

Back from the Brink – Species summary

Purple Milk-vetch

BftB project: IPO4 Limestone’s Living Legacies

Project lead organisation: Butterfly Conservation

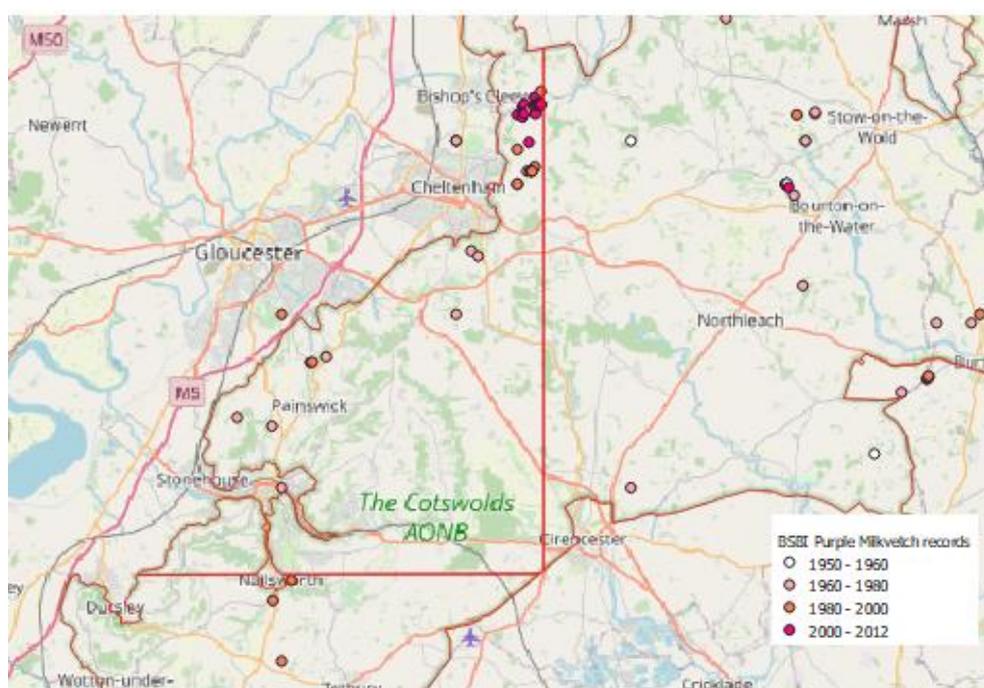
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Partner organisation for species: Plantlife

Species name – common & scientific	Purple Milk-vetch <i>Astragalus danicus</i>
Photograph	 <p>© Andrew Gagg / Back from the Brink</p>
Taxon group	Family Fabaceae (Peas & Legumes)
Conservation status	A species “of principal importance for the purpose of conserving biodiversity” under Section 41 (England) of the Natural Environment and Rural Communities Act 2006.
UK distribution	Populations in southern England in Gloucestershire, Wiltshire, the Chilterns and on the Brecklands of Norfolk and Suffolk. Further north the populations are mainly towards the eastern side of England, east Midlands, Lincolnshire and Yorkshire Wolds, as well as coastal grasslands in the north-east of England and Scotland. It is absent from Wales and Northern Ireland. An isolated population occurs on Aran Islands off the west coast of Ireland.

Habitat associations	Species-rich short, dry and infertile calcareous grassland, on both limestone and chalk. The plant is also found on coastal sand-dunes and in the Brecks on inland calcareous sands. It appears to be physically rather than chemically restricted to calcareous soils and will grow on moderately acid sands/gravels as long as competition from other species is kept low, primarily by adequate grazing and maintenance of low soil nutrient status. In Scotland Purple Milk-vetch is also present on old red sandstone sea cliffs and machair grassland.
BftB work carried out:	
Survey & Monitoring	Surveys were carried out at two sites during both 2019 and 2020 – Painswick Beacon and Snow’s Farm.
Site habitat management works	<ul style="list-style-type: none"> • Cattle handling system installed in 2018 to enable Painswick Beacon Conservation Group to continue cattle grazing at Painswick Beacon. • New targeted paddock grazing system at Painswick Beacon started in 2018 to benefit a range of species including Purple Milk-vetch. This seemed to have already contributed to an increase in abundance and distribution of Purple Milk-vetch plants by 2020. • Strimming and raking of Purple Milk-vetch area by Painswick Beacon Conservation Group in winter 2020-21 following site advice visit.
Technical advice provision	<p>Site advice visit to Snow’s Farm to discuss management for various target species including Purple Milk-vetch.</p> <p>Several site advice visits to Painswick Beacon to discuss management for various target species including Purple Milk-vetch. Management advice covered targeted paddock grazing and targeted strimming and raking of specific Purple Milk-vetch areas that were becoming rank.</p>
Links made with other taxa / conservation work?	Purple Milk-vetch has benefitted from targeted grazing primarily aimed at Large Blue and Duke of Burgundy at Painswick Beacon.
Wider engagement & advocacy activities?	Species mentioned in project talks.
BftB results obtained:	
Recorded Distribution (in BftB focal areas)	<p>Surveys carried out in both 2019 and 2020 found no plants at Snow’s Farm in either year.</p> <p>Surveys at Painswick Beacon found plants present in both 2019 and 2020, however an increase was found in both abundance and distribution in 2020 with at least 48 individual plants recorded. This included plants re-recorded in an area where they were last found in 2009 and plants recorded in a new area not recorded previously. This increase is thought to be a result of the newly introduced targeted paddock grazing initiated in 2018.</p>
Recorded Abundance of species populations	At least 48 flowering individuals counted at Painswick Beacon in 2020, with other plants not in flower.

<p>Species Recovery Curve progress made</p>	<p>Species recovery curve score moved from 1 to 6: Recovery solution in the form of targeted paddock grazing has been trialled at one site with an increase in both abundance and distribution of Purple Milk-vetch as a result. Further trialling of targeted grazing should be undertaken at other sites to identify if this result can be replicated. This is one solution and others need to be investigated such as restoring population from the soil seed bank where plants have not been recorded recently (there is a gap in knowledge regarding seed longevity) and reintroduction processes where necessary.</p>
<p>Recommendations for future work:-</p>	<p>Continued use of targeted paddock grazing at Painswick Beacon to enable to continued spread and increase in numbers of Purple Milk-vetch plants.</p>



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Figure 1. BSBI data on Purple Milk-vetch distribution in the Cotswolds. (Recording on Cleeve Common in 2012 supported by the Cleeve Common Trust.)