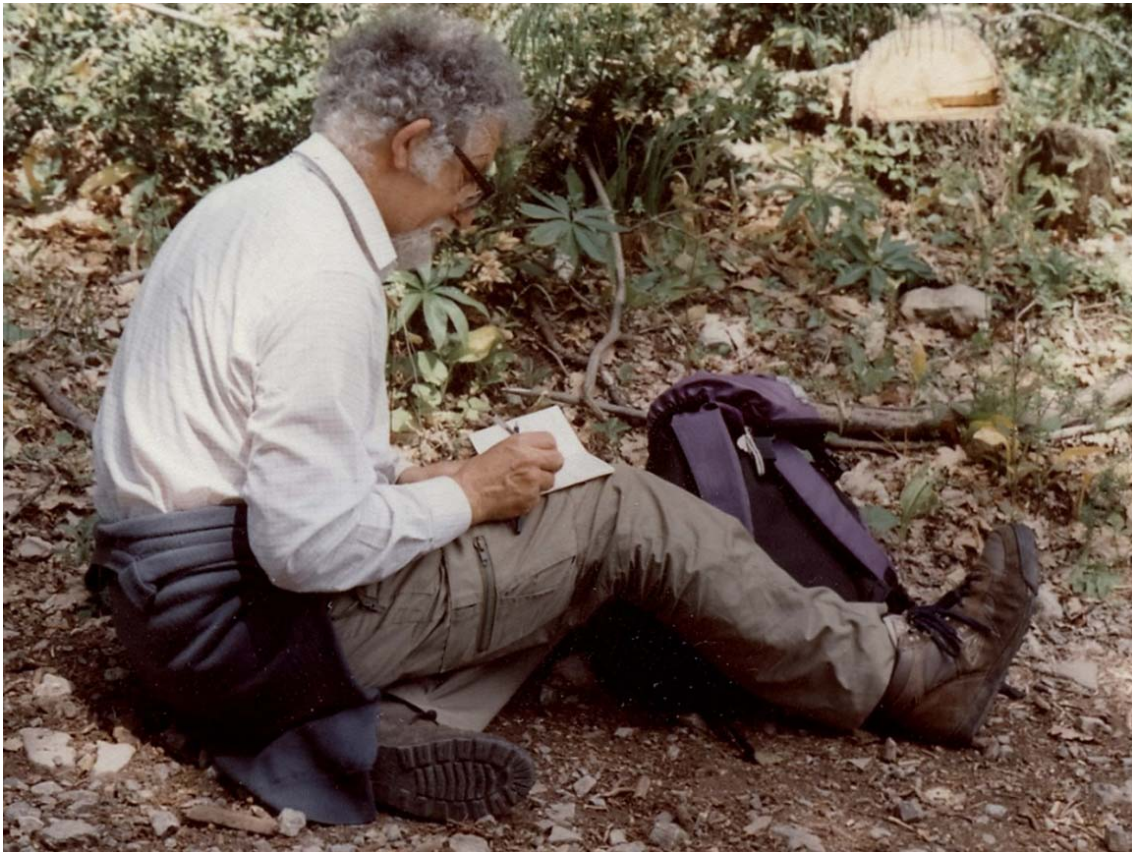
In December 2020, at a virtual BMIG Annual General Meeting, John was presented with a framed print of centipedes by artist Richard Lewington from his book *Garden Wildlife*. We had hoped to do this at the 2020 AGM at the planned meeting in Somerset but other things intervened.

Always something of a larger-than-life character, enthusiastic, knowledgeable and ever helpful, John, who is a great raconteur with a real sense of humour, also seems to have just that tiny bit of a public-school master about him, a role he actually had during part of his career. He could be very funny and Helen Read tells of him running at great speed to try to catch a *Scutigera* in Galicia. At the same time, the volume of his publications about centipedes and, sometimes other groups, is striking testimony both to his industry and to his scholarship.

Postgraduate studies on *Strigamia maritima* on the Sussex coast, revealed three centipede species new to Britain. *Pachymerium ferrugineum* (1960), *Schendyla peyerimhoffi* & *Geophilus pusillifrater* (1961). *Pachymerium*, despite being very widely distributed elsewhere in the world, remains a species rarely recorded here and only, it seems, from our east & south coasts. *G. pusillifrater* is an inconspicuous animal, rarely recorded whose status is elusive. *S. peyerimhoffi*, on the other hand is quite widely distributed on the south and west coasts of Britain & Ireland with more than fifty records. His classic studies on the life history and ecology of *S. maritima* were reported in 1961 in *Proc.Zool.Soc.* and he followed up his studies on littoral centipedes with an account of the species found on the shore in the Plymouth area (1962) which included discussion of *Geophilus seurati* as we now know it and on physiological adaptations (with John Binyon, 1963), and spiracular structure (1963) and his first paper on a non-British species, *Clinopodes poseidonis* (now *Tuoba poseidonis*) from the Red Sea (1963). It is interesting to note that *S. maritima* has become a “model centipede” in more recent times including studies on populations, embryology and development and genetics - it is a centipede which can be found in very large numbers for such work.

