

being released at the start of the next wrap cycle, the un-detached end of film is lifting all of the wraps of the film on the side of the bale, creating a very easy channel for air to enter the bale. This is allowing air right into the centre of the bale. If the bale is from a fixed chamber machine producing softer centre bales, it will have an even more dramatic effect, trapping air in the part of the bale where there is possibly more air anyway, producing the perfect situation for mould formation and considerable spoilage to the bale.



if film is not released at start of wrap cycle it will allow air into the bale.

Other areas needing remedial action centre around the pre-stretch unit rollers, and their

associated workings. Once again, all aspects should be considered, even though they may seem very obvious. How many machines are rolled out of the shed without the rollers even having the residue of last season's tack build up on the rollers cleaned off?



Remove any tack build up on pre-stretch rollers with solvent based cleaner

This is a very easy task, which does have a dramatic effect on the efficiency of your wrapping job and the subsequent safety of the bales, yet is so often over-looked, either by causing film over-stretch or tack build up attracting dirt and crop debris to stick to rollers, damaging the film passing over them. Aluminum rollers should be washed with white spirit, or other similar solvent based

cleaners, to remove all traces of film tack, leaving the surface clean and not sticky to the touch.

Finally, check that the gearing for the rollers are free and operating correctly, ensure no dirt is present in the gearbox which might restrict free movement and that gear-box casings are not damaged.



Check that gear box is not damaged

On the few wet days that are sure to happen between now and start of silaging, take an hour to look over the baler and wrapper, it could save you many more in season.



News

Crop Packaging Association News

Issue No.9

Season 2007

IN THIS ISSUE:

- Crop Packaging Association – make the most of it
- Longer net and where it's leading us?
- Money to waste?
- Agri Chat
- Contractor Profile: John Troop
- Pre-season preparations will save you time
- Spend an hour - save a day

Your Crop Packaging Association – make the most of it

It is seven years since the Crop Packaging Association was formed. The free subscription association brings together all aspects of crop packaging – producers of the products, the manufacturers of the balers and wrappers and, most importantly, the valuable end users of all of these. The Crop Packaging Association finally provided a forum for all of these important 'ingredients' in this very significant business, to communicate and share information, to learn from one another and communicate more clearly on a subject that is very important, and of immense value, to all of us.

Farming is a huge industry in the UK and Ireland and crop packaging is a significant cost within this industry. Consider this, making over 10,000 bales per year means in a three year period you could have spent over £40,000 on film, netwrap and twine, quite possibly, in that same time period, much more than the machines on which it is all used! It is for this reason that the Crop Packaging Association could be so important to you, the only forum dedicated to this important, and costly, part of your business.

Industry news; market influences and price predictions; product reports; manufacturer details and insights, the list goes on, but what more can the Crop Packaging Association do for you? This is your thing and we would like to know what you think. In recent issues we have outlined moves within the industry on farm waste disposal and highlighted potential solutions.

What do you do with your farm waste, now that the need to dispose of it has been addressed, identified and decreed?

How do the subjects of more waste plastic on farm sit alongside the sure knowledge that 6 layers of film on a bale make a substantially better bale than one wrapped with 4 layers? Does the increased value of the bale, offering higher potential feed value (with all of the associated benefits that brings) mean more than a slight increase in farm waste – that now needs to be disposed of officially anyway?

Some manufacturers are doing something to try and reduce waste plastic, witness the extra long, 4000m rolls that Tama are now developing. With netwrap rolls that are 33% longer than the old, original 3000m, means fewer rolls needed to make the same number of bales – fewer rolls means less core and packaging, less pallets to move and store; a

small point perhaps but it is a move in the right direction.

The Crop Packaging Association provide information in this regular newsletter format, but also have a fully inter-active website that has its own 'chat room' www.croppackaging.com/agrichat specifically for baling and wrapping contractors and farmers – Agri Chat, as mentioned elsewhere in this newsletter. This is the place to ask questions, seek advice and information of anything related specifically to this business of crop packaging.



If you make bales, buy netwrap, film or twine, own and operate a baler or wrapper or buy and sell hay, straw or silage; this is your association. It is provided with your needs and requirements in mind, we are here to help you, become more a part of it.



