

Forage Focus: Does it Pay to Stockpile Fescue and Orchardgrass?

Clif Little, OSU Extension Guernsey and Noble Counties

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Stockpiling fescue and orchardgrass is generally considered an economical way to extend the grazing season and cut feed costs. However, high fertilizer costs and applications of nitrogen too late in the growing season may call this practice into question.

It goes without saying stockpiling does have some risks. We have to apply approximately fifty to seventy units of actual nitrogen per acre 4-6 weeks prior to the end of the growing season and get some rain shortly after fertilizer application followed by cool temperatures. If everything works correctly we can grow enough additional forage to cover the cost. Let's see what nitrogen cost does to the economics of stockpiling. For the example below we will assume stockpiling will yield 2000 lbs. of D.M. (dry matter) per acre. We will apply fifty units of urea or 46-0-0 at various prices per ton (right hand column) and add in a \$6 per acre spreading cost. We will total these cost per ton of stockpiled forage and subtract it from the value of hay D.M. per ton. All figures are rounded and approximate and are per acre.

	Price of Hay Dry Matter per Ton					
Cost of Urea	\$30	\$40	\$50	\$60	\$100	\$150
\$700	- \$14.04	- \$4.04	\$5.96	\$15.96	\$55.96	\$105.96
\$650	- \$11.32	- \$1.32	\$8.68	\$18.68	\$58.68	\$108.68
\$600	- \$8.60	\$1.40	\$11.40	\$21.40	\$61.40	\$111.40
\$550	- \$5.89	\$4.11	\$14.11	\$24.11	\$64.11	\$114.11
\$500	- \$3.17	\$9.83	\$16.83	\$26.83	\$66.83	\$116.83

(difference in cost per ton of D.M. positive numbers favor stockpiling)

As the table illustrates, positive numbers indicate stockpiling can pay if we place a high value on the forage. The dollar values represent profit or loss per acre at hay dry matter values indicated. However, if fertilizer prices continue to increase it can become less economical particularly if hay prices do not rise as quickly as nitrogen prices. We should also note that stockpiling has a risk. If we do not receive rain after the nitrogen application and throughout the remainder of the growing season we may not recoup our initial investment. Early frost or freeze could also hit and we may not produce enough forage to pay for stockpiling. In this example I do not place a value improved forage quality that can occur when stockpiling. I would place the 3rd week of August as the absolute latest period of time to apply nitrogen with the hope of producing an extra ton of dry matter per acre. We don't know exactly when the end of the growing season will be and the later it gets the more risk we have in recovering our costs.