

At Sanborn Mills Farm, preserving the past and planning for the future go hand in hand!

## Sanborn Mills Farm

### September 2017 eNews



[www.sanbornmills.org](http://www.sanbornmills.org)

### Hay, 1<sup>st</sup> cut, 2<sup>nd</sup> cut . . . is there any difference?

Hay as defined by Wikipedia is "grass, legumes, or other herbaceous plants that have been cut, dried, and stored for use as animal fodder." Like many New Hampshire farms, Sanborn Mills cuts hay twice during the season. First cut is usually mid-May to early June, second cut is toward the end of August. By now it's all dried, baled, and stored away to feed our horses & oxen this winter.

According to John Porter of UNH Cooperative Extension Services, "Haymaking combines science and art. Old timers knew just the right feel of hay before it was ready to put into the barn." The goal is to maximize the amount of nutrients in the hay and if you are not a farmer, you may wonder if there is a difference between first cut and second cut. The answer is, yes.

First cut hay tends to have a lot of mature grasses with high fiber content so it is not especially rich in nutrients.





*First cut bales (left), second cut bales (right).*

After first cut, grasses like timothy and alfalfa as well as clover have a chance to get established so second cut hay is finer, leafier, and has more proteins. When cut and baled it is greener and smells sweeter. With all this goodness and moisture, it can take a little longer to dry. Regardless of when you do it, the key is to cut hay before it goes to seed.

What do the animals prefer? From what we hear, horses like second cut hay and cattle can find it a little too rich. But either way, it's good to have a bale of hay after a hard days work.

For more information on hay, contact [UNH Cooperative Extension](#) or check out these publications:

- [Hay Making](#)
- [Hay Quality](#)
- [Improving Pastures & Hayfields](#)



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## Hay bales or loose . . . is there a difference?

With an increased interest in sustainable farming practices, some small scale farmers are returning to the tradition of using draft horses to cut and store loose hay. In other parts of the world, farmers are making progress in modernizing the storage of loose hay.

Colin Cabot, founder of Sanborn Mills Farm has done some research on this very topic. "In French Canada I have seen a haymaking process that I found impressive on several fronts. First it reduces the time involved in haying from several days of drying in the field to one day; second it



eliminates the need to ted or rake the hay, saving fuel and tractor time; third it allows precise capture of the highest protein content of the hay without worrying about the weather, which in turn allows more cuts per season; fourth (according to those who are using it) not "conditioning" the hay, not sun drying it, not baling it, preserves up to twenty percent of the hay's nutritional value, which means animals need less of it, and fifth it can all be done by one person."



Here's a brief outline of the process: cut the hay with a conventional mower that doesn't crimp or thrash the hay, pick it up in the field with a loader that fills a large wagon with a conveyor floor, unload it on the floor of a bespoke barn that has enormous bins 25 feet tall on either side of the center aisle, each equipped with a platform with duct work that allows air to be forced through the hay as it is stacked on the platforms by a grab arm running on tracks on the ceiling.

The same mobile arm later can pick up the hay and dump it in a chute that goes directly to the animals' feeding area. The arm and ventilation system can be powered by solar power on the roof of the barn.

Here are two videos on modern loose hay practices in France:

- <https://www.bing.com/videos/search?q=sechage+foin&&view=detail&mid=51E257BE8A74A65FE49B51E257BE8A74A65FE49B&&FORM=VDRVRV>
- [https://www.youtube.com/watch?v=g95sQ\\_qAwTg](https://www.youtube.com/watch?v=g95sQ_qAwTg)

Here is some info on traditional loose hay practices in the US:

- A video on David Fisher's [Natural Roots Farm](#) where he hays with horses: <https://www.youtube.com/watch?v=yxlcPyjMEck&feature=youtu.be>
  - *Loose Ways of Making Leafy Loose Hay* by Peter Vido: <http://scytheconnection.com/loose-ways-of-making-leafy-loose-hay/>
  - *Hay Harvesting Methods & Cost* by Robert E. Marx & James W. Birkhead: <https://naldc.nal.usda.gov/download/CAT87217476/PDF>
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## Repairing the lower spillway . . .

A spillway allows a sawyer to control the level of the mill pond. When water is needed to build up a "head" at the gate to power the turbine and gears, *stop logs* (planks) are slid into place in the spillway. When too much water builds up in the pond, *stop logs* are pulled out and the excess water is released.

A skilled sawyer knows how to monitor and control the level of the pond in order to keep the saw operating at a constant speed. To accomplish this, *stop logs* are added or pulled out as needed to maintain consistent water pressure.



*Fully repaired lower spillway.*



*Stop logs (left) spillway deck and floor being removed for repair (right)*

Wooden spillways are subject to rot, especially the parts that are not submerged in water all the time. Millwright Brian Clough and Jake Farmer just replaced the lower spillway. Step one was to drain the lower mill pond through the gate bypass. Next was removing the rotted portions of the spillway, putting in the new posts, wood slides, floor, and a walkway.

Maintenance is an ongoing challenge in a historic mill  
- this is the third time the lower spillway has been replaced a little over twenty years.



*New floor and wall in process.*



*Completed spillway from the mill pond side.*



*Completed spillway from the "toe end" downstream side.*



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## Snapshots from recent workshops . . . .

Blacksmithing basics students experimenting with the basic trivet design.



*Craig Fournier of Webster, NH (left) & Alan Tiede of Barnstead, NH (right).*

Logging with Oxen students in the woods and by the garden.



*Randy Hill of Banks, Oregon (left)  
Jim Allen, Kristina Allen, Michael Allen, Randy Hill (left to right).*

Interested in working with oxen and learning how to make an ox yoke?

There are still spaces in the following workshops:

- [Oxen Basics for the Teamster & Team - Oct 14 & 15](#)
- [Ox Yoke Making - Oct 19 to 22](#)
- [Ox Yoke Making - Oct 24 to 27](#)

And if you are wondering about next season's workshops, we should have the lineup posted to the website the end of next month. Stay tuned to the October eNews to learn more.

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Photographs for this eNews:

Haying with horses courtesy of [David Fisher, Natural Roots Farm](#).

Loose hay image courtesy of [Billaud-Segeba.com](#)

All other images by Lynn Martin Graton.



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A traditional New Hampshire farm and nonprofit organization dedicated to sustainability, creativity, and preserving folklife skills and agricultural knowledge so that the best of the past can help shape our future.

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