SHEEP: FLYING FLOCK KEPT MOVING
20 YEARS EXPERIENCE AS A 'GYPSY SHEPHERD' 10

MILK: LARGE HERD SHOWS LOW PRICE STRATEGY 40

ARABLE: HOME BUILT IMPLEMENTS UTILISE FASTRAC SPEED 27

WORKSHOP MIRACLE: REMOVING WINDSCREEN SCRATCHES 35
EDITOR'S NOTEBOOK

Last issue we reported on the innovations of David Stone, a farm engineer who went to Ryecote College in Thame Oxfordshire, and now we find ourselves interviewing another Ryecote man... Neil Harrison. Motor racing has replaced farming at the college, yet the enthusiasm of tutors such as Evelyn Pearce created a generation of thinking and innovative graduates able to continue working positively an industry which is going pear-shaped. Farming in Britain, and elsewhere, is already feeling the effect of these closures, as the shortage of skilled and educated workers increases. The rational economy will be the next to find it actually needs farming, for food, our balance of trade, inflation, rural wealth, countryside maintenance, not to mention the psyche and well being of the rural and urban population alike. Our contributors and readers continue to amaze us with their innovations, which continually expand the pool of ideas into which all can assess and select according to their individual needs. As we start our 13th year, many thanks and God bless.

Farming’s biggest growth area
Inspectors might set aside, inspect for animal welfare purposes, assess for hygiene, scrutinise the environmental impact both for wild life and pollution, examine the farm operations for health and safety, and more besides. Each of these inspectors has a job to protect, a expensive claim form to fill in, and a mortgage to pay, and a pension policy to maintain. Their reports are set to reflect their essential role in the industry. So each inspector highlights the deficiencies he finds, requires improvement and further visits to see the work has been carried out satisfactorily.

None, to date, have had the power to demand the scrap heap is cleared, the mud removed and the yard made as pristine as the unused industrial estate.

Next year - in fact in about 9 months time - this will change. A new tranche of farm inspections will start. These are for the all important Single Farm Payment, and the warning is out for those with ‘untidy’ farms to de-clutter and sanitise, as their single farm payment is at risk. Too much ‘clutter’ - to borrow a phrase from the all important domestic ‘make-over’ TV programmes - and the inspector has the power to declare the farm as not meeting cross compliance measures.

Advisors love to cause alarm and worry - they get more business that way. They need to blow the warning whistle before the heavy hand of authority comes down on the farm.

Advisors are going around telling farmers to cash in their scrap piles - the stuff which isn’t being used, and out the stuff which costs nothing to source, which saves not only the purchase price or any of the thousand and one items or any of the thousand and one items contained in the scrap heap. Useful stuff which costs nothing to source, which is going pear-shaped. Farming in Britain, and elsewhere, is already feeling the effect of these closures, as the shortage of skilled and educated workers increases. The rational economy will be the next to find it actually needs farming, for food, our balance of trade, inflation, rural wealth, countryside maintenance, not to mention the psyche and well being of the rural and urban population alike. Our contributors and readers continue to amaze us with their innovations, which continually expand the pool of ideas into which all can assess and select according to their individual needs. As we start our 13th year, many thanks and God bless.
Nigeria and Venezuela have hit production, but can be solved. So medium term supplies are also looking better than today.

In Britain farming has a more peculiar problem. Gordon Brown has decided to triple the rate of duty on tractor diesel, which adds 10% to the price of diesel.

We discover the questions over the MMR vaccine were led by a doctor-scientist paid £5,000 by solicitors trying to prove a scientific link which was never there. Scientists dictate what is safe and what is dangerous, and regulations follow their advice.

Independent science is vitally important. We all have to trust the findings of the scientists working in food, health, medicine as well as engineering, and the MMR revelation was front page material, combining children, health, doctors and dishonesty. Not all dodgy science attracts this attention. Some attracts little at all.

Take, for example, the science behind the ban on on-farm burial of animal carcasses. The Ministry created mass graves during the Foot and Mouth crisis. The science which condemns the farmer from burying dead stock apparently failed to apply in this case. Are there no environmental costs associated with incineration, cremation and rendering? The issue is unattractive to the press, so the new rules go unquestioned.

Tesco has been skillful and lucky in the game of Retail - the real life form of Monopoly. The company seems determined to win the game, by good trading and acquisition. For the past 20 years they have avoided landing on ‘Go to Jail’. Over the years their ‘Chance’ cards seem to have done as well as their dice throws, and the lucky run seems continuing. Despite their 26.8% of the UK grocery market, their management has acquired another group of Adminstore convenience stores - Cullens, Hart and Europe. The Ministry created mass graves during the Foot and Mouth crisis. The shop is a major outlet for local farmers and food producers, and the food is fresh. This means items can be sold out, as it takes time to get in new supplies.

There’s something really great hearing about people who make the best of adversity. The motorway has changed John Dunning’s life, but he hasn’t let it ruin it.

Greater London has a food market of 7.5m people. What percentage of their consumption comes from abroad? 8%? 20%? 50%? The staggering truth is that 80% of the food they consume is sourced from overseas - according to Don Curry, the government’s farming advisor. The conclusion is that farmers in easy reach of the capital should be tapping into this market. But they can only do so with the support of the companies they are currently supplying. One of the mysteries of farming is seeing commodity crops being grown tight to major urban conurbations - a fact which seems to suggest the food trade is happy to truck in from abroad and not seek out growers and producers closer to hand.

Dear Sir,

Since the outbreak of Foot and Mouth disease, the government has introduced a system that can track every cow born in Wales to its current home in Yorkshire, and its calves to their stalls in Sussex. How is it the Home Office is completely unable to trace illegal immigrants in this country?

Should DEFRA be put in charge of immigration, or should all foreigners landing in our country be presented with a cow on arrival?

Henry White-Smith, in The Telegraph

Old Woodburning Rhyme

Beechwood fires are bright and clear
If the logs are kept a year.
Chesnut’s only good, they say,
If for long ‘is laid away.
But Ash new or Ash old
Is fit for a queen with crown of gold.

Elm wood burns like churchyard mould,
Beneath the very flames are cold.
Birch and fir logs bum too fast
Blaze up bright and do not last.
E’en the very flames are cold.
Hawthorn bakes the sweetest bread.

Elwood burns like churchyard mould,
Beneath the very flames are cold.
But Ash green or Ash brown
Is fit for a queen with crown of gold.

So many he had to do some thinning using a dribble bar with glyphosate, driving across the rows.

A king shall warm his slippers by.
But Ash wet or Ash dry
With an incense like perfume.
Fills your eyes and makes you choke.

Poplar gives a bitter smoke,
Even the very flames are cold.
Birch and fir logs bum too fast
Blaze up bright and do not last.
E’en the very flames are cold.
Hawthorn bakes the sweetest bread.

Elwood burns like churchyard mould,
Beneath the very flames are cold.
But Ash green or Ash brown
Is fit for a queen with crown of gold.

So many he had to do some thinning using a dribble bar with glyphosate, driving across the rows.

A king shall warm his slippers by.
But Ash wet or Ash dry
With an incense like perfume.
Fills your eyes and makes you choke.

Poplar gives a bitter smoke,
Even the very flames are cold.
Birch and fir logs bum too fast
Blaze up bright and do not last.
E’en the very flames are cold.
Hawthorn bakes the sweetest bread.

Elwood burns like churchyard mould,
Beneath the very flames are cold.
But Ash green or Ash brown
Is fit for a queen with crown of gold.

So many he had to do some thinning using a dribble bar with glyphosate, driving across the rows.

A king shall warm his slippers by.
But Ash wet or Ash dry
With an incense like perfume.
Fills your eyes and makes you choke.

Poplar gives a bitter smoke,
Even the very flames are cold.
Birch and fir logs bum too fast
Blaze up bright and do not last.
E’en the very flames are cold.
Hawthorn bakes the sweetest bread.

Elwood burns like churchyard mould,
Beneath the very flames are cold.
But Ash green or Ash brown
Is fit for a queen with crown of gold.

So many he had to do some thinning using a dribble bar with glyphosate, driving across the rows.

A king shall warm his slippers by.
But Ash wet or Ash dry
With an incense like perfume.
Fills your eyes and makes you choke.

Poplar gives a bitter smoke,
Even the very flames are cold.
Birch and fir logs bum too fast
Blaze up bright and do not last.
E’en the very flames are cold.
Hawthorn bakes the sweetest bread.

Elwood burns like churchyard mould,
Beneath the very flames are cold.
But Ash green or Ash brown
Is fit for a queen with crown of gold.

So many he had to do some thinning using a dribble bar with glyphosate, driving across the rows.

A king shall warm his slippers by.
But Ash wet or Ash dry
With an incense like perfume.
Fills your eyes and makes you choke.

Poplar gives a bitter smoke,
Even the very flames are cold.
Birch and fir logs bum too fast
Blaze up bright and do not last.
E’en the very flames are cold.
Hawthorn bakes the sweetest bread.

Elwood burns like churchyard mould,
Beneath the very flames are cold.
But Ash green or Ash brown
Is fit for a queen with crown of gold.

So many he had to do some thinning using a dribble bar with glyphosate, driving across the rows.

A king shall warm his slippers by.
But Ash wet or Ash dry
With an incense like perfume.
Fills your eyes and makes you choke.

Poplar gives a bitter smoke,
Even the very flames are cold.
Birch and fir logs bum too fast
Blaze up bright and do not last.
E’en the very flames are cold.
Hawthorn bakes the sweetest bread.

Elwood burns like churchyard mould,
Beneath the very flames are cold.
But Ash green or Ash brown
Is fit for a queen with crown of gold.

So many he had to do some thinning using a dribble bar with glyphosate, driving across the rows.
The Vicon drill was an unloved machine resting in a hedge for some years. Being made almost entirely of plastic helped keep it from deteriorating, and a good clean and grease had it working well. The hopper outlets are reduced to nine, the rest being blanked off with expanding foam - to reduce the noise! The grille preventing straw and other material getting into the blower is opened, equalising seed flow into each one. The出让 preventing the access to the tines is opened leaving the bale where it’s wanted.

Clockwise from far left: lightweight loader extension is fitted with the general purpose crane extension - note the angles between the main beam and the headstock, and the jib; close up shows the headstock in detail, and the accurate cut out of the angle fitting; like the crane jib, this has two lengths to which it can be extended. The angles look peculiar when the fork is laid on the ground, but come into their own when in use. The fork tips are used pointing down, as in the picture. Using them the other way would make it impossible to detach the bale from them.

The seed tubes are Kverneland Suffolk coulter tubes, welded to the back; rear view of the McConnel machine makes it easy to fit the drill. Rob strengthened it by extending the headstock.

The design is clever, in that the angles have been worked into their own when in use. The drill metre wheel is off the Accord drill, and the seed flow makes a good noise so you can tell when there’s a bridging in the hopper. The drill works really well, and the bean sample was dirty and Rob was concerned about grease had it working well. The hopper outlets are reduced in direct proportion to the amount the jib is extended.

This extension is about 6ft. It has two main uses - lifting bales to the top of the shed and handling 1/2 tonne fertiliser bags. The frame has Quicke brackets. It isn’t a substitute for a telescopic handler, but does quite a bit of the lighter work a handler might be required to do.

Followup: Rob Renwick, Kingstons Farm, Cadley, Marlborough, Wilts Tel: 01672 512039

DEOSAN TOWEL DISPENSER

The roll stays clean, is where you want it on the wall, and the paper comes off as it should. Instead of an expensive dispenser from the shop, this one uses no more than an old handle as a spindle and a drum as the holder, and it all looks made to fit together!

LOADER EXTENSION LIFTS BALES TO THE BARN ROOF LIKE TELESCOPIC HANDLER

• expands versatility and work of tractor fore-loader
• reduces the need for expensive tele-handler
• releases farm handler for loading bales in field etc

The laws of physics say that if you add an extension to your loader and it will lift less - but it will get it higher. Even a telehandler can’t defy these laws, though the salesman might try to persuade you that it can’t! The lift capacity is reduced in direct proportion to the amount the jib is extended.

