



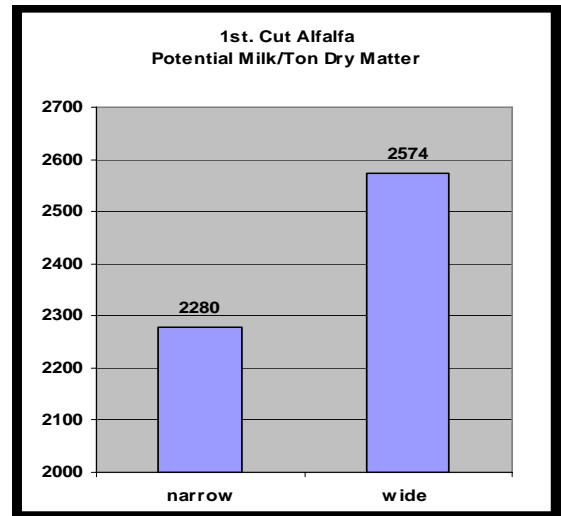
## Wide Swath Haylage



**D**airy cows are animals designed for, and produce best on, quality forage. Profitability hinges on the quantity and quality of forage fed. Forage quality is measured by what makes it to the mouth of the cow.

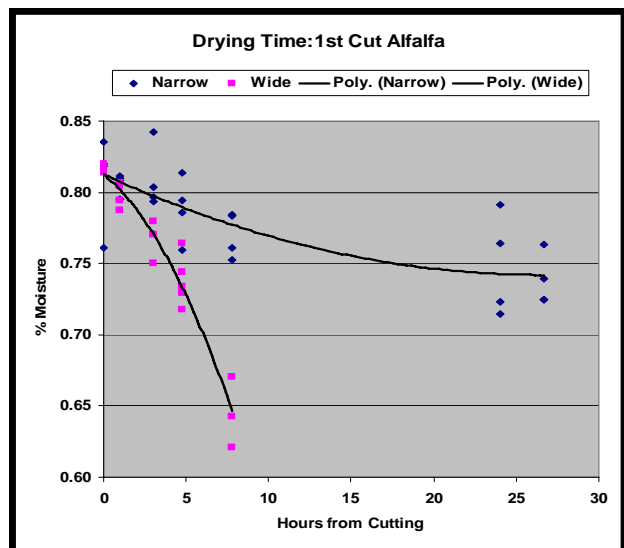
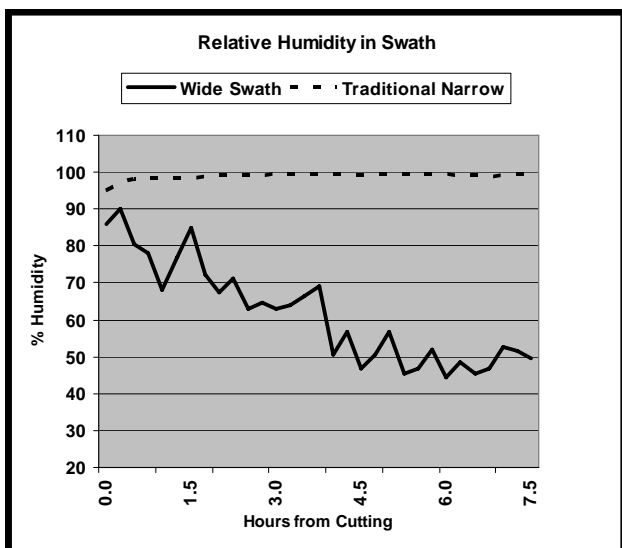
**T**raditional haylage is placed directly into tight windrows, reducing drying and increasing the respiration loss of digestible nutrients. The longer it takes the forage to dry to the ideal moisture for chopping, the longer the forage is respiring. This loses 2 – 8% of the highly digestible dry matter and up to 16% dry matter for milk under poor drying conditions. The more time spent between mowing and chopping, the greater the loss.

**Wide Swath - More Milk** : Cornell Cooperative Extension research, supported by H&S Manufacturing and New Holland Equipment, backed by on-farm experience, has found that **HOW YOU HARVEST CAN ADD 300 LBS. MORE POTENTIAL MILK** in every ton of Dry Matter reaching the cow's mouth. The wide swathing and subsequent rapid dry down, allows forage to reach the silo the same day as mowed, with minimal respiration consuming the milk producing nutrients.



