

Threats to a rare European spider species, Tetragnatha reimoseri (Araneae: Tetragnathidae), and fishponds as an alternate habitat

Izabela Hajdamowicz and Piotr Jastrzębski

Department of Zoology, University of Podlasie

B. Prusa 12, 08-110 Siedlee, Poland, e-mails: hajdamo@ap.siedlee.pl, pjast@ap.siedlee.pl

Abstract

Tetragnatha reimoseri is a European spider species recorded thus far in only a few sites in Middle and Eastern Europe. It has been listed in red books of extinct and endangered species in Belgium, Germany and Poland. In the last decade, this species was discovered in new sites in eastern Poland, thus extending the previously known range farther to the northeast. The dispersion of *T. reimoseri* in Middle Europe is likely associated with global warming as with *Argiope bruennichi*, but suitable habitats are limited. *T. reimoseri* may have been more widespread during warmer periods in European history, but its range has likely become restricted due to climatic changes and human environmental impacts. This species has specific habitat requirements since it primarily inhabits sedge rushes and peatland moss-sedge communities. Land reclamation, eutrophication and intensive agricultural management, all of which lead to habitat destruction, are considered the most important threats to *T. reimoseri*. Since the natural habitats of this species are disappearing, extensively used fishponds might serve as a substitute habitat for the species. Most likely a stable population of *Tetragnatha reimoseri* has been occured in a projected nature reserve "Stawy Siedleckie" on South Podlasie Lowland since 1998.

Key words

Spiders, endangered species, aquatic and peatland habitats, substitute habitats, fishponds, distribution, threats, protection, *Tetragnatha reimoseri*.