

LITTLE OR NO-COST MANAGEMENT PRACTICES INCREASE HAY PROFITS.

By Calvin H. Pearson, Professor and Research Agronomist, Western Colorado Research Center, Ag Experiment Station, Colorado State University

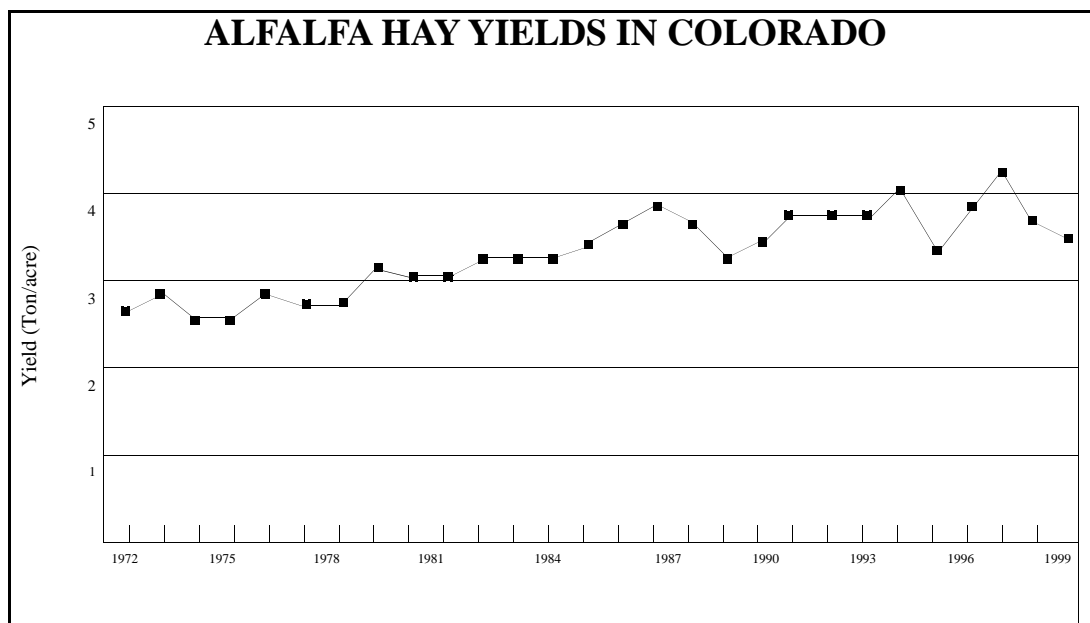
Over a nearly 30-year period, yields of alfalfa hay in Colorado have been on the increase. In 1972, alfalfa hay yields in Colorado averaged 2.7 tons/acre; by 2000, yields had increased by a full ton to 3.7 tons/acre. Keep in mind this 37 percent increase is a statewide average based on thousands of growers operating in a broad diversity of environments and production situations. Similar increases in alfalfa hay yields have likely occurred in other hay producing states. What is responsible for these impressive yield gains?

No doubt better hay production technology is a major contributing factor to these higher yields. We have seen advances in weed and other pest control practices. We have seen improvements in hay-making and handling equipment. Irrigation technology has also improved. We have new varieties that produce higher yields and have increased disease resistance. Certainly, other technologies have also contributed to increased hay

yields. However, unless growers had made the decision to use the new, proven technologies, these improvements would have been of no value.

To implement the use of new technologies into farm operations requires growers to make conscious management decisions. Many management decisions require little or no out-of-pocket expense, yet making good management decisions requires an investment of time to learn new production technology and how to use it effectively.

Technological advancements are discounted over time as they are used by more and more farmers. Farmers who find and use new, proven technology as it becomes available are more likely to obtain higher profits than those who wait until the technology becomes commonplace. Waiting too long to use a new technology often requires growers to adopt it just to stay in business. It takes good management skills to decide if and when to adopt new technology.



I have driven by a large field of alfalfa nearly every day for several years. A couple of years ago, the field was split and sold to different owners. The field is the same variety and was very uniform prior to the split. Today, the two parts of the field look very different and is clearly the result of two different managements being imposed on it. A noticeable difference is the irrigation practices. One side of the field has been over-irrigated and has significant plant stunting and yellowing. There is no doubt that yields on the over-irrigated side of the field will be considerably lower than on the other side.

Presented below are several management decisions and approaches that can be used on your farm, that when used properly, will have a positive impact on hay profits. Certainly, there are many other management decisions that can be made on your farm that will positively or negatively affect hay profits.

Selecting the right variety of alfalfa to plant can affect hay profits. The yield of two varieties of

illustrate how profits can be increased just by picking the right variety to plant.

Timeliness of operations is essential to good haymaking, just as it is to many crop production practices. When to control weeds and other pests, when to irrigate, when to plant, when to prepare the seedbed, when to harvest, when to haul bales, along with many other operations, are all important and can ultimately effect hay yield and quality. I have seen many fields over the years where haymaking was done very well, only to let the bales sit in the field while the next cutting grows up around the bales. By the time the grower gets around to picking up the bales, not only is the quality of the hay bales reduced, but the next cutting is severely damaged by equipment traffic used to pick up bales.

Regular monitoring of fields helps to identify problems early and gives growers more lead time to schedule practices. Using the management approach of regular field monitoring will often encourage growers to deploy more timely and effective control operations. Waiting too long to check fields only to find a critical problem that requires immediate attention generally results in a hurried reaction and a remedy that is not nearly as favorable than if the problem had been found and dealt with sooner.

When doing field operations, growers should not only focus on performing the task at hand as precisely as possible, but they should also consider how the current operations will affect subsequent operations. Considering how subsequent operations may be influenced by current tasks will likely affect management decisions. For example, if a grower considers baling while he is swathing, he is more likely to make uniform windrows that will dry more evenly — allowing for baling that can be accomplished sooner and result in bales with a more consistent bale moisture.

No doubt hay yields over the past thirty years have improved. What we can expect in the next thirty years remains to be seen, but if the past is any indications, we should expect to see more innovation and improvements in hay production in the years ahead. But remember — to increase profits. It takes farmers making good management decisions to put new, proven technology to work on their farms.

Production Year	“New Variety”	“Old Variety”	Difference
First year	\$406.00	\$341.00	\$65.00
Second year	\$348.00	\$289.00	\$59.00
Third year	\$249.00	\$202.00	\$47.00
Fourth year	\$210.00	\$167.00	\$43.00
Total	\$1,213.00	\$999.00	\$214.00

Table 1. Net receipts per acre, comparing a “new” variety (relatively high seed cost, high yield) with an “old” variety (relatively low seed cost, low yield) using yield data and production information based on agronomic research conducted in western Colorado. This scenario assumes similar decreasing yields with older stands for both varieties and selling price of \$80.00 per ton. Figures are based on data collected from research plots in western Colorado.

alfalfa over a four-year period are shown in Table 1 (below). The seed for “new” variety is more expensive, but out yields “old” variety. Yields over a four-year period show that the net returns for “new” variety was 21 percent higher per acre than for “old” variety, resulting in \$214 more profit over the four-year testing period. These numbers