

Small-flowered Catchfly

Silene gallica



Lifecycle

Small-flowered Catchfly is an annual herb flowering from June to October. Seeds can germinate in autumn or spring, but in arable situations this species tends to be found in spring-sown crops.

Seed dormancy for Small-flowered Catchfly is unknown, but it is likely to be long-lived as small, regular-shaped seeds tend to be long-lived.

Habitat

An arable species, typically found in the margins of fields sown with spring crops. This species is also occasionally found on dry, sunny banks near to the sea and along former railway lines. Other than regular disturbance, low soil nutrient levels and open vegetation are important requirements for this species. Many of the largest populations are found where root crops are a major component of crop rotations.

Small-flowered Catchfly is found on nutrient poor sands and sandy loams, which in most cases are acidic in nature.

A small campion that grows to about 30 cm in height. The whole plant is hairy and the hairs on the upper part of the plant are sticky, hence the name 'catchfly'. The lower leaves are narrowly oval in shape, while the upper leaves are more slender. The young leaves form a rosette close to the ground which dies off as the plant matures.

Small-flowered Catchfly could be confused with White Campion and Night-flowering Catchfly. The flowers of these two species are larger than those of Small-flowered Catchfly which are up to 15 mm across. White Campion does not have sticky glandular hairs on the upper stem, and the flowers of Night-flowering Catchfly close during the day.

Small-flowered Catchfly is normally found within species-rich arable plant communities with Corn Spurrey, Weasel's-snout and Corn Marigold. At a small number of sites this species grows alongside Broad-fruited Cornsalad.

GB status and rarity

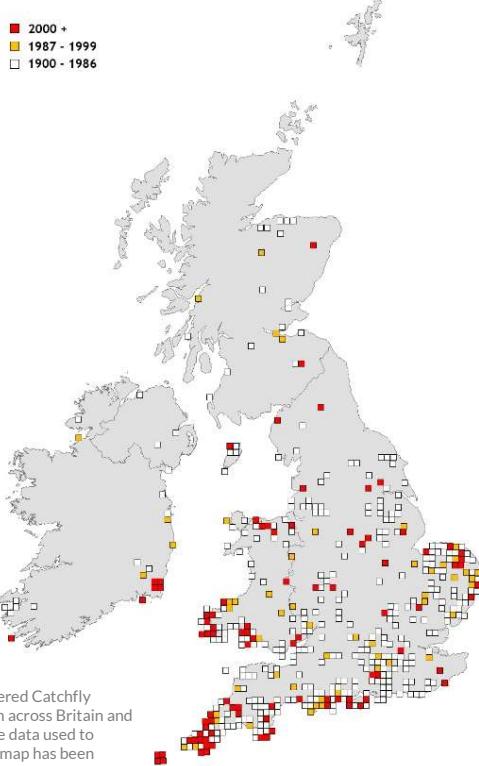
Endangered

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, and listed as a priority species under Section 7 of the Environment (Wales) Act 2016.

Survey method

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



Distribution

This species has disappeared from an estimated 70% of its former range, when it was widespread across southern England and Wales. Most sites are now found near the coasts of south-west England and Wales. There are recent records scattered throughout north and eastern England and also in Scotland.

Reasons for decline

Small-flowered Catchfly is a poor competitor preferring open vegetation, low nutrient levels and regular cultivation of soil. Threats include intensive farming, particularly the development of competitive cereal crop varieties that can grow quickly, closing the cereal sward and preventing light reaching seedlings. Widespread use of broad-spectrum herbicides has also had a negative effect on this species.

Habitat management

Ideal management on arable land involves annual cultivation in either spring (between February and April) or autumn (between October and early December), without subsequent disturbance until small-flowered catchfly plants have flowered and set seed.

Small-flowered Catchfly readily germinates from seed, and requires soil disturbance, such as ploughing, to bring buried seed to the soil surface and trigger germination. It will grow within a crop, such a spring of autumn sown cereal, root crops, or within uncropped cultivated margins, field corners or plots.

It is susceptible to broad-spectrum herbicides and their use will reduce population sizes. However, if required, treatment of problematic weed species, such as sowthistles, could be undertaken through targeted herbicide use. Fertiliser can encourage problem weeds, but fertiliser is not usually applied to uncropped areas for arable plants and its use is limited on cereal headlands and wildlife cover crops.

Using a reduced seed rate and/or a crop variety that has fewer tillers on conservation headlands will also benefit small-flowered catchfly as it is not very competitive. If this species is growing within a crop, the crop should be harvested after small-flowered catchfly has set seed, usually later into August. If conditions are right, seeds can germinate later in the summer, flower and seed before the first frosts.

In non-arable situations, populations of small-flowered catchfly should be maintained through appropriate scrub clearance. Small scale manual disturbance could also be carried out to create bare ground for seed germination.



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