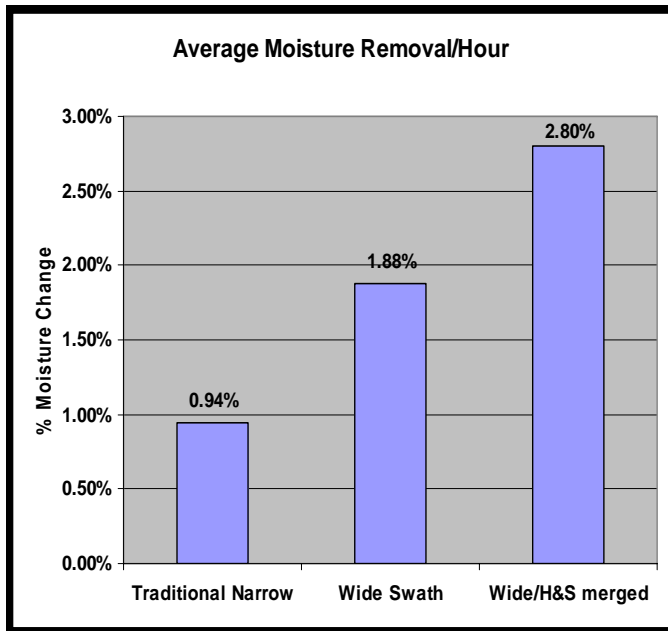
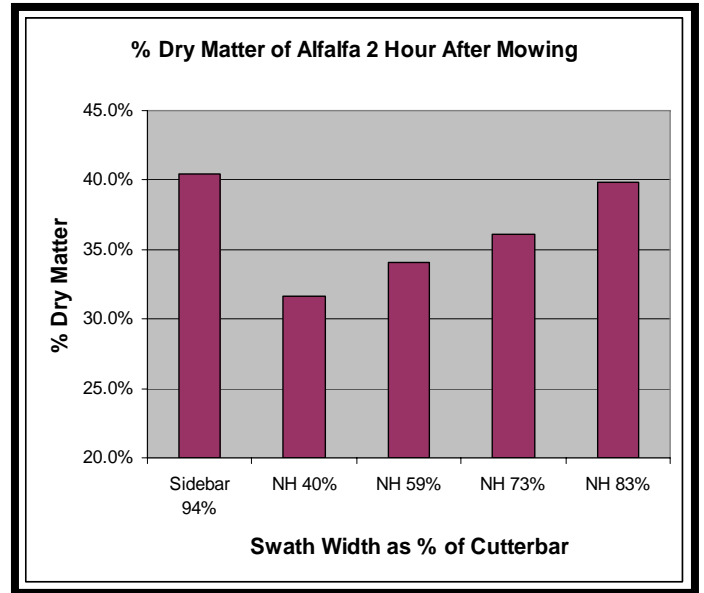
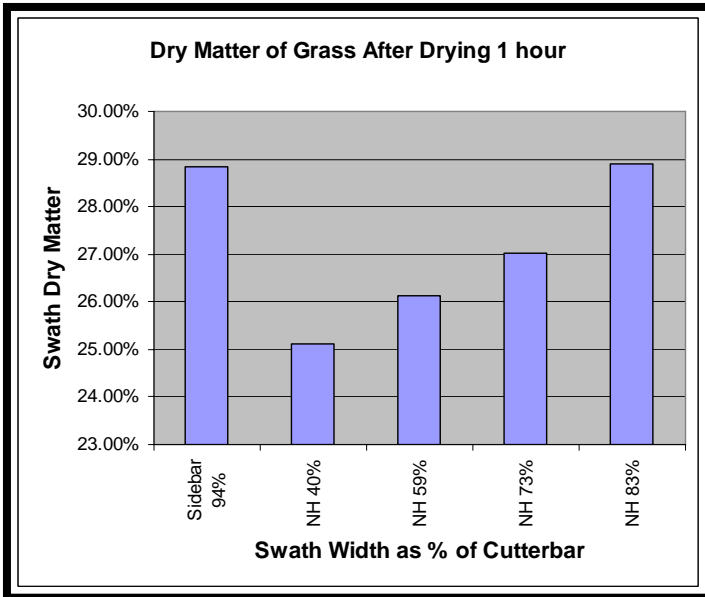
### How Does it Work?

Field curing is relatively inefficient compared with the natural evapotranspiration of the crop. Wide swathing drives the rapid removal of moisture by evapotranspiration because the leaves are exposed to the sun, the stems are not damaged, and the plant is heated by the sun. Full width swath (as for dry hay), **increases the drying surface area 2.8 times**. This increase in the surface area increases swath temperature and dramatically decreases the relative humidity (graph at lower left). The effect was a major reduction in time to reach proper moisture for silage (graph at lower right) for the heavy first cutting alfalfa. Each of the tests produced haylage-in-a-day.



# For Silage: Width Matters More Than Conditioning

In another study at Don Skott's farm, in Buskirk, New York, assisted by New Holland Manufacturing, in both first cutting grass and first cutting alfalfa a mower that did NOT condition but laid the swath at >90% of the cutter bar, dried faster than the traditional system of mowers that only leave a swath at < 75% of cutter bar. For dry hay, conditioning is an advantage.



## Merger Accelerated Drying

Moving the swath to a windrow with an H&S mini merger accelerated the already rapid drying rate 1.5 times faster than wide swath – nearly 3X faster than traditional.

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For further information, visit our website site at <http://counties.cce.cornell.edu/rensselaer/agriculture>