This extension is about 6ft. It has two main uses - lifting bales to the top of the shed and handling 1/2 tonne fertiliser bags. The frame has Quicke brackets. It isn’t a substitute for a telescopic handler, but does quite a bit of the lighter work a handler might be required to do.

The design is clever, in that the angles have been worked in direct proportion to the amount the jib is extended. The angles between the main beam and the headstock, and the jib end; close up shows the headstock in detail, and the accurate cut out of the angle fitting; like the crane jib, this has two lengths to which it can be extended. The angles look peculiar when the fork is laid on the ground, but come into their own when in use. The fork tips are used pointing down, as in the picture. Using them the other way would make it impossible to detach the bale from them.

Loading the extension a further 4ft., with 3’ 6” inside the main beam. Joints have been neatly made, but there’s no great evidence of strength. There’s a logical reason for this - for safety reasons the machine should not be overloaded, and there’s no great evidence of strength.

Joints have been neatly made, but there’s no great evidence of strength. There’s a logical reason for this - for safety reasons the machine should not be overloaded, and there’s no great evidence of strength.

The laws of physics say that if you add an extension to your loader and it will lift less - but it will get it higher. Even a telemanager can’t defy these laws, though the salesman might try to persuade you that it can’t! The lift capacity is reduced in direct proportion to the amount the jib is extended.

This extension is about 6ft. It has two main uses - lifting bales to the top of the shed and handling 1/2 tonne fertiliser bags. The frame has Quicke brackets. It isn’t a substitute for a telescopic handler, but does quite a bit of the lighter work a handler might be required to do.

The design is clever, in that the angles have been worked in direct proportion to the amount the jib is extended. The positions between the main beam and the headstock, and the jib end; close up shows the headstock in detail, and the accurate cut out of the angle fitting; like the crane jib, this has two lengths to which it can be extended. The angles look peculiar when the fork is laid on the ground, but come into their own when in use. The fork tips are used pointing down, as in the picture. Using them the other way would make it impossible to detach the bale from them.

LOADING THE EXTENSION A FURTHER 4FT, WITH 3’ 6” INSIDE THE MAIN BEAM. Joints have been neatly made, but there’s no great evidence of strength. There’s a logical reason for this - for safety reasons the machine should not be overloaded, and there’s no great evidence of strength.

The laws of physics say that if you add an extension to your loader and it will lift less - but it will get it higher. Even a telemanager can’t defy these laws, though the salesman might try to persuade you that it can’t! The lift capacity is reduced in direct proportion to the amount the jib is extended.

This extension is about 6ft. It has two main uses - lifting bales to the top of the shed and handling 1/2 tonne fertiliser bags. The frame has Quicke brackets. It isn’t a substitute for a telescopic handler, but does quite a bit of the lighter work a handler might be required to do.

The design is clever, in that the angles have been worked in direct proportion to the amount the jib is extended. The positions between the main beam and the headstock, and the jib end; close up shows the headstock in detail, and the accurate cut out of the angle fitting; like the crane jib, this has two lengths to which it can be extended. The angles look peculiar when the fork is laid on the ground, but come into their own when in use. The fork tips are used pointing down, as in the picture. Using them the other way would make it impossible to detach the bale from them.
HESSTON HANDLER ADDS SAFETY AS WELL AS SPEED

It's quick work unloading an artic trailer of D1010 or other large square bales if you can handle them three at a time. With the right rules on driving time, haulage companies want a rapid turn around.

This handler goes on a Howard FX16 loader fitted to a Ford 7600, and it needs a tractor and forloader with capacity. A rear weight is essential as well. You then have a machine which lifts stacks of bales from a trailer (or for that matter on to the trailer as well). The back is tall enough to prevent the bales from falling back onto the tractor, which is the major danger when doing this job with the wrong equipment. The back is also strong enough to allow the spike to be tilted back at an angle, so preventing them falling forwards.

The spike can be quickly altered to carry two round bales. The centre spikes are removed and located put directly above the two outside tines, so each round bale is supported, preventing the centres becoming loose and the bale turning.

Above high back - which lifts off the frame so the machine can be used to handle single bales up to roof height - and a decent loader make this a real time saver. Right: four times are bashed in positions. Note the way the back drops into the frame, making it a flexible machine.

Top holes in the side are used to handle round bales. Far right: Quicke brackets are still used on the farm as they are simple and universal - an adaptor plate fits the loader.

REAR WEIGHT USES WATER TANK

A galvanised water tank with a hole in the bottom makes an ideal tractor weight. Weighing in a just over a ton, the weight is ideal for a forloader on a 90 - 120 HP tractor, providing rear wheel grip and relieving the front axle of undue strain. When making a weight, be careful not to over-ballast - it causes major damage. The tank looks neat and won't rust for many years, and can be filled with concrete with no difficulty.

The A frame has a robust 2 x 4 in frame made from heavy channel section, and this goes through the side of the tank in three places - at the top of the A frame and at its base. The steel frame inside the tank was made on the bench and then dropped into the tank and the three fixing parts were pushed through their holes. The A frame was then welded on and positioned so the frame hangs symmetrically. The frame extends through the top of the concrete so that the weight can be handled with pallet forks when necessary.

Loader tractor's lift longer and suffer far less abuse when fitted with rear weights, even when they are 4 WD. The weight is positioned over the rear axle instead of the tractor pivoting on the front one. A good weight like this can give a 2 WD tractor the same kind of performance as a 4 WD. Care must be taken not to attach too large a weight on the rear, however. The strain on the bell housing is magnified, as the weight on the tractor effectively gets broken in two.

BULK TANK MAKES USEFUL WATER RESERVOIR

Above, from left: bulk tank stands outside - lid keep dirt out; it takes an age to fill the sprayer with this water pressure; submersible pump keeps tank isolated from the sprayer.

Filling the sprayer from this disused bulk tank instead of using a hose on a tap saves a lot of time. Your sprayer may be small and a conventional bowser larger than you'll ever need, but cutting the time to fill the sprayer will be much appreciated, particularly when the tank is available for nothing.

Stainless tanks like this 500 gall Dairycool have no value. There seems to be no export market for them, and their scrap value is minimal. You will have paid £3,000+ for it 20 or more years ago, but you'll have to write the whole value off. So using it like this is cost free.

Alan put a ball valve in the top so when it's full the water is turned off. There's a pump in the bottom so the water can be pumped into the sprayer and there's zero contamination of the tank from sprayer hoses.

MOBILE FENCING STAKE

Above right: Rear weight is symmetrical and provides an equal pressure on both rear wheels. Right: frame hugs pass through the side of the tank.

The off-centre hole for the fencing stake is deliberate, not accidental. It's there to prevent cows knocking the stand with their feet when they pass by. It only takes a small movement for the wire to become slack, and that's the time when adventurous heifers start experimenting and making bids for freedom.

Moving the base means lifting it onto the rim and rolling - a central hole - maybe a short length of 2in plastic drain, would allow a bar to be pushed in and the base wheeled with clean hands and a straight back.

Readers often say that the simple things included in Practical Farm Ideas are the ones which they find really useful to make themselves. Here's a real gem!

Whether you're shifting a new born calf or ones which is a month or so old, whether you're shifting a new born calf or ones which is a month or so old, this cart is the way to do it.

"I can't understand why every livestock farmer doesn't have one!" says Glos farmer Alan Brookes. "Instead of struggling with string around the neck or a halter which has a 50% chance of slipping off the calf's head, you wheel them at your pace." When you get to the new pen, you can leave them alone as you open the door and get things organised. It makes one man calf handling so much easier, and there's no need to start a tractor or anything like that"

The cart uses a pair of motor cycle wheels, has a wooden floor and solid mesh sides. With wheels in the centre it is nicely balanced. The big wheels make it good on rough ground. The door opens, and as it naturally rests nose down the floor is the loading ramp.

FOLLOWUP (BOTH PAGES): ALAN BROOKES, HAW STREET FARM, COALEY, DURSLEY, GLOS
Describing himself as a ‘gypsy shepherd’, David Sullivan has kept as many as 5,000 sheep - yet owns not an acre of land. Today, closer to retirement age with the numbers to 1,500, time help only. His ethos is long-term planning.

He planned the main structure of his sheep business in the 1980s, and the modern system takes no account of this vital part of the original formula. ‘A ewe likes to be alone when lambing. She goes off into the hedge or hollow and makes a nest to lamb in. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its bleat and scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognise its mother through its scent. She knows her lamb through its bleat and scent. The nest is important - it enables the lamb to recognis...'
Securing land for his flock
Having as many as 5,000 sheep with no permanent home for them means securing a succession of short term grazings. At one stage David was grazing 37 different farms in the season, but today these number a mere eight!
Because he can fence land quickly and securely, he is able to take on any kind of grass or arable ground, and put sheep on until it is grazed down. He takes on barley stubble, sow turnips and grasses them off before the land is ploughed, and will have the land under this arrangement for no charge. The benefits to the next crop are well recognised. Similarly he can utilise under-grazed grass land, and sow other grazing crops for short term use.
Reliability, both of his fencing and his vacating the land, is a corner stone of the system. If either of these were compromised, he would soon find it hard to get a supply of land in the area.
A sole occupancy licence links the arable farms he uses, which cuts down the paper work needed.

Flock management
All lambs are fattened for market, and lambs bought in as replacements. He buys in around 1,000 gimmers which are kept for a period in a lambing shed, a special trailer fitted with 25 compartments. He buys in around 1,000 gimmers which are kept for a period in a lambing shed, a special trailer fitted with 25 compartments. The 16 which are sorted with a George Mudge trailer. The 16 are cut down the paper work needed. The 16 are

Drift Lambing
Lambing outside provides ewes with all the seclusion and opportunities to bond with the lambs, and doing this in May means they go straight onto grazing which is at its best. Ewes are moved into the lambing paddocks a few days before they are due, and are moved from one to the other on a 12 hour basis. Those which have lambed are left where they are, and moved from one to another and when lambed are moved to the grazing location.

Dogs are an important part of the management team, and are trained to a respectable standard. He likes his dogs to have 6 months playing with the family so they are kind and biddable, and then starts working with them. He keeps three at any one time, a traine, a prime of life worker, and an older dog. They need to work together and be reliable for basic work, but not necessarily be good for trials work. Sexism reigns - he always keeps working dogs, not bitches, as he gets on better with them.

Shearing is a problem with the flock spread over a wide area. Access to suitable yards is not always so easy. Ewes are shorn in the first week in September, and so have the summer in full fleece. Shearing coincides with weaning and a move to autumn and winter grazing.

“...you think the sheep will be uncomfortably hot, but that’s not the case. Wool is a marvellous insulator, it keeps heat out as well as heat in. Australian Merinos are in full fleece in very high temperatures, and are seen grazing in full sun. If we shear in hot weather, you often see the shorn sheep taking to the shade of a hedge or tree and the ones with their coats still on in full sunlight. Another example comes from the desert - Arabs always are covered, and often dress in wool.” There’s a small plus from the Wool Board for this system - David gets a small bonus for ‘storage’.

Ewes are lambed in a 15 acre paddock which is divided into two parts. The system is known as ‘Drift Lambing’.

Treatment - the mobile dip
Taking the dip to the flock is quicker and easier than the other way around, particularly when so many sheep are involved. The dip is a commercial machine made by Wilkinson. Disposing of used dip is an increasing problem, as licenses are needed for each site, rather than each dipping machine. The cost of each is £169. The costs and problems of dipping encouraged David to miss dipping last year, and the worst happened and one flock became infected with scab. By the time it was noticed and treated, a further two flocks were affected. This year the dip will be out, despite the costs of the business. It’s a real example of animal welfare being compromised by additional legislation, taxation and bureaucracy.

The mobile foot bath
All his sheep are seen to for drenching, vaccination, crutch, foot trimming, and foot bathing. He does 100 a day in March and early April. He works through them in groups of 16 which are sorted with a George Mudge trailer. The 16 are clipped and trimmed and injected and then loaded into the foot bath which is made of a cut up diesel tank fitted to a 12ft caravan chassis. The corner studs of the chassis keep the trailer stable, and the roof over the top prevents the dip becoming dilute with rain water. The inside of the tanks are thinly painted and the base lined with wood to prevent the solution coming in contact with the metal area of the tank.

