

HEATHLANDS FOR THE FUTURE

Heathland Bedding



USING HEATHLAND BEDDING





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Heather and gorse cut using the Ryetec flail collector from heathland sites was first used on the Llŷn in 2011, the practice was extended to Anglesey in 2012.

Historically, commoners with rights of estover cut gorse for fuel for the house and chopped the green tips for livestock feed in the winter and bracken was cut for bedding

ADVANTAGES

This practice is reaping benefits all round for the farmers, livestock and the environment:

- › Reduced straw costs.
- › Removal of mulch from the heaths which reduces nutrient enrichment
- › Easier to use than straw, saving time for bedding up.
- › The cut areas on the heath regenerate with less gorse content than when they are burnt- making the heath more productive for livestock and benefitting biodiversity.
- › The carbon footprint of the farm is reduced because the

bedding is locally sourced, saving haulage of straw from as far away as England.

- › Even when the cattle appear to be dirty the bedding doesn't stick to their coats like straw, making them easier to clean for sale.

USING THE BEDDING

Storage:

The material may be clamped on the farm in or outside. It heats up initially and may get warm again when put down in the shed. Water drains freely through so it is not essential to cover the stored material, though it absorbs better if fresh and dry.

USE IN THE SHED

"A dry bed is as good as a feed."

The bedding has been used in loose houses and cubicles for cattle, sheep, pigs and poultry and for horse loose boxes on rubber matting.

- › In loose houses most farmers lay enough bedding to achieve a depth of 30cm once it has settled. If laid thicker it may last longer.
- › Boards may be used to retain it and prevent it spilling into feed passages.
- › Additional material can be added through the season to maintain the depth.
- › In cubicles and horse stables a thinner layer of 10cm has been used to absorb moisture. This is replaced more regularly.

Manure: Some farmers have scraped the bedding in with the liquid manure and spread it during the winter; others have left it for 2 years to rot down.

A trial has been done to check for germination of the gorse following spreading on the field. No gorse plants were seen to germinate from either rotted or fresh material in the first 6 months. Management of the land where the manure is applied is unlikely to encourage growth of gorse even if germination does occur.

Analysis:

The following analysis is from material which had been under cattle and then rotted for 2 years.

Not all the amounts will be available in the first year, N is particularly variable. Refer to MAFF publication RB209 for further information.

ANALYSIS	RESULT
Nitrogen N kg/tonne	4.88
Phosphate P ₂ O ₅ kg/tonne	2.93
Potash K ₂ O kg/tonne	7.10
Magnesium MgO kg/tonne	1.62
Dry Matter kg/tonne	336.40
pH	8.2

WASTE TRANSFER REGULATIONS

If the material is cut for heathland management and intended for use by the contractor and landowner for bedding then it is considered to be a product and does not require a permit or exemption.

COSTS

Farmers reduced their straw costs by an average of £1,433 and reduced bedding-up time by up to 10 hours a week.

Our overall objective is to achieve biodiversity and landscape benefits whilst generating revenue to sustain the heathland into the future. Empowering farmers to generate income or save money through initiatives such as this is key to sustainable management of the commons.



HEATHLAND BEDDING USE 2011 - 2013

FARM	SOLFACH	BRYN GORONWY	BODLONDEB
Type of livestock	Continental and Stabiliser Suckler Cows, stores, finishing cattle and Youngstock	Improved Welsh lambing ewes, Pigs, Cattle	Limousin cows, stores, bull, heifers
Number of animals	40	200 ewes. 2 sows, ducks and cattle.	38
Time taken to carry material to farm and spread	1.5 days	1.5 days	1.5 days
Thickness	Spread 25cm deep and topped up	Spread 30cm, compressed to 25cm	45cm compressed to 30cm
Time saved per week	10 hours	4 hours	3 hours
Usual straw usage (£30/bale)	60 to 70 Hestons	25 Hestons	50 Hestons plus £160 shavings
Straw used 2011/2012	3 Hestons	0	5
Cost saving (including transport costs £230)	£2,000	£520	£1,120
Willing to use again	YES	YES	YES
Comments	Appreciate time and cost saving, cattle keep cleaner than on straw.	Pigs enjoy digging in it	Cattle like warm bedding. People laughed at first but can now see the advantages.

FARM	TY'N LLAN	PORTH Y POST CATTLE	PORTH Y POST HORSES
Type of livestock	Continental x steers	Shorthorn steers and cows in cubicles	Horses
Number of animals	15	8 steers 10 cows	10
Time taken to carry material to farm and spread	1.5 days	1 day	6 hours
Thickness	90cm	30cm in shed 15cm in cubicles	3cm cleaned daily
Time saved per week	3 hours	2 hours	N/A
Usual straw usage (£30/bale)	26	6	30 bales of wood shavings
Straw used 2011/2012	13	0	0 shavings
Cost saving (including transport costs £230)	£400	£620	£100
Willing to use again	YES	YES	
Comments	I'll use the bedding again next year as it is still bone dry.	Warmer and drier than paper	Cattle like warm bedding. People laughed at first but can now see the advantages.
Willing to use again	YES	YES	YES
Comments	I'll use the bedding again next year as it is still bone dry.	Warmer and drier than paper	Very absorbent, good alternative to shavings.