

Linyphiid Sheet Webs

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Sheet webs in field, Upper Reaside

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Many people will be acquainted with money spiders. The finest gossamer threads, catching the light or often invisible, drift considerable distances carrying a tiny spider. They 'balloon' across the face or clothing, and are said to bring good luck and good fortune.

Spiderlings of many species will disperse by ballooning, but the technique is typical of the money spiders, particularly in late summer and autumn, the 'gossamer season', when a warm sunny day follows a cooler spell. The spiders climb to a high point, stand with spinners pointing skywards and let out strands of silk. 'Silk is a fibrous protein, insoluble in water, with a high tensile strength. It is extruded from the spigots of the spinners as a liquid, hardening immediately as it is pulled out.' As the ground warms, convection currents develop and drag at the silk threads, and when these currents are strong enough, the spider lets go and is carried away.

Money spiders belong to the Family Linyphiidae. Of the 620 British species of spiders over 400 species in 120 genera fall into this family, the largest group of north European spiders.

Most species of Linyphiidae make 'sheet webs'. The web encloses the spider with no retreat. Covering grass, other vegetation, posts, etc., the spider runs, upside-down, underneath the sheet seizing prey, e.g.

tiny insects, young greenfly, which fall on to the top or as in some cases, entangle in fine threads set as a superstructure above the sheet.

The accompanying pictures show extensive sheets of web and thousands of money spiders over a large area. This was the 15th November 2014. On 18th a similar event is recorded from St. Leonards-on-Sea Nature Reserve with photographs of extensive webs. This would seem to be not uncommon. Why such an explosion of population should arise so briefly and suddenly, and be so ephemeral, is not explained. Little is known of the biology of money spiders.

Location details: Upper Reaside, Cleobury Mortimer, Shropshire. 500m north of River Rea which forms the county boundary with Worcestershire

Grid reference: SO 6735 7465

Date and time: 15th November 2014, at 15.30

Weather: Mild, dry, calm, cloudy/bright

Area 1 uphill of gate: approx. 120yds x 20yds.

Area 2 downhill of gate: approx. 50yds. x 20yds.

Total area: $170 \times 20 = 3400\text{sq yds.} = 0.7\text{acre} = 2842.7\text{m sq} = 0.284\text{ ha.}$

Altitude: 150-155m

Aspect: south

Vegetation: permanent grass and clover ley from at least 1985.

Wyre Forest Study Group



Sheet web and spiders on fence post

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Sheet web and spiders on thistle

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References

Roberts M.J., The Spiders of Great Britain and Ireland, Part I, 1993 Part II, 1985. Harley Books.

Roberts M.J., Collins Field Guide; Spiders of Britain and Northern Europe, Collins, 1996.

Halley J.M., Thomas C.F.G., & Jepson P.C. A Model for the Spatial Dynamics of Linyphiid Spiders in Farmland. Journal of Applied

Ecology, Vol. 33, No. 3 (June 1996) pp471-492.

Google; Wikipedia, 'money spiders'

Google; Wikispecies, <species.wikimedia.org>

Google, BBC Nature, Money Spiders.

Google, Money spiders, Mail Online, 18th November, 2014, Mr. Ross Lawford.



Sheet webs on grass, Upper Reaside

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