RANI WRAP
Bale Wrapping Solutions

Effective and Functional



The choice of professionals






Round Bale Netwrap 3600m

- Lower Costs
- More Bales
- Less Waste
- More Efficiency
- More Features






www.croppackaging.com

THE CROP PACKAGING ASSOCIATION
PO Box 90, Alton, Hampshire
GU34 1XR
U.K.
Tel: +44 (0)1420 545800
Fax: +44 (0)1420 549549
Email: enquiries@croppackaging.com

Visit www.croppackaging.com for product information, technical support, questions and answers, local stockists and quotation requests, hints and tips and much more...

The Crop Packaging Association is a subsidiary of UAT Ltd



Longer net length and where it's leading us?

There is no getting away from the fact that the past 2 years have seen a real trend develop in round bale netwrap towards the use of longer length rolls.

First introduced by trend-setting netwrap innovator Tama Plastic Industry, the move for a longer net roll is now well established and, if popularity and demand are anything to go by, is long overdue. A number of other producers are now following Tama's lead, such as the move towards longer lengths, and those manufacturers whose production techniques cannot achieve the advances required for these products may be left behind, as the market moves away from standard 3000m net.

So, what benefits have been shown? The sales arguments for a longer product are obvious and easy to understand, with fewer rolls required to achieve the same number of bales – it's no different to most consumables we can buy in bulk; in fact we do this with so many things around the farm already.

The biggest advantage available is from Tama's Pro-Tec 3600m net, giving a fantastic 20% more net in the roll than the old standard 3000m length many still insist on supplying. 20% might not sound that much, but looked at in terms of savings in physical handling of net rolls throughout the busy days of the

season and it soon becomes obvious that four roll changes, instead of 5 every 1,500 bales or so, soon adds up in a good year.



Another trailer of perfect bales made with Edge to Edge 4000m net in the north of Scotland

As outlined in the last Crop Packaging Association newsletter, Tama Plastic Industry are pushing ahead with even greater developments in netwrap technology, with the aim of providing an even more significant benefit to the end user; that of greater efficiency and output from the baler – as well as their well known and renowned Edge to Edge bale coverage.



The tough dry summer season in Australia was a severe test for Edge to Edge 4000m

During 2006, parts of the UK, Ireland, France and Germany were involved in a volume trial of Tama's new longest ever net, which had over 1,000m more than standard 3,000m white net. A cross-section of end users involved in the volume trial of the 4,000m netwrap were invited to partake in a survey, giving their experiences of using the new netwrap, through the completion of a detailed questionnaire form.

Questions asked highlighted such points as the end users' experience and opinion of bale coverage, net strength, comparison to existing TamaNet and also to other nets available on the market. Answers were graded on a score of 1 – 5 (where 1 was rated as being very bad and 5 very good). Upon completion of the survey, the results were collated and showed, very interestingly, that the most important point for end users of the new netwrap was its consistency and reliability, which scored 4.5/5. Participants in the survey were also asked to rate the strength of the new net compared to other makes of net and responded with a resoundingly positive score of 4.3/5, which ranked equal second highest score, alongside their satisfaction of the net's overall performance.

That consistency and reliability scored highest clearly shows that serious netwrap users are extremely keen to reduce any wasteful and

can trap stones, which will damage the net roll when it is turning in the net box during use.

The most numerous problems encountered with any net, on any baler, are usually net wrapping on feed rollers or not spreading full width on the bale. These situations are both a result of poor net tension, which will not allow the net to spread fully (as it requires uniform and full tension to spread) and also risk a poor and inconsistent cut of the net at the end of the wrap cycle, as the net is not taught when the knife cuts it, in effect the net is still moving when the knife comes in. This creates a very ragged cut of net, leaving long tails that can wrap on feed rollers, pull the net in any direction when next feeding (meaning un-even bale coverage) or possibly pull the stitch out leaving a split in the net as it goes to the bale.

