

Dartmoor Delivery Plan for Deptford Pink

Description and Importance of the Species

Deptford pink (*Dianthus armeria*) is one of Britain's rarest plant species, suffering a 93% decline nationally in the 20th century. It is an annual flower which usually grows in open sites such as pastures, roadsides, field margins and occasionally on waste ground. It is a poor competitor, so it requires relatively open conditions with areas of bare ground on which it can establish itself.

It is included on Schedule 8 of the Wildlife and Countryside Act and Section 41 of the NERC Act. It is also included on the priority list of the UK Steering Group Report on Biodiversity, where it is categorised as being 'vulnerable'. Whilst the plant occurs throughout southern Britain, south Devon is a hot-spot, with 15 of the 51 sites (30%) located here. The population at the Buckfastleigh road verge constitutes the largest colony of this species in the country, being twice as large as the next biggest colonies in Kent and south Wales.



Deptford pink, © DNPA

Current Status on Dartmoor

An extensive survey of known, historic and potential sites in 2013 revealed that there are nine known sites for this species on Dartmoor, all but one located around Churchill, Buckfastleigh, with the other at Ashburton. The Buckfastleigh sites could be considered as one population with 8 colonies. Numbers have fluctuated at the various sites since surveys first began in 1998, and numbers in 2013 were generally on the lower end of the spectrum. Overall, there has been a decline in all sites apart from the main site at Buckfastleigh road verge (where numbers average between 2000 and 4000 plants) and the populations in the remaining sites are all under 100 plants. New sites have been found over the years as well though, notably around the main site at the Buckfastleigh road verge, with Deptford pink spreading steadily to neighbouring areas.

The Buckfastleigh road verge comprises a very steep slope, a southly aspect and thin, rocky soils. These ground conditions mean that the slope gets very hot, dry and parched, making it difficult for other plant species to establish, allowing areas of open ground to persist.

Current factors affecting the Species on Dartmoor

1. The primary factor is succession to bramble, grass and scrub, which in time leads to deeper soils and conditions where the Deptford pink is out-competed or shaded out
2. As succession is a natural process that is very difficult to prevent, periodic scarification will be needed at most sites
3. A lack of sufficient grazing on some sites may also allow scrubbing up to occur

Current Initiatives on Dartmoor

1. Annual monitoring by volunteers and Dartmoor National Park Authority (DNPA) Ecologists of plant numbers at the main Buckfastleigh sites (road verge, bakery and Churchill farm) has taken place since 2001. In 2013, a total of 16 sites, including known, historic and potential sites, were surveyed for the presence of Deptford pink, with site condition and management recommendations drawn up.
2. Since the mid 2000's, strimming of gorse and bramble at the Bakery and Churchill Farm has been periodically carried out by DNPA staff, whilst the Highways Authority cut some of the Buckfastleigh road verge. The Vincent Wildlife Trust undertakes management for Deptford pink at the two sites under their ownership. However, current efforts are not sufficient to prevent scrub encroachment and thick sward development at all sites, most notably at Churchill Farm and the Bakery site.
3. The 2013 survey also looked at sites that currently have no Deptford pink but that may have potential to support it. Five sites were identified that were considered to be suitable, primarily through suitable management. Should initial habitat management produce suitable conditions but not result in colonisation by Deptford pink, introduction should be considered.



New Road verge at Buckfastleigh, © DNPA

Targets

1. Maintain a viable population on Dartmoor, with a total population of not less than 3,000 plants in the nine sites
2. Expand the population by at least one new site by 2018, through natural colonisation if possible
3. Continue to involve the local community in monitoring sites

Delivery and Monitoring

1. Habitat management at all known sites – individual management requirements to be written out, discussed and agreed with relevant body, eg Natural England (NE), Devon County Council (DCC) and private landowners, to achieve improvements to management
2. Explore and implement requirements for Deptford pink to colonise new sites that are considered to have potential – DNPA lead with local NE advisors and private landowners to address management in the first instance. Monitor success of habitat management regime by surveying habitat conditions and potential establishment of Deptford pink
3. Explore licensing requirements with NE for any potential seed translocation from current populations to sites with suitable habitat conditions, following review of success of habitat management changes
4. Monitor numbers at known Buckfastleigh sites – DNPA Ecologist to ensure monitoring takes place and circulate findings

Habitat Management	Action	Lead	2014	2015	2016	2017	2018
	Monitor the 9 sites on rotation, 3 per year	DNPA	x	x	x	x	x
	Seek new local volunteers to monitor sites	DNPA	x	x	x	x	x
Current sites							
Holne verge	Annual cut and scrub removal; no mowing June-Aug	DCC	x	x	x	x	x
Bakery	Scarify, remove bramble and scrub, then cut annually; not between June and Aug	DNPA	x	x	x	x	x
Churchill Fm	Continue cattle grazing; extensive scrub clearance needed	NE		x	x	x	x
Barnsfield Close	Low intensity gardening regime; no mowing June-Aug	DNPA/landowner			x		
West Rock	Low intensity gardening regime; no mowing June-Aug	Vincent Wildlife Trust	x	x	x	x	x
Rock Farm	Continue mgt, clear scrub	Vincent Wildlife Trust	x	x	x	x	x
Mardle Ind Units	Annual visit and cut as required, not between June and Aug	DNPA/landowner		x	x	x	x
Dragonfly Foods	Annual visit and cut as required, not between June and Aug	DNPA/landowner		x	x	x	x
Ashburton road verge	Highways contractor to continue management	DCC/Plantlife	x	x	x	x	x
Potential sites							
Holy Trinity Church	Seek to get agreed management with the owner to create and maintain open conditions especially around the graves and stonework; no mowing June-Aug	DNPA/landowner		x	X		
Buckfast Abbey Orchard	Site in HLS; inform NE and landowner of specific DP requirements, and continue current grazing and scrub removal regime	DNPA and NE		x	X		
Ladymead, Dart Bridge	Seek to get agreed management with the owner to achieve a low intensity gardening regime; no mowing June-Aug	DNPA/landowner		x	X		
Field to east of Holne Road North	Site in HLS; inform NE and landowner of specific DP requirements, ie increase grazing and soil scarification along edge with road cutting	DNPA and NE		x	x		
Field to east of Holne Road Centre and North of Mardle Way Industrial Estate	Site in HLS; and inform NE and landowner of specific DP requirements, ie increase grazing and soil scarification along edge with road cutting; potential for seed translocation	DNPA and NE		x	x		
All potential sites	Monitor success of habitat management – habitat conditions and presence of Deptford Pink	DNPA/NE/landowners			x	x	x
	Following review of management regime and habitat suitability at individual sites, establish potential to move seed from donor sites, having obtained necessary licenses	DNPA				x	x