

Grower's Experience: Prevent Compaction, Improve Corn Yields

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— Clarence Keener believes corn growing and harvesting equipment is too heavy and the chances for compaction are greater than farmers realize.

Dealing with compaction problems on his 80-acre farm (in addition to another 120 he rents) allowed him to harvest the most amount of corn he's ever seen on his farm — 211 bushels — and made him tops in the state in the large acre size shelled corn class from the Pennsylvania Master Corn Growers Association Five Acre Corn Club.

Keener will be honored with the award at the Pennsylvania Corn Conference, scheduled March 2 at the Ramada Inn in West Middlesex.

At an interview at his farm, Keener, who has farmed for 32 years, outlined the major characteristics that went into achieving the highest yields in the state for the class.

Using subsoiler

"What has helped me in the last few years is going into deep tillage, using what they call a V-ripper," said Keener. "That was one of the contributing factors in being able to break the 200-bushel yield."

All his life Keener has dreamed of being able to harvest more than 200 acres. A combination of choosing the right seed, preventing compaction, and the right growing conditions (nearly ideal in the southeastern part of the state in 1992) garnered him the recognition.

Keener met with Wilmer Nissley, a Pioneer seed representative based in Mount Joy. Keener selected Pioneer 3245, which the salesman and Keener believed would do well on the farm, considering the Hagerstown-Duffield loam soil type as well as the growing conditions and soil fertility.

"It was corn that was planted into a field that hasn't had corn on it for 5-6 years," said Keener. "It had been sod, and therefore that's one of the contributing factors."

Prevented compaction

Keener said the sod allowed the soil to aerate and organic matter to work down in. Also, keeping the heavy equipment, including tractors, wagons, bins, and combines off the field as much as possible, prevented compaction, which has been proved to decrease corn yields.

Using a subsoiler, in this case, a V-ripper, has proven effective. But the weather conditions the past fall weren't ideal for subsoiling, considering the wet and cool conditions. According to Keener, the ground must be as dry as possible. "To rip well, it has to be fit

for planting type of tillage," he said.

The field — numbered "5" on careful records kept by the corn grower — was a 10-acre parcel. The ground, worked by minimum tillage, had corn planted the last week of April. Harvesting took place late in October.

Alleviate compaction

Regarding the problems of compaction, Keener said that more of it takes place on continuous corn than it does on a rotation, "because alfalfa and so forth and some of the other crops with their rooting systems will help alleviate compaction," he said.

Also, working closely with Pioneer, and choosing a good variety and obtaining soil samples on a regular basis, in addition to seeding the right population at the right planting date, also helped.

Keener noted that his farming operation didn't use any animal manure since 1974. (Until that date, Keener raised steers on the farm, and now raises entirely cash crops.)

Observe practices

Keener said a few years ago he won the National Corn Growers Association award for state yields. He was invited to Indiana to tour seed plants and to observe other cultural farming practices.

One thing Keener learned is



Clarence Keener, Manheim, was honored by the Five-Acre Corn Club for a harvest on a 3+ acre corn size totalling about 211 bushels per acre. This photo shows the original homestead, built in 1859, of which a family room was added about eight years ago.

Photo by Andy Andrews.

the way Midwest farmers handle compaction. There, they do not follow the same rows when discing or chisel plowing in the fall. Farmers in Pennsylvania, on the other hand, tend to aggravate compaction by following the same rows as the planter or combine. In the Midwest, they disc and chisel diagonally from the rows — keeping away from the same tracks as the combine. By going off-row and working diagonally, the areas under compaction stress are not recompacted.

For Keener, the contest itself encourages corn growers to "become involved on your cost of production," he said. "It's not only the yield, it's what your cost of production is."

Yields differ

Keener cautioned that farmers must be careful in considering what varieties of corn they choose, because yields will differ according to site-specific conditions. Varieties differ to how they handle different types of weather conditions and plant and disease stress.

Also, farmers should be careful to choose different varieties and an array of planting dates. "Don't put all your eggs in one basket," he said. "You have to use three or four different numbers so you can average out."

Winning awards such as these allows Keener to meet with different farmers from around the state and country to exchange information and

improving yield and profit goals. "The incentive to winning I think is competing on a farm-to-farm basis, to see how you compare tillage practices and looking at it from an overall program and see whether you're producing corn on a cost-per-bushel basis compared to the other farmers in the contest," he said.

But in managing his own crops, more important is to keep abreast of different varieties, which he does in field test plots. "Before I choose a variety, I'd like to see how it does on my farm."

"Since I have achieved my goal of more than 200 bushels, I'll have to set my goals even higher with the new technology and new varieties."

Corn Growers To Debate Key Issues At Classic

ST. LOUIS, Mo. — Corn growers will quiz the experts about their expectations for corn prices in 1993 and beyond during the upcoming Corn Classic.

A trio of marketing sessions will examine market highs and lows, offer crystal ball forecasts, and delve into a variety of marketing techniques to maximize profit potential.

The National Corn Growers Association's 35th annual Corn Classic will be Feb. 21-23 in San Antonio, Texas. More than 2,500 registrants are expected to attend.

On Monday, early risers can participate in a sunrise marketing session sponsored by Doane Agricultural Services Co. In a mini-classroom setting, expert Jack Tower will discuss ways to customize general marketing strategies. He'll also answer questions about pricing fundamentals.

Noted ag economist John Marten will lead two Tuesday morning breakout sessions called "Prices, Production, and Politics in 1993." He'll provide

an insider's view of market trends and take his best shot at predicting which way corn prices will go. Marten's presentation will cover the nuts and bolts of making market predictions. Marten's appearance is sponsored by Farm Journal. The first session begins at 9 a.m. and repeats at 10:45 a.m.

Rounding out the trio of marketing sessions is a special

Tuesday afternoon presentation by the Chicago Board of Trade (CBOT). "Don't Just Sell Your Grain: Market Your Grain" covers the how-to's of trading through cash, futures, and option markets as well as government programs. It features CBOT education specialist Jeff Campbell. The session begins at 1:30 p.m.

Participation in the marketing sessions is included in the Corn Classic registration fee.

All sessions will be held at the San Antonio Convention Center.

In addition to providing a wide range of educational opportunities, Corn Classic features an extensive trade show. It also includes an evening of entertainment by country music stars Crystal Gayle and Lionel Cartwright.

To register for Corn Classic, call NCGA at (314) 275-9915.

Other Corn Problems

V. A. Ishler Dairy and Animal Science Extension

Some increase in problems with feed intake, production, and health may result this year from mold that developed on the corn silage while the crop was in the field or during storage when ensiled at below normal moisture levels due to delays in harvesting. Considerable amounts of mold may depress energy content by five percent and reduce feed intake.

If mycotoxins produced by mold are present in appreciable quantities, production may drop drastically, animals may go off-feed, and increases may occur in acetone, displaced abomasum, diarrhea, hemorrhaging, infertility, and infection.

If any of these symptoms occur, the suspect forage should be sampled and sent for a mycotoxin screen. Do not sample only the moldy portions of the feed, since mycotoxins are usually present in samples

that exhibit no visible signs of mold. Once the level and type of mycotoxin(s) are determined, appropriate recommendations can be made.

The variability observed in corn silage is also showing up in high-moisture corn. There has been a tendency for lower protein values, and because corn did not dry down properly, there will be more variation in moisture content.

