Farmer Panel: Baleage – How it Works on My Farm

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My Farm’s Experience with Baleage

Scope of Operation
115 Brood cows (late Spring calves)
300 + Finishers (Whole Foods final destination)
Raise and purchase replacement heifers
Red and Black Angus/Charolais/Simmental/and South Poll genetics
Red Angus and SimAngus Bulls
2000 acres total operation

All acres in forage less 20 acres of tobacco and 17 acres of Hemp
20,000 Broiler Chickens produced in Pasture based system
1000 Laying Hens maintained in Pasture based System
60 Katahdin Ewes producing 90 Lambs

Hay production exclusively on 400 acres
Hay production 2018 (20,000 small squares and 2000 rounds)

Baleage 2018 (750)
Forage base of OG, BG, Fescue, white and red clover, and various forbs
Alfalfa OG mix on 120 acres

Why Baleage
Easier to navigate weather
Less Waste
Higher quality
Better Palatability
Easier to maintain condition of cattle
Ability to get forage off field when other methods wouldn’t work
Current System
Tubeline X2 inline wrapper
McHale V660 baler with chopper net wrap
Kuhn V Rake
Kuhn Mower Conditioner
Krone Tedder
Hay is cut every 4” in center of bale but not outside 8” of either side
3 wraps of net due to chopping and small pieces

Same guidelines for making hay are followed (stubble height, conditioning, density)
Density of bales can be controlled through baler monitor.
Feed Haylage by end of first year
50% to 60% moisture range (some fluctuations)

Lessons Learned and Preferences
Less plastic used per bale in an inline system vs individual bale
Harder to sell inline bales other than at feeding time
Chopped bales can be consumed easier (especially when density is high) by livestock
Prepare silage as if it will be dry hay (condition if possible, ted, etc)
Net is superior to twine (both speed of baling and smoothness of bale for wrapping)
Net is hard to remove when frozen during single digit weather
Junk in - Junk out (Ensiling does not improve bad forage)
Baleage can be carried over to following year but not ideal
Wrapping at night can increase bugs wrapped in plastic to later be picked out by raccoons and
birds, which break the air tight seal.
Can’t skimp on number of wraps of plastic and succeed.
Easier to retain Alfalfa leaves and Clover leaves with some moisture (baleage system)
Tom Wright | Shelbyville, KY

**Why and How? My experience with Inline Bale Haylage in Shelby Co.**

**Size of operation in Shelby co.**
70 brood cows  
Split calving - 45spring/25fall  
Background all heifers for around 5 mo.  
Raise all replacements  
Most are Angus cows  
2 registered Angus bulls  
1 registered Hereford on 1st calf heifers  
300 acres rolling farm land

Rent another 35 acres across from farm  
Row crop approximately 112 acres per year  
All row crop land will get wheat, rye or oats for cover crop  
I triple cropped 13 acres in 2018 with rye for cover crop, spring oats for second, soybeans for third crop  
53 acres in designated clover, orchard grass, fescue  
Row crops are rotated to clover and orchard grass

Why Balage?
Difficult to get hay up dry (especially early cutting)  
Unable to harvest crop before mature  
To improve quality  
Cutting often helps control weeds  
Have a full time job in addition to farming  
Ability to plan for additional labor  
Window of opportunity can be controlled  
Can do cereal grains (cover crops) and still have no-till row crops  
The cover crops really help with the no-till weed control  
Leaf loss - like tobacco, you wouldn't strip it when leaves are really dry  
Quality has greatly improved  
No need for protein supplement to brood cows  
Flesh scores on spring and fall cows remain good

**In The Beginning**
I purchased a used Anderson type wrapper in winter of 2008  
It used 20 inch plastic and was all hand operated  
I had a Gehl baler from 1980s, great for its time, string tie only  
High moisture hay was about all it could handle, density was fair, productivity was poor

**What I have learned**
Did not use enough layers of plastic wrap initially.  
Baled at too high moisture  
String tie caused stems to punch holes in plastic leading to alot of rot and animal damage  
Very slow process with older baler and wrapper  
Much of Haylage molded and rotted  
A percentage did turn out well
This gave me some hope I could make this process work

**Current Process**

I do a lot of cereal grains now
I do 7 to 9 wraps (layers) of plastic per bale
I net wrap all bales
I currently use a John Deere 567 baler (regular not a silage special)
I drive a lot slower in high moisture hay to get density as high as I can
I use a 12 wheel V rake
I still use same Gehl disk mower (non-conditioner)
I use a Anderson NWX-660 x tractor wrapper; it uses 2 -30 inch rolls of plastic
I learned - do not wrap going down grade (downhill) with wrapper (can’t compress rolls, air gaps)
54 inch diameter bales
Cut 2 1/2 to 3 inches height
Try to keep dirt out of windrow
Cut early boot stage
50% to 60% moisture range
Feed all Haylage within one year
Handle rolls gently to not loosen them up
My wrapper is pretty automated, but you still need to watch for bales that don’t align well and add extra plastic at joints (where bales come together)
Tom Greathouse | Midway, KY

Tom Greathouse farms in Midway, Kentucky with his brother, wife, and 3 of his children. They raise a multitude of crops including corn for grain and silage, soybeans, wheat, burley tobacco, alfalfa hay, grass hay, and a variety of specialty crops and vegetables across 1,200 acres. In addition to the crops, the Greathouses also raise 310 head of commercial cows/calves. Calves are often weaned and backgrounded to approximately 850 pounds or sold as finished animals to local outlets.

Haylage plays an integral role in feeding cattle across farms. It allows us the opportunity to put up a large amount of hay quickly and timely, then provides time for other farm tasks including planting other crops or setting tobacco. Most is made from small grains, alfalfa/grass mixtures, or clover/grass mixtures.

All of these crops are cut with a mower conditioner. Tedding and raking are usually dependent upon conditions. Most fields are cut one day and baled/wrapped the following. Round hay bales are wrapped with an inline wrapper and covered with 6-7 layers of plastic.

Haylage is fed quickly, trying to keep fresh haylage available to animals at all times. Sometimes the haylage is supplemented with corn silage, distillers’ grains, or other commodity feeds dependent upon the class of cattle it is being fed to.