

Back from the Brink – Species summary

Wormwood Moonshiner

BftB project: IP07 Shifting Sands – Securing a future for the Brecks

Project lead organisation: Natural England

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Partner organisation for species: Buglife

Species name – common & scientific	Wormwood moonshiner (<i>Amara fusca</i>)
Photograph	 <p>© Brian Eversham / Back from the Brink</p>
Taxon group	Invertebrate- Coleoptera (Carabidae)
Conservation status	Endangered/Nationally Rare
UK distribution	Brecks restricted
Habitat associations	Brecks, low nutrient, and disturbed sandy soils

BftB work carried out:	
Survey & Monitoring	<p>All extant Field wormwood populations were surveyed in 2019 and 2020, using night-time torching with volunteer teams. Two training events were held for volunteers indoors to improve beetle identification, alongside field sessions. Species experts have confirmed the methodology whereby beetles out after dark and on Field wormwood and Yarrow flowers can be assumed confidently to be the species. Records from new sites were confirmed by verification of photos by species experts.</p> <p>Sites visited:</p> <ul style="list-style-type: none"> • <u>College Heath Road County Wildlife Site</u>- First recorded in 2018- but not by project surveys. 72 recorded on single survey in Oct 2019, at the time the 2nd highest ever count for the species, 57 recorded in Nov 2019. 2020 surveys recorded 219 individuals- highest ever UK count, with 151 on Field wormwood and 68 on Yarrow. • <u>London Road Industrial Estate, Brandon SSSI</u>- Previous stronghold, however none recorded during project. • <u>London Road Industrial Estate verges and accessible industrial unit edges</u> -New site- 2 found in 2019 in Jewel Display industrial unit car park. 4 found in Jewel Display in 2020, and 22 on verges (21 on Yarrow and 1 on Field wormwood) • <u>Mildenhall High Lodge Pit</u> -New site- single individuals counted in each of 2019 & 2020. • <u>Icklingham Triangle</u> -No records- single visit 2019. • <u>Lakenheath Warren</u> -No records- single visit 2019. • <u>STANTA</u>- No records- single visit 2019.
Sites habitat management works	<ul style="list-style-type: none"> • The habitat at the London Road Industrial Estate SSSI was restored under the guidance of Natural England and Plantlife, removing the established vegetation and re-exposing the underlying sandy substrate. • Field wormwood introductions undertaken by Plantlife. Unable to ascertain their suitability for Wormwood moonshiner or their ability to colonise due to limited flowering during the life of the project. • Site management advice provided for College Heath Road and London Road Industrial Estate by Plantlife, primarily for Field wormwood but with clear benefit for Wormwood moonshiner.
Conservation 'interventions' incl. reintroductions & translocations	None beyond stated management and technical advice provision
Technical advice provision	<p>Advice issued to College Heath Road and London Road Industrial Estate by Plantlife for the benefit of Field wormwood, with benefits for Wormwood moonshiner.</p> <p>Plantlife input led to Industrial Estate verges being designated as a County Wildlife Site</p>
Links made with other taxa / conservation work?	Project closely linked to Field wormwood deliverables.

Wider engagement & advocacy activities?	<ul style="list-style-type: none"> • Press releases in 2019 and 2020 to celebrate successful increase in number of sites supporting the species and the successful survey counts. • Workshops held to train volunteer surveyors and night-time surveys delivered with a small group of volunteers. • Wormwood moonshiner survey successes promoted on social media and as part of BftB national communications outputs.
BftB results obtained:	
Recorded Distribution (in BftB focal areas)	3 sites- College Heath Road CWS, London Road Industrial Estate verges and industrial units, and Mildenhall High Lodge Pit
Recorded Abundance of species populations	<p>Highest ever count of the beetle achieved, with 219 on a single night at College Heath Road, as well as further counts of 72 and 57.</p> <p>Recorded beetles in the verges and industrial units adjacent to their previous London Road Industrial Estate SSSI stronghold, which is a notably small site, suggesting that with improved management in the verges (now CWS), that the complex can support strong populations.</p>
Species Recovery Curve progress made	<p>Species has moved from 4 to 6. This is largely a result of improved management of grassland sites at College Heath Road and the London Road Industrial Estate verges leading to impressive species surveys, particularly during 2020. This suggests that managing existing Field wormwood sites is a suitable remedial action.</p> <p>Other methods have been trialled to benefit the species, such as the translocations of Field wormwood and restoration of the London Road Industrial Estate SSSI, which is why it is classified as 6. However, it is uncertain how successful these trialled recovery solutions will be; if the Field wormwood translocations will establish to provide more plants and if these can be readily located by Wormwood moonshiners.</p>
Recommendations for future work:-	<ul style="list-style-type: none"> • Continue to coordinate a network of local volunteers to survey for Wormwood moonshiner- potentially could be linked to the active Breckland Flora Group due to its close association with Field wormwood. • Engage with the industrial estate units to build on the relationship established by Plantlife. • Survey establishing Field wormwood plants to establish if they have been colonised by the species. • Continue to monitor the Mildenhall High Lodge Pit site, which has a small but potentially important population of the species. • Research the use of Yarrow by Wormwood moonshiner. Including surveying sites with only Yarrow (e.g. Field wormwood absent) in close proximity to the known core sites, to establish the degree of dependence on Field wormwood.