

ALKON NEWS BULK CURING EDITION

Published by
ALKON INDUSTRIES, INC.

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Bennett Sees Bulk Curing, Mechanical Harvesting

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The cost, price, labor squeeze and recent years has stimulated much interest in reducing the effort and time required in harvesting and curing tobacco. Many farmers and machinery manufacturers and research and extension workers of N. C. State College have tried various means and mechanical devices in an effort to reduce labor and cost of the harvesting and curing operations.

Efforts to mechanize harvesting and curing really got under way in earnest about 12 to 15 years ago when several tobacco growers started experimenting with high clearance tri-cycle type harvesters. One early unit developed by a tobacco grower provided seats for 2 primers to ride and an ingenious looping device that would loop the hands of leaves on a string astride of the date are of stick. In general, the mechanical harvesters available to date are of two types. One provides seats on which the primers and stringers ride through the field priming and stringing the leaves on conventional sticks. Another type provides seats for the primer and endless chains fitted with clips or holders for hands of leaves. The leaves are strung on conventional sticks and cured in conventional barns.

A few years ago, the Experiment Station, recognizing the interest of the tobacco grower in the mechanization of harvesting and curing operations, began research with mechanical harvesting and bulk curing.

Agricultural engineers at N. C. State College have developed machinery that will prime the leaves from the stalk and convey the leaves between belts to an upper platform and deposit the leaves in frames for bulk curing.

The first commercial model of a machine patterned after this principle has been used on a farm in 1961.

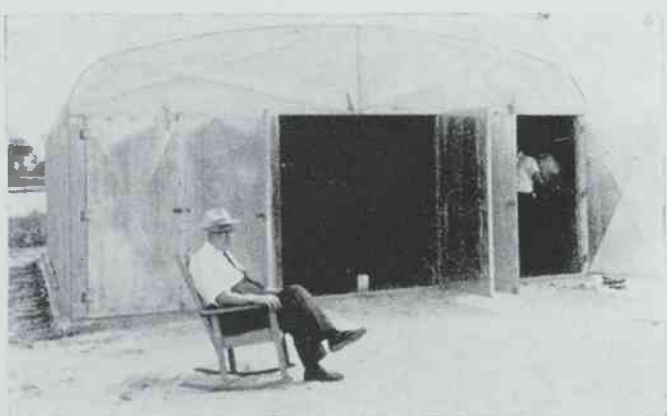
Simultaneously with the research on the mechanization of tobacco harvesting, agricultural engineers have developed a system of bulk curing. That is, the tobacco is not strung on the conventional stick nor is the curing done in a conventional barn.

The Hassler bulk curing unit is a quonset type of building equipped with a heating system and a fan and a system of metal air ducts to distribute the heated air under the tiers of tobacco. The fan forces the heated air up around the leaves of tobacco to remove the moisture.

In the bulk curing system, the tobacco is not strung on sticks. The leaves from the field are clamped in a curing rack and pierced with prongs to hold the leaves in place. Each rack holds the equivalent of about 9 to 12 conventional sticks of tobacco, or about 120 to 150 lbs. of primed leaves.

It has been demonstrated that tobacco can be primed mechanically and cured in bulk curing barns without going through the process of stringing the leaves on the conventional stick.

Progress will not stop here. More and more people will contribute worthwhile ideas and effort toward the reduction of labor required in tobacco farming and to further improve mechanization and efficiency in growing and marketing the crop.



Cordie Page says he can now take it easy during the curing season.

CORDIE PAGE, CONWAY, SOUTH CAROLINA: "I am very pleased with the barn, and we are getting top prices on our bulk cured tobacco. The way it cures, the color, the aroma, and everything about it, I like. When we sold our tobacco, the farmers and tobacco men showed a tremendous amount of interest. They wanted to see the tobacco that was cured in the bulk barn. They all were highly complimentary on what they saw. The initial cost of the barn seemed high, but I am glad I bought it. It certainly has done everything claimed for it."

