

Foraging Around



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Within the next 2 to 4 weeks alfalfa growers throughout the Northeast will be harvesting that big first cutting of 1985. Based on longtime averages for a 3-cut harvest system that first crop represents about 40 percent of the total annual production. In a 4-cut management system it usually represents 30 percent or more of the season's crop. In either case it represents a big crop that you can't afford to lose to bad weather.

Thus, a question on the minds of many farmers is "How can I manage that first cutting to minimize losses?"

Certain Losses Inevitable

Some losses in either silage or hay making are unavoidable. For example, when the alfalfa plant is cut it continues to respire. Thus, respiration losses are inevitable, regardless of how the crop is handled, as long as the plant cells are alive. And in many cases this may represent a sizable loss, possibly up to 8-10 percent of the original dry matter in the crop. This loss is usually included as a harvest or storage loss.

Estimated total losses for alfalfa harvested and stored as either silage or hay are about as follows:

	Field & Harvest Losses %	Storage Losses %	Total Losses %
Direct Cut Silage	4-5	15-20	19-25
Wilted Silage (60-70% H ₂ O)	5-7	10-11	15-18
Low Moisture Silage (45-60% H ₂ O)	7-8	8-10	15-18
Barn-dried Hay	12-18	5-7	17-25
Field Cured Hay	20-25	5-7	25-30+

Thus, regardless of how you handle your first cutting you can expect some losses. But based on the best data available these losses will be less and your total seasonal yields higher if you store that first cut in the form of wilted or low moisture silage.

Top producers in the Pennsylvania Alfalfa Grower's

Program seem to agree. For example, of the top 50 growers over a 5 year period 47 stored one or more cuttings, including the first harvest, in the form of hay crop silage. Nineteen stored all cuttings as hay crop silage while only 3 were in an all hay program

Silage Making Practices

How can you consistently make top quality hay crop silage? There's no magic formula. But following these rules should help you keep losses to a minimum:

1. Start with a crop of high quality.
2. Harvest at the proper stage of maturity - full bud to very early bloom.
3. Field dry to 65% moisture or less to produce either a wilted or low-moisture silage, or if you do direct cut, use a feed additive such as corn and cob meal.
4. Chop relatively fine. Recent studies suggest a theoretical cut of 1/2" and keep the knives and shear bar sharp. This particular size seems to result in more effective fiber for rumination than the very fine cut.
5. Provide a tight silo to exclude air and water.
6. Used covered wagons to prevent excessive leaf loss in the field. Alfalfa leaves make expensive mulch.
7. Fill silo rapidly and pack thoroughly. Distribute evenly in silo.
8. Use a suitable seal to exclude air.
9. If you're storing silage in a conventional upright or horizontal silo leave the silage undisturbed until ready to use the feed.

During the past several years a number of microbial products containing lactic acid-producing organisms (bacteria) have been put on the market. Several of these appear to offer some potential for reducing ensilage losses of dry matter and especially protein. Acidity of the silage often appears to be increased and general silage quality improved. If you do include

one of these products in your program be sure to follow the supplier's directions for use. And don't expect to see dramatic improvement in the quality of your silage.

Hay Making Helpers

While silage appears the way to go for first cutting, for many producers silage simply does not fit into their program. What can these growers do to preserve quality in their hay crop?

As with silage, start with a quality product. And quality is most closely related to the maturity of the plants at the time of harvest.

Bad weather can result in both excessive dry matter losses and losses in feeding quality. Under ideal conditions total losses may exceed 20 percent. But these losses can be doubled if the crop is rained on. But remember, early-cut hay somewhat damaged by rain is still likely to be much higher in total feed value than the same crop cut late and free of weather damage. Losses from weather damage can be reduced by: (1) using hay making equipment that reduces field curing time, and (2) understanding and using existing

weather aids.

Hay Preservatives and Drying Agents

The use of organic acid preservatives such as propionic acid or mixtures of propionic and acetic acid, when properly applied, can also help. The rules to follow when using these products include (1) don't bale hay at a moisture greater than 30 percent, (2) be sure to have your equipment properly calibrated and use the correct amount of preservative depending on hay moisture and (3) apply the product uniformly throughout the hay mass.

Hay drying agents such as potassium or sodium carbonate are the newest aids to hit the market. Applied to the alfalfa stems at the time of mowing these materials attach the cuticle layer on the stems causing stems to dry at about the drying rate of the leaves. Results on a heavy first cutting have been less than spectacular. But research at Michigan, Maryland and New Hampshire all agree that these products when properly applied show real promise for second and third cuttings.

Bradford plans tractor course

TOWANDA - A tractor certification program will be held in May at the Bradford County Extension Office, 701 South Fourth Street.

If a youth 14 or 15 years of age plans to work on a farm this summer or if a farmer plans to hire a person of this age, they may become certified by completing this course.

There will be four evening sessions starting at 7 p.m. on May 8, 10, 15 and 17 and a morning

session starting at 9 a.m. Saturday, May 18th during which a driving test will be given.

Youth 13 years of age will be accepted but will not receive their certification until their fourteenth birthday.

Contact the Extension Office for more details, (265-2896). Registration should be made by April 30 either by calling or writing Al Homan, at the Extension Office.

There is a charge of \$3 to cover the cost of study materials.

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