

Red Hemp-nettle: A National Treasure

Red hemp-nettle (*Galeopsis angustifolia*) is a tiny annual plant with pinkpurple flowers. Red hemp-nettle is listed as 'Critical' on the UK vascular plant red list, which means that it is one only step away from 'Extinct in the Wild'.

Mainly growing in arable fields on light soils, it has declined due to the use of fertilisers and herbicides, loss of field margins and autumn cultivation patterns which destroy plants before they have shed their seeds. At Cleeve Common it grows on fragile scree habitats where the competition from other plants is minimal and the conditions are ideal for this delicate annual to complete its rapid lifecycle.

The "main" colony was found in 2003 growing on the westfacing screes below Cleeve Cloud and subsequently two much smaller colonies were found close by. These were monitored by Cleeve Common Trust for several years and a plan was formulated to take action to try and help conserve the species.



In 2013, seed was harvested from Cleeve Common and sent to the Millennium Seed Bank. The Millennium Seed Bank is the largest *ex situ* plant conservation project in the world and is hosted by Royal Botanic Gardens at Wakehurst. They used the seed to produce a larger seed collection that will be made available for use in conservation.

In 2015 a trial introduction using seed harvested from the main colony was carried out on a similar west-facing scree slope, further north along the scarp. The seed germinated readily and numbers of the plant built up gradually over three years. In 2018 the introduced colony produced more seed than was used in the introduction, showing that the colony had become self-sustaining.

By the end of 2017 the Millennium Seed Bank had managed to produce some 32,000 seeds from the original 1,263 seeds sent from Cleeve Common.

In 2018 some of this seed was brought back to Cleeve Common (leaving plenty still available in storage for other projects) and used in further introductions. This time four new locations in and around Postlip Quarries were chosen. Careful records were kept of scree particle size, depth, slope and aspect to see which conditions prove most favourable. All four of these introductions look very promising, with one colony producing more seed than was used in its introduction, during its first growing season.

There are now eight colonies of this Critically Endangered plant at Cleeve Common. Importantly the new colonies are a considerable distance away from the originals, and occupy a range of different aspects, slopes etc., which should make the species less vulnerable to chance events damaging the whole population. In other words, all our red hemp-nettle is no longer in one basket!

You can find out more about the Millennium Seed Bank at https://www.kew.org/wakehurst/whats-at-wakehurst/millennium-seed-bank

Further information on red hemp-nettle from Plantlife at https://www.plantlife.org.uk/application/files/1015/3932/9821/
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