

DRASSODES PUBESCENS (THORELL) (ARANEAE, GNAPHOSIDAE): A SPIDER NEW TO IRELAND FROM CALCAREOUS GRASSLAND

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Background

Orchid-rich calcareous grasslands are a priority habitat on the EU Annex I habitats guide (European Commission, 1996). An examination of a variety of invertebrate orders at 25 such sites was the subject of an EPA funded post-doctoral study carried out by ER through Trinity College, Dublin between 2005 and 2007. In 2006 MN was contracted by TCD, on foot of funding gained from the Heritage Council (WLD/2006/14776), to participate in this study with the mandate to partake in fieldwork and to identify spiders recorded during the survey.

***Drassodes pubescens* (Thorell, 1856)**

A single male of *Drassodes pubescens* (Thorell) was identified from the catch taken in a set of ten pitfall traps established between 24 May and 14 June 2006 on Split Hills Esker, Co. Westmeath N346382. The location at which the traps were set has a strong gradient and was characterised by a sandy soil 5cm in depth. Vegetation at the site was short (5cm) and dominated by mountain everlasting *Antennaria dioica* (50-90% cover), with some quaking grass *Briza media*, wild thyme *Thymus polytrichus*, *Cladonia* lichens and mosses. The top of the ridge was

heavily colonised by tall gorse *Ulex* shrubs and rank grasses, which in the long-term could encroach on the site.

According to Helsdingen (1996), *D. pubescens* had not previously been noted from Ireland and there are no records subsequent to that publication. The specimen was identified using Roberts (1985). The male of the species is easily distinguished from the two congeners that occur in Ireland on basis of structures of the mature palp.

D. pubescens occurs in a wide range of habitats throughout Europe preferring dry oligotrophic grasslands, fallow meadows, coastal systems and especially sand-dunes thereof (Hänggi *et al.*, 1995). It also occurs in dry heaths and vegetation at woodland edges, on raised bog and bog heathland and on disturbed ground e.g. quarries. It is associated with pine *Pinus* forest (perhaps accounting to some extent for its occurrence on raised bog), with larch *Larix* and sometimes occurs in older oak *Quercus* dominated deciduous woodlands, especially oak/hornbeam *Carpinus*. It occurs occasionally amongst fen vegetation or on wetter grasslands. Almquist (2006) records it from *Pinus* woodland, and dune heath in Sweden. On Swedish sand-dune systems, it was found most abundantly on the landward side of dune ridges and amongst marram *Ammophila arenaria* (Almquist, 1973), extending inland into areas of heath.

The species is typical of the Gnaphosidae with respect to its habits, being ground-dwelling, nocturnal and cursorial. It may be found by day in a silken cell constructed under a stone sitting on soil or vegetation. Wandering specimens are restricted to the ground surface where they may be found at the base of grasses, amongst other vegetation, or in litter. The female sets and remains with an egg-sac in a silken cell until the spiderlings have hatched and dispersed. British records (Harvey *et al.*, 2002) show adults of both sexes occurring from May to September, being most abundant in May/June and appearing in smaller numbers later in the year.

D. pubescens is widespread in southern England and most abundant in the extreme south. It has a Palearctic distribution (Platnick, 2007) and is found across

Europe, occurring throughout the Mediterranean, in European Russia, in the Scandinavian countries and across Central and Western Europe (Helsdingen, 2007).

Given the species' European distribution it is not surprising that it should also occur in Ireland. However, calcareous grassland of the type from which the present record was taken is a threatened habitat in Ireland. The site in question is potentially threatened by further encroachment of the already substantial stands of *Ulex* that occupy the uppermost areas of the esker (and which occur even more abundantly along that section of the esker in an easterly direction). Given that low-nutrient, sandy, well-drained soils would seem to constitute the species' preferred habitat in much of western Europe, it could be suggested that it may be actually uncommon or rare in Ireland. It might be expected to occur on sand-dune systems, especially perhaps in the southern half of the country, however this habitat also has suffered significantly from over-grazing and other management practices and abuses over the years. Only further survey effort in appropriate habitat would answer the question as to whether the species can be considered genuinely rare in Ireland or is simply under-recorded.

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