

## Managing for bespoke species/assemblages within Countryside Stewardship – guidance template

Species/assemblage name	Conservation status
<p>Striped Lychnis (<i>Shargacucullia lychnitis</i>)</p>  <p>Striped Lychnis larva (Mark Parsons/Butterfly Conservation)</p>  <p>Roadside verge habitat (Mark Parsons/Butterfly Conservation)</p>	<p>Section 41, Nationally Scarce</p>  <p>Striped Lychnis field margin habitat (note flowering spikes of Dark Mullein) (Mark Parsons/Butterfly Conservation)</p>  <p>Dark Mullein (Peter Hall)</p>
<p><b>Introduction</b></p> <p>This species has an annual life cycle. The adult flies at night in June to July, the larva feeding from mid July to early September. The larval foodplant is dark mullein, the larva usually eating the flowers. It has also been reported from white mullein, great mullein, figwort and ornamental mulleins. This species frequents roadsides, field margins, verges, embankments and rough downland that have recently been left fallow, also reported from woodland rides and clearings. Usually found in open, sunny situations on calcareous soils.</p>	
<p><b>Why a bespoke species/assemblage?</b></p> <p>This species is reliant on its main foodplant, dark mullein. This plant is a biennial that requires ground disturbance to become established, the larva feeding on the flowers, so the plant needs to be left undisturbed for at least two years, and preferably at least for a third year as the larva is likely to pupate close to the plant and just below the ground surface.</p>	

The aim should be to provide a good supply of flowering dark mullein on an annual basis. Small scale ground disturbance through rotovation, scarification etc. is likely to be needed on rotation to maintain a long term continuity of the plant. As may be required on some sites, cutting should be undertaken in autumn, after the plant has set seed, and again in spring to aid seed dispersal and prevent sites from becoming overgrown. Cutting should not be undertaken from late April to September.

### **When and where to apply this guidance**

This species occurs locally in parts of southern England and is found in Hampshire, West Sussex, Berkshire, Buckinghamshire and Oxfordshire, although it has been recorded from Wiltshire and formerly in some other counties.

Ground disturbance should take place in late autumn/winter. If cutting is necessary, sites should not be cut from late April until late September. Scrub can be an issue on some sites and this should be controlled to retain open situations, again this is best undertaken in late autumn/winter.

### **Developing a Countryside Stewardship agreement**

#### **Relevant CS options**

AB8	Flower-rich margins and plots
GS6	Management of species rich grassland
GS13	Management of grassland for target species
SP9	Threatened species supplement
FM2	Major preparatory works for Priority Habitat (creation and restoration) and for Priority Species

#### **Prescription guidance for AB8**

Where this species is present and there is the opportunity to increase available foodplant in arable habitats:

P156 - Establish [a flower-rich margin or plot between 15 March to 31 May with the following composition [Dark Mullein].

P159 – In [Year 3 and each year after, cut [33%] of the area between [20 September and 31 October] leaving a plant height of between [10 cm and 20 cm]. Leave [66%] of the area uncut each year].

#### **Prescription guidance for GS6**

On chalk grassland sites:

P42 - [Manage] [scrub] [in XXXX] [by cutting] so that [by year [3]] cover [of the [LOCATION] is no more than [20] %]. [Remove all cut material.]

P135 – Only top [after 20September] [except] [in patches to control injurious weeds, invasive non-native species, bracken or areas dominated by rushes]. [Do not top more than [50%] of

the total area where Dark Mullein occurs.]

P667 - [From] establishment] onwards], manage by [grazing between 20 September and 1 April] [to maintain VEGETATION CONDITIONS] [so that the sward retains patches of bare ground].

### **IoS for GS6**

[By year 3/ in all years], species [Dark mullein should be at least occasional/ (locally) frequent], and flowering during [July to August]

[In all years] [Dark mullein] [should be present] on the site

[By year x/ in all years] Cover of bare ground, [including dry crumbly soil, soft damp soil] must be between [1% and 5%].

### **Prescription guidance for GS13**

P42 - [Manage] [scrub] [in XXXX] [by cutting] so that [by year [3]] cover [of the [LOCATION] is no more than [20]%. [Remove all cut material.]

P135 – Only top [after 20September][except][in patches to control injurious weeds, invasive non-native species, bracken or areas dominated by rushes]. [Do not top more than [50%] of the total area where Dark Mullein occurs.]

P667 - [From ]establishment] onwards], manage by [grazing] [to maintain VEGETATION CONDITIONS] [so that the sward retains patches of bare ground]. Comment as above

### **IoS for GS13**

[By year 3/ in all years], species [Dark mullein should be at least occasional/ (locally) frequent], and flowering during [July to August]

[In all years] [Dark mullein] [should be present] on the site

[By year 5] Cover of bare ground, [including dry crumbly soil, soft damp soil] must be between [1% and 50%].

[By year 5] cover of [woody species should be less than 20%]

If Striped lychnis is present in a holding with low value grassland or scrub, it could be beneficial to strip and remove surface vegetation back to a mineral soil (to encourage germination of Dark Mullein). This could be carried out using the options listed below:

### **Prescription guidance for SP9**

#### **Where scarification/rotovation plots are required to encourage growth of Dark Mullein:**

P697 - Carry out the management for [Striped lychnis][so that by year [X] [VEGETATION CONDITIONS]][ as set out in XXXX/Implementation Plan/Feasibility Study produced by [name, organisation] dated [date]].

### **Prescription guidance for FM2**

Where appropriate, FM2 could be used to undertake large scale rotovation/scarification to return to a bare mineral soil or chalk to encourage germination of Dark Mullein. Seed spreading and planting can be used to assist the establishment of the foodplant.

### **Monitoring**

Larval counts on dark mullein during early August. This should be undertaken by a specialist or trained individual. Abundance of dark mullein on known sites for the moth to be monitored in addition or as a surrogate to larval counts. Extant sites for the moth should be monitored for larvae at least once every three years.

Training can be provided to anyone volunteering to assist with surveys for Striped Lychnis larvae, for further information please contact Butterfly Conservation.

### **Further information**

A factsheet is available at: [http://butterfly-conservation.org/files/1.striped\\_lychnis-psf.pdf](http://butterfly-conservation.org/files/1.striped_lychnis-psf.pdf). See also Waring, P. & Townsend M. 2009. *Field Guide to the Moths of Great Britain and Ireland*. British Wildlife Publishing, Gillingham. (Second edition).

### **Authorship/version control**

Mark Parsons (Butterfly Conservation), Katie Cruickshanks (BC) & Tony Davis (BC), April 2015 2<sup>nd</sup> draft