

Surviving the Elements

Every spring and summer, farmers spend time and money putting up a hay crop, only to watch harsh weather conditions deteriorate much of the hay that has been stacked outdoors and left to languish in the elements. Thanks in part

to a program approved by the Kentucky Agricultural Development Board, many farmers there have constructed or renovated structures to store hay, helping to preserve quality and reduce loss.

University of Kentucky (UK) College

of Agriculture research has shown that losses of 15%-35% can occur in large round bales stacked on the ground. Inside storage can reduce that level to 4%-7%.

To date, nearly \$10.5 million has been committed to the Hay, Straw and Grain

Storage Program since it began in late 2002, according to the Governor's Office of Agricultural Policy. With participating farmers matching that amount, there has been (or soon will be) at least \$21 million worth of hay storage construction, estimates Douglas Overhults, an ag engineer with the UK Cooperative Extension Service.

That translates to about 2,800 construction projects, he says. "Trying to estimate beyond that gets pretty speculative, but it is probably reasonable to say that this program has provided new storage space for more than 250,000 tons of hay," Overhults says. "Farmers obviously see some value in it."

Model storage

Most of the projects are new construction and most have been for hay storage, although some have been used to improve or construct storage for grain and feed commodities such as soybean hulls, he says.

"Hay is a critical resource for Kentucky," says Garry Lacefield, UK Extension forage specialist. "When the large round bales came into being, they were largely accepted across the state, but we soon learned that we lose a lot from storing through the feeding process. We've had a lot of research and educational programs on this topic, and we know that the better the quality of hay, the more we can afford to spend to preserve that. We know if we can protect hay from the elements, then we are going to reduce that amount of loss. Hay is an expensive commodity. It costs us a lot to put up; anything we can do to reduce loss is critically important."

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Lacefield says beef and forage programs funded with tobacco settlement money have enabled farmers to be more aware of what it takes to produce quality, how to assess hay quality, and what their storage needs are. "It has helped us to move the whole quality emphasis forward," he says. "It is something that will be paying back in Kentucky livestock forage production for years to come."

The model cost-share program for storage of hay, straw and grains utilizes county agricultural development funds. The program provides for up to \$5,000 in cost-share assistance, matched by the applicant on a 50:50 basis. So far, 78 counties have participated in the

program. The program is modeled from a hay, grain and silage storage program that began in Kentucky's Shelby County.

Farmers must apply for funds through their county. The program is handled differently in each county, with some providing less than \$5,000 in matching funds. In many cases, farmers may be providing more than half the cost of the structure, says Kara Keeton, director of communications for the Governor's Office of Agricultural Policy.

Blueprints for quality

The main goal of this program is to improve net farm income by employing the best practices related to hay, straw and commodity storage and utilization, thus improving feed and straw quality. Other goals are to enhance existing commercial hay enterprises and to help interested producers start a commercial venture.

As an Extension agricultural engineer, Overhults says his role has been to provide educational support. The program requires that all participants attend an educational session provided by Cooperative Extension Service.

Thanks to educational and research efforts throughout past years by forage and beef specialists, along with county Extension agents, producers are aware of what it takes to produce quality hay and what losses occur from outside storage.

"Now people have a chance to do something about it," Overhults says. "We don't have to tell them how much they are losing; they've seen that and understand that. Once this program started, the questions weren't about the value of storage, but 'Where will I build, and how will I build it?'"

"So what we've tried to do is to respond to questions about building planning — 'How much space does it take? How much hay can I store? What's the best location? And what kind of building?'" he says. "So, we've put together materials that address planning and construction of the buildings."

These materials can be accessed at www.bae.uky.edu/ext/haystorage. The Web site includes information on the model program, sample applications, storage losses, options and costs, planning and design, example building plans, construction contracting and safety.

For more information on hay production, storage and agricultural development programs, contact a local Cooperative Extension office.



Editor's Note: This article was written by Laura Skillman, Extension associate for UK Ag Communications Services, which supplied this article. There is a wealth of information available on the Web site presented in this article. If you are interested in building a storage facility, the editor highly recommends you explore the information available there.

**Hay storage program
preserves quality,
reduces losses.**

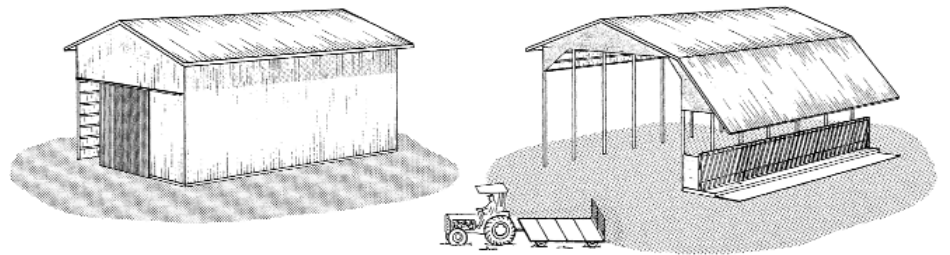


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