

Back from the Brink – Species summary

Spreading Hedge-parsley

BftB project: IP03 Colour in the Margins

Project lead organisation: Plantlife

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Species name – common & scientific	Spreading Hedge-parsley <i>Torilis arvensis</i>
Photograph	 <p data-bbox="735 1261 1177 1290">© Cath Shellswell / Back from the Brink</p>
Taxon group	Vascular Plant
Conservation status	Endangered
UK distribution	<p>Spreading Hedge-parsley is scattered across southern and central England with a concentration of sites in Somerset, Worcestershire and East Anglia. However, the species has declined significantly from a historic distribution covering much of England, although records become very sparse to the north and west of a line bisecting the country from The Wash westwards.</p> <p>Most sites are on calcareous boulder clay in the East Anglian Plain (Cambridgeshire, Suffolk and Hertfordshire), on Lias clays in the Mid-Somerset Hills and in the Avon Vale of Warwickshire and Worcestershire, with other records from similar soils elsewhere in central southern England (see page 11 in the Portfolio for more information).</p>
Habitat associations	Autumn-cultivated arable farmland and railway ballast (see pages 5, 8-9 of the Portfolio for more information)

BftB work carried out:	
Survey & Monitoring	Population count/survey of extant populations and reintroduced populations (see pages 6-7, 10, 12-13 and 18-21 of the Portfolio for a brief description, a 'how to' case study and survey form).
Sites habitat management works	There have been two interventions for this species: <ul style="list-style-type: none"> • farm management advice provided at extant locations (see pages 13-16 of the Portfolio for information on management and three case studies) • reintroductions undertaken to create a model for undertaking this type of activity (see pages 16-17 in the Portfolio for information about how to reintroduce this species and one case study).
Conservation 'interventions' incl. reintroductions & translocations	Nine reintroductions undertaken in: Hampshire (1 site), Somerset (5 sites) and Wiltshire (3 sites), eight of which produced a new generation of plants in the first year.
Technical advice provision	Tailored reports on survey results and management advice sent to landowners. Production and dissemination of species ecology and conservation portfolio.
Links made with other taxa / conservation work?	Shepherd's-needle and other arable flora; Skylark; Harvest Mouse; Shril Carder Bee
Wider engagement & advocacy activities?	Species briefing sheet or Portfolio sent to approximately 25 farms / sites, including both natural populations with post-2010 records and reintroduced populations.
BftB results obtained:	
Recorded Distribution (in BftB focal areas)	There are approximately 150 records of 'natural' Spreading Hedge-parsley populations that have been found since 2000 (Figure 1: Natural populations are those that originate from the soil seed bank and are not sown). 17 records of populations fall within the CitM Mid-Somerset Hills focus area, 10 within the Wessex area and 1 within the Cornwall and South Devon area (record data analysed as part of Natural England's Species Recovery Programme funded Mapping IAPA and S41 species by Plantlife). Within the core of its range, Spreading Hedge-parsley populations appear to be healthy. A recent study found that of 13 populations surveyed, five sites where population counts were undertaken had an average of 198 plants and nine sites had between 101-1000 plants. Just four sites had fewer than 10 individual plants.
Recorded Abundance of species populations	The population sizes of annual plants vary enormously from year-to-year, dependent on a wide range of variables. Abundance data has been recorded annually at project sites between one and four times during the project. However, without a comprehensive dataset of population counts from previous years and a thorough understanding of the variables effecting the abundance of the species it is not possible to make valid assessments of trends within this timeframe. Colour in the Margins has made progress on both these fronts by providing a few years of population counts and improving our understanding of the autecology of the species. Thus, we will be better able to interpret changes of abundance in the future.

<p>Other results documented?</p>	<p>The additional seed biology information (i.e. dormancy) collated by Kew MSB has been essential to gain a fuller understanding of the requirements of this species (see pages 3-5 in the Portfolio). The information about soil nutrients and texture at extant sites, and the arable plant communities within which Spreading Hedge-parsley grows is also new and captured in the Portfolio (pages 8-11).</p>
<p>Species Recovery Curve progress made</p>	<p>Sites with recent records were targeted for monitoring and one to one advice on management practices. Over time it will be possible to see if these management interventions are having a beneficial effect. Reintroductions have been undertaken to identify biological, management and environmental factors that need to be in place for successful translocations of Spreading Hedge-parsley. These activities are working towards trialling of recovery solutions and therefore Spreading Hedge-parsley is deemed to now be at step 6 on the recovery curve, from a baseline score of 1.</p>
<p>Recommendations for future work:-</p>	<ul style="list-style-type: none"> • Continued annual monitoring of reintroduction sites. • Seed longevity in natural conditions within the soil seed bank. • Investigation of the structure of genetic variation within Spreading Hedge-parsley. • Analysis in ~10 years of the success of the reintroductions and exploration of the factors that correlate. • Further reintroductions, following CitM protocols.

