

Back from the Brink – Species summary

Broad-leaved Cudweed

BftB project: IP03 Colour in the Margins

Project lead organisation: Plantlife

Contact: enquiries@plantlife.org.uk

Species name – common & scientific	Broad-leaved Cudweed <i>Filago pyramidata</i>
Photograph	 <p>© RI Moyse / Back from the Brink</p>
Taxon group	Vascular plant
Conservation status	Endangered
UK distribution	Broad-leaved Cudweed is known from 13 widely dispersed sites over the chalk and Jurassic limestone of south-east England and East Anglia. Its former range was concentrated on the North Downs of Kent and Surrey and on the East Anglian chalk in south-east Cambridgeshire, and there are still isolated sites in these areas. There are scattered records from as far north as Yorkshire and west as Cornwall (see pages 10-11 of the Portfolio for more information).
Habitat associations	Autumn- and spring-cultivated arable land, quarries and spoil heaps that have loose or compacted soil (see pages 5-7 in the Portfolio for more information).

BftB work carried out:	
Survey & Monitoring	Population count/survey of natural and reintroduced populations (see pages 12-15 and 18-21 of the Portfolio for a brief description, four case studies and survey form).
Sites habitat management works	<p>There have been three interventions for this species:</p> <ul style="list-style-type: none"> • At Plantlife's Ranscombe reserve Broad-leaved Cudweed was present in a field where the population had slowly reduced as the grassland sward thickened. Scrapes provided new habitat and installation of a drove-route linked different areas of the site allowing cattle to be driven between fields and transport seeds with them (see page 9 in the Portfolio for a case study). • Management advice provided at extant locations (see page 12 of the Portfolio for information on management). • Reintroductions undertaken to create a model for undertaking this type of activity (see pages 16-17 in the Portfolio for information about how to reintroduce this Broad-leaved Cudweed and a case study).
Conservation 'interventions' incl. reintroductions & translocations	<p>Two reintroductions have been undertaken: in Surrey (only four plants recorded in year one and also in year two) and Buckinghamshire/Hertfordshire (unsuccessful in year one). Another trial is being undertaken as part of the legacy of Colour in the Margins. Seed harvested in the 1990s from an extant site in Berkshire has been grow-out by Kew's Millennium Seed Bank to bulk up the seed. This will be sown at a site near the original population over successive years to build a soil seed bank and increase the chances of successful establishment in the long term.</p>
Technical advice provision	Tailored reports on survey results and management advice was sent to landowners. Production and dissemination of species ecology and conservation portfolio.
Links made with other taxa / conservation work?	Ground-pine and other arable farmland flora
Wider engagement & advocacy activities?	The Portfolio and species briefing sheet has been sent to those involved with the management and monitoring of all the extant sites in the UK.
BftB results obtained:	
Recorded Distribution (in BftB focal areas)	Thirteen populations of Broad-leaved Cudweed have been recorded since 2000 in the UK, of which two fall within CitM focus areas; one in Wessex and another in the North Downs (Figure 1; Record data analysed as part of Natural England's Species Recovery Programme funded Mapping IAPA and S41 species by Plantlife).
Recorded Abundance of species populations	The population sizes of annual plants vary enormously from year-to-year, dependent on a wide range of variables. Abundance data has been recorded annually at project sites between one and four times during the project. However, without a comprehensive dataset of population counts from previous years and a thorough understanding of the variables effecting the abundance of the species it is not possible to make valid assessments of trends within this timeframe. Colour in the Margins has made progress on both these fronts by providing a few years of population counts and improving our understanding of the autecology of the species. Thus, we will be better able to interpret changes of abundance in the future.

<p>Other results documented?</p>	<p>Colour in the Margins has presented new information on the soil nutrients and associated vascular plant communities present at sites with Broad-leaved Cudweed (see pages 6-8 and 10 of the Portfolio).</p>
<p>Species Recovery Curve progress made</p>	<p>The potential to give management advice for this species was limited as the habitat where it grows on the two sites within CitM focus areas are either already managed very well and/or are the subject of random disturbance such as along the tracks of dirt roads.</p> <p>Reintroductions have been undertaken, with limited success, to identify biological, management and environmental factors that need to be in place for successful translocations of Broad-leaved Cudweed.</p> <p>These activities are working towards trialling of recovery solutions and therefore Broad-leaved Cudweed is deemed to be at step 6 on the recovery curve.</p>
<p>Recommendations for future work:-</p>	<ul style="list-style-type: none"> • Further work is required to identify processes necessary for making reintroductions successful in the long term. Another trial is being undertaken to sow seed over successive years to determine whether this is a better strategy to create a soil seed bank. • Investigate seed longevity in the soil seed bank as very little is known. • Further investigation of seed dormancy, as this species has very variable germination patterns and it is unknown what triggers germination.