The trailer has running boards so he can sort the sheep in the tank if necessary without going in himself. The chemical is zinc sulphate, and each batch of sheep are being crutched, injected and foot trimmed; ramp into the foot bath; wool sack frame makes filling easy, and opens to release the filled sack; this building makes a good place to handle the sheep - David crutches, injects and does the feet of around 150 a day during April

Drift Lambing
Lambing outside provides ewes with all the seclusion and opportunities to bond with the lambs, and doing this in May means they go straight onto grazing which is at its best. Ewes are moved into the lambing paddocks a few days before they are due, and are moved from one to the other on a 12 hour basis. Those which have lambed are left where they are, and moved from one to another and when lambed are moved to the grazing location.

Newly born lambs have their navels dipped in iodine, are castrated with rubber rings and docked before going out to their paddock on until it is grazed down. He takes on barley stubble, sow turnips and grasses them off before the land is ploughed, and will have the land under this arrangement for no charge. The benefits to the next crop are well recognised. Similarly he can utilise under-grazed grass land, and sow other grazing crops for short term use.

Reliability, both of his fencing and his vacating the land, is a corner stone of the system. If either of these were compromised, he would soon find it hard to get a supply of land in the area.
A sole occupancy licence links the arable farms he uses, which cuts down the paper work needed.

Flock management
All lambs are fattened for market, and lambs bought in as replacements. He buys in around 1,000 gimmers which are kept for a period in a lambing shed, a special trailer fitted with 25 compartments. He buys in around 1,000 gimmers which are kept for a period in a lambing shed, a special trailer fitted with 25 compartments. The 16 which are sorted with a George Mudge trailer. The 16 are cut down the paper work needed. The 16 are

Drift Lambing
Lambing outside provides ewes with all the seclusion and opportunities to bond with the lambs, and doing this in May means they go straight onto grazing which is at its best. Ewes are moved into the lambing paddocks a few days before they are due, and are moved from one to the other on a 12 hour basis. Those which have lambed are left where they are, and moved at the end of the 12 hour period straight to their grazing. This means each ewe has a minimum of 12 hours to recover and bond in the lambing ‘nest’ before being disturbed.

Newly born lambs have their udders and teats checked. The ewes have their udders and teats checked. The ewes on the whole get on with it. Crossing tups are most-
The fencing system
Ridley equipment is used here without exception. David finds it reliable, which is the prime requirement. It is also suited to one man working.
Stakes are bundled into 20s and are stored on ex-supermarket flat trolleys in the workshop/store shed. The bundles make it easy to load and handle a large number stakes, and prevent them getting damaged. Wire reels, all of which are Ridley, are also stored on trolleys. Fencing is done using the Land Rover and trailer, which carries the ground driven reel for rolling up the wire. The Land Rover works well, is a slow walking pace, starting as fence stakes are picked up. The bonnet of the Land Rover is covered with protective checker plate, so it becomes a useful platform for repairs to one man working.

Drinking water uses header tanks filled from bowser
• suitable system for calves, horses, small herds
Many arable fields have no water, but this isn’t a problem as David has developed a standard set-up using a trailed bowser and pump to suck water from the river and drive around filling up 300 gallon header tanks on a weekly basis. He tops up all his tanks clockwise from top left: Land Rover bonnet has checker plate and is used to carry the stakes erecting and collecting fence stakes are racked on a supermarket trolley, and bundled into 18s; reels of wire are stacked on trolleys and are handled four at a time; there are always batteries on charge - he uses mostly Hotline energisers; electric netting is rarely used, but the lengths he has are rolled; corner posts are racked and those needing repair sorted.

The water system in this field is easy to see - the tank under the tree (stays cool) leading down to the trough in the horse field shows the simplicity of the system; connection to the base of the juice container; the water bowser is a useful system, as the rear trailer can be parked and the first used separately if needed; the PTO pump on the first trailer fills both the front and rear tanks, and discharges water from them as well.

Below, from left: the wood fire is beneath the carcasses which are loaded onto a grid. There’s almost no odour, and after the bodies have dried, they go without making much smoke. The machine is an insulated container containing a fire burning wood - mainly off-cuts from a builders yard. The base of the fire is built on sand, and the sides have nearly 12ins of kapok and glass fibre insulation.

Deadstock disposal uses home built incinerator
• bio-secure, no farm to farm transport of dead animals
Dead sheep in this incinerator disappear into dust within 24 hours. David designed it and had it built some years ago, and uses it exclusively for his sheep. The machine is an insulated container containing a fire burning wood - mainly off-cuts from a builders yard. The base of the fire is built on sand, and the sides have nearly 12ins of kapok and glass fibre insulation.

The fire is started and the sheep loaded through a door in the top, where they rest on a grille made from 1in dia solid steel bars. The fire dries the bodies and they then combust quite slowly, the heat in the chamber being retained by the insulation. Temperatures get very hot and the sheep go to ash - a programme on BBC a few years ago showed the same phenomena where people were burnt to a cinder although the house never caught fire. The same thing happens in this incinerator. There’s almost no odour, and after the bodies have dried, they go without making much smoke.

The machine is mobile and weighs around 4 tons - there’s a lot of sand insulation in it. The ash is raked from time to time, and disposed of in a registered dump.
Sheep production offers real opportunities

The success of the management system makes David immensely bullish over the future of sheep in the UK. There’s a healthy market for the product, and production in the rest of the EC is relatively small. New EC states are all importers of sheep meat, and there’s strong demand from outside the EC as well.

Added to this, the sheep plays an important environmental role. After their food, need sheep, or they to maintain grassland. Many situations are no real alternatives, as mechanical trashing and mowing is not just expensive, it can’t be done. So areas under management will need to have sheep to keep the landscape in order, and they are increasingly finding it easier to import flocks rather than take over the responsibility of flock ownership.

“Political changes alter much in farming, and no more so than in the sheep industry,” claims David. “For years there was the motivation to increase production, and this in turn changed to supporting existing production levels under quotas. Now the pendulum is moving away from production towards the maintenance of landscape and the environment. Sheep are the unstated cornerstone of much environmental policy today. Land owners under schemes will soon be paying sheep farmers to graze their land.”

Short term licence farming

In 1982 David was awarded a Nuffield Scholarship to study sheep farming in New Zealand. His interest was in the human factor. How their share farming systems worked, how farmers and the agricultural industry was regarded in New Zealand, the New Zealanders perception of British, and British farming.

He found share farming, both with cows and sheep, to be a system which in many cases worked well. His report says: “Enormous value was placed by those involved (in successful share farming) in the satisfaction of helping one another.”

Share farming sheep in the UK

1. Avoidance of a tenancy. A 50/50 share farming arrangement as widely practised in New Zealand, which means individual sheep in the flock are owned by the landowner or the share farmer, is likely to create an agricultural tenancy in the UK, as the share farmers sheep have continuous access to the land. The safe precaution is for the flock to be in joint ownership.

2. Avoidance of a partnership. Each owner need to show they have a separate relationship. In this deemed responsible to separate their achievements, and proud.

3. The landowner must be seen as ‘trading’ if his income is to be treated as ‘earned’ under schedule D, and also for certain capital gains reliefs. He must be seen to be actively buying inputs and selling produce.

4. Accounting. The relationship between the two parties provides the proportion of each share. In theory bills and receipts need splitting to this proportion, but the accounting work involved is in many cases impractical. Block allocation of total areas of expenditure is probably better. However, there have been many advances in both accounting and banking, and today the separation of bills and receipts is easier than it was thirty years ago when the CLA published ‘Share Farming’ by Richard Stratton, Michael Gregory and Richard Williams.

Subscriptions / Contact / On-Line Info

www.farmideas.co.uk

Followup: David Sullivan, 2 Horseshoe Lane, Ibthorpe, Andover, Hants. SP11 0BY

Tel: 01264 736514
Farmer-shareholders need to be wary

These days it seems company directors make themselves more money when they fail than when they succeed. Take Michael Green, who walked away with a ‘loss of office’ payment of £1.8m, plus further share deals worth £13.2m, when he failed to be appointed boss at ITV.

While Michael Green makes the headlines, there are thou-sands of others making similar deals for themselves, and it’s not just in entertainment. Be aware that directors of the farm co-op in which you have shares may request share options, loss of office payments and other expensive packages. The scale of these payments may be nothing as grand as Greens, but their effect on the business could be enormous. In many respects, these service contracts effectively hand over ownership of the business to the directors.

Termination deals need watch-ing...and those who are members of farm co-ops should be pre pared to resist unreasonable requests and not be steam-rollered into giving the business away. For these contracts make the debate about directors’ cars pure chicken feed. Green’s deal - with a total pay out of £1.5m - may be exceptional, but his business was big. Agreements worth a tenth of his in businesses a tenth the size and with slender profits are far more damaging. The result is a real weakening of the company. The penalties of removing the lack lustre chief executive are so great he becomes a permanent feature. Other board directors may well put up only a fee ble fight, as they see themselves having a similar chance at riches in a few years time.

Green isn’t the only greedy director

Farmers find themselves financially involved in the businesses they supply. They sell to co-ops or marketing companies in which they have a shareholding - fastock to co-operatively owned abattoirs, milk to dairy businesses, grain to co-ops. Farmer members invest and provide these businesses with an attractive source of funds. Many company boards find the farmer makes a good representative. They are trusting and non-contentious, are busy people with little time to whistle blowers - until it’s too late. Farmers are also generally straight thinkers, whose understanding and appreciation of modern business practice can be wanting. Some can be easy meat.

Farmer directors need to make time to discover company contracts, and get them properly interpreted, explained in a way which is understandable to them, as shareholders of the business. Severance contracts can, like Green’s, involve bene ficial share options and payments sufficiently large to have a significant effect on the business.

It’s easy to go with the flow, and accept these contracts as part of modern business. Easy to be per suaded that these generous con tracts are needed if the executive’s unique talents are to be retained, and not allowed to escape down the road to a competitor. Delicate matters such as executive con tracts and remuneration are fre quently lost in a complex agenda (often drawn up with the assist ance of the executive himself), placed to come up at the board meeting as a time of least resistance.

The executives concerned will have done their lobbying as well as their homework. Soft touch directors, and those who may have similar ambitions as far as their contracts are con cerned, will be won over well before the meeting takes place. Executive packages are of obvious importance to the peo ple concerned, and many will pursue the terms they want, with a determination of a terrier. Those involved not only have the incentive and the skills to achieve what they want, they often have the time and resources as well. Why hire farmer directors spend their non-board time on the tractor and in the milking parlour, the chief executive often has the time and freedom, the office, secretary and other necessities to secure the deals they need.

Farmer businesses need to make themselves fully aware of the real consequences of such severance contracts. They need to make certain the contracts are not an incentive for failure, or the disincentive for the business to merge with others and benefit from economies of scale.

...be aware directors of the farm co-op in which you have shares may request share options, loss of office payments and other expensive packages...

House prices to plunge 20% in the next 3 years?

In 1994 the property market was on its back. Repossessions were rampant. Pundits, including the Governor of the Bank of England, Eddie George, said there would be no change for six years.

In 1996 it seemed to us to like a good buying opportunity. Farmers could invest in local housing, upgrade it if needed, and hold it until the market improved. Since then we’ve had a few phone calls of thanks. One reader bought five run down properties for £300k and now has a portfolio approaching £2m. So the house market is of relevance to farmers.

The market now is in exactly the opposite position as in 1994. So it is going to crash and, if it does, what should the prudent investor do about it? - Economists seem to agree the market is going to fall. Some predict tumbling prices as early as this autumn, while others anticipate a gradual cool-off and an end to double-digit inflation. Whatever the case, one thing is certain: the raging property bull market of the last three years is at an end.

