

## *Filago vulgaris* Lam.

### Common Cudweed

*Filago vulgaris* is a small annual plant with a dense covering of white-woolly hairs on the stem and leaves, and straw-coloured tips to the greenish phyllaries. It is associated with a diverse range of dry, open and disturbed habitats, including heathland tracks, roadside banks, bare chalk, arable fields, disused quarries and gravel pits. Population strongholds are located in the east, south-east and southern coast of England, and to a lesser extent along the Welsh and eastern Scottish coastlines. It is widely scattered elsewhere, becoming rarer in the north and west, but has declined across its range, leading to an assessment of Near Threatened in Great Britain.



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#### IDENTIFICATION

The stems (-40 cm), branches and linear-lanceolate to lanceolate leaves of *Filago vulgaris* are covered in a dense felt of white-woolly hairs, giving the plant a silvery appearance (Rich & Jermy 1998). Leaves are 10-20(30) mm long and 1-3(4) mm wide with wavy (undulate) margins (Davis 1975). Stem leaves are widest below the middle or oblong in outline (Rich & Jermy 1998) and often have a distinct midrib (Poland & Clement 2009). The tip of the leaf is usually blunt, occasionally acute, but lacks a mucronate tip.

Plants are often regularly branched above the middle of the main stem, forking into 2-3 branches below each cluster of capitula (Rose 2006; Stace 2010). Capitula (5 × 1.6 mm) are in quite neat and dense ±globose clusters of (15)20-c.40 (Davis 1975). Clusters measure c.10-12 mm across and are



Overwintering (seedling) rosettes of *Filago vulgaris* at Baglan Bay, Neath Port Talbot. © Charles Hipkin.

located in branch forks and terminating branches (Stace 2010). Subtending leaves are shorter than the clusters of capitula and consequently do not overtop (Stace 2010).

The acute phyllaries of *F. vulgaris* often have straw-coloured tips and edges and thickly scarios margins. The colouration of the phyllaries is distinctive, with most often having a flush of pink in the middle grading to a greener colour towards the base (Rich & Jermy 1998).

#### SIMILAR SPECIES

*F. minima* has smaller stems (-25 cm) and leaves (4-10 mm), a cluster of capitula that is narrow and ±oval (not globose), and less capitula per cluster (2-8(14); Rose 2006; Stace 2010).

*F. pyramidata* is covered in a felt of grey-woolly hairs, has parallel flat-edged leaves with a mucronate tip, and outer phyllaries with yellow recurved bristle-points (Stace 2010). *F. lutescens* has clusters of capitula that are over-topped by 1-2 subtending leaves, and capitula have outer phyllaries with bright or dark red tips, although the colour of the red tip begins to fade as the flower heads mature (Rich 1999a).

#### HABITATS

An annual plant occurring in a diverse range of dry, open and periodically disturbed habitats on acidic, neutral and occasionally calcareous soils (Halliday 2002). It has been recorded from heathland tracks (Rand & Mundell 2011), on a range of habitats over free-draining glacial gravels (Wells 2003), as an associate of intensely rabbit-grazed turf on south-facing rocky slopes (Chater 2010), on bare chalk, dry roadside banks, weedy arable and cultivated fields, quarries, tracks, sand and gravel pits, and disused railway

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embankments. *F. vulgaris* is often found growing with other annuals such as *Apera spica-venti*, *F. minima*, *Hypochaeris glabra*, *Ornithopus perpusillus*, *Scleranthus annuus* and *Trifolium arvense*.