It is essential; therefore, that the net tension and brake system is examined and checked, to ensure that it is working as it should. Different manufacturers employ different methods to apply tension to the net, to achieve

optimum tension for spreading and correct cutting. There are three basic methods for tensioning the net: 1) against the net roll (such as on Claas, McHale and older New Holland); 2) against the inner core (as on Krone, Welger, Vicon and New Holland BR) or 3) with the feed rollers (John Deere). Typical checks for these systems would be as follows:- 1) Check tension spring setting and, for the Claas system, it may be necessary, when starting with a new roll to run without the brake bar for the first 40-50 bales to avoid over-tensioning the net.



check that the net brake is actually correctly set

2) Check the inner core of the net roll is not damaged or water-logged, otherwise the mechanism cannot fully grip the turning roll. On the Welger, it may be necessary to make

a fine adjustment to the brake setting, whilst a check on the Krone and Vicon would be that the brake pad is not worn and sitting correctly, for instance.



an easy check for feed roller setting can be done with a sheet of paper

3) Ensure that the feed rollers are correctly aligned and gripping the net evenly across their full width. This can be checked simply by rolling a sheet of paper between the rollers, at various places across their width, and comparing the tension required to pull it out.

These different methods all operate in different ways, they are all designed to achieve the same thing and should be clearly understood and correctly set before the season starts to avoid troubles further down the line.

Spend an hour - save a day

In many ways, the job of wrapping silage bales is, probably, the most important of the entire baled silage process, as a whole year's hard work; sowing, fertilizing, rolling, mowing and baling can all be wasted by poor preparation and careless operation of the bale wrapper. It might seem that important a point to make, but often the biggest losses to valuable silage are not apparent at all during the wrapping time and only become evident when feeding out, long after the mis-hap occurred and way too late to try and put right. Instead, some careful thought and common sense should be applied now, whilst you have time to think clearly – before all hell lets loose in a few weeks!

Probably the greatest saving can come from careful and more considerate bale wrapping, where applying the 6 layers of film is still a problem area for some. The extra cost is

small, around 50p/bale to add 2 more film layers to the bale; however, this extra application will almost certainly guarantee a perfect bale, easily worth more than the small amount of extra cost to wrap it. Apart from this obvious detail, there are still a number of basic points to consider and check on the wrapper.

Very often, long tails on bales are suspected as being a result of alleged poor tack in the film, when in reality they are more likely a caused by the film not being cut fully when the bale is ejected, the film actually being snapped as the bale falls off the wrapper. This has the effect of over stretching the film tail, making it impossible to then snap back and stick to the bale surface, as the film is now so long and almost like plastic rope. The wind then does its best to make sure this tail becomes even longer, unwinding from the



Is film cut and catch working correctly

bale as far as it can, opening the bale up to the elements and risk from the, now, fewer layers of film attached to the bale.

A very easy clue that something is a-miss can be seen during wrapping, if the film has not detached from the cut/catch mechanism. Not only does this highlight a possible problem at the time of cutting, but as the film is still attached it is creating a far more serious problem for your valuable silage bale. By not

20% more perfect bales per roll

Consider carefully the value of your bales and the work involved in making them. A cheaper priced roll may not only be more expensive per bale, it will not offer the level of crop protection you are able to achieve with Pro-Tec.

Do your own calculation:

$$\frac{\text{Price per roll}}{\text{No. of bales per roll}} = \text{Cost per bale}$$

and the value?

Cost per bale like this **or** Cost per bale like this

Crop Packaging Products

- Silage Stretch Film
- Baler Twine
- Netwrap

from one company, which claimed this was the way to go, instead of having to lift a longer roll. The foreign imported 2,500m net did not really help, with only 223 bales per roll, compared to 368 with the 4000m net. The 2,500m roll was not that much lighter than the 4000m roll and was over one third shorter, meaning more roll changes, especially when baling all day when it can become time

consuming and tiresome. In silage, with the wrapper close behind the baler, I can achieve up to 450 bales from a roll of the Tama 4000m, making 4' bales, and can still around 350 bales from a roll when baling straw, in a mixture of 4', 5' and 6' bales".