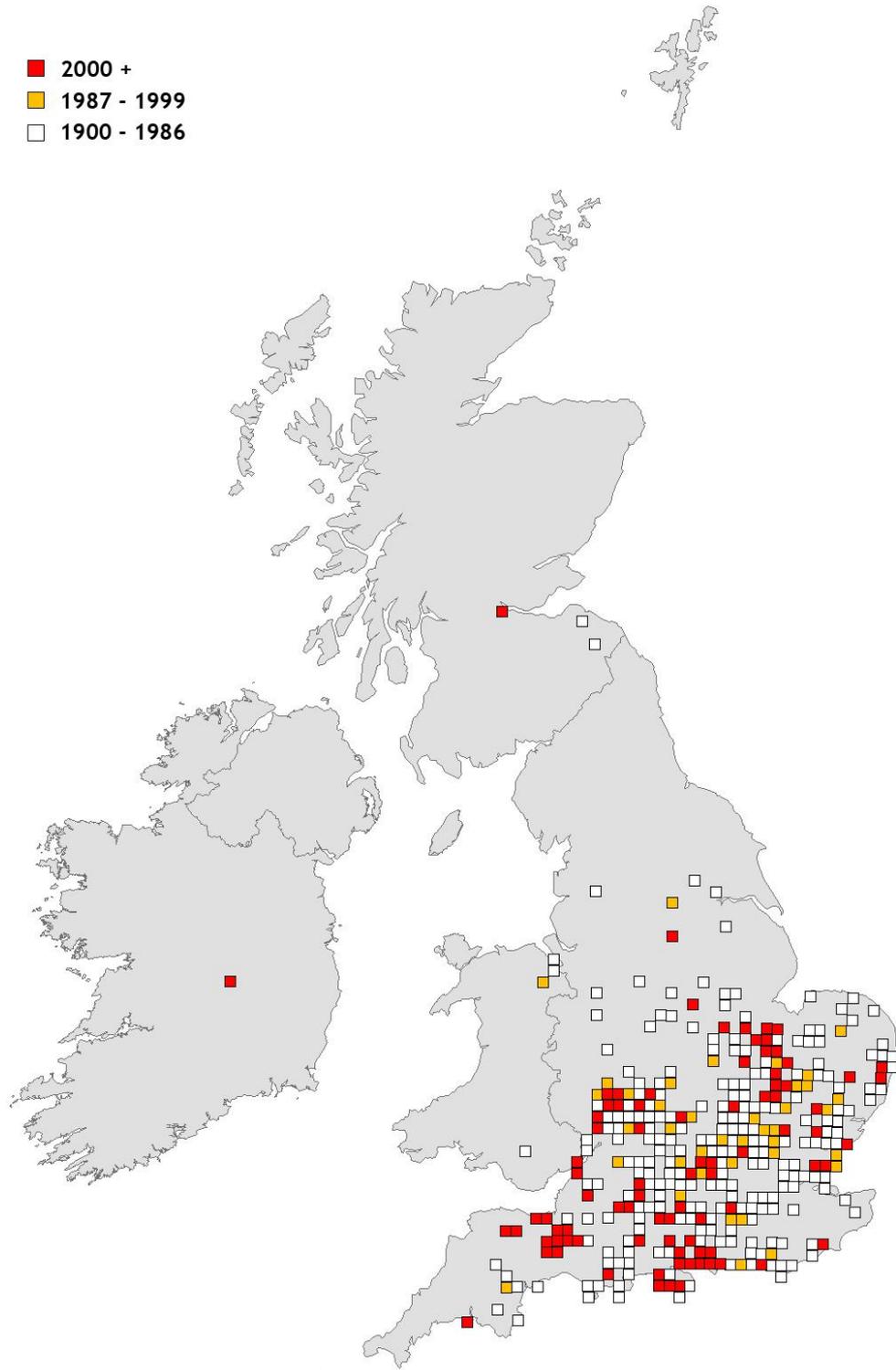


Figure 1: Spreading Hedge-parsley *Torilis arvensis* distribution across Britain and Ireland. The data used to create this map has been provided under licence from the Botanical Society of Britain and Ireland (BSBI) and accessed from the Society's online database in 2020.