The facts are these:

The number of first-time buyers in 2003 was down 40 per cent on the previous year. Dynamic growth curves when new buyers cease coming into the market. Overall, people trade up to more expensive homes, and the process repeats itself down the line. The base of the pyramid requires new homebuyers, and when they don’t, the market fails. It has always worked in this way - prices rise to a point when new money is not available for investment, new buyers are absent and prices start falling. Until recently, new buyers were young couples with high earnings living in front of them. This last boom has been fuelled by the buy-to-lets - older buyers responding to the poor performance of paper investments and putting their savings into property instead. These people have no need for a roof or home and can decide to sell overnight, and are likely to do so if they become anxious or see better returns elsewhere.

House today are over valued. The ratio of house prices to incomes is now the highest ever recorded, the average being five times average income. Prices fell in real terms (adjusted for inflation) by 30-35 per cent after the boom of the early 1970s and late 1980s.

This compares with average rises in the UK alone of 15.5 per cent for this last year. Some areas, including Wales, saw prices rise by more than double this. The phenomenon is not confined to Britain, and the borrowing and economic expan sion which has occurred on the back of the growth in property values is also worldwide. In San Diego, house prices rose more than 16 per cent last year, and in Los Angeles they were up an incredible 29 per cent.

What do the experts predict?

Even the big mortgage lenders, with a vested interest in talk ing up the market, are predicting a sustained slowdown. Nationwide and Halifax lead the pack predicting rises of 9 and 8 per cent. The Woolwich and Hometrack predict rises of just 5 and 4 per cent respectively. This is little different to the predictions they made in 2002 for 2003, which was for a ‘steady as the go’s rise’. Nothing for the chancellor or investors to get worried about.

Yet they were wrong - the market boomed. Forecasters Robert Boole from Capital Economics got closest to the mark in 2002, when he said it would be full steam ahead to close to 20 per cent in 2003. He predicts a major down turn starting in the second half of this year. and a fall of 20 per cent over the next three years. 300,000 home owners would be put into negative equity - they will be borrowing more than their property is worth - and their number will increase in 2005 as the market continues to fall.

How will this leave the ‘buy-to-let’ investor

Much depends on the calculations they made before buying. Those relying on a rise in their asset value will face tough times, and will be the first to get out. Those whose rental incomes provide a positive return of 4 - 6 per cent will find their return on increasing as the value of their assets goes down. Rising returns are unlikely to be matched by other forms of investment.

Will the supply of tenants dry up, as houses become more affordable? Unlikely. People are increasingly mobile, so rentals are in demand. There are thousands who will remain price insensitive, and marginal buyers have little incentive to invest in a falling market. Migrants from the ten new EU members will increase demand for rentals.

The predictions remain good for buy-to-let, even if the housing market crashes. It will provide buyers with an opportunity to invest at more reasonable prices. There won’t be the pressure to take hasty decisions, and there will be room to negotiate.

So the answer is - don’t buy to let until property looses 20 per cent of its present value, and then go in. Those who are in should stay in, provided their initial purchase had a solid foundation. Their asset value may fall, but returns are going to be better than match with other ‘safe as houses’ non-s speculate investments.

What about land prices?

If property prices fall, building plots will faller, but are unlikely to fall much. Profits on new houses have provided companies in the market with a substantial cushion, as sale prices have exceeded expectations. Farms and agricultural land are inde pendent of the housing market, and agents have we spoken to see no down-turn in demand. New farm buyers, unlike house buyers, fund their purchases from sources outside the prop erty market - the farm is not the top end of the housing mar ket.

Agricultural land will continue to be a safe investment. Static prices for the past ten years may lack lustre against house prices and other metals. It looks poor against corporate bonds and gilt, but has certainly had a far easier ride then equities. Agricultural land will stay largely static in value just as long as the profits from using it remain weak. If and when these should lift, the response is likely to be immediate.
Turbo-charging your farming business

Many farmers regret the fact their children have no interest in the family farm, but would rather work at a quiet mundane job instead. Being a partner or a shareholder is not the same as being an owner of the business. They don’t fancy a life being tied to a cow’s tail, or being the #2 until they reach middle age. A job off the farm has the possibility of freedom, of days off on holiday. It means a break from the laws and regulations to observe, and there’s a need to get them employed. Employment tribunals apply to farming as much as other industries, and although farm staff are probably not as litigious as people in other industries, there is an increase of the same kind of harassment, bullying and many other functions. Email means fewer trips to town, fewer phone calls and there’s little doubt the internet should be on the shelf of your business. The Employers Handbook from Kogan Page publishing carries a price tag of £37.50, but is said to be comprehensive and up to date. The Director of Institutes recommends it, and there’s little doubt it should be on the shelf of your business. The Handbook goes through the whole process of employing staff, from recruiting staff, working out the costs incurred to prepare just one of these would probably work out more than the cost of the total book. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book. The Handbook goes through the whole process of employing staff, from recruiting staff, working out the costs incurred to prepare just one of these would probably work out more than the cost of the total book.

Employing people without shedding tears

Most farmers, or their wives, are the personnel managers of the business, as well, of course as being every other kind of manager needed. Hiring staff is fraught with complexity. There are the laws and regulations to observe, and there’s a need to get them employed. Employment tribunals apply to farming as much as other industries, and although farm staff are probably not as litigious as people in other industries, there is an increase of the same kind of harassment, bullying and many other functions. Email means fewer trips to town, fewer phone calls and there’s little doubt the internet should be on the shelf of your business. The Employers Handbook from Kogan Page publishing carries a price tag of £37.50, but is said to be comprehensive and up to date. The Director of Institutes recommends it, and there’s little doubt it should be on the shelf of your business. The Handbook goes through the whole process of employing staff, from recruiting staff, working out the costs incurred to prepare just one of these would probably work out more than the cost of the total book. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book.

World’s greatest communication tool looks doomed

You either love or loathe electronic mail, but there’s no denying its immense power and convenience. The world has, in the last decade or so, really become more of a village than a world. The brick and mortar general store may be the wild, wild west, but not the wild west. They see this wonderful space, some special skills, and it all coming together to make an income every bit as good as that provided by Grainfarmers or United Milk. Their experience is of life on the other side, where people queue to gain access to the country, pay through the nose for aspects of the farmer’s life he enjoys for nothing, and, as a result, takes for granted.

Getting out of the groove

If the business is trading as if the needle was stuck on the LP record, there’s a real need to give it a shake. While the business stays static, the people concerned get older, with different capabilties and, at some point, will leave the stage. While all viable full time farms are eligible to receive some free consultancy from DEFRA, it is enough, in terms of either time or quality!

Agricultural land values

Not all rich people own land, but enough do for the Sunday Times to include this table in the index to their Rich List of 2004, which lists Britain’s richest 1,000 people. (If you’re on it, please contact the editor!). Compilers Strutt and Parker report land values unaltered from last year in every sector and area.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Poor land</th>
<th>Good land</th>
</tr>
</thead>
<tbody>
<tr>
<td>South East England</td>
<td>£1,500</td>
<td>£2,500</td>
</tr>
<tr>
<td>East Anglia</td>
<td>£1,000</td>
<td>£2,750</td>
</tr>
<tr>
<td>East Midlands</td>
<td>£1,500</td>
<td>£2,500</td>
</tr>
<tr>
<td>West Midlands</td>
<td>£1,400</td>
<td>£2,300</td>
</tr>
<tr>
<td>West South</td>
<td>£1,600</td>
<td>£2,300</td>
</tr>
<tr>
<td>Wales</td>
<td>£1,000</td>
<td>£2,000</td>
</tr>
<tr>
<td>North of England</td>
<td>£1,000</td>
<td>£2,250</td>
</tr>
<tr>
<td>Scottish Lowlands</td>
<td>£285</td>
<td>£2,500</td>
</tr>
<tr>
<td>Scottish Highlands</td>
<td>£600</td>
<td>£1,400</td>
</tr>
</tbody>
</table>

SUBSCRIPTIONS / CONTACT / ON-LINE INFO

www.farmideas.co.uk

China’s industrial output grew by 19% last year. The country’s needs for scrap to fuel its factories and to produce the steel which is a vital component of the auto industry have been a major factor in the recent rise in scrap prices, as China has now become the world’s largest importer of scrap steel. Scrap demand from China has nearly doubled in two years, and the UK industry has responded to the extent that 7.5m tonnes of scrap iron will be exported this year, representing three quarters of the total imports to China (11m tonnes).

This demand has raised the price of scrap steel from £40 in 2001 to £120 a tonne today. Scrap is not only worth collecting, but the extra income can be used to buy new machinery, to improve facilities and to provide better working conditions for your employees. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book.

Any old iron, any old iron!

China’s industrial output grew by 19% last year. The country’s needs for scrap to fuel its factories and to produce the steel which is a vital component of the auto industry have been a major factor in the recent rise in scrap prices, as China has now become the world’s largest importer of scrap steel. Scrap demand from China has nearly doubled in two years, and the UK industry has responded to the extent that 7.5m tonnes of scrap iron will be exported this year, representing three quarters of the total imports to China (11m tonnes).

This demand has raised the price of scrap steel from £40 in 2001 to £120 a tonne today. Scrap is not only worth collecting, but the extra income can be used to buy new machinery, to improve facilities and to provide better working conditions for your employees. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book.

Any old iron, any old iron!

China’s industrial output grew by 19% last year. The country’s needs for scrap to fuel its factories and to produce the steel which is a vital component of the auto industry have been a major factor in the recent rise in scrap prices, as China has now become the world’s largest importer of scrap steel. Scrap demand from China has nearly doubled in two years, and the UK industry has responded to the extent that 7.5m tonnes of scrap iron will be exported this year, representing three quarters of the total imports to China (11m tonnes).

This demand has raised the price of scrap steel from £40 in 2001 to £120 a tonne today. Scrap is not only worth collecting, but the extra income can be used to buy new machinery, to improve facilities and to provide better working conditions for your employees. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book.

Any old iron, any old iron!

China’s industrial output grew by 19% last year. The country’s needs for scrap to fuel its factories and to produce the steel which is a vital component of the auto industry have been a major factor in the recent rise in scrap prices, as China has now become the world’s largest importer of scrap steel. Scrap demand from China has nearly doubled in two years, and the UK industry has responded to the extent that 7.5m tonnes of scrap iron will be exported this year, representing three quarters of the total imports to China (11m tonnes).

This demand has raised the price of scrap steel from £40 in 2001 to £120 a tonne today. Scrap is not only worth collecting, but the extra income can be used to buy new machinery, to improve facilities and to provide better working conditions for your employees. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book. The Handbook is available at a cost and the bill incurred to prepare just one of these would probably work out more than the cost of the total book.
Exploiting the worldwide market for machinery
Buy a new car today and you will pay 12% less than you did in 2000, according to Alliance and Leicester. Car makers not only search for customers, they need to find savings. Components, even the engine itself, are no longer assembled by one manufacturer. Components are now supplied by a variety of manufacturers, often from different cultures. This has opened up a new world of choices for car buyers, one which the car manufacturers never thought they'd have.

The fate of the ‘lumpinvestor’
Just as the car manufacturer has diversified its supply, so have the machinery manufacturers. There are now many more potential suppliers of agricultural machinery, and the choice is often based on more than just price. European farmers are very loyal to their national machinery manufacturers. The ‘global market’ has really only developed in the last ten years as tractor manufacturers have consolidated and grouped themselves to the extent that few European countries are still very national, with French farmers favouring Kuhn, Italians Mashio and Scandinavians Kverneland. British farm machinery manufacturing has suffered from the rise of the car industry here, resulting in a wide choice of imported products. Remaining companies are small compared to those in Europe, and increasingly are serving specialist markets here and abroad.

So while the average farmer is buying the same model of tractor for each new set of wheels as a handful of global manufacturers slog it out in markets around the world, the farmer experiences a more balanced market. Yet the ‘asking price’ should still be considered a guide. Machinery buyers will always do better when they give themselves time. If you’re going to change the combine, drill, forager or whatever, the time not to do it is when you need the machine, so you can be more put-off ‘you’d have to find another’.