Showing that farm diversification is often the way ahead for many farmer/contractors, four

years ago John obtained a DEFRA grant to convert the farm's old cow shed and milking parlour into a well appointed out building. The old farm building has now provided an annexe to the farm comprising 5 comfortable rooms, which wife Clare now runs as a successful business, Ivy Farm B & B, showing that a varied agri-business can take on many different guises.

potentially expensive down-time, so a net that can give this is surely a benefit. Added to this, the ability to have a longer length roll, with 1,000m more netwrap than standard white 3000m net, the time and cost savings are further enhanced, by a considerable amount. Round bale netwrap has been with us for almost 20 years now and it is worth considering that many, indeed, most manufacturers have done little or nothing to develop the product in that time. Netwrap was designed with an important purpose – namely to speed up the

round baling operation and provide better protection for the bale than baler twine could.

In continuing to produce and promote the original roll length of 3,000m, with net that continually fails to cover the bale fully, other netwrap manufacturers have shown that they, perhaps, are not interested in their customers' true needs. Tama, by comparison, have shown, once again, that through innovation and technology advances the needs of the end user are paramount in their and your success.



Down-under, Edge to Edge 4000m has been well tried and tested in New Zealand

PLATINUM
HI RESISTANCE
BALER TWINE

- A BALER TWINE UP TO 40% STRONGER THAN BEFORE
- A BALER TWINE THAT ENABLES THE PRODUCTION OF SIGNIFICANTLY DENSER BALES

manufactured by Cotesi

COTESI

Pre-season preparations will save you time

In this second edition of the Crop Packaging Association newsletter of 2007, we will try to devote a little more time to technical issues that are very relevant at this time of year. Preparation of the baler and wrapper and trying to pre-empt problems that result from certain in-actions this time of year, when the machine is still stationary in the shed.



damage to net roll from stones in net box

After many months of inactivity, there will be parts of the baler that will have a negative impact on the net if they are not inspected and made right, should they need to be. It is all too easy to think that the machine was working alright last season, but it is now many thousand bales older than this time last year and has not been used for a while.

The most common problem encountered during first cut silage work is the frustration



rusty net roll brake bar will damage net

of bales bursting after they come out of the baler. This problem has been covered before and results from the bale not being ejected quick enough from the baler and becoming jammed in the chamber, whilst the rollers are still spinning against the bale, as a result of the chamber walls having rusted up over the winter. This action will eventually scuff the bale enough to begin breaking one or two of the net threads on the bale, eventually leading to a broken bale when it finally leaves the baler. This problem can usually be overcome by dis-engaging the PTO but will, in any event, clear itself once the bale chamber walls have shined up.

Close and careful inspection should be made to all parts of the baler that the net is in direct contact with, as anything rusted, damaged or

dirty will damage the delicate threads of the net, leading to problems. Delicate is the right term to user, as the fine threads can easily



worn rubber strip on brake bar will reduce braking action against net roll

be snagged and tear. Remember, the net is designed to have strength in 'machine direction', that is linear, as the explosive energy of a bale works against the net in this direction. Netwrap does not have a strength in 'transverse direction', that is across its width, so any damage to the delicate zig-zag threads will create a 'hole' in the net, which can, and will, easily expand very rapidly when under pressure around the bale. If your baler has a metal brake bar that sits directly against the net roll, this will have been worn to bare metal from the previous season's work, so rust could have formed over the winter. This is a prime area for damage to the net at the start of the new season. Also, spend some time cleaning out the net box, as dust and crop debris that has collected over the season

Money to waste?

What is the true cost of making a good silage bale? There is the easy calculation of baling and wrapping costs, time for the job and materials used, but what about the countless hours tending to the grass in season, fertilizing, rolling, mowing, then there is the carting and stacking of the bales. All in all, quite a considerable expense surrounds the making of good silage bales, which have an immense value either in the depths of a long winter or as we saw clearly last summer, when the grass is so scarce that every bale is worth making. Why, then, does so much of this valuable and costly commodity often get put at such risk and peril every year, unless for every customer of silage bales there is an 'acceptable' loss ratio for all of the hard work and expense each year? I think not!

Silage bales are now recognised and accepted as the most cost effective way of conserving fodder for cattle feed. Baled silage has a value as a sealable commodity, due to its convenience and transportability. That is, if it is actually worth something. Every stretchfilm producer and distributor will tell you their number one complaint, every year, is related to film damage from birds and vermin. Film is a mightily useful product when used correctly to preserve cut grass, but is one of the most difficult things to protect once on the bale, unless it is cared for in the right way.

