

Back from the Brink – Species summary

Annual Knawel

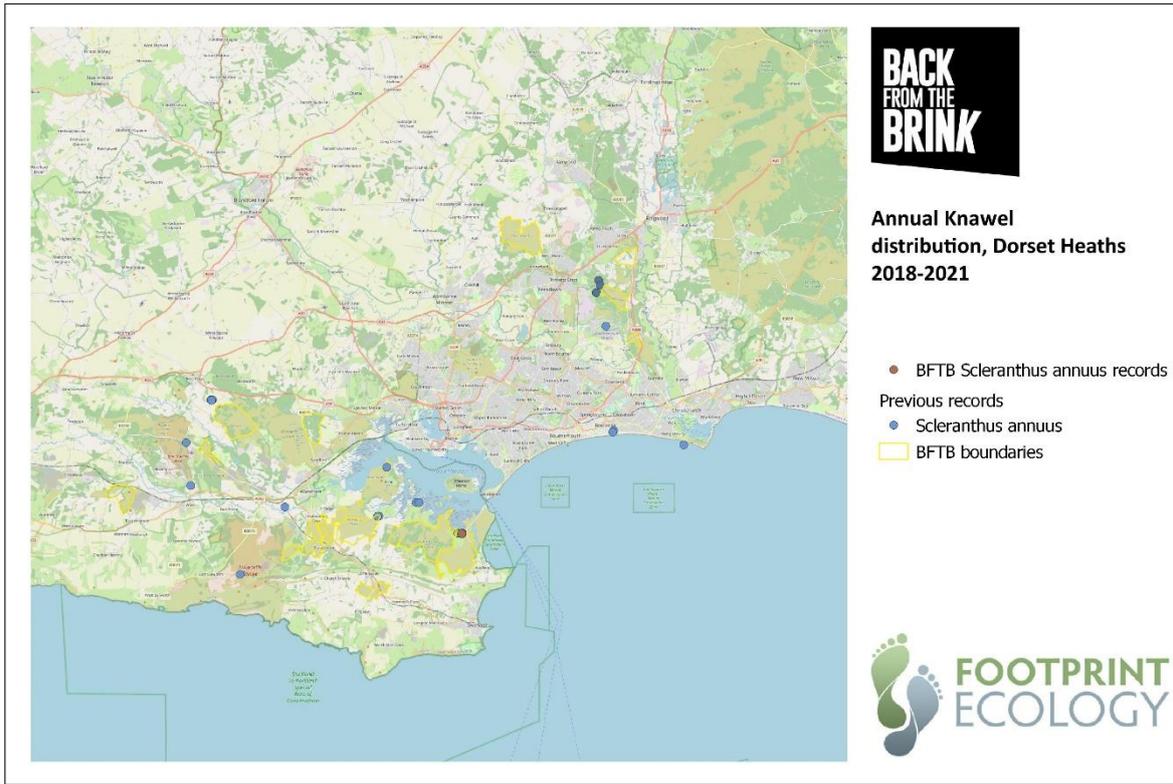
BftB project: IP01 Dorset's Heathland Heart

Project lead organisation: Plantlife

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Species name – common & scientific	Annual Knawel – <i>Scleranthus annuus</i> (<i>subsp annuus</i>)
Photograph	 <p>© Alex Hyde / Back from the Brink</p>
Taxon group	Vascular plant - Caryophyllaceae
Conservation status	NERC S.41.GB & Eng Red listed - IUCN Endangered, Nationally & Dorset scarce.
UK distribution	Annual Knawel is widespread throughout Britain but most frequent in the south. Subsp. annuus is widespread where open habitats persist on seasonally parched soils; subsp. polycarpus is mainly found in the Breckland of East Anglia and parched grasslands in the West Midlands (but may be under-recorded elsewhere).
Habitat associations	This species requires open ground and sandy, acidic, soils and can be found in a variety of habitats. In a heathland context it is found in very short acid grassland where there is bare ground created by livestock grazing and trampling, rabbit activity or recreation pressure. On arable land, it is typically found in the margins of fields sown with winter cereals and in fallows. It is also found in sandy quarries and on road cuttings and occasionally on river or maritime shingle.

BftB work carried out:	
Survey & Monitoring	Surveys were carried out at 4 sites with old records (Arne x 2, Middlebere Heath, Greenlands fields nr Godlingston). Monitoring of 15 rotovated/ploughed areas was carried out in the summer following rotovation for each.
Sites habitat management works	Rotovation and power-harrowing in different winter months was tried at 3 sites (one more than planned), total of 15 plots (5m x 20m) across 3 years in an attempt to restore the species from the buried seedbank.
Technical advice provision	Ecological advice on future management was given to the site managers at the one remaining site by BFTB staff plus an information pack provided at end of project.
Links made with other taxa / conservation work?	The rotovation provided suitable habitat for a suite of associated RDB/scarce species e.g. Hairy Bird's-foot-trefoil <i>Lotus subbiflorus</i> , Clustered Clover <i>Trifolium glomeratum</i> Smooth Cat's-ear <i>Hypochaeris radicata</i>
Wider engagement & advocacy activities?	Talks given to the Wild Purbeck Partnership, 16 th European Heathland Workshop, Dorset Recorders, Dorset Flora Group, Bournemouth Natural Science Society and BFTB volunteers provided information and raised awareness about Annual Knawel in Dorset. A factsheet was created for this species.
BftB results obtained:	
Recorded Distribution (in BftB focal areas)	There are recent records from one site only. With the exception of a farm population outside of the Dorset Heaths, the species has not been recorded from the remaining 20 Dorset sites within the last 20 years (however, it is not known whether targeted surveys have been carried out outside of Purbeck and the species may be persisting at some locations).
Recorded Abundance of species populations	BFTB monitoring showed that the remaining Purbeck population increase from 30 to 100 flowering plants between 2018 and 2021 (this was as a result of favourable weather conditions rather than BFTB interventions).
Species Recovery Curve progress made	1 - 6 recovery solutions trialled (start point is now considered to be an underestimate). The management interventions were not successful at restoring the site at 3 locations where it has been recorded previously, or in extending the distribution of the 1 remaining site on the Purbeck Heaths



Map 1: Distribution of Annual Knawel *Scleranthus annuus* in Dorset. Pre-project data provided by Dorset Environmental Records Centre.