

# Red Hemp-nettle

## *Galeopsis angustifolia*



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### Lifecycle

Red Hemp-nettle is an annual herb, flowering from July to October. It is spring germinating and seeds are long-lived in the soil seed bank. Red Hemp-nettle can appear up to 20 years after a previous disturbance. Plants can re-grow following crop harvest - flowering and producing seeds for a second time.

### Habitat

This species grows in arable fields, coastal shingle, railway ballast and limestone scree. It has also been recorded growing on Salisbury Plain within tank tracks. On arable land this species is largely associated with spring-sown cereal crop margins.

When growing in soil Red Hemp-nettle is found on free-draining calcareous soils, particularly those

A relatively low-growing plant with an erect stem growing to 50 cm in height, though it can be much shorter on low nutrient soils. The short-stalked, spear-shaped, narrow leaves are pointed at the tip, toothed on the edges and covered with soft hairs.

Red Hemp-nettle has asymmetrical flowers with pinkish-red petals which have white blotches at the base. The flowers have a long tube and look like they are 'jumping' out of the short green calyx tube.

Red Hemp-nettle is unmistakable when in flower, but it can be confused with Red Bartsia when not in flower. The lower leaves of Red Bartsia have stems that are less than 6 mm long, whilst lower leaves of Red Hemp-nettle have stems over 6 mm long.

derived from chalk. This species is normally found within species-rich arable plant communities with Rough and Prickly Poppies, Night-flowering Catchfly, Field Gromwell, Narrow-fruited Cornsalad and Dense-flowered Fumitory.

### GB status and rarity

Critically Endangered

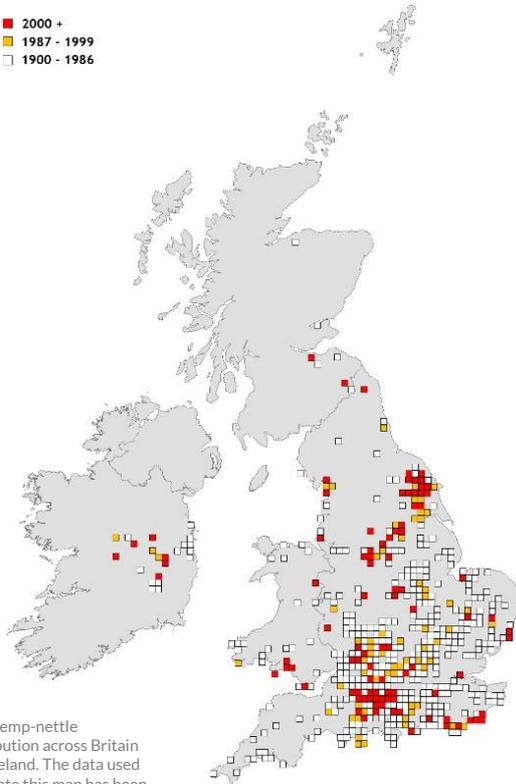
### Protection under the law

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.

### Survey method

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

■ 2000 +  
■ 1987 - 1999  
□ 1900 - 1986



Red Hemp-nettle 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

Once widespread on calcareous soils from Devon to Yorkshire, it is now largely restricted to south and south-east England from Dorset to Cambridgeshire.

### Reasons for decline

The main cause of decline is intensification of arable farming. Key factors include the use of more competitive crop varieties, increased use of fertiliser and broad-spectrum herbicides. Red Hemp-nettle is a very poor competitor and only seems to survive in very open habitats. It is rarely found growing within a crop or under dense cover. Being spring-germinating this species has suffered from the switch from spring to autumn cropping.

### Habitat management

Ideal management on arable land involves annual cultivation in spring (between February and April) without subsequent disturbance until Red Hemp-nettle plants have flowered and set seed. Stubbles should be left as long as possible into autumn as plants can re-grow and set seed for a second time.

Red Hemp-nettle prefers very sparse cover and is often found with few associated species. If there is high cover of other plants, be that a cereal crop or wild plants including problem species, the population size declines and the plants often appear to be smaller. Uncropped cultivated margins or plots are the best management for this plant. However, it will grow within a crop, such as spring sown cereal or cereal headland where herbicide is not used.

This species is very susceptible to broad-spectrum herbicides and their use will reduce population sizes. However, if required, treatment of problematic weed species could be undertaken through targeted herbicide use. This could be undertaken along margins where problem weeds have increased in cover and detrimentally suppressing Red Hemp-nettle.

Fertiliser can encourage problem weeds, and should be limited on uncropped areas, and even cereal headlands or other conservation measures that are put in place for arable plants. It also encourages vegetation growth which can have a negative affect reducing the population size of Red Hemp-nettle.

In non-arable situations, populations of Red Hemp-nettle should be restored and maintained through annual soil disturbance during the spring e.g. rotovation. Scrub clearance may be required at coastal shingle, limestone scree and railway ballast sites with Red Hemp-nettle.

Although Red Hemp-nettle prefers very open and sparse habitats, the species relies on the overall community of plants to attract pollinating insects to spread pollen between plants. Thus, it rarely grows completely alone.