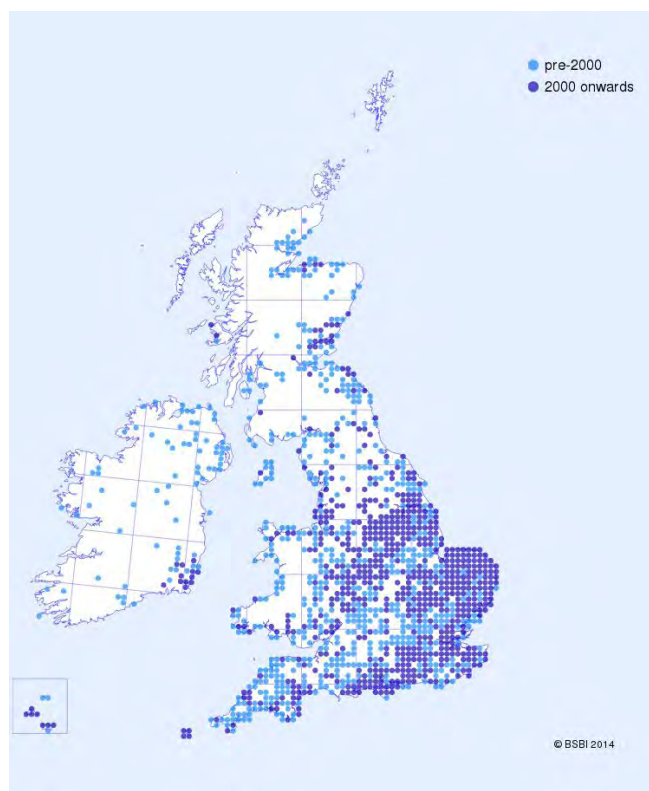
### BIOGEOGRAPHY

British strongholds for *F. vulgaris* are located in the east, south-east and along the southern coast of England. It is widely scattered across Wales, especially in coastal areas, but is rare in northern England, Ireland and Scotland, save for the eastern and north-east coastlines near the Firth of Forth and the Moray Firth where it is widely scattered.

*F. vulgaris* reaches the northern limit of its European range in Caithness, Scotland and Jutland in northern Sweden (Halliday 2002; Preston 2007). The species belongs to the European Southern-temperate element (Preston & Hill 1997), with its easterly limits in north-western Iran and its southern limit through Macronesia, Algeria, Crete and northern Turkey. *F. vulgaris* is widely naturalised in North America.

### ECOLOGY

A winter or spring annual, flowering from June to September. Plants consist of a main stem with branches and 'flowering heads' comprising a cluster of capitula. Each capitula is surrounded by phyllaries (receptacular scales) and contains a cluster of florets, the inner of which are hermaphrodite (i.e. contain stamens and styles) and the outer female (i.e. contain styles only). The number of hermaphrodite florets [(1-)2-3(-4)



Distribution of *Filago vulgaris* in Great Britain and Ireland.

in the case of *F. vulgaris*] is an important diagnostic character best examined before plants begin to fruit (Rich 1999b).

Fruits are ellipsoid achenes (0.7-0.9 × 0.3-0.4 mm) that are a green-brown colour and have a lustrous surface covered with whitish papillae (Bojňanský & Fargašová 2007). Plants that produce numerous small seeds usually have a persistent soil seed bank. Although no studies have been found specifically relating to longevity and *F. vulgaris*, other *Filago* species (e.g. *F. minima*) have been reported as persisting in the soil for more than 40 years (Thompson et al. 1997).

Seed germinates in the autumn and occasionally in early spring, with seedlings and mature plants requiring sunny, open and dry conditions on moderately infertile soils (Hill et al. 2004). Populations can fluctuate and may be transient depending on conditions from one year to the next, although a decline of more than 20% occurred between 1930 and 1999 (Cheffings & Farrell 2005).

No dispersal studies have been undertaken for the species, but it is likely that the primary mechanism of seed dispersal is via wind due to the presence of pappi, with secondary vectors probably including the feet and fur of animals and the tyres and equipment of farm machinery.

### THREATS

The decline of *F. vulgaris* has been attributed to changing agricultural practices, notably the increase in the application of herbicide and the sowing of year-round crops, as well as the cultivation of marginal grassland to arable (Halliday 2002). As a plant requiring disturbance, it has suffered from a pervasive 'tidying-up' of the countryside in recent years.

### MANAGEMENT

Management is often passive, with suitable habitat kept open by a combination of walkers, rabbits or vehicle activity. In arable areas, management should include the provision of uncropped, rotationally disturbed margins or fallow areas in locations where the species is extant or has been recorded in the recent past.

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