

Species Statement for Sussex

Fen Raft Spider

Dolomedes plantarius

1. Introduction

The fen raft spider is a wetland spider dependent on permanent, standing or slow moving water. It is associated with nutrient-poor water of near neutral or alkaline pH. It lives on the surface of pools and ditches, and amongst emergent vegetation; typically it hunts from `perches` on stems emerging from the water, taking a wide range of invertebrate prey on or below the surface. Emergent, stiff-leaved vegetation in open, sunny conditions is also required for the construction of nursery webs in which the young are reared.

There are no reliable records of this species in the UK before its discovery in 1956, at Redgrave and Lopham Fen, on the Norfolk/Suffolk border. In 1988 it was discovered at a second site, the Pevensey Levels, Sussex, c160 km away. The Redgrave and Lopham Fen population has contracted progressively in range over the last 30 years and is now restricted to two, small, isolated centres. Since systematic monitoring began in 1991, numbers in these areas have fluctuated around very low levels, with no detectable temporal trends. The total population, probably of little over 100 adult females in most years, is highly vulnerable to stochastic extinction. The only survey of the Pevensey population in 1992 estimated that there were over 3000 adult females. The fen raft spider has been recorded throughout the Palaearctic. Under recording and confusion over identification make assessment of status difficult, but it appears to be declining and often under threat of extinction in western and central-southern Europe whilst remaining well established in Scandinavia and the Baltic States.

In Great Britain this species is classified as *Endangered*. It is given full protection under Schedule 5 of the Wildlife and Countryside Act 1981.

2. Current Factors Affecting the Species

- Water abstraction.
- Inappropriate ditch management.

- Deterioration in water quality.
- Loss of suitable wetland habitat.

3. National Species Action Plan

National Species Action Plan objectives and targets are as follows:

- Achieve a ten-fold increase in the range of the population at Redgrave and Lopham Fen.
- Increase the population density throughout much of the range of Redgrave and Lopham Fen to a mean maximum of c15 individuals per pool (the maximum level supported since monitoring began in 1991).
- Maintain the density and range of the fen raft spider on the Pevensey Levels.
- Introduce populations to two suitable new sites by 2010.

4. Current Action

- Most of the Pevensey population occurs within the Pevensey Levels NNR/SSSI complex. The population at Redgrave and Lopham Fen occurs within an NNR, which is included within the Waveney and Little Ouse Valley Fens candidate SAC.
- The fen raft spider has been the subject of an EN Species Recovery Programme since 1991.
- Habitat restoration, initiated in 1993 at Redgrave and Lopham Fen by the Suffolk Wildlife Trust, with grant-aid from the EU Life Fund, has involved restoration of the fen's natural hydrology, extensive peat-stripping, scrub clearance and grazing.

5. Objectives

- i. Maintain the density and range of the fen raft spider on the Pevensey Levels.

6. Targets and Costs

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7. Potential

There are a number of sites in Sussex in which the habitat is suitable for this species. There are many sites within the Pevensey Levels/Hooe Level complex which are suitable for the species. The Romnsey Marsh area also contains sites where the habitat is suitable for this species and could be considered for locating a population of the species after careful consideration of the suitability of the sites and the possible success of the project.

Other smaller sites within East and West Sussex have contain suitable habitat and could also be considered for the location of a population of the species.

8. Action plan

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9. Monitoring/Review

This action plan will be monitored by the Sussex Biodiversity Partnership annually and reviewed and updated by the Sussex Biodiversity Partnership every five years.

10. References

UK Biodiversity Group, (1999). National Species Action Plan for fen raft spider, *Dolomedes plantarius*.

11. Consultation

12. Appendices