

Straw set for take-off with Flying Factories



Prefabricated buildings made from straw could prove a winner for farmers. **Cath Harris** reports on a Yorkshire success story.

WHEN foot and mouth floored rural communities in 2001, farmers were urged to diversify and they did.

Some converted barns into bed and breakfast accommodation. Others made their livestock operations organic.

Unused haylofts were transformed into classrooms, native trees planted and hay meadows nurtured under Government-backed environmental schemes.

Now a new tide of innovation is sweeping Yorkshire requiring little or no investment from farmers: houses, study centres and business parks are being built from straw.

And it is not just the raw material that farmers provide. Whole farmyards are being transformed into straw-build factories with machinery, haulage and labour sometimes hired too.

John Broadfield is the latest Yorkshire farmer to benefit.

He is renting space to a Bristol-based company called ModCell.

"I went out of dairy farming because the milk price was too low, which left a lot of buildings unused at this time of year," John says.

"Farmers are diversifying to survive and I use straw for livestock anyway. I like the sound of straw-built houses."

John's Chidswell Farm near Dewsbury has become the workplace for 15 outside craftsmen supervised by ModCell's site manager, Peter Homer.

It is what the company calls a Flying Factory – a term it has trademarked – which it sets up in a radius of about 10 miles of

where the straw buildings are to be erected.

Peter, who comes from a farming family and is a rural development specialist, explains the space they use depends on the size of the job.

John Broadfield's is the third Yorkshire farm he has used.

In 2006, when straw wall panels were required for a pioneering eco-depot for City of York Council they were built in an Easingwold farm 12 miles away.

"I used labour, haulage and straw from Easingwold and must have put in between £15,000 and £20,000 to the farm," says Peter.

"That project set the tone for the how we run things now.

"Farms have a very good range of facilities, they're very comfortable with the idea of straw and I am comfortable with them.

"We pay well and I have never had a farmer turn me down on cost.

"People assume straw building is deep green and



SLEEPING GIANT: Straw is rapidly becoming a major resource for the construction industry and has all the green credentials. PICTURE: JAMES HARDISTY

haired but it's actually been done for centuries."

Earlier this year, straw panels for a research and development centre at

Barnsley College were made at a farm in Wakefield.

The present work at Chidswell farm is for a Bradford business park requiring 199 wall panels made from 2,500 bales of straw.

Peter says farms are ideal for the task for a variety of reasons.

"For city centre developments you can't have lorry loads of straw dumped anywhere. So we build the panels in a barn and transfer them to the site.

"There can be more of a fire risk at industrial premises where I'd have to bring in the electricity and water supplies myself."

For the Barnsley College job, 400 bales of straw were brought from John and Alan Wainman's Milestone Farm

at Newport near Brough in East Yorkshire. They are in a minority of farmers who produce the small-sized bales required.

John Wainman says, "Not many people make the little bales because there's a lot more work involved and they're more expensive. We have a small baler."

He adds that straw is a good trade for him and he has no problem selling it.

Availability could dwindle this year however because of the spring drought.

The Bradford business park is three times bigger than any previous ModCell job.

It is Andy Dale's second for them. A boat builder by trade from Sheffield, Andy helps construct the tall timber frames enclosing the compressed straw bales which

are first pinned together with broom handles and trimmed to a uniform width.

It takes two days to make one panel, which is waterproofed with lime render. When there's a lorryload ready, they are shipped to the building site.

Yorkshire is leading the way in exploring the possibilities of straw. Nick Cheffins is

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We need to increase awareness that it's not difficult to build with straw.



GREEN FUTURE: An artist's impression of LILAC'S 20 affordable straw homes to be built at Bramley, near Leeds.



MEN OF STRAW: Top: A member of the Flying Factory workforce fabricating a straw panel at Chidswell Farm. Below, Peter Horner, left, with farmer John Broadfield

PICTURES: CATH HARRIS



managing the construction of Europe's largest load-bearing straw building, which will be in East Yorkshire.

It's a new pavilion for the Driffield Agricultural Society and Nick believes the benefits of straw are not sufficiently appreciated because it's still seen as quirky and fun.

"We need to increase awareness that it's not difficult to build with straw and get the demand and supply side sorted out," he says.

"Straw is local and has a brilliant carbon footprint." A society in Leeds called the Low Impact Living Affordable Community (LILAC) has also taken practical steps to exploit the value of straw.

Earlier this year, LILAC won planning permission for 20 affordable flats and houses on a former school

site in Bramley, to be partly funded by the Homes and Communities Agency.

The group has appointed ModCell to build its wall panels and Chidswell Farm is potentially the Flying Factory where they will be made.