After his postgraduate studies at Queen Mary College, John worked at Bradford Institute of Technology. Some results of this were his studies on life cycles of *Lithobius variegatus* and *Lithobius forficatus* (1965) and their protozoan parasites (1966). He subsequently took university posts in Africa, first at Khartoum (Sudan) and then at Zaria (Nigeria) so by 1966 we have an account of *Scolopendra amazonica* and of the scolopendromorph centipedes of the Sudan (1967a, 67b). This was the beginning of his work on African centipedes and of his interest in the Scolopendromorpha which extended over many years and to the knowledge of which he has made significant contributions. Apparently, he found himself, despite a first interest in ecology, spending much time doing taxonomic work just to know what centipedes he was actually finding.

John attended the first international myriapod congress in Paris in 1968 which saw the setting up of the Centre International de Myriapodologie, C.I.M. (International Society for Myriapodology) and attended most of its subsequent congresses. He is now an honorary member. His interests were wide, also including such topics as segmentation and nomenclature of centipede body parts as well as life history and taxonomy. In 1981 he published *The Biology of Centipedes*, now a standard reference work. His name is attached to papers, as either the sole or joint author, on centipedes from various parts of the world; Ascension, Chagos Is, Christmas Island, Eritrea, Iraq, Mauritius & Rodrigues, Nepal & Kashmir, Oman, Saudi Arabia, Sarawak, Seychelles, Spain, Tunisia, UAE, US Virgin Is., Yemen, as well as Sudan and Nigeria.



John Lewis compiling field notes during British Myriapod Group's excursion to Hungary in 1994.  
Image by Liz Hornung.

When the then British Myriapod Group met for the first time in 1970 in North Devon, John (now back from Africa) with Gordon Blower and Colin Fairhurst were the main instigators and he was, for many years, a regular attender (with Sheila) at the group's annual meetings in Britain and elsewhere and a consistent contributor to the Bulletin. He felt strongly that observations about myriapods (behaviour, abnormalities, ecology, and so on) should not be limited to conversations in the bar at meetings but should be recorded somewhere rather than becoming just hearsay or lost altogether and he made efforts to do this himself by regular contributions to the Newsletter and Bulletin.

As well as the three British species already referred to, John's name is linked, often with other British workers, in recording *Tygarrup javanicus*, *Cryptops doriae* and *Cryptops cf hispanus* and the description of *Nothogeophilus turki*. In 1985 we find him describing *Geophilus carpophagus* in houses, later reporting on the two forms (as they were then referred to) in Somerset and his name is listed amongst the authors of the 2001 separation of *G. carpophagus* sensu stricto and *Geophilus easoni*.

And..... just in case one should think of John as a "one class" specialist... we have discovered that he once wrote papers on beetles (1964) and a spider (1965) – African - and several accounts of millipedes (Nigeria, Sarawak) and his name is actually attached to a chapter on Woodlice and Myriapoda in J.L. Cloudsley-Thompson's *Sahara Desert* (1984).

Of the nearly 120 publications, both singly and jointly to which John's name is attached, just over forty had a British interest and these varied from short notes in the *Bulletin* to full length papers of importance in British/Irish myriapod studies (see list below).

**References cited in text:**

- Lewis, J.G.E. (1963) On *Clinopodes poseidonis* (Verhoeff) (Chilopoda, Geophilomorpha, Geophilidae) with a description of a new subspecies from the Red Sea littoral. *Ann.Mag.nat.Hist* (13) **6**:49-55.
- Lewis, J.G.E. (1967a) The taxonomy and biology of the centipede *Scolopendra amazonica* in the Sudan. *J.Zool.* **149**:188-203.
- Lewis, J.G.E. (1967b) The scolopendromorph centipedes of the Sudan with remarks on taxonomic characters in the Scolopendridae. *Proc.Linn.Soc.Lond.* **178**:185-207.