Even with 6 film layers applied to a bale, the film is still not impervious to bird and animal

activity on it. Bales are an easy and comfortable refuge for cats, foxes and even rabbits, especially when warmed by the sun, providing a restful and warm place to rest. Climbing up there and moving around on the bale does untold damage to the bale's surface, holing the nicely wrapped bale and leaving the film surface like a pin cushion. Small holes they may be, but it will come as a shock to many of you to learn just how much crop can be lost from bales holed in this way. The problem is worsened with higher dry matter bales, which are of more value to some. The drier material being harder to compress when baling, so with more air within the bale, potential spoilage may be greater in these bales.



is spending a small amount on protection not worth this risk

Birds are even less forgiving, not only do they wander all over, probably, every top bale they can find, but they are also prone to pulling the crop, and even netwrap, out from the bale making their already annoying damage even greater. It is clearly understood that wrapping at the stack reduces the opportunity of birds to settle on every bale wrapped and left for a while in a field, however, the eventual stack

is still vulnerable when the job is done. Stacking round bales on end can go a long way to reducing the potential damage, as the bale ends are covered with many more layers than the sides, but they are still at risk, unless some sensible protection is sought to eliminate almost entirely the worry of bird and animal damage, in the form of application of a fine woven protection net.



the losses to a bale damaged by birds or animals can soon add up

This handy and inexpensive addition to your season's purchasing will pay for itself many times over, with the smallest size available (8m x 25m) being capable of covering and protecting up to 160 bales at least, other sizes up to 50m in length are also available and can be re-used year after year with careful handling. The net should be suspended on top of the stack by tyres or sand bags, and held in place by the same on top and at the sides. It is important that the net is suspended in this way, and not simply laid directly on the stack, as the shimmering movement of the net suspended above the stack deters birds from settling on the net.

If even as much as 10% of each top bale is lost, that's still the same as wasting one in every ten bales you toiled hard to make, and ►

pay for is someone else did the job for you. Thought of in that way, the prospect starts to seem frightening and a rather expensive folly. Why not use a protective net on your bales? It is a simple question and one that cannot really have anything to do with the cost to your business. Think of it, is the cost of 2 or 3 silage protection nets really going to make the difference between profit and loss for you...? 50 or 60 lost bales, or the equivalent of, is another matter, however, and one that will begin to have an effect on your bottom line. Why not offer this as part of your bale wrapping and stacking service, and see the difference it can make from one year to another as losses reduce.

Let's do some quick reckoning. A roll of m 8x25 of Novatex Silage Net covers at least



square bales are at even more risk as any damage will be exaggerated from standing water on the bales afterwards

160 bales (with the 3 layers arrangement): the value, in terms of forage, can amount to £3,000. Leaving the bales unprotected, raises the probability that a certain number will be damaged. The investment in a protection might add a few pennies to a bale, but this is far better than losses that could be counted in pound per bale if not used. Novatex Silage Nets are completely UV resistant, thus retaining

their efficiency for at least 3 years and can be used many times over, keeping its protective ability constant.



easy protection with the net suspended on the bale stack on top of tyres

The exclusive Silage Net is made up of close and compact mesh which is the outcome of accurate studies carried out by Novatex technical staff aiming at maximum protection with minimum cost.

receive a response from the Crop Packaging Association, who has a wealth of knowledge and information on product manufacturing, product performance, historical information and much more that may be of help. In an industry where so much money is spent on one product range every year, it is interesting to note that the Crop Packaging Association is the only service to offer free help and advice to the huge market for these products.

One of the most important aspects of Agri-Chat's on-line forum, which is sadly lacking anywhere in the industry, is the comprehensive trouble-shooting service available for anyone encountering problems when using twine, film or netwrap. Very often, a simple solution is possible to a, seemingly, in-surmountable problem with net or film. What might appear like the end of the world to a frustrated end user can often be sorted quickly and easily with this valuable service.

Much business is done on-line nowadays and, to many farmers and contractors, computers are now an every day part of your business. Next time you are 'on-line', type in www.croppackaging.com/agrichat, have a read, see if you can offer any fellow end user some advice or should you need theirs, please feel free to contribute.