Paul Chatterton, of Meanwood, Leeds, is a co-founder of LILAC and is enthusiastic about the use of straw.

"It's a locally sourced renewable material from Yorkshire which is really satisfying," he says. "You can't tell that buildings are made of straw and the beautiful thing is that with lime render they can look rustic, or smooth and professional. Straw is a revolutionary building material right here on our doorsteps."

The use of local resources

is not the only benefit that straw-build projects are bringing.

Peter Horner points out that the presence of a Flying Factory means "we're recycling money for food and petrol in local communities".

Specifically, he means the cash that his workforce is spending on site in the farm shop at Chidswell Farm.

John Broadfield is expanding the shop, a move that could prove timely if the farm is used for the LILAC development.

A further fascinating innovation is that LILAC plans to invite Leeds residents to take part in the building work.

"We'll be putting a call out to anyone who wants to learn about straw and help us out for a week," Paul Chatterton says.

My anniversary week marred by thieves and heartache they bring

THIS is my 200th diary and I wish it could be more positive. But things have happened this week that have saddened me. I went to meet a friend at a very busy Clitheroe auction mart where I intended to get a couple more chickens. I went early to have a good look at what was on offer, was tempted by the wonderful array of birds for sale but firmly resolved not to buy anything too exotic.

After lunch, I looked at the furniture auction. In a modest way, I collect the sheep paintings of Joseph Farquharsen but having little funds I tend to search for them at car boot sales, charity shops, jumble sales and auction marts. The ones I can afford are only prints but I like them. I asked my friend to bid for the chickens for me and at the furniture sale rather impulsively acquired a TV cabinet to replace my chewed one. I think Boo was the culprit. It was ridiculously cheap.

I returned to the chickens to find I was the owner of seven growers – all beautiful but not what I had intended to buy – and a large handsome Brahma hen which was what I wanted. I have for some reason called her Helen as she reminds me of a much-loved cousin.

I helped a lovely rather petite lady drag a sack of cushion covers which she had purchased to the door while her sister went to fetch the car. She returned most distressed. Their car had been stolen and the lady's adored black miniature poodle, Harry, was in it. She went to pieces. I took her to the office where she was frantic with worry. I did what I could to help which wasn't much and offered them a lift home. Thankfully the thieves stopped at a garage to dumped the dog which was reunited with its owner. The car is still missing.

Thieves have stolen lead from the roof of the beautiful church at Linton. They have also targeted a church in Skipton. It isn't just the value of the lead that matters so much as the damage caused to the churches when it rains. When these thieves and their accomplices are caught I wish I could believe that they would be punished with something that makes them fearful. But I hold out little hope.

Over the last week I have heard a lot about the poor and underprivileged youth. I also know a lot of folk



SUE WOODCOCK
DALES DIARY

who raised themselves up into upright citizens from such backgrounds and who are to be admired for their honesty and hard work. I had a "different" childhood too but at least I know right from wrong. Nor does my childhood mean that I could ever have an excuse for bad behaviour.

I was quite apprehensive about going and doing Street Angels in Skipton this week. I needn't have been. It was a great evening with the company of lovely youngsters who were sensible and almost behaving themselves. During the week I also went up the dale for a rehearsal at the Buckden Players of another murder mystery.

My eight new birds from Clitheroe adapted very well. The seven growers will probably end up being named after the seven dwarfs but it will take me a while to tell them apart. I found them one evening snuggled up with a hedgehog in the barn and I have been feeding that too. The rain has been pretty constant and has made things rather miserable at times. The dogs don't care. I lost Gizmo and Boo for two hours one day but found them drenched and playing hide-and-seek down in the long rushes of the mire.

Boo found a young dead stoat and lovingly placed it on my pillow. Unfortunately it has been dead a while so yet more washing of bed linen was required.

I saw several weasels while out for a walk and was also delighted to learn that a group of them should be called a sneak of weasels. Very apt!

The glorious 12th has been and gone. All day I hear gunshots from the land above mine and the cats have spent more time inside thankfully.

A lot of game seems to have taken up residence on my land because of it where they know they are safe.

I do not hunt but accept that it is the way of the countryside.

GREEN LIGHT FOR GREEN HOMES

STRAW has exceptional insulating properties which could cut heating bills by 80 per cent.

Straw homes have also been around a long time. Farmers in America's mid-west were the first to build them and a century later they are still there and still being lived in. The American farmers' experience has shown common misconceptions to be untrue. Straw buildings are not a fire risk, they don't provide a home for vermin, and they do last. The big question, perhaps, is why we haven't got cracking with them before?