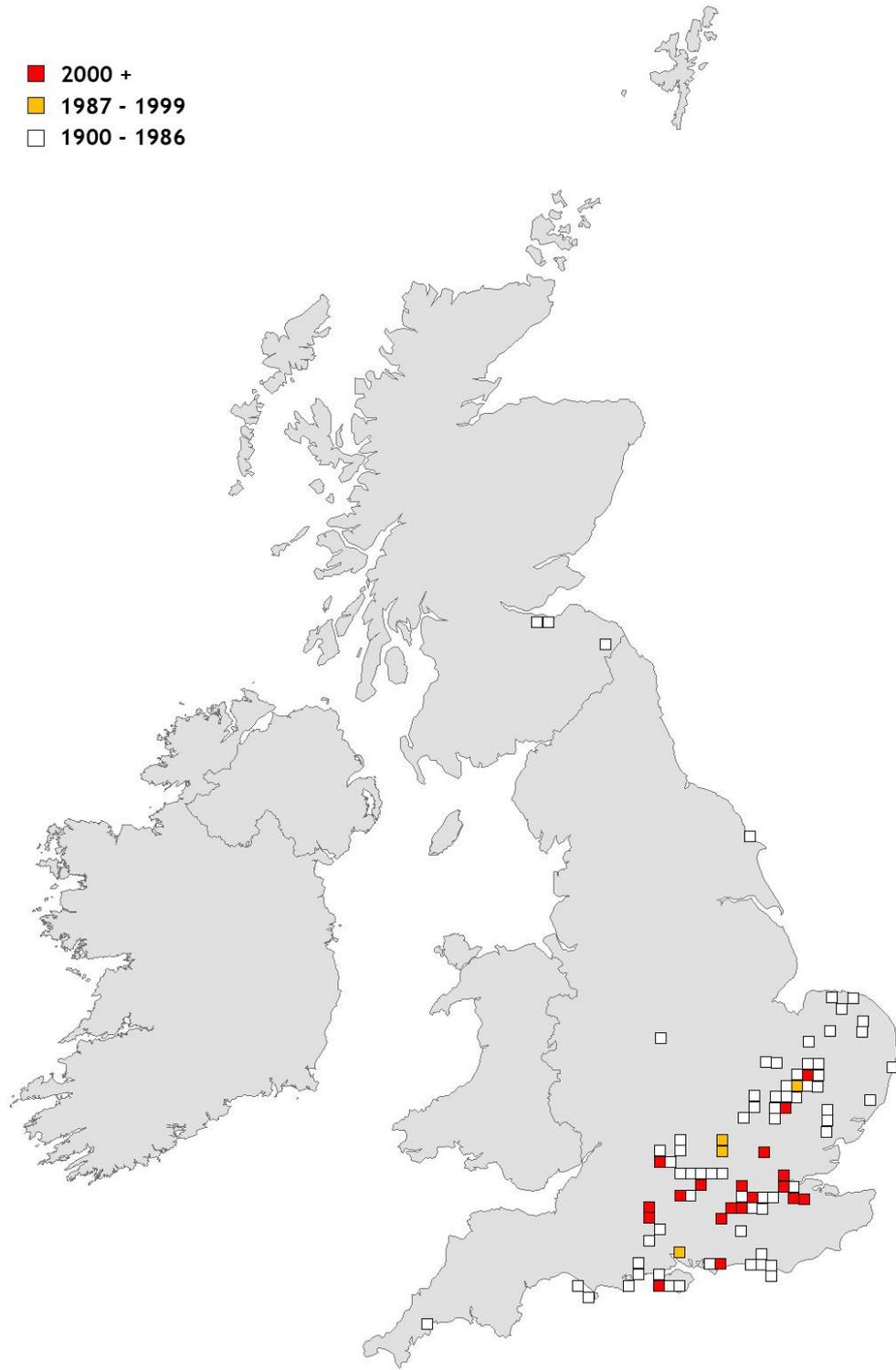


Figure 1: Broad-leaved Cudweed *Filago pyramidata* distribution across Britain and Ireland. The data used to create this map has been provided under licence from the Botanical Society of Britain and Ireland (BSBI) and accessed from the Society's online database in 2020.