

Species Action Plan

Tower Mustard



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1. Aim

- To contribute to the conservation of Tower mustard in the UK through the maintenance of London's population.

1. Introduction

Tower mustard (*Arabis glabra*) is a biennial or sometimes short-lived perennial plant of disturbed habitats on free-draining, sandy soils in grassy and wasteland places. It is a member of the cabbage family and it has smooth, grey-green leaves and produces pale yellow flowers on stems 30-100 centimetres tall. Tower mustard germinates in spring spending at least one season in a vegetative state before flowering the following May-June. It can produce abundant seeds, which appear to remain viable for many years with plants often reappearing on old sites after long periods of absence. It is nationally scarce and declining, currently known from only about 30 sites in England. Since open ground is required for germination, it will not survive when the habitat becomes overgrown. Its rarity and rather undistinguished appearance means that tower mustard is not a plant, which often touches the public consciousness. It is not known to have ever had any significant culinary or medical use anywhere within its wide European range, though the Cheyenne of North America know it as a cure for the common cold.

2. Current Status

There is one large population of tower mustard in Greater London, at Stain Hill Reservoir in the London Borough of Richmond-upon-Thames. This is one of the largest populations in the country, surpassed only by a couple of East Anglian sites. This site is in secure ownership and management, which this plan seeks to maintain. Other historical records have been traced, the majority of which are pre-20th century, and do not appear to offer scope for population restoration. The plan will therefore look to other ways in which Greater London can contribute to research on the species and to targets for population creation by introduction in the future.

3. Specific Factors Affecting the Species

4.1 Protection and management

The continued protection and suitable management of the Stain Hill Reservoir site is crucial to the survival of this species in Greater London. Management guidelines involve cutting back growth to prevent excessively dense vegetation and shading from occurring and some light disturbance needs to be carried out when the grassland becomes closed and tussocky. Cutting should take place after mid-winter (as the plant retains seed in the pods throughout the winter) or alternatively the seeding stems should be broken off before cutting and returned to the site. The northern part of the embankment needs to be strimmed to remove excess vegetation and to disturb the accumulated vegetation litter and the soil. Overgrazing by rabbit's means that plants may need to be caged to ensure some return of seed to the soil, but cages should be removed during the winter to allow rabbits access to graze and disturb the vegetation.

4.2 Other

Other historic sites in London have been lost through development or changes to habitat. Nationally, it has suffered due to the loss of open habitat on heathland, through building development, agricultural improvement and intensification, forestry and neglect.

Habitat neglect results in a lack of open ground for regeneration and the development of coarse competing vegetation. It is also vulnerable to high levels of overgrazing by rabbits.

5. Current Action

5.1 Legal status

Tower mustard is classified as *Vulnerable* in the UK.

Tower mustard receives the same protection as all other wild plants in the UK through the Wildlife and Countryside Act 1981 (as amended). Therefore, it may not be uprooted without the permission of the landowner.

Stain Hill reservoir has been designated as a Site of Metropolitan Importance for Nature Conservation.

5.2 Mechanisms targeting the species

These current actions are ongoing. They need to be supported and continued in addition to the actions listed under Section 6.

5.2.1 Local management

Thames Water Utilities manage the Stain Hill Reservoir site to ensure the continued existence of the colony of Tower mustard.

5.2.2 National mechanisms

Nationally, Tower mustard is included in English Nature’s Species Recovery programme and Plantlife’s *Back from the Brink* programme. *Back from the Brink* recovers wild plants through practical, hands-on response to the crisis of species loss and decline in Britain.

5.2.3 Advice

Plantlife advises landowners and managers of the importance of this species and the most appropriate management for its conservation under the *Back from the Brink* programme. Advice is available to anyone managing a site for one of the *Back from the Brink* species, whether the site is a nature reserve or in private or public ownership.

6. Objectives, Actions and Targets

Most of these actions are specific to this species. However, there are other, broader actions that apply generically to a number of habitats and species. These are located in a separate ‘Generic Action’ section, which should be read in conjunction with this document. There are generic actions for Site Management, Habitat Protection, Species Protection, Ecological Monitoring, Biological Records, Communications and Funding.

Please note that the partners identified in the tables are those that have been involved in the process of forming the plan. It is not an exclusive list and new partners are both welcomed and needed. The leads identified are responsible for co-ordinating the actions – but are not necessarily implementers.

Objective 1 Ensure the protection and suitable management of the extant population.

Target: No long-term reduction in size of the Stain Hill population, measured annually.

Action	Target Date	Lead	Other Partners
1.1 Produce advice and guidelines for the management of Stain Hill Reservoir to safeguard the Tower mustard population	2005	Plantlife	Working Group, GLA
1.2 Continue management of Stain Hill Reservoir population	Ongoing	TW	EN, Plantlife
1.3 Monitor population and reassess status at Stain Hill and supply data to Plantlife for databasing in co-operation with BSBI Threatened Plants Database	Annually	TW	Plantlife, BSBI, GIGL, WWT
1.4 Provide Tower mustard seeds to the Millennium Seed Bank at Wakehurst Place	2006	TW	Plantlife, RBGK

Objective 2 Monitor populations on demonstration plots in London Borough of Richmond, to publicise the species and learn more about its ecology.

Target: Ensure demonstration plots are self-sustaining by 2006, with accompanying interpretation material by 2008.

Action	Target Date	Lead	Other Partners
2.1 Monitor public demonstration plots at Kew (in the 'Order beds' & at 'The Rockery') and at WWT to determine whether plants are flowering, producing seed and self-sustaining	Annually	RBGK W WT	Plantlife
2.2 When public demonstration plots are self-sustaining produce suitable interpretation material for the public	2008	RBGK WWT	Working Group

Objective 3 Use seed collected from extant population and/or established demonstration plots in LB Richmond to establish new populations in other boroughs in Greater London.

Target: Establish one new demonstration plot and one introduced wild population by 2008.

Action	Target Date	Lead	Other Partners
3.1 Research historical records and establish where Tower mustard used to originate in London to find suitable receptor sites	2005	Plantlife	Working Group
3.2 Use historical records to establish an introduced wild population of Tower mustard at a suitable receptor site in Greater London	2008	Plantlife	Working Group, TW
3.3 Choose and establish another public demonstration plot at a suitable site outside of LB Richmond	2006	Working Group	LWT, GLA
3.4 Produce suitable interpretation material for the demonstration plot for the public	2008	Working Group	

Relevant Action Plans

London Plans

Wasteland, Private Gardens, Churchyards and Cemeteries, Heathlands, Acid Grassland, Built Structures

National Plans

Tower Mustard

Key References

Davis R (1999). *Species Action Plans for Plants: Tower Mustard*, Plantlife.

Abbreviations

BSBI - Botanical Society of the British Isles
EN - English Nature
GIGL – Greenspace Information for Greater London
GLA – Greater London Authority

LWT – London Wildlife Trust
RBGK - Royal Botanic Gardens Kew
TW – Thames Water
WWT – Wildfowl & Wetlands Trust

Contact

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