

Feed The Best Year Round!

FACTORS TO CONSIDER

"I make \$50 to \$100 more profit per acre each year because I have a Stinger Wrapper." — Matlack Farms - Burrton, KS

4010

"We baled grass hay at 12% to 50% moisture. We could bale twice as many hours a day. We baled most at mid 20's moisture and the cattle loved it." — Wayne Shoemaker - Toponas, CO

"They say 9 out of 10 cows prefer baleage wrapped with Stinger Cube-Line Wrapper. In my case it was 10 out of 10. Once our cows ate the first load they refused to eat top quality dry forage. My milk production was up and the cows wasted less." — Hancock Dairy, Miller, MO

FOR HAY OR BIOMASS

of loss of all bales from fire or other perils.

Bale weight will shrink less if wrapped and

you can carry over hay or straw one year to

the next without additional cost of storage

You can wrap in excess of 1500

bales per day - Wrap 2-4x4x8 bales or

3-3x4x8 bales at one time in a continuous

line with any number of bales at any

Storing at the location of baling

- There is only one transportation cost from

the baling point direct to the point of use.

given location.

and little or no shrink or quality loss.



- Eliminates storage buildings or tarps - The number of bales at a given location may not match the building or tarp size. Hay sheds cost a lot of money plus taxes and insurance each year. Tarps need maintenance, allow damage and shrinkage, and can be dangerous to put on and take off.
- Reduce the first year investment by more than 80% - It also cuts long term costs per ton by nearly 50% while allowing more flexibility.
- Little or No Shrink or quality loss
- More storage locations reduces the risk

for storage or transportation. This increases safety and reduces training required for personnel which further reduces your cost. • Wrap lines should be on well-

Expensive high lift loaders are not required

- **drained & sloped fields** Dry Bales should be wrapped near or below 12% moisture. If bales are wrapped at moisture levels above this you can expect some mold damage from condensation on a small percentage of the bale's surface. Moisture levels that cause bales to heat and sweat (12 to 25% moisture) may cause more damage to the hay if oxygen is allowed to enter the wrap line. The same is true if poor quality film or insufficient quantity is used or if standing water enters at the bottom of the bales.
- Bottom Line... Improves your profits - If you make dense bales of quality hav, wrap them well with high quality film, close the ends to prevent oxygen from getting inside and keep bales this way you will take out high quality feed. If moisture levels are high enough then the bale will ensile. Shelf life of bales above safe moisture storage levels will vary but in most cases one to two weeks in hot weather and a month or more in cold weather.



Barely Baleage Kansans like very-low-moisture silage

enny Schmidt and Sean Hartung had 400 acres of alfalfa down, and rain was eminent. At just over 20% moisture, the crop wouldn't quite make dry hay. But they baled it anyway, and wrapped it with a neighbor's tubeline wrapper.

"It was kind of a crap shoot because we weren't sure what we would come up with," says Schmidt, of Haven, KS. "But we really liked it when we took it out of the wrap. It was something we wanted to keep doing."

That happened in 2004. Last year they made more low-moisture baleage, always aiming for 20-24% moisture. This year they bought a wrapper and plan to put up at least

a third of their production that way. They claim the forage is softer than dry hay, and dairy clients say it's more palatable. One told them his herd's production jumped when he started feeding it.

It doesn't smell like silage, but "There must be some fermentation going on, because the hay changes color a little," says Schmidt

They use a dry, organic preservative that they feel helps make verylow-moisture silage work. Treated forage goes through a sweating process the same as dry hay, they say.

Schmidt and Hartung, his nephew, grow 1,700 acres of alfalfa, making big square bales for the horse and dairy markets. They made bale age at 50-60% moisture a few years ago, but prefer the low-moisture product. Reduced drying time is the

biggest advantage over dry hay. Even though it's just slightly wetter, they can bale up to 11/2 days sooner.

"It seems like, when we go to check hay in the field, there are so many times that it's not 14 or 15% moisture, it's in the low 20s," Schmidt says.

Low-moisture baleage also conserves shed space, and can be shipped long distances without a lot of extra weight. Schmidt and Hartung have sold it to dairy producers in Pennsylvania, Indiana, Ohio Illinois and Missouri.

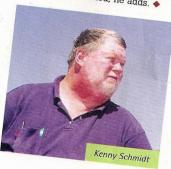
They see beef feedlots as a otential market for their lowerquality baleage, replacing grinding hay. Ground high-moisture hay is less dusty, with some of the

stems and leaves still attached. "We ground some of it and left it sit in a pile for two weeks," Schmidt reports. "It was a goodlooking product, so we're hoping ome of the feed yards will want it."

He says the ground forage didn't change in color or temperature during the two weeks. Similarly, spoilage hasn't been a problem when they've shipped unwrapped bales to far-away clients.

"I think it would be a problem if the moisture level were considerably higher," says Schmidt.

When wrapping at low moisture levels, he says to use plenty of plastic. They use 8-10 layers. Make the tubes where water drains away, and keep the ends sealed, he adds.



OTHER CONSIDERATIONS

- No high stacks; sometimes they fall over or the bottom bales get smashed
- Baleage does not get hot and burn down the hay shed because you have it stored wet and without oxygen in the wrap
- Average bale weight for 3x4 bales are 1750 lbs. so even 48 ft. trucks always go with a full payload — You have to market Baleage; it does not yet market itself
- Black hay doesn't sell well
- Take care to do baleage right; bale a good product, wrap it well with high quality film as soon as possible and keep it air tight
- Baleage takes more management not less, but it can
- Think about your dollars lost each year due to rained on hay