To get a cut, and those fellows don’t work cheap. Nobody wants to buy ‘investment’ products from a poor man. So, like Vegas casinos, Wall Street institutions need to spend a lot of money to keep the lumps coming in the door. Warren Buffett has estimated that the financial industry gobbled up nearly a third of all investment gains. Plus, the average lumpeninvestor has to provide higher returns to the ‘smart money,’ the people who actually know what they are doing. This doesn’t leave much for the little guy.

Smart investing and dumb money
We know what the dumb money is doing...refinancing its home in order to buy tech stocks at 100 times earnings. But we know what the dumb money is doing...refinancing its home in order to buy tech stocks at 100 times earnings. But we know what the dumb money is doing...refinancing its home in order to buy tech stocks at 100 times earnings. But we know what the dumb money is doing...refinancing its home in order to buy tech stocks at 100 times earnings. But we know what the dumb money is doing...refinancing its home in order to buy tech stocks at 100 times earnings. But we know what the dumb money is doing...refinancing its home in order to buy tech stocks at 100 times earnings. But we know what the dumb money is doing...refinancing its home in order to buy tech stocks at 100 times earnings. But we know what the dumb money is doing...refinancing its home in order to buy tech stocks at 100 times earnings. But...
Maize ground produces early ryegrass

Mark and Hazel did a proper job in October and it shows it’s true colours in April, despite the cold spring and their late season farm.

This stand of ryegrass, pictured on April 23, was planted after maize was harvested in October. Costs were £20 for the ‘After-Maize’ seed mixture sown at nearly 20kg /acre, a further £20 for a top dressing of N, plus cultivation costs which was a heavy discing followed by sowing a power harrow combination followed by ballast rolls. The spring application of N was a heavy discing followed by sowing a power harrow combination followed by ballast rolls. The spring application of N was controlled as a heavy application will not have time to be absorbed properly by the plants.

Despite the slow spring, the results will provide a good start to the silage season, the grass going into baler and Hazel and Mark Crockford have a 1.15 acre mixed farm carrying 130 cows. Cereals are both fed to the herd and also sold. The ryegrass will be ploughed and drilled before May 14.

CAP reform may well change the policy over cropping and their late season farm.

LPG runs out of gas

LPG looks like becoming one of those government side shows designed to fool some of the people some of the time. In February 2000 Labour deputy John Prescott announced they were backing the new fuel because of its environmental benefits. He converted one of his Jags, offered grants to encourage people to change, and promised a continuation of the reduced taxtion. Today the news is that LPG tax will increase from the 5.4p/l it is today to nearly 8p in September - this compares with the the 47.1p/l duty on petrol and diesel. Conversion grants will be cut from £1,000 to £700 a vehicle. The reason is that LPG has been overtaken for clean emissions by other vehicles, particularly the petrol-electric vehicles from Toyota (the Prius, which we have featured) and the Honda Insight.

The true cost of oil leaks

Where fluid leaks out, contamination gets in. It costs ten times more to extract contaminants from hydraulic fluid than it does to eliminate them. So fixing hydraulic leaks as soon as they are noticed not only minimizes the costs of the replacement fluid as well as those of cleaning up the mess, it also saves the hidden cost of removing the contaminants which have been sucked into the system.

Prevent the reservoir inhaling dust and moisture

The changing level of fluid in the reservoir means air is continually being sucked into the system and then blown out. This can air carry contaminants, which mix directly with the hydraulic fluid. Nearly all filler-caps breather fitted to hydraulic reservoirs are not effective in preventing these contaminants entering the system. The air should be adequately filtered. In damp environments desiccant breathers are essential to prevent moisture getting in. Adding an additional filter, and changing or cleaning the filters which are fitted, is an important maintenance job which is often overlooked. It costs much less to exclude contamination than it does to extract it.

Always clean couplings

Dirt inside female and on the end of male connectors is washed into the oil. Wiping with a rag so grit and moisture is removed is not being paranoid, just sensible. If female ends are dirty they can usefully be cleaned with solvent and compressed air.

Keep ram pistons straight

protectors (bellows) to cylinders operating in abrasive or corrosive environments can extend rod and wiper seal life. Bellows are an extra barrier for contaminants.

Filter oil rather than throwing it away
Water or particle contamination rarely necessitates an oil change — unless the contamination has resulted in additive depletion or base oil oxidation. These contaminants can be removed from hydraulic fluid by filtration. Drain the reservoir and filter the oil through the finest material you can find, so it just weeps through. Throwing expensive hydraulic oil away can often be a waste.

Training qualifications in farming

Farming is no longer a job you learn on the job, sitting by Nellie’s. Government wants farmers to be trained to perform tasks to a recognised standard. It is hoped the result will be higher productivity, less waste and fewer accidents, and expected or hoped that farm staff will be better motivated, and farm customers more satisfied.

This policy has been implemented in a hodge-podge manner, making it really extremely difficult for those in the industry to follow. Regulations are on a piecemeal basis, each is mandatory, others are advisory. Others are work professionally necessary. Additional and advanced qualifications are available for people with a NVQ Level 2 and then a specialised Level 3 where the candidate can select from a number of practical options.

The topics above are all covered by a programme of Integrated Training and Assessment which awards a Certificate of Basic Training and also a nationally recognised Skills ID card.

Further qualifications are available for pesticide and fork lift truck operations, and these involve further training, logged working practice and assessment. Lantra Awards is one of a number of agencies providing the training and assessment, and Lantra, an Investor in People, organise, traces its involvement in the land based sector back some 30 years to its Agricultural Training Board.

Cultivator uses Shakerator legs

Towing this 3m cultivator at twice the normal working speed gives it a work rate of something close to 6m machine working at a more pedestrian speed. Driving at speed is quite feasible with the Fastrac, as Simon finds the suspension on both axles and also the cab provide a ride which is impossible in a tractor. The packing depth is controlled by the setting on the tractor top link and the three turn buckles on the rear packer. Get these settings right and the machine maintains a constant working depth. The close coupled rollers are self cleaning, so it works in less than perfect conditions. The machine is built around a heavy cross bar of square section with 12mm walls. This is located in the centre of the machine, and carries a tie bar in front and another behind it. The mounting bar for the ties is in line with the lower links, providing a direct pull. The tracing is immense.

The headstock frame is square and has angled braces stretching to the either end of the main cross piece. The front cross bar tells you the strength of the machine; packer end of the flexible link which attaches its frame to the cultivator. It means the angles can be set so the two sections can be lined up correctly to work at a wide range of depths. The packer frame has lower hinges mounted on the rear end and the front end. Getting the packer placed correctly is important if the machine is going to work at its best. The packer frame is mounted on a pair of regular pins set on the main frame. Two turn buckles link the frame and these helped by a single one in the centre set at a different angle. The result is a rigid mounting which sets the working depth of the tines.

SUBSCRIPTIONS / CONTACT / ON-LINE INFO

www.farmideas.co.uk

HIGH SPEED NON-INVERSION FASTRAC SEEDBEDS

CUT COSTS AND MAINTAIN GOOD YIELDS

• 3M MACHINERY TRAVELS QUICKLY BETWEEN FIELDS

• HIGH SPEED BREAKS DOWN CLODS

• SURFACE TRASHIMPROVES STRUCTURE

Simon Walter leaves his plough in the shed, and works his heavy ground at high speed. His 260 ha all arable farm now grows only combinable crops, although onions, roots and other crops have been grown in the past. As the price of these ‘exotics’ has declined and buyer demands increased, so their acreage decreased and in the last few seasons he decided against continuing their production.

Non-inversion has allowed a friable surface to develop on his soils, and organic matter and other regulations have been on the increase, as have wheat yields, with most fields now averaging 45 - 5 tonnes. The ground produces large quantities of straw which challenges many commercial cultivators.

A primary feature of Simon’s machines is their ability to deal with large quantities of trash, particularly straw. The front line are two Fastracs, a 3155 and 3170. Hayling Island has relatively small fields and narrow lanes, and is a picturesque place where visitors and tourism are important. So wide machinery must be carried on low loading trailers. But the small fields mean loading and unloading can count for a disproportionate amount of working time, which means there are many advantages in having a machine ready for a disproportionate amount of working time, which means there are many advantages in having a machine ready.

Above from left: the main cross beam tells you the strength of this machine; packer end of the flexible link which attaches its frame to the cultivator. It means the angles can be set so the two sections can be lined up correctly to work at a wide range of depths. The packer frame has lower hinges mounted on the rear end and the front end.
Clockwise from right: 3m cultivator has independent-ly angled scolloped discs on a heavy frame, and an interlinked packer roller to follow the levelling box turns on a nut passing into the frame, and so each leg is rotated the same angle all together; the packer height is altered on three vertical mounting bars which are drilled so it can be fixed - or left to float; big discs need big spanners. Each disc is secured between two large nuts: detail of leg attachment brackets.

Disc packer mixes straw, levels field surface
• 3 bearing design long lasting
• heavy section for fast speeds

These heavy discs prepare the soil surface for a single pass with the cultivator before drilling. Disc angles are adjusted by rotating the legs. The axles on each leg are home designed and built using the workshop lathe. Each leg is fitted with three bearings instead of the two which are used by most manufacturers using this system. Simon realised that premature bearing failure is caused because the disc exerts a thrust down on ground conditions. The drier and harder it is the greater the weight needed ing on ground conditions. The drier and harder it is the greater the weight needed.

The discs are followed by a set of interlinked packer rollers which break up any clods before they have time to dry and become impossible to handle. The roller height can be adjusted, so a variable weight can be applied to the discs depending on ground conditions. The drier and harder it is the greater the weight needed on the discs.

Below from left: a selection of mounting positions allow for different soil and drilling cir-cumstances, and also tractors. The top link adjusts the angle of the two sections of the machine; the cultivator rides on hinges with two alternative positions which of working down the rolls. Two support the side of the front sight driving; side boards are fitted with a single tine; a tine outside it, reducing the typical spring time riding to nothing, and making a seamless join between bouts.

Below: the previous home made disc looks more like some of the products seen at Smithfield. Long and heavy, it’s a slower speed machine which can’t utilise the stubble which is difficult to manoeuvre which can’t utilise the stubble.

Cultivator finishes the seedbed
This 3m cultivator mounts on the front linkage of the drill tractor, and provides the finishing touch to a top quality seedbed. It’s brilliant in sorting out cloddy seedbeds, the times lifting the clods to the surface are maximised. The machine is fitted with the bracing necessary to take the punishment.
Right: drive motor is out of harm’s way here, and the head is slightly less wide as well. For right: solid guarding, and a deflector to eliminate a sharp edge, makes the head end pretty well protected against damage.

Hedge trimmer gets needed modification
• re-sited motor won’t get damaged
• simple modification for any ag engineer

Here’s a simple improvement for all owners of Bomford B467s and other trimmers with their rotor motors mounted directly onto the shaft. If you haven’t damaged the rotor motor or its mounting so far, there’s a good chance you, or your tractor driver, will in the future. The end mountings are a particular problem when using the mower on the ground, or when trash ditching. The head need to be close to the ground, and it’s difficult to see if there’s anything in the way. Hit it too hard and the mounting bends.

Simon whipped the motor off the shaft and fitted a double pulley instead. He then made motor mountings behind the head so the same hydraulic motor fitted on them, and put a double pulley on the motor shaft. The motor position can be moved to put tension on the belts. The pipes need to be swapped around so the rotor is driven in the same direction. The belts drive the rotor without trouble and don’t slip or wear unduly quickly. The motor is out of harm’s way and and head is marginally narrower. With a decent solid guard on the end to protect the pulleys, the head can be knocked against stones, earth banks and other obstacles without danger of damanging expensive parts.

Liquid N plant uses urea and distressed material and how to save money when replacing a special electric motor
• worthwhile fertiliser savings
• straightforward system

Mix urea with water by pumping it around out of the old motor (to prevent any electro-magnetic drag) and removed the cooling fan. He then fitted a new, bigger but far cheaper motor with a standard shaft drive on the end, using a rubber coupling to make the connection. The result is good.

You won’t be able to replace every special motor this way, but the idea is worth remembering – for pressure washers and other machines bolted directly on the end of a motor.