Good Tobacco Farmers, Lead Praise The Excellent Results



R. F. "Cap" Moore stands in his field of tobacco. He purchased the first Hassler Curing Unit in Florida.

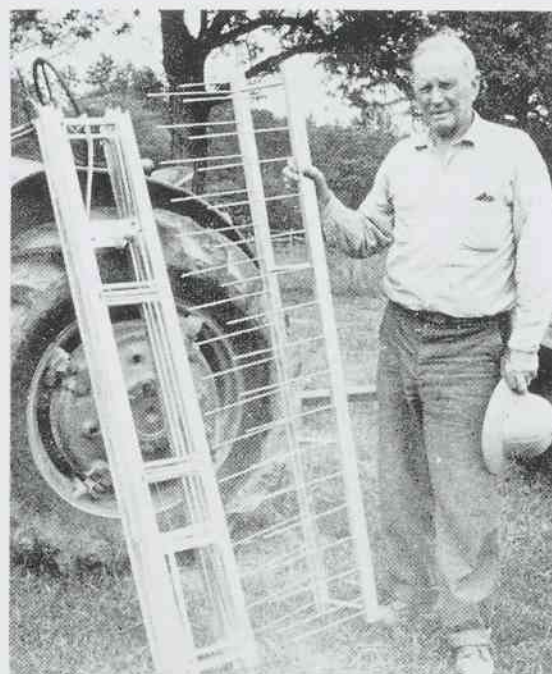
R. F. "CAP" MOORE, LIVE OAK, FLORIDA: "The new bulk curers are like any other type of new farm equipment. You have to learn how to operate them by using them. For the first 3 or 4 weeks, we mostly experimented with ours. During this time we had a few green stems, but the tobacco had a good green color to it and cured out much better than in a conventional type barn. As we moved along in our 6th, 7th and 8th primings, we didn't find any green stems and the tobacco still looked good. The cost to operate these barns is economical. It runs around 500 kilowatts per barn plus 135 gallons of diesel. We received high dollar for our tobacco cured in the bulk barn. We recommend the new bulk curer because it is easy to operate, time saving, holds more tobacco, and most of all, reduces labor which we all know has begun to be a problem in this section. We also picked less trash out of our bulk cured tobacco than out of our conventional barns."



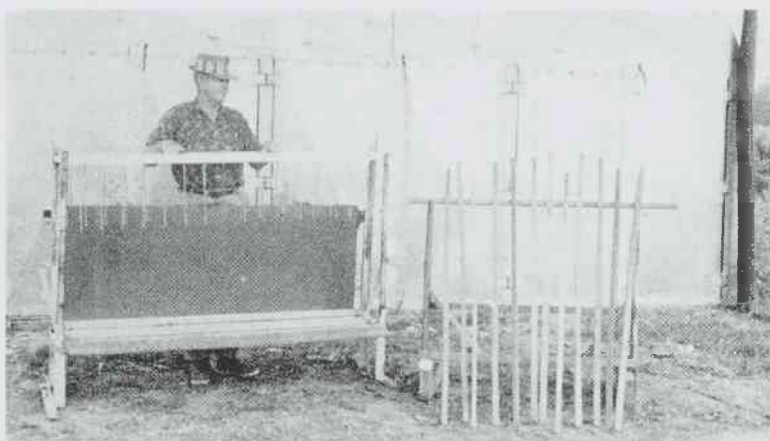
James P. Wall checks his tobacco.

JAMES P. WALL, WAGRAM, NORTH CAROLINA: "One of the main things about it, is the ease of curing. It's a whole lot less headache in getting crop in barn. We fill in less than three hours, six primers in the field, two rack loaders at the barn. Two women and two girls fill the racks and two men place the racks in the barn. My son drives the mule and hauls the tobacco from the field."

LINDSEY MOORE, RINGGOLD, VIRGINIA: "I would say the grade of tobacco is greatly improved. It's a great labor saver. The ease of curing is a joy instead of drudgery. The expense of twine and the added expense of stringing are eliminated. The barn will hold twice as much as any four room barn in this area. All fire hazards are eliminated. The heavy type of semi-grainland which we have produces a yellow which is very difficult to yellow in the conventional type of barn. I am getting white fibers in my cured leaf for the first time, which are highly desirable. I am getting a light orange color, and with a great percentage of uniformity. I might say this, I had given much thought to scalding in this barn before I bought it, but am so pleased to see that it is no problem at all."



