

Lancaster Farming

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Results Show Wheel Track Planting Okay.

After looking over the results, both in person and in print, it would seem that wheel track planting of corn has a place in Lancaster County and Southeastern Pennsylvania.

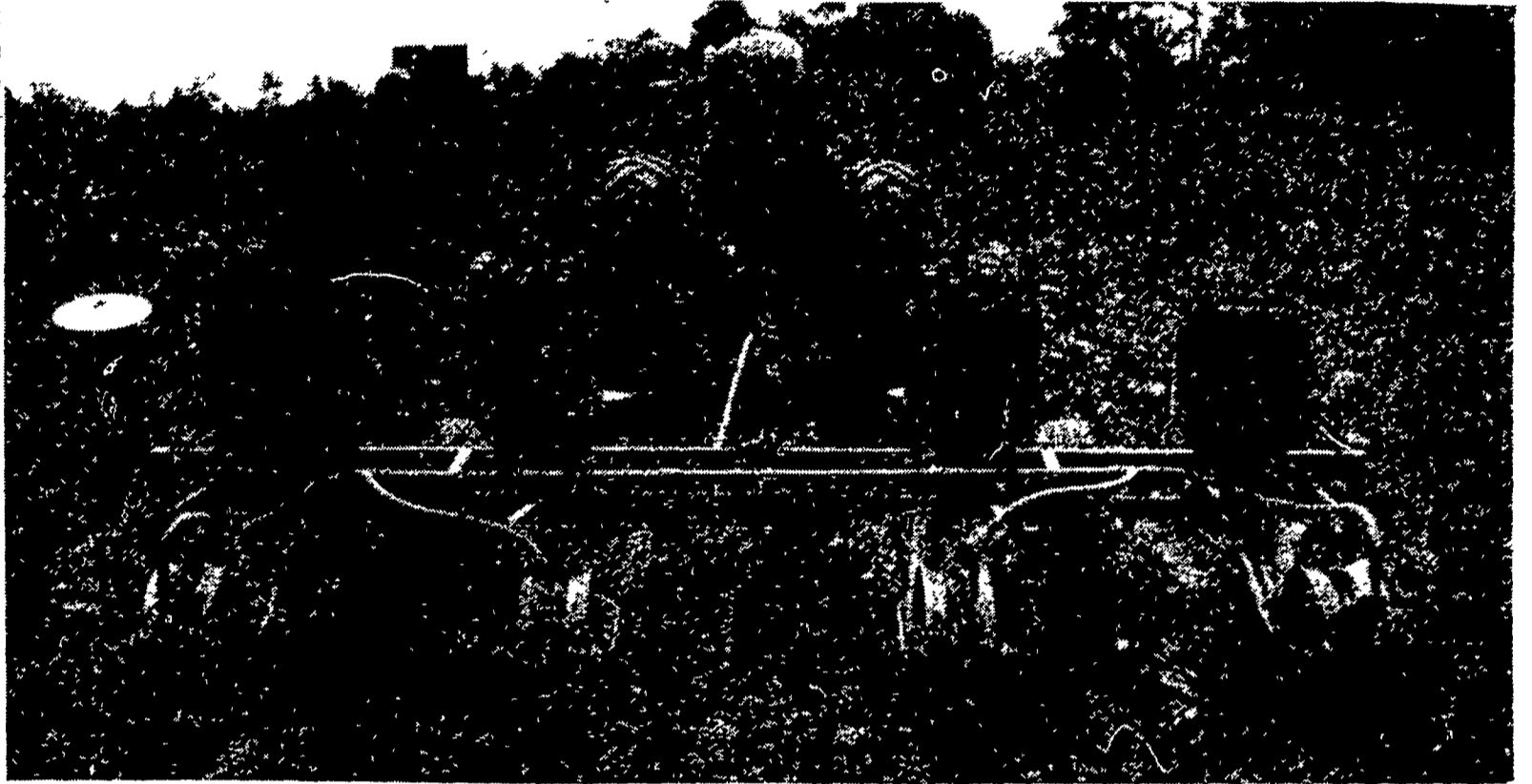
But there are a couple of "If's" tacked on.

The first thing to consider is the acreage to be planted on the farm. If the acreage is limited, then the cost of modifying equipment probably will be prohibitive.

If time and labor are no problem in the spring, there is little to be gained. Most savings are in labor costs, although fuel and depreciation are cut.

And if you operate the tractor yourself. Narrowing the rear wheels means that the tractor is much less stable. If your tractor operators are inexperienced or tend to be careless, accidents will happen.

For a copy of the University of Wisconsin report mentioned in the accompanying article, write to John T. Murdock, extension soils specialist, College of Agriculture, University of Wisconsin, Madison. Ask for Wheel Track Corn Planting, Circular 559.