**J.G.E. Lewis, British related publications**

1. 1960. *Pachymerium ferrugineum* (C. L. Koch) a geophilomorph centipede new to Great Britain. *Ent. Mon. Mag.* **95**: 206-207.1961.
2. 1961. The life history and ecology of the littoral centipede *Strigamia* (=Scolioplanes) *maritima* (Leach). *Proc. zool. Soc. Lond.* **137**: 221-248.
3. 1961. On *Schendyla peyerimhoffi* Brolemann and Ribaut and *Geophilus pusillifrater* Verhoeff, two geophilomorph centipedes new to the British Isles. *Ann. Mag. nat. Hist.* Ser. 13, **4**: 393-399.
4. 1962. The ecology, distribution and taxonomy of the centipedes found on the shore in the Plymouth area. *J. mar. biol. Ass. U.K.* **42**: 655-664
5. 1963. On the spiracle structure and resistance to desiccation of four species of geophilomorph centipede. *Ent. Exp. & Appl.* **6**: 89-94.
6. 1965. The food and reproductive cycles of the centipedes *Lithobius variegatus* and *Lithobius forficatus* in a Yorkshire woodland. *Proc. zool. Soc. Lond.* **144**: 269-283.
7. 1967. Seasonal fluctuations in the protozoan parasites of the centipedes *Lithobius variegatus* and *Lithobius forficatus* in a Yorkshire woodland. *J. Zool.* **151**: 163-169.
8. 1972. On the nature of 'intercalary' males in *Brachydesmus superus* Latzel (Diplopoda: Polydesmida). *Ent. mon. Mag.* **107**, 1971 (1972): 158-159.
9. 1981. *The Biology of Centipedes*. Cambridge University Press. pp vii+476.
10. 1985. Centipedes entering houses with particular reference to *Geophilus carpophagus* Leach. *Ent. mon. Mag.* **121**: 257-260.
11. 1987. On some structural abnormalities in *Lithobius* and *Cryptops* (Chilopoda) and their possible significance. *Bull. Br. Myriapod Grp.* **4**: 3-6.
12. 1988. Ecology and distribution in lithobiomorph and geophilomorph centipedes: gleanings from the Seventh International Congress of Myriapodology held at Vittorio Veneto in July 1987. *Bull. Br. Myriapod Grp.* **5**: 9.
13. 1988. Miscellanea: *Scolopendra subspinipes subspinipes* in a cargo of bananas. Abnormal coxopleural teeth in *Lithobius forficatus* L. Additional moult in *Lithobius variegatus* Leach *Bull. Br. Myriapod Grp.* **5**: 36-37.
14. 1989. On the two forms of *Geophilus carpophagus* in Somerset. *Bull. Br. Myriapod Grp.* **6**: 6-7.
15. 1989. Miscellanea. Reduction in number of coxal pores in *Lithobius variegatus* Leach. *Brachygeophilus truncorum* (Bergsoe and Meinert) with 35 pairs of legs. A yellow mutant of *Lithobius variegatus* Leach. *Bull. Br. Myriapod Grp.* **6**: 32-33.
16. 1990. Abnormalities in the coxal pores of *Lithobius variegatus* Leach. *Bull. Br. Myriapod Grp.* **7**: 41-42.
17. 1990. Miscellanea: Dead millipedes, *Ommatoiulus sabulosus* (L.) on sand dunes at Braunton Burrows, Devon. *Lithobius forficatus* carrying a woodlouse. *Bull. Br. Myriapod Grp.* **7**: 52.

18. 1994. On a case of abnormal segmentation in *Lithobius variegatus* Leach (Chilopoda: Lithobiomorpha). *Bull. Br. Myriapod Group* **10**: 23-25.
19. 1994. Local differences in age structure of populations of the centipede *Lithobius variegatus* Leach in the Quantock Hills, Somerset. *Bull. Br. Myriapod Grp.* **10**: 27-30.
20. 1994. On the true identity of *Geophilus sorrentinus* Attems (Chilopoda: Geophilomorpha). *Bull. Br. Myriapod Grp.* **10**: 39-42.
21. 1997. The possible factors affecting the distribution and abundance of the centipedes *Lithobius variegatus* Leach and *Lithobius forficatus* (Linn.) in the British Isles. *Bull. Br. Myriapod Grp.* **13**: 14-18.
22. 2000. Additional data on segment number in some British Geophilomorpha. *Bull. Br. Myriapod Grp.* **16**: 26-29.
23. 2002. On blue geophilomorph centipedes with comments on other unusual coloration. *Bull. Br. Myriapod & Isopod Grp.* **18**: 45-46.
24. 2003. Water relations, habitat and size in lithobiomorph and geophilomorph centipedes (Myriapoda; Chilopoda). *Bull. Br. Myriapod & Isopod Grp.* **19**: 51-56.
25. 2004. Biological data on British centipedes recorded in his notebook by Gordon Blower between 1948 and 1975. *Bull. Br. Myriapod & Isopod Grp.* **20**: 7-12.
26. 2007. On *Cryptops doriae* Pocock from the wet tropical biome of the Eden Project, Cornwall (Chilopoda, Scolopendromorpha, Cryptopidae). *Bull. Br. Myriapod & Isopod Grp.* **22**:12-16.
27. 2007. A comparison of the growth patterns in British and Iberian populations of *Lithobius variegatus* Leach (Chilopoda, Lithobiomorpha). *Bull. Br. Myriapod & Isopod Grp.* **22**:17-19.
28. 2008. The succession of post-larval stadia of *Lithobius variegatus* Leach, 1817 in a Somerset beech wood. *Bull. Br. Myriapod & Isopod Grp.* **23**: 18-21.
29. 2011. The *Cryptops* species from a Welsh greenhouse collected by I. K. Morgan with a description of a problematic specimen of a species new to the British Isles (Chilopoda: Scolopendromorpha: Cryptopidae). *Bulletin of the British Myriapod & Isopod Group.* **25**: 39-43.
30. 2014. On the status of *Cryptops savignyi* Leach, 1817, and *Cryptops anomalans* Newport, 1844, (Chilopoda: Scolopendromorpha: Cryptopidae). *Bulletin of the British Myriapod & Isopod Group* **27**: 30-34.
31. 2014. John Cloudsley-Thompson May 1921-4 October 2013. Some personal recollections. *Bulletin of the British Myriapod & Isopod Group* **27**: 57-58.