Buying farm assets, be it machinery, land or buildings in haste is no better than going into marriage in the same state of mind. You repent at leisure. There’s a real need to assemble facts before starting the process. What you want, why you need it, and its value to you in terms of asset value, operational benefits and so on; they all need to be considered and calculated. Do this with some care and a chance are the whims will be eliminated.

It’s clearly important to buy the items involving major expenditure correctly. There’s a real need for information on which to base a really sound and considered decision - but it rarely is enough. The two major determinants are:
1. what you’re buying
2. who you are

The design and function of different farm machines develop at very varying rates. A trailer made ten years old is little different to one made today. If you’re looking for a flat roll, the new machine is almost, if not totally, identical to the one available 30 years ago. Look for a steeping hoe, for example, and you’d think the same might be true. But there’s been a major technical breakthrough, with the self steering Garford machine, as shown at last year’s Royal Show, being capable of working at some three times the speed of the conventional. If you have a decent area of beet or other crops to hoe, who would buy the old technology?

The ‘who you are’ is also important - not in respect of being a serf or a lord, but your own personality and inclinations.

Are you happy to take a reasonable risk? Can you accept something which may need attention and be conformant any problems can be solved? Is the number plate important? Every farmer has different circumstances, cash flows, business plans. Your business plan is a part of who you are. Who, for example, wants to be farmer selling a 2 year old Simms Miniflow min-till drill which has been used for just 220 acres? Or a 1999 MF 4220 with 98 hours on it, or even a four year old wood shredder with 211 hours? Some machines like these with very low hours will have been bought as tax breaks, but others are purchases made without doing the necessary thinking.

The ‘who you are’ includes the scale of the work involved. Many small scale farmers in today’s terms, with perhaps 200 acres of cereals, use combines and other machines which are more than 20 years old, bought second hand for small money and used and maintained to continue performing adequately over that acreage season after season. The savings they make over employing outside contractors often pays for the machine in a season and a half. The machines are simple to maintain, parts are frequently available, and they look like going on for ever.

The ‘what you’re buying’ is equally, if not more, critical. Is it a front line machine with a heavy regular work load? Can a substitute be found easily? Will a breakdown be a disaster or just a hiccup in financial terms? What is the value of reliability? Would the fuel savings of a new machine reduce annual operating costs significantly? A support machine can be as critical as a star player. Farm operations involving a series of machines are done at the pace of the slowest in the chain.

We all know second hand is not always cheapest, but buying new can often be an extravagance. The new or used decision is one which has to be made quite frequently on many farms.

Above, from left: storage of 90,000 litres of N; the mixing tank makes 14,000 litres at a time. Note the steel barrel which forms a quality protective cover for the motor and pump, with the end cut out so the motor can drive in cooling air. Old burnt-out motor with an expensive flange is now driven by a run-off-the-mill model coupled on the back end - a good way to recover.

FOLLOWUP: SIMON WALTER, MANOR FARM, HAYLING ISLAND, PORTSMOUTH, HANTS

FINANCIAL FOCUS
In practice we often hear of new machinery having amazing ‘teething troubles’ instead of breakthroughs, but they are still events which mean the job is on stop.

New machine reliability

A new farm machinery is manufactured under a different set of rules to domestic appliances, and even some motor cars, both of which today are generally amazingly reliable and trouble-free. These products have seemingly been designed and tested to the limits before being put in the showrooms. The reason? Reputation. A bad washing machine would be a disaster for Bosch, Indesit or Hotpoint, as their product is sold through relatively few, very powerful retailers. Farm machinery manufacturers work in a different world. They sell through hundreds of dealers, some who they own or control. Independent product testing is infrequent and not freely available. Users are accustomed to things going wrong, having few channels of complaint. Some farmers say manufacturers sometimes rely on their customers to do the product testing for them.

New machinery design

New machinery is made with the aid of designers and CAD systems, so curves of moulded plastic and tin, finished off with stylih vinyl decals reinforce your belief the machine has been designed and tested down to the last bolt. But what if the curves and the decals were the first item they put on the design screen, and the machine was created to fit made the ultimate machine probably has the potential for better quality, faster work, if operated correctly.

New machine serviceability

Like other products, new farm machinery appears sometimes to be made to have a definite life span, with parts programmed to wear out or fail apart all at the same time - a wonderful incentive to replace. It has components which you can’t repair, and can only replace at substantial cost. If it can incorporate an electronic control system, it will. Cables and hoses can be replaced, soiled grease worked into two dozen different coloured wires poking out from them can’t.

New machinery insurance costs

Insurance is something to ignore until the decision has been taken and the machine needs cover. Pay £30/£300 on the first £1k and £12 thereafter and the annual insurance bill on a £40k John Deere 6420 autostep, and the annual bill is nearly £500. Double the premium for a combine or self propelled forager. For the tractor or harvester which spends most of the year in the shed, insurance can account for a chunk of the running costs.

New machinery taxation

Most buy some new, some used, some home built and modified machines being used - raising output 1.5% from the harvester. If he’s a bit ded machinery is made from parts which have been designed and tested to the limits but that’s all they have in common.

Used machinery costs

Do make sure you know the lowest next price.  New machines are expensive, but that’s all they have in common.

Used machinery services

As contracting charges rise in line with the contractor’s costs of machinery and labour, so farmers need look again at the pros and cons of doing their own work. Many will be looking at used, perhaps out of date, equipment. While the contracting costs which they intend to replace are easy to find, the costs of tooling up and doing the work on the farm are sometimes less easy to quantify. There are management risks and worry in addition. The fixed and running costs of the machinery will. You be able to get it all to work? What’s the chances of an unattended dishwasher which won’t clean as well? You’re probably losing sight of the fact that you’ve got.  It’s all about costs: to replace are easy to find, the costs of tooling up and doing the work on the farm are sometimes less easy to quantify. There are management risks and worry in addition. The fixed and running costs of the machinery will.

Used machinery taxation

Farm machinery breaks down when doing the work on farm can have added bonuses as well. You can pick and use the really good weather windows, rather than accept the ones in the contractor’s schedule. These can lead to better harvesting conditions - drier grain, better quality silage (in which turn has the knock-on benefit of better milk production and a better milk price).
Farmers are notorious for being the patients doctors never see. Farmers arrive at surgery with conditions which should have been treated months or even years earlier. They ignore medical problems and hope they go away.

So should they now heed the latest advice of the doctor - which is to let nature do the healing, because it often works as well as medication? The British Medical Journal has recently advised patients and doctors to give diseases the chance to go away on their own accord, rather than be stamped on by drugs. The BMJ says the best treatment for illness is frequently no treatment at all.

It’s advice many farmers’ families should ignore. A health service in Derby cerned that farmers not even the clinic in Bakewell cattle mart so farmers can pop in when they’re waiting to sell their sheep and cattle.

The physiotherapist at the High Peak and Dales Primary Care Trust has found that farmers suffer greater health problems than miners, with back, hip and knee problems being very common. Skin cancers which have been ignored are another frequent problem, as are hernias and other problems.

In the country as a whole the BMJ has drawn on the experience of a wide range of doctors and others in the medical world. Editor Luisa Dillner says “The big myth about medicine is that the professionals know what works. People don’t realise that when each patient is reduced. The doctor has the task of sorting patients into those who need instant attention, those who can probably wait for developments and those who are likely to get better of their own accord. For the doctor, there’s a big problem, for if they get it wrong, patients increasingly seek retribution and compensation.

“Am I really ill?”

The new BMJ Best Treatments publication has drawn on the experience of a wide range of doctors and others in the medical world. Editor Luisa Dillner says “The big myth about medicine is that the professionals know what works. People don’t realise that when each patient is reduced. The doctor has the task of sorting patients into those who need instant attention, those who can probably wait for developments and those who are likely to get better of their own accord. For the doctor, there’s a big problem, for if they get it wrong, patients increasingly seek retribution and compensation.

Last November doctors practices in South East England tried a system of post-dated prescriptions. Patients were told they could get their drugs only two days after the doctors had prescribed them. Researchers at Guys and St Thomas’ medical school in London found that, of the 256 patients given deferred prescriptions, almost half never collected the drugs. They got better in those 48 hours, or at any event, recovered sufficiently not to need to take them. The survey produced an even more interesting finding. Nearly 90 per cent of those prescribed said they would choose to receive a deferred prescription again. Deferred prescriptions score as they don’t send the patient away as a possible drug abuser, but the presence of the problem, the time, give the patient the chance to exert it sometimes.

The BMJ editor says it is difficult now for people to understand that their bodies can control and cure themselves. “Patients have a tremendous faith in the power of doctors and the drugs they prescribe, and see side effects and long term problems as trivial.” Her view is backed by work on placebos done in the UK and the USA. We find a surprisingly high number of people responding positively to pills which have no health inducing ingredients. This happens not only in the areas of anti-depression drugs - where one might expect a higher normal response - but also for drugs for bacterial infections.

If delay tactics become the latest prevention - the plastic indicators you see on lorry wheels, are a useful indicator, and provide an instant visual check. They cost pence and can save thousands of £s of damage. The wheel could as easily have fallen off on a slope, resulting in a rollover, rather than on a level road. All in all, someone up there was looking after this driver! Never assume your nuts will stay tight. It can be years before they start to move. Once one has started, the others follow. They allow the wheel to move by no more than a thou or so, and when it does, the stud hole in the wheel is made a little larger - which allows greater movement and loosens the stud further.

Here’s the evidence to show why wheel nuts must be tight. The driver was lucky. It could as easily have been the off-side wheel falling in front of fast moving traffic coming the other way, pulling the tractor to the right rather than the left. The load could have been a heavy laden trailer which would have pushed the tractor further. The wheel could as easily have fallen off on a slope, resulting in a rollover, rather than on a level road. All in all, someone up there was looking after this driver! Never assume your nuts will stay tight. It can be years before they start to move. Once one has started, the others follow. They allow the wheel to move by no more than a thou or so, and when it does, the stud hole in the wheel is made a little larger - which allows greater movement and loosens the stud further.
CRANE IS ‘JACK-OF-ALL-TRADES’ IN BUSY WORKSHOP

Dyfrig Williams’s workshop’s small because the National Park won’t allow a larger building to be constructed. Yet manhandling many parts and assemblies is just impossible—they’re far too heavy. He designed and made this crane to fit on the 3-pt of his Massey 135, and Harry Ferguson couldn’t have made a better job himself. “I worked out the geometry really carefully, as I do with all my projects, as I want to get them right first time,” says Dyfrig, who does outside repair work as well as helping out on the family farm.

The crane stays on the tractor nearly year round, as it gets used nearly every day for one job or another. For as well as lifting and moving engine, gearboxes, machines to be repaired (he does a good job on broken Sheargrabs!), the tool has a removable ball hitch which is used for towing and moving trailers and other implements about.

Followups: Dyfrig Williams, Tycanol, Pontfaen, Fishguard, Pembs Tel: 01348 881407

Above: lifting to the top of this shed gives the machine plenty of use without compromising stability, and the short lift arm means the load is kept close to the tractor when being lifted. Below, left to right: ball hitch is great for moving cattle boxes and other trailers into the workshop; jib uses a 7 x 3in rsj for the upright and heavy wall 3 x 3 box section for the arm, which is braced by extending the ram pivot; driver’s view - the 135 puts the driver close to the work, and gives a good view

DRILL TEETH PATCHED WITH HARD FACING

Look at the teeth on this antique pillar drill and you won’t be able to see the teeth which were repaired using hard weld and an angle grinder, and those which are original. Bought for a few pence in a sale, the drill had been damaged - but not beyond repair. The cog was taken out and the teeth carefully built up with weld, and then the drill reassembled. Shims were added to give a close mesh, and it was all about 15 years ago. Since then the drill, which runs slowly and takes Morse taper drives as well as the chuck, has been in regular use.

While some machinery is now made with a means of keeping hydraulic pipes out of danger, many still rely on the driver using twine, old electric fencing stakes and whatever he can find. It’s none too reliable.

