



## Helen Babbs

Helen writes, gardens and keeps goats on her family smallholding in West Wales. In the best HF tradition, her writing work is done in a converted stable block. Examples of her articles about all aspects of smallholding can be found on her website: [helenbabbs.co.uk](http://helenbabbs.co.uk)

Photo © East Yorkshire Hemp.



# HEMP

## FOR SEEDS & FIBRE

Helen Babbs learns about a most useful plant with a more notorious close relative

When I first came across chopped hemp bedding for horses, I was rather startled. The television news had recently been full of stories about the discovery of one of the UK's largest illegal cannabis farms, and I couldn't help wondering if this was what the police did with the confiscated crop! How could it be safe? Wouldn't the horses just eat their floor and get 'high' on it?

### SAFE AND LEGAL

Fortunately, hemp horse bedding is not a by-product of criminal activities, but rather a different sub-species of the cannabis plant, *Cannabis sativa* subsp. *sativa*. It contains only minimal levels of the narcotic cannabinoid chemicals, but has both highly nutritious seeds and a stem of similar construction to flax, with central woody pith and strong outer fibres. Hemp has been grown to produce fibre for at least 3,000 years, particularly for cloth and rope. Today it is increasing in popularity once more as an eco-friendly substitute for many wood and cotton products, and as an annual plant, it is

much more renewable than trees, as well as providing a faster return for growers. Unlike cotton, a hemp crop requires little fertiliser and no pesticides or herbicides. It is affected by no specific pests or diseases, and its growth is so vigorous that it will even out-compete any weeds.

Hemp is grown as an arable crop, with the plants very close together so they grow tall and straight, rather than branching out, and here in the UK, hemp plants can even reach heights of up to 5 metres in height! In late summer, the hemp is harvested with a specialised tractor-mounted cutter, rather like a flail hedge trimmer fitted with circular saw blades. The cut hemp is then left on the field, exposed to sun and rain, to be 'retted' for five weeks. This helps the long fibres separate from the woody parts of the plant stem. The hemp stems are then dried, baled and taken to the initial processing factory where they are put through a mechanical decorticator – a series of mills, shredders and cleaners which remove the dry pith of the stems from the long hemp fibres, ready for further processing.

In the UK, hemp growing is strictly regulated by the Home Office in order to avoid the crop being used as a cover for any illegal activities! Farmers must obtain an annual licence to grow the crop, which involves submitting detailed maps of the intended location and providing seed samples. This is followed by a site inspection and a background criminal



Harvesting hemp. Photo © East Yorkshire Hemp.



Commercial hemp. Photo © East Yorkshire Hemp.

record check before any licence is granted. As the licensing process costs over £300 each year, this puts hemp growing out of the picture for most smallholders, but we can still use its many products around the holding.

## HEMP CORE

The most common hemp product for smallholding use is chopped hemp for horse and livestock bedding. This is made from the dry pith and stems of the hemp, and the end product is highly absorbent – I find it soaks up liquids and suppresses ammonia much more effectively than straw or wood-shavings. This also means there's a cost saving, which is always a good thing! Hemp bedding can be used neat as a dense padded layer for all livestock, from horses to hens. If you have sheep and are concerned about the hemp fragments contaminating their fleece, a thin layer of long straw on top keeps it all in place. I also use chopped hemp on the floor of my hay store to keep it dry and absorb any moisture from the hay sweating.

When it comes to mucking out the stable, hemp is also much easier to shovel out than soggy straw! It composts well too, rotting faster than straw, and without any 'carbon robbery' as with any wood-based bedding. In hot weather I find it necessary to add a little extra water to the heap while building it up, to stop any hemp around the edges from drying out instead of rotting.



Hemp bedding can be used neat or under a thin layer of straw.

Chopped hemp is also available as garden mulch, eco-friendly cat litter, compressed 'logs' for use in wood-burning stoves, and even as a building material! Hemp-crete is a mix of lime and finely-chopped hemp core, which bonds together in a similar way to concrete. It can be used as a plaster, or cast just like concrete to make solid walls and floors.

## HEMP FIBRE

Hemp is similar to linen, being a 'bast' or plant stem fibre. The individual fibres can actually be slightly longer, which meant that hemp was traditionally used to make rope. But tough and thick isn't the only option – either blended with other fibres or by itself, hemp can be woven into fabrics, ranging from corduroy to fine, silky muslin. If you want to spin it

yourself, hemp can be bought as 'stricks' or bundles of hemp fibre, ready to fix onto a distaff for spinning with a spinning wheel or top-whorl spindle. Wetting the hemp fibre as you spin will help to keep any fly-away fibres in line to give a very smooth and silky thread.



Top: Hemp contains fibres similar to linen. Bottom: A 'strick' of combed hemp ready for spinning. Photos © Mike Roberts/WildFibres.



Hemp fibre makes excellent building insulation. Photo © Joy Batey/Eden Renewables Ltd.

