



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

<p><b>Species/assemblage name</b></p> <p>Lulworth Skipper <i>Thymelicus action</i></p>	<p><b>Conservation status</b></p> <p>Section 41</p>
	
<p><b>Image Martin Warren, Butterfly Conservation</b></p>	

### Introduction

The Lulworth Skipper is restricted to the south of Dorset where it can be found along a stretch of coast from Swanage to Burton Bradstock. The adults fly from May until August. Whilst its range has remained stable, its numbers have declined steeply since 2000 although the last 4 years have been good for the species and the 10 year trend including 2014 data shows the species up by 39%.

The main habitats are unfertilised calcareous grasslands, including chalk downland, coastal grassland and undercliffs. Most colonies are on steep south-facing slopes and grasslands sheltered from onshore winds. The butterfly breeds on tall patches of Tor-grass *Brachypodium pinnatum* that are lightly grazed.

The butterfly also occasionally uses grasslands on calcareous clays, or even road verges where chalk or limestone ballast has been used in construction. Females prefer to lay eggs on tall foodplants (30–50 cm), and only rarely select patches 10–30 cm tall (never patches under 10 cm).

The butterfly breeds on tall patches of Tor-grass (*Brachypodium rupestre*) and occasionally Wood False Brome (*Brachypodium sylvaticum*). The eggs are laid in groups of up to 15 which are deposited deep in the flower sheaths of Tor-grass. The larvae hatch after about three weeks and immediately go into hibernation, spinning a small silken cocoon around the remains of the eggshell. They emerge during the spring and live within leaf tubes, formed by spinning together the edges of the broad leaf-blades. The larvae move and construct new shelters as they grow, but during their final instar they sometimes rest openly on the leaf blades. They pupate deep within the tussocks of Tor-grass, surrounded by loose cocoons of grass and silk.

Aim to maintain areas of grassland with extensive, tall patches of Tor-grass (20-50cm tall), especially growing in sheltered situations or amongst scattered scrub.

Extensive light cattle grazing is ideal as this produces a varied sward with some tall and some shorter areas. Heavy grazing, especially by sheep, is highly detrimental. Where heavy grazing is necessary due to other interests, leave some areas ungrazed, or lightly grazed to create refuge areas for breeding. On sites more heavily grazed the Tor-grass growing Scrub clearance should be undertaken as required to maintain open sunny grassland. However, a scatter of scrub is beneficial, particularly where grazing is heavier as the Tor-grass growing around the scrub will be used as this is more likely to be growing within the necessary height range. Leave some patches of scrub and manage on rotation.

**Why a bespoke species/assemblage?**

Lulworth Skipper requires slightly longer sward structure than standard prescriptions and the host plant is often controlled and its removal may be attempted.

**When and where to apply this guidance**

At all sites where the species is present, on historical sites where restoration is undertaken to encourage recolonization or potential new sites.

**Developing a Countryside Stewardship agreement**

**Relevant options**

GS6	Management of species rich grassland
GS7	Restoration towards species rich grassland
GS13	Management of grassland for target features
SP4	Control of invasive plant species supplement
SP6	Cattle grazing supplement
SP8	Native Breeds at Risk supplement
WD7	Management of successional areas and scrub
WD8	Creation of successional areas and scrub

**Prescription guidance for GS6/GS7**

P42 - [Control/Manage] [no more than 30% of scrub] [in XXXX] [by method] so that [by year [NUMBER]] cover [of the [LOCATION] is no more than [20-30] %]. [Remove all cut material.]

OR

P138 - Retain the full extent of well-established scrub [where cover is below 10%]. [Where the cover is 10% or greater, maintain scrub over at least 10% and a maximum of 30% of the parcel area.] It must be retained as discrete small patches, lines and occasional individual bushes scattered across the site. [Do not cut more than half of the scrub in any one year except on historic and archaeological features.]

P464 - Maintain the extent of [habitats/features] of interest within the [grassland/scrub/successional area/mosaic /XXXX] as identified [XXXX].

P470 - [By year X], [at least 2 moderate/high value indicator species Tor-grass for Priority habitat feature XXXX must be frequent/~~in flower~~ during May and August and 2 high value indicator species XXXX for Priority habitat feature XXXX occasional (as defined in XXXX

(currently the FEP Handbook)]. [By year X], cover of [species XXXX must be less than 10% / between 50% and 90%/frequent].