Here’s an idea from America which gives hydraulic hose a real chance of long term survival. A smooth circular flange is welded to a steel rod which in turn is fitted to a spring mounted on a base plate which bolts to the implement drawbar. The hoses can slide on the flange easily and without getting damaged, as it has a smooth curve. When turning tightly, the rod will flex on the spring, and if needed you can make it so it swivels as well.

Parts are all from the scrap heap, but, once painted the same colour as the implement, will look as if the idea came from the manufacturer.

excerpted from Farm Show magazine

KEEP HYDRAULIC HOSES SAFE WITH THIS HOLDER

BATCH DRIER HOPPER IMPROVES LOADING

Loading Opico, Master and other mobile grain driers can be a job to test the patience. This home made hopper is placed over the loading auger and can then fill the hopper as quickly as you like. The grain fills the auger and keeps it full. The height of the outlet is made so it fits neatly over, and the opening is narrow so the grain won’t spill over the sides. At the top the hopper has angled sides which again prevent grain from spilling, use this with reasonable care and you won’t have a bucket of grain to sweep up.

The panels are made with cheap and cheerful Sterling Board, and the frame is angle and flat plate. Lift it on a pallet and there’s no chance of damaging the lips of the chute at the bottom.

The panels are made with cheap and cheerful Sterling Board, and the frame is angle and flat plate. Lift it on a pallet and there’s no chance of damaging the lips of the chute at the bottom.

SUBSCRIPTIONS / CONTACT / ON-LINE INFO
www.farmideas.co.uk

TO ADVERTISE IN THE BEST READ FARMING MAGAZINE
call: 01994 240978

Guns By Post!!
500 AMMO, FREE!
Ultimate post controller • 22 cal. Underlever
Mac Long Line • Classic Game Improver
JCB MACHINES WANTED
for breaking, pre owned parts available
01455 844413/07771 861026
fax: 01455 843769

www.farmideas.co.uk
Britain produces a vast quantity of rubble and waste stone. Building sites, road repairs and a thousand other works produce truck loads of material which contractors need to get rid of, legally and at least expense. Farmers can get licences for inert waste, get paid to accept it and then have the chance of utilising the stone to improve farm tracks, make foundations for yards, fill in areas.

One problem is that trucks are loaded with material which varies in size from large boulders to soil and dust. Sorting this roughly into sizes makes the rubble much easier to use. Large stone is used at the base of any project. Medium stone can be laid on top, and then finer stuff on top of this. The science may not be exact, but the result is surprisingly good. The science may not be exact, but the result is surprisingly good.

The bars are made of rail line so the material rolled slightly slower, or else the frame would not change. So Phil would make it slightly differently a second time. He would reduce the angle a fraction so the material rolled slightly slower, or else he would make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning. His other change would be to make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning.

The bars are made of rail line so the material rolled slightly slower, or else the frame would not change. So Phil would make it slightly differently a second time. He would reduce the angle a fraction so the material rolled slightly slower, or else he would make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning.

The bars are made of rail line so the material rolled slightly slower, or else the frame would not change. So Phil would make it slightly differently a second time. He would reduce the angle a fraction so the material rolled slightly slower, or else he would make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning.

The bars are made of rail line so the material rolled slightly slower, or else the frame would not change. So Phil would make it slightly differently a second time. He would reduce the angle a fraction so the material rolled slightly slower, or else he would make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning.

The bars are made of rail line so the material rolled slightly slower, or else the frame would not change. So Phil would make it slightly differently a second time. He would reduce the angle a fraction so the material rolled slightly slower, or else he would make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning.

The bars are made of rail line so the material rolled slightly slower, or else the frame would not change. So Phil would make it slightly differently a second time. He would reduce the angle a fraction so the material rolled slightly slower, or else he would make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning.

The bars are made of rail line so the material rolled slightly slower, or else the frame would not change. So Phil would make it slightly differently a second time. He would reduce the angle a fraction so the material rolled slightly slower, or else he would make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning.

The bars are made of rail line so the material rolled slightly slower, or else the frame would not change. So Phil would make it slightly differently a second time. He would reduce the angle a fraction so the material rolled slightly slower, or else he would make the frame so the angle could be altered. This is not, however, a machine which lends itself to fine tuning.
Experts predict another possible round of price reductions for hard pressed milk producers. For dairymen, it means further adjustments to their business. Less feed, lower costs, and marginally less milk as well.

Low milk prices require a careful analysis of costs. ‘Feeding for yield’ and ‘getting the full genetic potential’ are concepts which can produce losses. Getting the most from low cost feed means being very careful with bought in feed, and matching stocking rates to forage production. Filling quotas maximising potential are all management ideas which have little or no place when milk is sold for a fraction of the price of water.

This feature looks at a substantial dairy business which has been planned on minimal cost lines right from the start. Established dairy farmers may well read it open-mouthed.

Today’s ‘model farm’ is one which Neil Harrisons is putting together. The Harrison farming business is in many ways a ‘model farm’. Not that Neil would recognise it as such! For most farmers, the model farm is a money-no-object place, with fine wrought iron work, brick work and hedging. Model farms were designed to demonstrate wealth as well as be efficient units.

Neil, who bought it new for around £6,000. “The GEKA saves hours and hours of work,” says Neil, who bought it new for around £6,000.

A MAJOR SLURRY INNOVATION

LOW COST FEEDING

A MAJOR SLURRY INNOVATION

LOW COST COW HOUSING

The Workshop

This is Neil’s kingdom, his interest and skill being honed at Ryecotewood College in Oxfordshire. The workshop has a pair of sheds, each 40 x 20 ft. The twin buildings provide space for more than one project being worked on at a time, and gives a good deal of storage space as well.

Well equipped is almost an understatement, as the shop has many machines only found in professional engineering shops. It includes:

1. A GEKA metalworking machine which punches holes, guillotines and presses and nibbles. “The GEKA saves hours and hours of work,” says Neil, who bought it new for around £6,000.

2. A digital bending machine which handles tube up to 60mm diameter. This £10,000 machine was bought for a specific job - to bend all the parts needed to make a sequential bailing machine in a new herringbone milking parlour. The job required numerous accurate bends in pipe of 2ins diameter and less, and this machine is able to replicate each part exactly, so it all fitted together. The high cost of the machine was more than repaid by the one job. Since then it has been in use for much other work.

3. Plasma. £700-800 and is a first class tool for cutting 3-4mm thick. GEKA metalworking machine which 1.

4. Welders. The twin buildings provide space for more than repaid by the one job. Since then it has been in use for much other work. The job required numerous accurate bends in pipe of 2ins diameter and less, and this machine is able to replicate each part exactly, so it all fitted together. The high cost of the machine was more than repaid by the one job. Since then it has been in use for much other work.

5. Naturally, as much work as possible is done inside the sheds, and Neil has mounted a MIG welder on a swivelling rail fitted high on a side wall. The rail is 15 ft long and 11 ft from the floor. The 2in diameter scaffold pipe flexes from the weight of the welder, particularly when it carries a new 15kg roll of wire. Yet it’s too strong to buckle. The equipment is sufficient for Neil to take on some quite exacting outside work, and also some outside work.

Far left: there’s liberal use made of reclaimed materials - hundreds of sleepers and many motorway sections - all put up before Practical Farm Ideas magazine was even thought about! Left: cows for all go in these special stalls which lead from the cubicles on the 300 cow herd. Cows don’t get stuck in them. The layout is based on rows of 25, giving 50 kennels to a section - cows can exit either end into wide passageways. Design is important to prevent queuing and slow movement. The layout enables cows to be checked, as they are all visible from the centre aisles. The kennels are lit at night.

This feature looks at a substantial dairy business which has been planned on minimal cost lines right from the start. Established dairy farmers may well read it open-mouthed.
Circular drive shaft wheel is small electric motor; looking glass from a dresser lets the milkers on the outside check the milk is going down the pipe. There are two drive rollers, on opposite sides. The frame will bend. There is need precise positioning otherwise the main parlour runs on 40 auto washing down outside; made revolving gantry connections; home milk and electrical pulse. Pipes carry vacuum, dairy and motor house. The centre point where the rotating pipes connect with their static extensions going into the dairy and motor house. Pumps carry vacuum, main milk and dump milk and electrical pulse connections; home made revolving gantry carries a hose line for washing down outside; parlour runs on 40 auto lubricated rollers which need precise positioning otherwise the main frame will bend. There are two drive rollers, on opposite sides.

Rotary milks 400 in 90 minutes
- fast milking but needs two to operate
- complex with many parts to wear out
- reliability and service paramount

The Dairymaster 60 point rotary has flat rate feeding and no ACRs. There is a main milk line and a dump line, and these are selected by the cowman as the cows enter. The parlour has 40 small wheels which run on a rail, and it takes 12 minutes for it to rotate. There are a pair of driving wheels located opposite each other. The parlour has had a few problems since commissioning, mainly electronic and connected with the washing cycles and also the dump pipe - added after a pipe seal let the best part of a milk. The wash gantry is fixed directly above the centre point; the drain is well structured - there's minimal walking and bending. The parlour is easy to clean, and herdsmen enjoy working it. The Dairymaster design is robust and not over technical, and Nick Harry, the senior Dairymaster engineer, is reliable and service good.

Herringbone speed increased with sequential bailing
- 300 cows in 2 hours
- single person can manage for some of the time
- uncomplicated with little to go wrong

The Harrison's tow other herds are milked conventionally. The larger of these is a 24:48 which takes 2 hours to milk 100 cows through it. The extra milking time over the rotary limits much expansion of this herd, but the herringbone has certain advantages. Thoughput has been significantly increased by fitting a sequential-bailing system, which Neil built in the workshop to the Dairymaster concept.

Sequential bailing achieves:
- faster cows: the two, and, opportunities; no chance of looking in mangers as they pass - there's only one manger open at a time. This means the passage is wide enough for the cows to file in two or three abreast. There's only one manger available at any time - hence the sequential bit. When a cow goes into the stall she automatically opens the adjoining manger. The cows go in quickly - click - click - click.
- The stallwork was made in the workshop, using a profile bending machine (nearly £10,000) bought specially for the job. The whole side is raised and lowered with six rams working off compressed air - no chance of contamination, odour etc. When he first made it the stalls failed to work reliably. They rely on gravity and the angle of the hinge to close, and they were sticking. The hinges were too accurately engineered - they needed some 'slop' so there was no resistance. Fabricating the stallwork was an engineers job, and one that together properly - Neil is well with others. He made this stallwork considerable experience in how it works. Bedding down take two people - one on the tractor and the other on the platform loading the chopper. Sections of Hestons or D120s are fed into the chopper - the bale standing on the platform. The machine is driven slowly down the cow passages, and the straw is not pulverised, but gets blown to the front of the bed so some gets eaten and the rest moves back.

Blown wagon is loaded from bunkers with 2x wheat; 2x rapeseed; 1x soya meal; + minerals (ration cost approx. £90/5), and is mixed in the process of loading.

**SUBSCRIPTIONS / CONTACT / ON-LINE INFO**

www.farmideas.co.uk

**SHOW INNOVATIONS COMPETITION**

The Bath & West Show makes a great day out for the family.
- talk business with people difficult to meet otherwise.
- see some top quality livestock.
- do the food hall, get the hospitality.

This year there's a chance for you to do it all FREE!! Farm Innovations have been a feature of the show since it started in 1778. Every year farmers are invited to enter machines they have made and adapted in their workshops for the show to see and admire. It's always worth finding time to see them, as some wonderful innovations are there every year. Ideas which save real quantities of time, capital and fuel as well as backache.

Why not make the 2004 show the one for your idea, and take advantage of this valuable Bath & West offer??

**SHOW INNOVATIONS COMPETITION**

The Bath & West Show makes a great day out for the family.
- talk business with people difficult to meet otherwise.
- see some top quality livestock.
- do the food hall, get the hospitality.

This year there's a chance for you to do it all FREE!! Farm Innovations have been a feature of the show since it started in 1778. Every year farmers are invited to enter machines they have made and adapted in their workshops for the show to see and admire. It's always worth finding time to see them, as some wonderful innovations are there every year. Ideas which save real quantities of time, capital and fuel as well as backache.