NOTICE THAT A good job of plowing puts a field in better shape than you might imagine for corn planting. The planter follows the furrows, thus giving a greater

supply of moisture to the seedlings. Nozzles mounted behind the planter press wheels are used to apply 2,4-D pre-emergence spray in a band along the row.

A Lancaster Farming Report -

Wheel Track Planting Cuts Costs

From the Midwest during the past couple of years has come a lot of talk and advice, most of it favorable, about "wheel-track planting" of corn.

To find out how good this

method is, and how well it might apply to Southeastern Pennsylvania conditions and methods, we last week visited Hill Girt Farms, Chadds Ford, in Delaware County.

At this sprawling dairy farm — 1,500 acres — manager George Newlin is using the wheel-track method for the second year. About 130 acres of corn are planted annually on the farm, most of it for use as silage.

NEWLIN SAID that he first learned of the method through a national farm magazine. With labor costs highly erodable, steep land and the need for speeding the planting operation as incentives, he decided to give the method a trial.

The results, while not spectacular, were gratifying. Of course, last year no corn yields in the Southeastern part of the state were outstanding. Getting a crop at all was gratifying to many farmers.

Most of the 130 acres of corn was planted using the wheel-track method. One field was prepared using more conventional methods. Newlin said that yields were better on the roughly prepared fields because what little rain fell soaked into the ground.

HERE IS HOW he is doing it this year.

Six hundred pounds of 10-10-10 are applied as a plow-down after manuring. The ground is plowed using a three bottom mounted plow.

Following closely behind the plow is a specially modified tractor pulling a four-row planter equipped with 2,4-D spray nozzles. Some 250 to 300 pounds of 6-18-18 are applied in the row. The rate of planting is 16,000 stalks to the acre.

After the corn is up, it is sprayed again to kill weeds in the middle of the row. Only after the corn is knee high is it cultivated, and then only once.

CULTIVATION MUST be delayed this long to allow the plowed-down weeds and sod to deteriorate so that they will not hang on the cultivator sweeps.

Equipment modification, especially the tractor used for planting, is the largest item to consider if you are planning to use this method.

The University of Wisconsin, Madison, in a new bulletin, "Wheel Track Corn Planting," (Circular 559) lists at least six modifications that can be made to row-crop tractors to use the wheel-track method.

The modification adopted by Newlin for a four-row planter is one of those listed.

USING A MODEL H Farmall tractor, the rear wheels were set in to 40 inch centers. He then purchased a wide front axle for the tractor. This axle is still too narrow for the width required, so an extension was welded into it to make the tires 120 inches between centers.

This allows a 44 inch spacing between the center two rows and 30 inch rows on the other two. This is done to get a better match between corn planter and rear wheel tread. These spacings still permit the use of a four-row cultivator and a two-row picker.

Two barrels of spray material mounted alongside the engine give added weight on the front wheels. The front tires are over-size, fluid filled, and have 26 pound weights on them. This seems to compact the ground sufficiently.

THE WISCONSIN report, issued after four years of trials by farmers and research stations, points out that wheel-track planting will save 40 per cent of the cost of planting an acre of corn.

The savings are made in the cost of plowing, harrowing and in the elimination of one cultivation. However, the use of pre-emergence spray and a post-emergence spray and the cost of equipment is not considered.

Soil conservation and weed control are two very distinct advantages of the method.

There is less soil compaction because fewer tillage operations are required. The loose soil left between the rows absorbs more moisture and runoff is greatly reduced. Erosion may also be reduced on old hay and pasture fields because the sod cover is left on the field longer.

WITH CONVENTIONAL seedbed preparation, weeds normally have a one to two week "head start" on the corn. Thus, it is usually necessary to cultivate corn when it is still very small. Cultivation during this early stage of growth may kill many corn plants unless done with utmost care.

With wheel track planting, however, the corn and weed seeds in the row germinate at the same time. Weed seeds in the loose soil between the wheel tracks remain dormant until rains thoroughly moisten the surface soil layer. Therefore, corn is usually six to 12 inches high before cultivation is necessary.

The Wisconsin tests have shown that yields have been equal to or slightly higher than the conventional. The increased yields can be traced directly to better plant population. Higher germination, additional water from increased absorption and better weed control gave this greater population.

HERE ARE SOME pointers for wheel-track planting.

Deep plowing (seven to nine inches), and a good job of plowing is absolutely necessary.

Plant soon after plowing. If not, the topsoil will dry and reduce germination.

Compact adequately. At least a two-bottom plow tractor is necessary. Over-compaction has been found to be no problem.

When planting on contour strips, use a side-hill-hitch attachment to permit the planter to trail in the tractor tracks.

(Continued on page 13)



TWICE OVER A field is sufficient when using the wheel track method of planting corn. Using a four row planter, the planting tractor can keep up with the plow tractor. It is advised that the ground be plowed not more than 12 hours before planting time. (LF Photo)