P667 - [From [year NUMBER /establishment] onwards], manage by [extensive cattle grazing (avoiding summer grazing) [to maintain open sunny grassland] [so that Tor-grass is growing in tall patches especially in sheltered situations or amongst scattered scrub. Sward height should be between 20cm and 50cm with some patches up to 80cm in summer and no less than 10cm in winter. If heavier grazing is required for other features, then leave some areas ungrazed.].

### **IoS for GS6/GS7**

[By year XX/ in all years], cover of wildflowers in the sward (excluding undesirable species but including rushes and sedges), should be between [20% and 90%]. At least [60%] of wild flowers should be flowering during [May-July].

[By year X/ in all years], the average sward height [between May to August] should be between 20cm and 50cm with some patches up to 80cm in summer and no less than 10cm in winter. If heavier grazing is required for other features, then leave some areas ungrazed.

[By year X/ in all years], cover of [Tor-grass should be between 50% and 90%]

[By year X/ in all years] [Lulworth Skipper] [should present and maintained] on the site

### **Prescription guidance for SP6/SP8**

See further information

#### **Monitoring:**

Timed count/transect

### **Further information**

*List key references and provide weblinks to additional information*

#### **Grazing**

Extensive light cattle grazing is ideal as this produces a varied sward with some tall and some shorter areas. Heavy grazing, especially by sheep, is highly detrimental. Where heavy grazing is necessary due to other interests, leave some areas ungrazed, or lightly grazed to create refuge areas for breeding. On sites more heavily grazed the Tor-grass growing

Habitat mosaics can be achieved by continuous extensive stocking of cattle, sheep or ponies, or by light winter/spring grazing.

If management is just targeted to Lulworth Skipper then avoid grazing in spring/summer when larvae are higher up in larval tubes, if management is just targeted to Adonis Blue then moderate/heavy grazing through winter and spring (with some summer grazing if possible) can be most effective.

For Lulworth Skipper cattle grazing can be more effective at breaking up dense mats of Tor-grass, sheep grazing can also be used as long as grazing is light and extensive because they selectively graze around Tor-grass tussocks.

Specifying grazing with respects to turf height rather than stocking rates is the most effective method in achieving suitable sward.

Reactive grazing is an important component in managing for both long and short-turf species if the farmer/land manager checks the sward and moves stock when sward height meets their aim. This can then take into account the growth season, if it has been a wet year grazing may need be prolonged and in dry years the grazing period may need to be shorter. If the numbers are right then cattle grazing will always leave bits of long and short-turf, the key is to keep on observing cattle and sward.

Fencing is a useful tool in compartmentalising and allowing areas to be grazed on a rotation, creating habitat mosaics and incorporating a variety of swards. However this should always been undertaken with consideration to the landscape impacts of new fences; which usually means thinking about where the fence is located rather than not fencing i.e. below the skyline.

Traditional breeds of grazing animals such as Devon Reds, Herefords can be more effective. Cattle seem to graze on the top of the site and on flatter areas, leaving steeper areas longer, helping to achieve the mix of long and short turf.

Placement of water troughs is important – nearer the trough will be more heavily grazed, consider this in management.

This is similar when supplementary feeding, place hay bales near scrub re-growth to encourage grazing in areas.

### **Scrub**

Scrub clearance should be undertaken as required to maintain open sunny grassland.

However, a scatter of scrub is beneficial, particularly where grazing is heavier as the Tor-grass growing around the scrub will be used as this is more likely to be growing within the necessary height range. Leave some patches of scrub and manage on rotation.

Most important point to consider: There is no point conducting scrub management if there is no follow up, otherwise fresh re-growth will just mean there is more of a scrub issue than prior to management.

Effective initial management can involve controlled burning (with follow up) or cutting with tractor and flail (not always possible on sites due to the steepness of sites).

Follow-up can include herbicide treatment with a knapsack on the young re-growth (not as effective on scrub over 2 years old). Very regular topping on accessible areas, cutting in June/July when plant is most actively growing can also work.

To leave some refuge for herps and birds do not clear more than 30% of the site in one year, and manage scrub in rotation.

When managing scrub on a site aim to leave scattered scrub rather than dense blocks, scattered scrub can provide long-turf within gaps.

In remaining scrub provide a variety of structure and ages, some mature scrub and some young.

### **Authorship/version control**

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