CARMARTHENSHIRE LBAP SMALL-FLOWERED CATCHFLY ACTION PLAN

Introduction

Small-flowered catchfly (*Silene gallica*) is a species of arable land, waste ground and sandy coastal sites. It is a winter annual, mainly germinating in autumn but also capable of doing so in spring. It is therefore found in both spring and winter crops.

Small-flowered catchfly was once widespread in the UK and has been recorded in 283 10-km squares as far north as central Scotland. However, it has undergone a very rapid decline in recent years and is now concentrated in southern and western England and Wales. It is now regarded as "Vulnerable to extinction" in Wales and is a UK BAP and Section 42 priority species for conservation.





Most of its remaining sites are in coastal areas. Its decline nationally has been associated with agricultural changes, but has been compounded by its vulnerability to harsh winters (seedlings cannot tolerate temperatures of less than

-10 °C). It is still widespread in central and southern Europe and is not threatened in Europe as a whole but has virtually disappeared from northern Europe. In Wales, there are about 15 post-1970 records of the species which are concentrated in sandy coastal arable fields in Glamorgan, Pembrokeshire and Ceredigion.

Reasons for its decline in arable sites include increased use of herbicides and fertilisers. The higher levels of fertiliser and herbicide applied to winter crops explains why this species has not benefited from the switch to autumn drilling as might otherwise have been expected. In addition destruction of field-edge refuges, conversion of marginal arable land to pasture and early harvests (i.e. around mid-July), which can destroy plants before seed has been set.

In Carmarthenshire small-flowered catchfly has mainly been associated with industrial sites and was first recorded at Llanelli Dock by Motley in 1836, "Occasionally found in corn-fields" by Ley in 1896, at Carmarthen Tinworks by Barker *c*.1900 and from Burry Port by Hamer in 1911. It is not known whether the species persisted at any of these sites for any length of time but of the two records from St Clears and Ferryside made by Ronald May around 1960, the Ferryside plant, at least, was a garden weed and did not persist Although recorded at Burry Port in the 1950s or 1960s by Ann Conolly, reputedly from the western breakwater, it was not seen again until 1997 on an area of a few square metres on the eroded coping of the northern wall of Burry Port Western Inner Dock. The Burry Port plants appear to germinate in spring (May in most years) and flower and set seed then disappear within 1–2 months. It has been recorded in most years between 1997 and 2012 although recent estate-management has resulted in the site becoming smothered with rank grass which is unsuitable for the germination of a poorly-competitive annual such as *Silene gallica*. It has not been recorded in 2013. Management to restore suitable habitat conditions is being undertaken.

The Burry Port site is extremely vulnerable to inappropriate parkland management, dock improvement works and stabilization, and is under extreme pressure from a high degree of public usage and development proposals. Since the construction of railings along the dock wall which prevent access, it is now suffering from smothering from rank vegetation due to lack of scuffing from passers-by. Its importance and extreme vulnerability dictate concerted efforts to secure its retention and conservation.

Key threats

- Inappropriate management of only Carmarthenshire site.
- Inbreeding of sole population.

Vision statement and objectives

Our vision for the small flowered catchfly is to ensure the continued presence of the plant at its only known site in the county and to try and increase the range of the species in the county by natural spread and through working with the National Botanic Garden of Wales.

- **SFC1** To maintain and increase the population of small-flowered catchfly in Carmarthenshire
- **SFC2** To undertake annual monitoring of the one Carmarthenshire population
- **SFC3** To raise awareness of small-flowered catchfly in Carmarthenshire and provide advice on habitat management.
- **SFC4** To undertake an *ex-situ* programme within the county

Summary of action achieved by LBAP Partners (for more information contact the biodiversity officer – Biodiversity@carmarthenshire.gov.uk) or visit the national Biodiversity Action Reporting System - <u>http://ukbars.defra.gov.uk</u>:

2010-13

2010–15	
• Management plan produced for the Burry Port population – CCC	SFC3
• Annual monitoring of the Burry Port population – BSBI	SCF2
• Talk with relevant council officers to discuss management – CCC/BSBI	SFC3
• Dock walls managed to encourage germination of small-flowered catchfly	v seeds
	SFC1
2014	
• Two additional sub-populations in 2014 identified at Burry Port Harbour	SFC2
2015	
• 33 plants in flower in the usual location on the dock wall in	
Burry Port. The other two stands found in 2014 were not re-found - BSBI	SFC2
Proposed future action	
• Undertake <i>ex-situ</i> propagation project at NBGW – NBGW/CCC	SFC4
• Identify suitable re-introduction sites in south Carms – BSBI/CCC	SCF4
• Consider seeding arable headlands at Burns Pet Nutrition farm, Kidwelly	SFC1/4
 Annual monitoring of Burry Port site – BSBI/CCC 	SFC2

Useful links

• Plantlife – <u>small-flowered catchfly</u>

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Partneriaeth **Bioamrywiaeth** Sir Gaerfyrddin Carmarthenshire **Biodiversity** Partnership

www.carmarthenshirebiodiversity.co.uk

The <u>Carmarthenshire Biodiversity Partnership</u> (CBP) is made up of the following organisations: <u>Carmarthenshire County Council</u> (CCC), <u>Wildlife Trust of South</u> and West Wales (WTSWW), <u>Natural Resources Wales</u> (NRW), <u>RSPB</u>, <u>Wildfowl</u> and Wetlands Trust (WWT), <u>Carmarthenshire Bird Club</u> (CBC), <u>National Botanic</u> <u>Gardens Wales</u> (NBGW), <u>Butterfly Conservation</u> (BC), <u>Carmarthenshire Rivers</u> <u>Trust</u> (CRT), <u>National Trust</u> (NT), <u>Botanical Society of the British Isles</u> (BSBI), <u>Llanelli Naturalists</u> (LN), <u>Bat Conservation Trust</u> (BCT), <u>West Wales Biodiversity</u> <u>Information Centre</u> (WWBIC), <u>Amphibian and Reptile Conservation</u> (ARC), <u>Woodland Trust</u> (WT)