On the distribution of *Hyptiotes paradoxus* (Araneae: Uloboridae) in Estonia and Finland

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In Estonia the spider *Hyptiotes paradoxus* has hitherto only been found in Saaremaa and no individuals have been found since 1934. In this paper several new findings in Saaremaa and the first finding on mainland Estonia is reported. The first finding of this species in Finland was on the Åland Islands in 2001. Four new localities on the Åland Island are reported on here.

**Introduction**

*Hyptiotes paradoxus* (C. L. Koch) (Araneae: Uloboridae) is a spider considered by most authors to be a relatively rare species in Northern Europe (Bristowe 1939, Locket & Millidge 1951, Roberts 1995). The number of individuals at the localities can, however, be surprisingly great (Nielsen 1931). *H. paradoxus* has hitherto been found in most of the northern European countries except Latvia and Lithuania (Vilkas 2006). Its northern limit is today along the lat 60° both in Norway and Sweden, as well as on the Åland Islands in Finland, where it was found for the first time in 2001 (Fritzén 2002). To date, there are no records from mainland Finland. In Estonia *H. paradoxus* was, according to Kauri (1934), a characteristic species for spruce forests in Saaremaa in the 1930s. No accurate notes on locations were given. However, the species has not been recorded elsewhere in Estonia nor in Saaremaa since then (Vilbaste 1987, Mart Meriste 2002, pers comm).

**Material**

During a field trip to Saaremaa 28–31 August 2005 together with Carina Järvinen one of our goals was to find *Hyptiotes paradoxus*. The first place we checked was a spruce dominated grove-like forest close to the village of Leisi in Northern Saaremaa. After having searched spruces by beating branches for an hour, three juvenile *H. paradoxus* were found in some small green spruces. During this and the following two days we searched another five forests more or less evenly distributed over Saaremaa apart from the East and South-East parts. All were inhabited by *H. paradoxus*, and in some places, for example Neeme in Kihelkonna, *H. paradoxus* was the most abundant species on lower spruce branches. In Vidumäe LKA (national park), single individuals were found in their webs about 50 meters SW of the tower and 370 meters anticlockwise along the path from the park center.

During a field trip to Tuksi (Bergsby) in Noarootsi on 1 October 2005 Ika Österblad found the first *H. paradoxus* on mainland Estonia. A single juvenile was beaten from a small spruce. The specimen was not collected. She also found numerous *H. paradoxus* in three forests in Värmdö close to Stockholm in Sweden. These are apparently some of the populations nearest the ones on the Åland Islands in Finland.

In Finland the first population of *H. paradoxus* was found by me accidentally when walking
through a mature mixed spruce forest in Jomalö, Hammarland on the northwestern Åland Island (Fritzén 2002). Since that, I have checked the site every year including 2006 and the spider has always been relatively easy to find in small spruces and on lower branches of spruces, but also in junipers. In Britain, *H. paradoxus* is mainly found on yew (*Taxus baccata*) and box (*Buxus sempervirens*) (Locket & Millidge 1951, Roberts 1995).

For this particular reason, in 2003, I paid a visit to the largest stand of yew of the Baltic Sea, the small island of Jungfruskär in the Nätö–Jungfruskär Nature Reserve, west of Nätö biological station in Lemland on the Åland Islands. In a small damp ravine with a dense stand of yew on the northern parts of Jungfruskär, several *H. paradoxus* were soon found (Fig.1). Not only on yew but also on spruces in the surrounding area have I found *H. paradoxus*. The presence of the species at this site was positively rechecked in 2004, 2005 and 2006. At the two sites mentioned above the species is relatively abundant and very easy to find. During 2002–2006 I have searched for *H. paradoxus* on the Åland Islands in a total of 12 forests of which I consider suitable habitats, and a few specimens have been found in three more places. Fig. 2 shows a map of all known sites in Estonia and Finland, and the site in Sweden mentioned above. In table 1 habitat data and coordinates are given for each of these locations.

**Conclusions**

As Kauri already stated in 1934, *H. paradoxus* still seems to be “typical of spruce forests” in Saaremaa. Apparently, it is also common and very numerous in suitable habitats. In Saaremaa I got the impression that it is hard to find a suitable habitat which is not inhabited. It is also very likely that it occurs on the island of Hiiumaa north of Saaremaa. However, on the Åland Islands *H. paradoxus*
still seems to be rather locally distributed but, still,
locally quite numerous.

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