Lindsey Moore holds a rack that will be used in bulk curing his tobacco in the first Hassler Curing Unit in Virginia.



Tom Winslow shows the bulk rack, which holds the equivalent of 12 sticks.

LEROY ODOM, MAYO, FLORIDA: "Now that the tobacco selling season is about over and I have just about completed marketing my 6 acres of tobacco, of which half was cured in a Hassler curing unit and the balance in the conventional stick type barn, I am satisfied that I had less trash in the cures from the bulk unit and no waste at all at loading time from overripe leaves. I put everything that was thrown out the bulk unit, whereas, the overripe leaves were thrown out when stringing for the conventional type barn."

"Another thing that I find about bulk curing, is the fact that you can cure tobacco any color that you feel will sell the best. If you want lemon or orange, you can make it whatever you desire."

"Since starting this statement, I have secured the total figures as to pounds and dollars, with exception of two barns of tips.

Bulk cured	8,856 lbs.	\$5,623.56	Ave. 63½¢ per lb.
Conventional cured	5,654 lbs.	3,477.21	Ave. 61½¢ per lb.

"I am thoroughly sold on bulk curing and feel that I will be in the market for another unit for next season. It is a pleasure to take four croppers and two men at the barn and be able to load a barn by 3 or 4 o'clock in the afternoon without much effort, besides all the money you save."

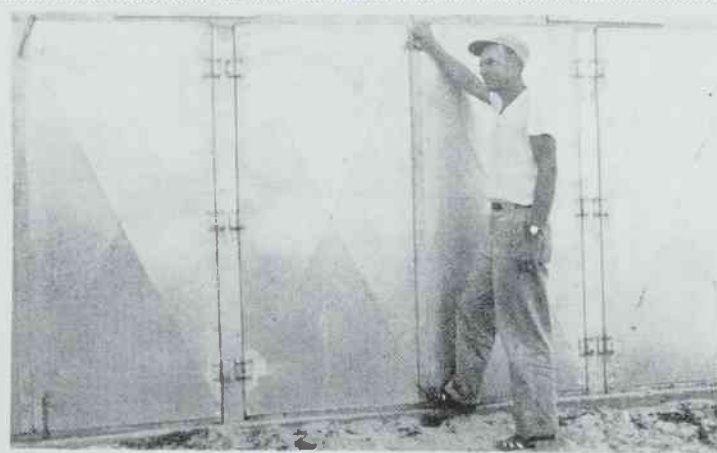


Leroy Odom, on trailer, helps unload trailer for placing in bulk unit.

L. A. McCALL, JR., FLORENCE, SOUTH CAROLINA: "This system shows more promise than any I have seen in 30-50 years of farming. Back of the whole thing is labor. When you can reduce labor costs and get a better product, as you do in the Hassler unit, it is bound to benefit the farmer."

GLENN YATES, CHADBOURN, NORTH CAROLINA: "It will cure tobacco. It is the safest way I know. Of course, this year I didn't have much good tobacco to put in it. We had 12 inches of rain in 72 hours, and a week later we had a hail storm that did 85% damage. It was the fourth and fifth cure before I had any decent tobacco to put in it. Even at that, I had to bring it from another farm. After I got on the high stalk tobacco, the cures were really nice."

OLIVER ODOM, CHADBOURN, NORTH CAROLINA: "This Hassler Curing Unit has advantages to bulk curing and a lot of waste tobacco in bulk curing. I like the Hassler unit a lot better than the conventional bulk barn I use. It holds 2,000 pounds of tobacco and 2,000 pounds of tobacco in our conventional barn. I think in five years labor and waste quality you get



Glenn Yates prepares to open the doors to check on progress of tobacco being cured in his bulk unit.