Hemp fibres can also be included in home-made paper to give results very similar to silk paper. Commercially, shorter hemp fibres are sometimes used for paper manufacture in place of wood fibre. A more unusual use of hemp fibre is as insulation, and rather than smoothing or pressing them down, the hemp fibres are encouraged to fluff up into the thick layers needed for loft insulation! Being a natural fibre, hemp insulation 'breathes' particularly well and will actually absorb water to help eliminate damp or condensation problems.

## HEMP SEEDS

Hemp seeds are rich in protein, iron, magnesium and the complete range of essential fatty acids, including Omega 3. They're available from most health food shops, either as whole seeds, ground flour (sometimes sold as a 'protein powder'), or hemp seed oil. With their nutty flavour, hemp seeds make a tasty addition to both sweet and savoury dishes. Try them anywhere you'd use other seeds: lightly crushed on top of home-baked bread; blended into pesto instead of pine nuts; or in cakes and biscuits to make a sweet snack extra healthy!

Photo © The Hemp Shop.



## HEMP SEED AND APPLE SCONES

### INGREDIENTS

450g wholemeal flour  
2 tbsp baking powder  
100g butter  
75g sugar  
25g hemp seeds  
1 medium dessert apple, grated  
200ml milk

### METHOD

- 1 Mix the flour and baking powder then rub in the butter .
- 2 Stir in the sugar, hemp seeds and grated apple.
- 3 Add the milk to form a soft dough.
- 4 Turn out onto a lightly-floured surface, knead quickly then roll out the dough to a thickness of 2.5cm.
- 5 Cut into 7cm rounds using a deep cookie cutter.
- 6 Bake on a greased baking sheet at 220°C for 15–20 minutes until well risen and golden brown.

## HEMP FACTOIDS

- Hemp enriches soil by holding it together and increasing microbial content.
- Scientists at Chernobyl found hemp removed chemicals from soil better than any other plant.
- During World War Two the US ran a 'hemp for victory' campaign.
- Hemp seeds contain gamma linolenic acid, which is in breast milk, together with omega 3 and 6 fatty acids.
- Henry Ford created a working car out of hemp, soya beans and plastic.
- Hemp plastics are 100% biodegradable.
- Hemp can be converted into biodegradable, non-toxic biodiesel.
- Due to high carbon dioxide uptake, hemp helps reduce carbon emissions through carbon sequestration.
- An acre of hemp can produce as much paper as four acres of trees.
- Hemp seeds are a protein, contain amino acids and vitamins, and can be made into oil or flour. Hemp is one of the most nutritionally dense foods.
- Colonial farmers in America in the 1700s were actually required to grow it.
- "Your lungs will fail before your brain attains any high from smoking industrial hemp," according to Oregon environmental activist, Andy Kerr.
- The words 'canvas' and 'cannabis' actually share the same root.

Hemp has been traditionally used to make rope. Photo © The Hemp Shop.





## HEMP AND HERB BREAD

### INGREDIENTS

- 400ml warm water
- 1 tsp sugar
- 2 tsp dried active yeast
- 450g wholemeal bread flour
- A pinch of salt
- 50g hemp seeds (and a further tbsp for topping)
- 2 tsp each of oregano, rosemary and sage, either dried or fresh
- ½ tsp ground turmeric (optional)

### METHOD

- 1 Dissolve the yeast and sugar in 175ml water then leave to rise for 10 minutes until frothy.
- 2 Mix the flour, salt, herbs, turmeric (if using) and hemp seeds, add the yeast liquid and the remaining 225ml of water, and mix to a soft, sticky dough.
- 3 Tip the dough into a greased, warmed 2lb loaf tin and spread it out level then sprinkle with an extra tablespoon of hemp seeds (if using), or a tablespoon of flour or bran.
- 4 Cover and leave to rise in a warm place for 15–20 minutes.
- 5 Bake at 200°C for 25 minutes until the loaf sounds hollow when tapped.

### FURTHER INFO

For more information visit:

- [thehempshop.co.uk](http://thehempshop.co.uk)
- [eastyorkshirehemp.co.uk](http://eastyorkshirehemp.co.uk)
- [wildfibres.co.uk](http://wildfibres.co.uk)
- [thermafleece.com](http://thermafleece.com)

### YOU ASK...

Sent: Caroline  
To: [ruth@homefarmer.co.uk](mailto:ruth@homefarmer.co.uk)  
Date: August 2017  
Subject: A growing hemp article

Hi Ruth

I really enjoy my monthly dose of info and common sense provided by Home Farmer!  
I wondered if you are considering at some time doing an article about hemp, as I think it might fit your criteria? I keep back-garden chickens and have been using chopped hemp for bedding, very successfully, although sadly the main provider seems to be French. I also see the claims made by the hemp fabric companies and it seems strange it isn't used more. What is the situation regarding British hemp growing? What do the plants look like?!

### WE ANSWER...

Send your feature suggestions to:  
[ruth@homefarmer.co.uk](mailto:ruth@homefarmer.co.uk)  
or phone 01499 500553

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