### With other authors

32. 1963. Binyon, E.J. and Lewis, J.G.E. Physiological adaptations of two species of centipede (Chilopoda: Geophilomorpha) to life on the shore. *J. mar. biol. Ass. U.K.* **43**: 49-55
33. 1987. Kime, R.D., Lewis, J.G.E. and Lewis, S.J. Centipedes and millipedes collected in Normandy, France *Bull. Br. Myriapod Grp.* **4**: 30-35.
34. 1988. Lewis, J.G.E., Jones, R.E. and Keay, A.N. On a new genus and species of centipede (Chilopoda, Geophilomorpha, Chilenophilidae) from the British Isles. *J. nat. Hist.* **22**: 1657-1663.
35. 1988. Lewis, J.G.E. and Rundle, A.J. *Tygarrup javanicus* (Attems) a geophilomorph centipede new to the British Isles. *Bull. Br. Myriapod Grp.* **5**: 3-5
36. 1988. Lewis, J.G.E. and Kime, R.D. Centipedes and millipedes from Finistere, Brittany. *Bull. Br. Myriapod Grp.* **5**: 6-8.
37. 1992. Lewis, J.G.E., Gliddon, T.P. and Newbold, K.L. (1992) Homing behaviour in the centipedes *Lithobius forficatus* (Linn) and *Lithobius variegatus* (Leach). *School Science Review* **73**: 93-94.



John Lewis (left) during British Myriapod Group's excursion to Hungary in 1994; with Zoltan Korsos (centre) and Desmond Kime (far right). Image by Liz Hornung.

38. 1994. **Lewis, J.G.E.** and Keay, A.N. (1994) The characteristics of an adolescens stadium *Geophilus linearis* C. L. Koch (= *Clinopodes linearis*) (Chilopoda: Geophilomorpha). *Bull. Br. Myriapod Grp.* **10**: 43-47.
39. 1995. **Lewis, J.G.E.** and Yeung, P.C.S. The appearance and disappearance of telopodal glands during the development of *Lithobius microps* (Lithobiomorpha, Lithobiidae). *Bull. Br. Myriapod Grp.* **11**: 59-62.
40. 2001. Arthur, W., Foddai, D., Kettle, C., **Lewis, J.G.E.**, Luczynski, M. and Minelli, A. Analysis of segment number and enzyme variation in a centipede reveals a cryptic species, *Geophilus easoni*, sp. nov., and raises questions about speciation. *Bio. J. Linn. Soc.* **74**:489-499
41. 2010. Bonato, L., Edgecombe, G.D., **Lewis, J.G.E.**, Minelli, A., Pereira, L.A., Shelley, R.M. and Zapparoli, M. A common terminology for the external anatomy of centipedes (Chilopoda). *ZooKeys* **69**: 17-51
42. 2015. Gregory, S.J. and **Lewis, J.G.E.** Geophilomorph centipedes (Chilopoda: Geophilomorpha) from North-West Spain and Northern Portugal collected by the British Myriapod and Isopod Group in 2004. *Bull. Br. Myriapod & Isopod Grp.* **28**: 2-14.

### Online Database

43. 2016. Bonato, L., Chagas Junior, A., Edgecombe, G.D., **Lewis, J.G.E.**, Minelli, A., Pereira, L.A., Shelley, R.M., Stoev, P., Zapparoli, M. ChiloBase 2.0 - A World Catalogue of Centipedes (Chilopoda). Available at: <http://chilobase.biologia.unipd.it>.