AGRI CHAT

There are many options available to you when looking to purchase netwrap, twine or film, with countless leaflets, advertisements and promotions to entice you. What do you buy, how do you know it really is that good and do you know someone who may have used that product to get some 'first hand' knowledge of what it's really like?

Advice from the dealer is useful, but with so many other product lines to handle, apart from crop packaging, it is unlikely that he is an expert in just this specialist area of your agricultural needs. And specialist it is, or at least should be treated so, as a contractor baling and wrapping 10,000 bales could easily spend up to £15,000 on crop packaging in a season, a considerable amount by any comparison and one that should make you consider very carefully how to spend your money. Likewise, if you have a problem with any aspect of your baling and wrapping, where can you turn to for advice and help? So, how and where do you get the advice? Your supplier would be the first step, but can he know every detail of what machine you are using, field conditions, product performance etc? More importantly, is there actually something wrong with the product or is it more likely a need to make some machine adjustment to rectify the fault?



The open forum layout allows you to post a question on any topic that you may need help with, which can then be replied to by other subscribers or visitors to the site with advice of points to add to the original thread. Often, a question has opened up a long debate from many other. In addition to open responses from fellow subscribers, your question will

Competition/Contractor Profile

Win a pallet of TamaNet Pro-Tec™ 3600m worth over £3000



To be in with a chance to win all you have to do is return this by freepost: the Crop Packaging Association, Freepost (SCE6386), Alton, Hampshire, GU34 1BR

Closing date: 15th June 2007

The winner will have the pallet delivered to their choice of address within Great Britain & Ireland by the end of June 2007



Conditions:

1. This is a FREE prize draw – entry is FREE to anyone except employees of Tama, or other suppliers approved by the Crop Packaging Association.
2. To enter, simply fill in this competition card and return to the Crop Packaging Association, Freepost (SCE6386), Alton, Hampshire, GU34 1BR or visit our website: www.croppackaging.com.
3. Closing date – 15th June 2007
4. Winner will be notified in last week of June 2007.
5. The winner will have the pallet delivered to their choice of address within Great Britain & Ireland by the end of June 2007
6. Prize delivery will be managed by UAT.
7. Decision on winner is final – No correspondence will be entered into.

☐ We may wish to use this information to provide you with details of products and services offered by UAT. Should you not wish to receive such communications please tick here.

Name	
Company (if applicable)	
Address	
Postcode	
Telephone	
Fax	
Mobile	
E-mail	
Number of bales	<div>Silage</div> <div>Hay/Straw</div>

code: Crop 2

Contractor Profile: John Troop

Agricultural contracting is well established in the UK, especially crop packaging businesses, unlike parts of Europe, where traditional farming is still predominant. Many larger scale contractors in the UK are now solely in the business of providing a service for others, though the majority of baling and wrapping contractors continue to farm and run their contracting business alongside their own farming, providing wider income opportunities.

John Henry Troop, of Barnby near Newark in Nottinghamshire, is a perfect example a varied agri-business, running a 220 acre farm with 100 head of beef cattle alongside a successful and very busy contracting business. Drilling and mowing over 500 acres a year, as well as baling up to 10,000 round bales each season keeps John busy, though he leaves the wrapping of silage bales to a neighbour, with whom he often works 'in tandem', whilst his own combine needs are handled by another neighbour on a normal commercial



John has tried many types of net but prefers the Edge to Edge

arrangement. "Round baling has become a very busy part of my life, once the season begins", easily handled by the Welger RP520 that John presently operates, of which he is enthusiastic of its capacity, speed and ability to produce good bales. "I started off round baling in 1987 with an old Massey Fergusson belt baler, with a twine tying system, which was so slow. This was soon changed to a much more capable John Deere 550, with a netwrap system that

speeded things up enormously, making 35 bales per hour compared to only 20 in an hour with the twine". Making up to 10,000 bales a year needs a pallet of netwrap at least, so John is enthusiastic of the longer length rolls that are now available on the market, especially the Edge to Edge 4000m. "I have tried many types of net over the years and prefer the longer rolls as this means less changing rolls in the day" says John. "Last summer I tried a roll or two of 2,500m net



netwrap is so much quicker than twine and the 4000m Tama rolls make it easier with less roll changes