

# Spreading Hedge-parsley

## *Torilis arvensis*



Spreading Hedge-parsley can be confused with a number of similar species such as Shepherd's-needle, Fool's-parsley, Wild Carrot, Upright Hedge-parsley, Knotted Hedge-parsley and Cow Parsley. Of these species Spreading Hedge-parsley is the only species that has all of the following features; hairy leaves, where the hairs are pressed against the leaf surface, a solid stem, several main stems (rather than one main stem), bristle-tipped leaflets and seeds which are covered in long, slender spines which are hooked at the very tip.

### Lifecycle

An annual herb, flowering from June to October, often not setting much seed until August. The seeds are mainly autumn germinating and are thought to be relatively short-lived in clay soils but can be longer lived in free-draining soils. Seeds germinate between October and December and seedlings form an overwintering rosette.

### Survey method

Individual plants should be counted, but in larger populations an estimate should be made.

A member of the carrot family which looks similar to its close relatives, Cow Parsley, Upright Hedge-parsley and Knotted Hedge-parsley. It grows up to 40 cm tall and is often branched. Stems are solid, cylindrical and strongly ridged and leaves are triangular in outline but are pinnate (divided into small leaflets), giving it a feathery appearance. Hairs present on the leaves give the plant a 'frosted' look. The small white to pink flowers (2 mm across) are grouped into three and five flower clusters, which collectively form an umbrella inflorescence. Each individual flower produces two oval seeds (between 4-6 mm long) which are covered in slender, long spines that have tiny hooks at the very tip.

### Habitat

Spreading Hedge-parsley is an annual species, typically found in the margins of arable fields sown with winter cereals. This species has also occasionally been recorded in road verges and railway sidings passing through arable land.

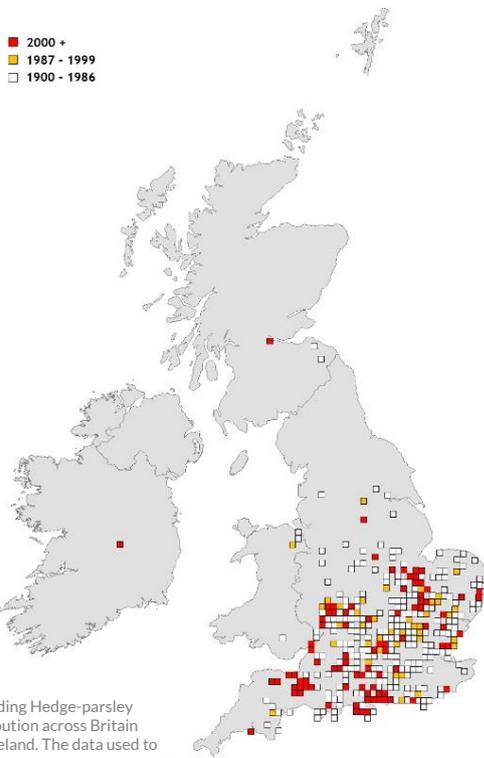
Spreading Hedge-parsley is largely associated with clay loams and calcareous clays. It is normally found within species-rich arable plant communities with species such as Shepherd's-needle, Corn Buttercup, Broad-leaved Spurge and Corn Parsley. However, it may just be present with a few other species like Knotted Hedge-parsley and Upright Hedge-parsley.

### GB status and rarity

Endangered

### Protection under the law

This plant is included as a species "of principal importance for the purpose of conserving biodiversity" under Section 41 (England) of the Natural Environment and Rural Communities Act 2006.



Spreading Hedge-parsley distribution across Britain and Ireland. The data used to create this map has been provided under license from the Botanical Society of Britain and Ireland (BSBI) and accessed from the Society's online database.

**Distribution**

Spreading Hedge-parsley was formerly widely distributed across England as far north as Yorkshire, with the majority of the records concentrated in the south and east. Although previously reasonably widespread, this species was never a noteworthy agricultural problem. However, its distribution has significantly reduced over the past 60 years, mainly because of the intensification of arable farming. Spreading Hedge-parsley is now most frequent in Somerset, Worcestershire and East Anglia.

**Reasons for decline**

Spreading Hedge-parsley is a poor competitor in crops with high fertiliser applications. This species produces seed late in the summer and is badly affected by early harvesting dates (especially for winter barley) and early cultivation of stubbles (ploughing or minimum tillage following herbicide application). This species is likely to be susceptible to broad-spectrum herbicides.

**Habitat management**

Ideal management on arable land involves annual cultivation in autumn (between October and early December), without subsequent disturbance until Spreading Hedge-parsley plants have flowered and set seed.

Spreading Hedge-parsley will grow within a crop, such as an autumn-sown cereal or within an uncropped cultivated margin or plot.

The application of broad-spectrum herbicides to areas where it occurs will reduce population sizes. However, if required, treatment of problematic weed species could be undertaken through targeted herbicide use, particularly of graminicides to reduce the cover of autumn germinating grass weeds. Fertiliser can encourage problem weeds so it should not be applied to uncropped areas and only applied in limited quantities on cereal headlands and wildlife cover crops where necessary.

Using a reduced seed rate and/or a crop variety that has fewer tillers on conservation headlands will also benefit Spreading Hedge-parsley, as it is not very competitive. If this species is growing within a crop, it is best if the crop is harvested after Spreading Hedge-parsley has set seed, usually later into August. Leaving stubbles as long as possible into autumn is beneficial as it allows plants time to set seed, even if the crop has been harvested earlier as seed can ripen on the parts of plants remaining in the stubble.



© Cath Shellswell