Why not make the 2004 show the one for your idea, and take advantage of this valuable Bath & West offer??

**SUBSCRIPTIONS / CONTACT / ON-LINE INFO**

www.farmideas.co.uk
Above, left to right: pit is full, and the straw still reasonably well dispersed. Umbilical spreading is used: tractor and scraper ride on the tracks, and the slurry and straw drop through the 4in dia tubes which are spaced at 12ins. Scraping pier prevents straw building up at the edge of the pit - it floats out and disperses better, making stirring much easier.

Shurry lagoon built for size
The lagoon is 2m deep, and 60m x 30m in area. With the 400 cows and the followers bedded on straw, there is a vast amount of material being scraped each day. The self feed area itself creates a large quantity of dirty water. Straw piled by scraping holes causes:
1. Safety problems as the scraper tractor is used as a bulldozer to push the piled straw back into the pit, with the danger of it falling off the unseen edge.
2. Safety problems when standing on the slippery straw and throwing it into the lagoon with a fork.
3. Stirring problems because the pile is difficult if not impossible to mix with a stirrer but needs shifting with a tractor and fork.
4. Storage problems if the pit has to be cleaned out early because no more can be scraped in due to the piles at the scraping holes.

Novel scraping pier disperses strawy muck
This neat solution puts the tractor on a pier made from heavy wall tubes with a flat track welded on top. The track is needed to support the scraper as much as provide the tractor with a place for its wheels. The pier needs strong steel piers set in solid foundations. Neil has found other farmers in the area interested in having him make one for them. It’s clear from the pictures they are a considerable help in managing the slurry. It doesn’t pile up because it is never packed tight by the reversing tractor. When it drops through it has the chance to float and be carried away. Regular stirring keeps the pit mixed and the floating straw on the move.

For many farms, a delivery of maize gluten, soya or cereals means getting the loader or handler out. The bulker tips on a piece of clean concrete in the yard and the load is then transferred by bucket into the storage bunker.

90° wind induced movement can be a problem. The bulker tips on a piece of clean concrete in the yard and the load is then transferred by bucket into the storage bunker.

Novel bulker design
The bulker was designed and built by Neil’s father, a farmer. The roof rolls on the shed back out of the way, reverses his truck and tips on a piece of clean concrete in the yard and the load is then transferred by bucket into the storage bunker.

This rolling roof solves the problem once and for all. The driver rolls the roof on the shed back out of the way, reverses his truck into the bunker and tips. With no roof to get in the way he can tip the truck as high as he needs, and can draw forward just as he wants. With the load delivered, he winds the roof back into place.

The rolling roof runs a railway line mounted on the top of a block wall. It is 40 ft wide and 44 ft long. The roof structure is similar to that of any other span, but additional bracing is added. The front is high enough to drive in and get the feed needed, but need be no more. Being low, there is a smaller problem from birds, and also driving weather.

Everyone benefits. Truck drivers find it excellent because they tip and are gone in the shortest space of time. No double handling means less waste, and less work. Deliveries in wet weather, which were always a problem, are far easier.

The winding mechanism was fitted with a small petrol engine to turn the wheel, but before this was fitted a handle was made to do the work. The handle has stayed - there’s no need for anything more sophisticated. The roof rolls quite easily, particularly if helped by the wind. A strong breeze will move it down the rails without help, and so there’s a latch to prevent movement.

The roof was made 9 years ago, based on a design seen in New Zealand. A similar roof can be made to cover a silage clamp, and positioned so the silage face and feeding cows are sheltered from the rain. Extend the rails back and the roof can be rolled clear of the clamp so it can be filled under an open sky. When the job’s done the roof is rolled over.

Care needs to be taken to make sure the walls supporting the rails carrying the roof are sufficiently strong to handle the weight. Decent footings are needed to prevent the wall distorting and cracking.

The straights are bucket loaded into a blower wagon which is used to deliver feed to the three milking parlours. Mixing is achieved by adding the feed in layers and by the blower action.

The rations this winter were costing about £90/ton - 2 units of wheat rolled on the farm, 2 of rape, 1 of soya meal plus minerals. The bulker unit was the back of a scrap feed lorry, and the blower is driven by the tractor PTO.

Clockwise from right: the roof is identical to any other steel one; bunkers are the wide enough to take a lorry comfortably; the roof has wheels fitted at each upright, and a rail line which goes twice the distance back; Neil Harrison winds his ingenious roof back so another load of straight can be tipped directly into the bunker; winding it back is done with a single wheel; the roof will get blown down the track, so needs shackling to the rail. The motor has never been coupled up - the ‘temporary’ handle works well.

TAKE OUT A SUBSCRIPTION
01994 240978 / www.farmideas.co.uk

“It’s the only farming magazine I read from cover to cover” is a frequent comment about Practical Farm Ideas. Yet the annual cost is just £14.25 - 30p a week!

TAKE PFI TO YOUR DOCTOR...

...and spread the word about us! Instead of chucking old copies of Farm Ideas into the bin, take them to your local doctor’s surgery, hairdresser, farm equipment dealer or other waiting room. Visitors might well find it interesting and different reading.
Home built front linkage carries a tonne
• far less expensive than branded
• carries required weights
• fits tractor front neatly

Front linkages are often a case of compromise. Yet the greater the potential for more expensive it becomes.
Neil wanted a lighter version. The ones he had were with capacity of over a tonne, but they were unfeasible to carry the Shandy barrow, or a link box or a single furrow press. The arms and frame are made by welding two 50 x 50mm box sections together. The Waltermcheid ends and the rams were both bought new, the rams having a 25mm rod and a 50mm bore. Rams are much less expensive now than they have been, and Neil thought it worth spending £160 or so for the pair of rams which are the right size and guaranteed not to leak. The linkage is fitted with an ‘A’ frame for quick attachment.

From left: note the double box technique to make some stiff load-bearing arms - the arms are new. Linkage mounts on the securely on the tractor frame; a simple home built design of front linkage which would suit many farmers wanting reasonable capacity without major cost.

Neil dislikes sowing grass with a fertiliser spinner. He prefers to sow the field in different directions to get more accurate results. Sowing the field in different directions to get more accurate results. The result is pretty accurate seeding. Seeds are balanced about the seed port, and the rams have 90˚ to the tractor. Neil thought it worth spending £160 or so for the pair of rams which are the right size and guaranteed not to leak. The linkage is fitted with an ‘A’ frame for quick attachment.

Barrow seeding gets top swards and cuts weed problems
• sow the field in different directions to get more accurate results

Neil dislikes sowing grass with a fertiliser spinner. “You have little idea of the spread width, seeds are blown by quite moderate breezes, and some are thrown further than others,” he explains.

“Putting seeds on accurately provides all important cover which will suppress weeds, and at the same time provide the maximum plant population and so production. Sowing with a spinner gives a result which is generally patchy and has holes which take time to fill.”

Neil sowes with a Shandy barrow, made by Blair Engineers in Scotland. The 16ft wide machine is ground driven and fits on the front linkage though it is made to be towed behind the tractor. Mounting it on the front means harrows can be towed behind. The barrow is not expensive, and if stored indoors will last pretty well forever.

They sow 150 acres of grass seed each year, and always split the seed and sow in two passes. The second is done at 45˚ to the first. The result is pretty accurate seeding. Seeds are balanced about the seed port, and the rams have 90˚ to the tractor. Neil thought it worth spending £160 or so for the pair of rams which are the right size and guaranteed not to leak. The linkage is fitted with an ‘A’ frame for quick attachment.

Barrow seeding gets top swards and cuts weed problems
• sow the field in different directions to get more accurate results

Neil dislikes sowing grass with a fertiliser spinner. “You have little idea of the spread width, seeds are blown by quite moderate breezes, and some are thrown further than others,” he explains.

“Putting seeds on accurately provides all important cover which will suppress weeds, and at the same time provide the maximum plant population and so production. Sowing with a spinner gives a result which is generally patchy and has holes which take time to fill.”

Neil sowes with a Shandy barrow, made by Blair Engineers in Scotland. The 16ft wide machine is ground driven and fits on the front linkage though it is made to be towed behind the tractor. Mounting it on the front means harrows can be towed behind. The barrow is not expensive, and if stored indoors will last pretty well forever.

They sow 150 acres of grass seed each year, and always split the seed and sow in two passes. The second is done at 45˚ to the first. The result is pretty accurate seeding. Seeds are balanced about the seed port, and the rams have 90˚ to the tractor. Neil thought it worth spending £160 or so for the pair of rams which are the right size and guaranteed not to leak. The linkage is fitted with an ‘A’ frame for quick attachment.

The result is pretty accurate seeding. Seeds are balanced about the seed port, and the rams have 90˚ to the tractor. Neil thought it worth spending £160 or so for the pair of rams which are the right size and guaranteed not to leak. The linkage is fitted with an ‘A’ frame for quick attachment.

Lighting on all his farm equipment is a priority. He fits Lumaflex sets. The glass is near unbreakable, and hinges open. The reflectors are made from stainless steel, so don’t corrode, and the electrical connections are built to top standards - no Scotch connectors in these units. Lights which fail to work not only cause accidents, they are poor farming. Lumaflex lights cost £50 a set, which is perhaps even twice the price of the cheapest on the market. Neil reckons their reliability and long life make the small extra cost well worth it. Dodgy lights are a headache we can all do without.

The HIAB trailer is mostly used for fertiliser, and will carry nine 1½ tonne bags on the back and six on the front. The HIAB came from a scrap dealer, and is powered by a small Lombardini engine which once drove a compressor. The hydraulics need only a small amount of power to drive them. The engine is easy to start, and of course makes the trailer self contained, which loads and unloads without any external power needed.

Trailers have MOD on them - meaning heavy duty
Although the Army trains its officers 30 miles away at Sandown, it gets rid of surplus equipment miles from Surrey. Sales are concentrated in Yorkshire, Glos and other far flung places. Neil finds Army sales a good source of material. One Army trailer made two for the farm. A low loading trailer has a steered axle which makes it great for going through narrow field gateways. The trailer can be steered in an arc through the gate - on the road the steering is locked straight. The steered trailer makes it possible to leave some gateways narrow. This low loader carries 7 tonnes, so is fine for moving a Drott digger shovel, a load of fertiliser and so on.

The second trailer provides regular transport for farm goods, and both will withstand the rigours of farm use.

Top row, from left: flat loader gives roll-on-roll-off capability - diverter valves cut spoil requirements; axle hinges upwards, and steering locks off for roadwork. Far left: crane fits neatly in the centre of the trailer and is mounted on the main chassis members. Left: small compressor engine is efficient to drive the pump on this HIAB, which is used extensively for drilling and fertiliser work - there’s no need to have a separate driving machine in the field.
Self feeding 900 cows cuts costs
  • no machinery to go wrong
  • minimal labour requirements
  • provides fresh air, exercise, and good for showing bulling

There’s no Keenan or HiSpec on these farms, all the cows walk to the feed face and help themselves.

The large herd has a total face length of 300ft, and the wire is moved 6ins a day. The length is made up of four separate clamps with widths varying from 60 to 85ft.
The cows have access to both maize and grass silage, and feed on whichever they fancy. Neil finds the cows contented, and never having to push in for food.

Teeth problems, often associated with self feeding, are no problem. The precision chop cuts maize at 7-8mm length and the grass to 20mm.

Calves and heifers get self feed silage, and are trained to the electric fence from an early age.

Winter rations are a mixture of grass and maize silage, plus flat rate meal in the parlour.

There’s no mixer wagon, no out of parlour feeders, no mid day top up.

Silage quality plays a large part in herd performance.
Quality comes from quality grass leys which are replaced every five years, from weed control, particularly docks, by making sure nitrogen is absorbed and measuring sugar levels prior to harvest.

Maize grows well in this part of Surrey, and varieties are selected for their quality.

Self feeding limits the height of silage to 7ft. Clamps are made with a slight dip in the centre, so rainwater flows to the middle and then down.

As the winter progresses, concrete is fenced off so as to limit the area needing scraping.

The space for cow movement outside is considerable, and there is no crowding.