

# Phillips tells no-till story

LANCASTER — "The history of no-tillage is relatively short," stated Shirley H. Phillips, Assistant Director of Agriculture at the University of Kentucky. He was addressing farmers from Pennsylvania, Maryland, Delaware, New Jersey, Virginia, and West Virginia during the 7th Annual Mid-Atlantic No-till Conference held here recently.

"Most of the developmental research is less than 30 years old," he said. "The actual adoption periods dates back into the late 1960's and early 1970's."

First no-tillage practices

were centered around growing corn in a killed sod. Few researchers, Extension specialists or early adopters could envision soybeans planted into small grain stubble, double cropping for grain and silage, or the many crop sequences that are commonplace today.

"Most of us have gone through the growing pains associated with no-tillage, a concept that approaches a 180 degree departure from traditional production practices in conventional tillage," Phillips said. "My personal no-tillage developmental patterns were something like this:

Two years' study to prove no-tillage won't work; three years' reversal with studies to prove it will work, and at the same time making recommendations without a research base; five years' study of why no-tillage works; fifteen years refining the concept and practices.

Something new — farmers who traditionally plant small grain as a cover crop in the fall to protect soil from erosion during the winter might consider switching to hairy vetch, an annual legume, said Phillips.

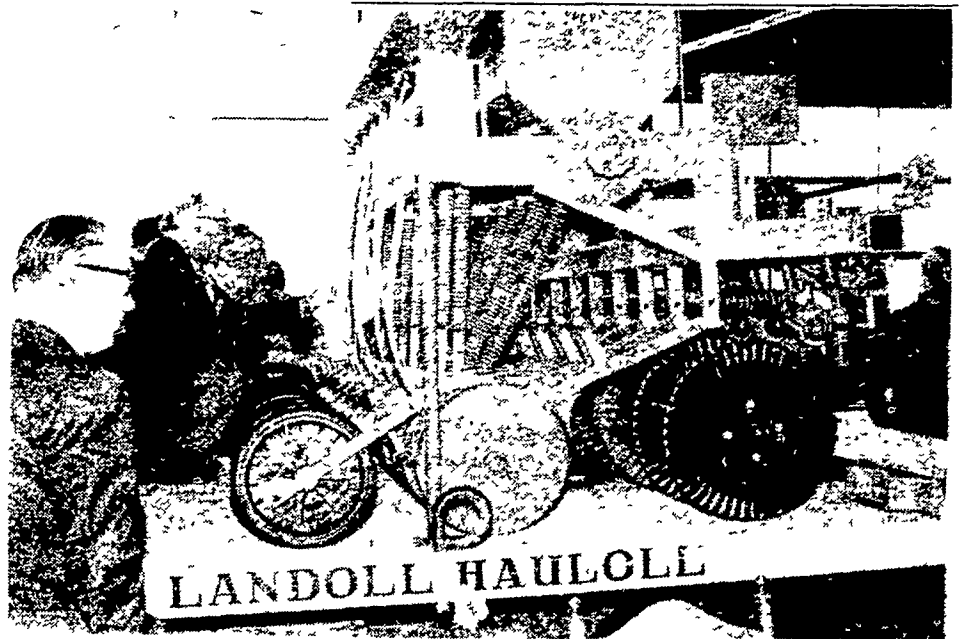
Research indicates the legume winter cover crop will help protect soil from erosion and at the same time will cut the nitrogen fertilizer bill for the corn crop.

Like wheat, barley or rye cover crops, hairy vetch provides a good soil cover and mulch for no-tillage corn planted in the spring. In addition, hairy vetch is a legume which has the ability to fix nitrogen from the atmosphere and supply the corn crop with nitrogen that otherwise would have to be purchased as fertilizer.

University of Kentucky College of Agriculture scientists S.A. Ebelhar, W.W. Frye and R.L. Blevins conducted research over a period of three years using winter legumes to fix nitrogen.

In the three years of research, average corn yields show hairy vetch supplied as much nitrogen to no-till corn as did fertilizer applications on an average of 39 pounds of nitrogen per acre.

Planting hairy vetch cover crops not only out the individual farmer's fertilizer bill but also help the nation conserve energy, Phillips said. One of agriculture's



More than 1200 people turned out to hear and see the latest on no-till farming last Thursday at the Host Farm, Lancaster.

major uses of energy in agriculture is in manufacturing nitrogen fertilizer.

Much of the Southeast has productive level soils with high water tables, he continued. The major problem associated with producing

grain crops is the yield reducing delay in planting to allow the water table to recede and soil temperatures increase.

Establishment of ridges in the fall and planting no-tillage in the spring offer

higher soil temperatures at the ridge crown, placement of seed above water table, timely planting and increased yields. Fuel requirement would be similar to chisel planting, Phillips explained



Farmers studied the planter demonstrator as it recirculated corn through the "planting" process.

## Franklin Extension to meet Friday

CHAMBERSBURG — Charles Overman, general manager of Adams Electric Co-operative, will address the annual meeting of the Franklin County Agricultural Extension Association on January 30, according to Association President, James L. Wilson.

Overman has achieved national recognition for his Jaycee work; and, thru his leadership, Adams Electric has achieved national prominence for its accomplishments in energy conservation, consumer relations, management innovation, and utility operations. He is well known

for his versatility as a public speaker.

He will address some of the broad issues facing America - free enterprise, citizenship, our heritage of freedom, and the roles and responsibilities of the individual in our society.

Over 350 county residents are expected to participate in the Annual Meeting which gets underway with a social hour at 6:15 p.m., and dinner at 7 p.m. in the Kauffman Community Center.

Franklin County Extension Director John Z. Shearer will report on the educational programs

conducted by the Extension Service during 1980.

Wilson urges all county citizens to attend, and to participate in the election of new directors. All county residents of legal age may vote.

Tickets for the event are available thru today from all Association Directors, and at the County Extension Office, 191 Franklin Farms Lane, Chambersburg



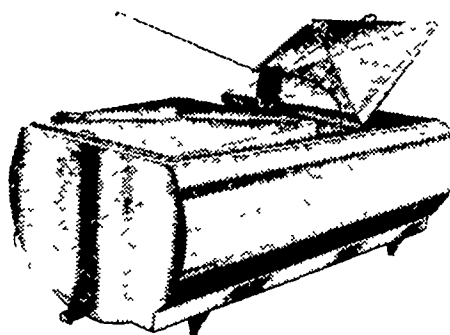
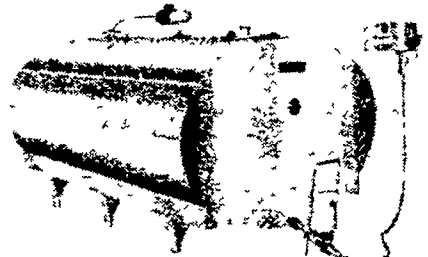
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