

Yellow Centaury

Cicendia filiformis



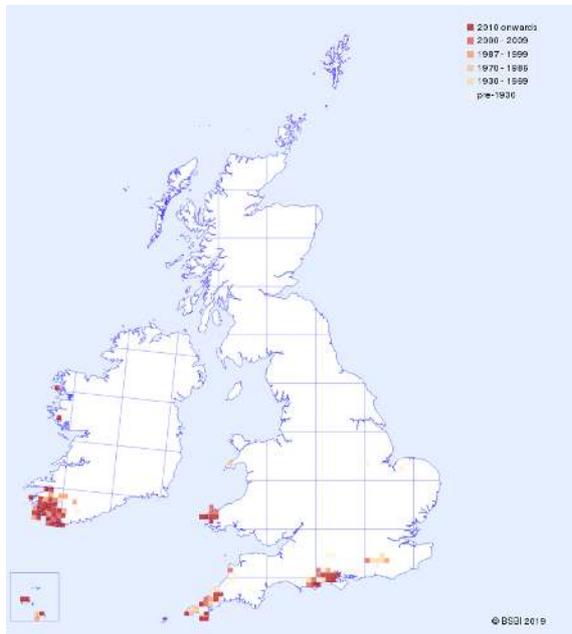
Description

Yellow Centaury is a diminutive yellow-flowered member of the Gentian *Gentiana* family. Between 1-12cm in height, it has single, 4-petaled flowers at the end of each stem (which may be branched). The delicate flowers are just a few millimetres in diameter, and tend only to open only in sunshine. The fleshy stems are green, becoming reddish in droughty conditions, and the ripe seed capsule is often orangey-red. A rosette of slender leaves can be found at the base of the stem.

Lifecycle

Yellow Centaury is a summer annual that flowers between June and September. Seeds may germinate whenever conditions are suitably warm and moist, with both spring and autumn germination seen. Seed dormancy is broken by soaking and the plant also requires very open conditions to germinate, so it is generally found in places where water lies for at least 4 months in the winter, inhibiting grass growth.

This species can form substantial seed banks and large numbers of plants often appear after disturbance, such as that created by heavy vehicles. In such cases, the population then gradually decreases as other vegetation re-colonises, until the next disturbance event. In other situations, ongoing livestock grazing can create disturbance on a smaller scale and limit vegetation growth, resulting in a more stable population.



Yellow Centaury 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.

Habitat

Lowland heathland landscapes provide the key habitats for this species, particularly where there is cattle or pony grazing such as on traditionally managed

commons and heathland tracks. It is found in distinct microhabitats, including rutted trackways, damp hollows and the drawdown zone of seasonal pools, where the slightly enriched, clayey mineral soil is exposed. It is also more rarely found along forestry rides, on coastal cliffs and dune slacks.

A suite of damp, open ground loving species that are also rare or declining are often found growing with Yellow Centaury, including Allseed *Linum radiola*, Chaffweed *Anagallis minima*, Three-lobed Water-crowfoot *Ranunculus tripartitus* and Pillwort *Pilularia globulifera*.

Distribution

Essentially a south-western species, it is largely restricted to heathland areas in Cornwall, Dorset, the New Forest, Pembrokeshire and south-west Ireland. It appears to have become extinct in North Wales, East Anglia and the Thames Basin heaths.

GB status and rarity

Yellow Centaury is classified as 'Nationally Scarce' (recorded in 16-100 hectads in Great Britain) and classified as 'Vulnerable' in The Vascular Plant Red Data List for Great Britain because of a significant decline in its area of occupancy.

Protection under the law

It 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 can be counted or, for larger populations, the dimensions of the stand and density of plants can be recorded together with an overall indication of the approximate number of plants. The small stature of the plant and propensity of the flower to remain closed can make it a hands-and-knees job. Like many annuals, numbers can fluctuate widely between years, and therefore regular surveys are needed to in order to judge the heath of a population

Reasons for decline

The loss of heathland habitat brought about by changes in agricultural economics and subsequent afforestation,

development or agricultural "improvement" caused historic declines. Changes in management, particularly the cessation of livestock grazing and the surfacing of trackways, has resulted in an ongoing reduction in the number and size of populations. However, recent conservation work has resulted in some new and restored populations.

Habitat management

Yellow Centaury primarily needs bare or lightly vegetated, winter-wet conditions. Close cattle and pony grazing is an ideal way to maintain open, lightly disturbed ground. Other suitable management may entail gorse and scrub clearance, deliberate rutting and scrape/shallow pool creation.



A re-instated, deliberately rutted track on Stoborough Heath, Purbeck resulted in the reappearance of small population of Yellow Centaury after a 20-year absence.

A large, long-lived seed bank means that habitat restoration work can be effective. For example, populations in Purbeck, Dorset and on the Lizard, Cornwall, appeared after scrub clearance, while vehicle movements have enhanced populations on Dowrog Common in Pembrokeshire and again in Purbeck. However, ongoing management is needed to prevent populations become out-competed again within a few years, as has been the case on some sites. Populations in the New Forest are largely maintained through close livestock grazing.

Acknowledgements/further information

[Yellow Centaury factsheet](#), Plantlife

[Yellow Centaury Species Dossier](#), Freshwater Habitats Trust

Yellow Centaury by Andy Byfield in Stewart, Pearman and Preston 1994 *Scarce Plants in Britain* JNCC

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