Variables In Corn Growing

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Throw in 300 head of Holstein grade heifers fed on contract, 500 feeder lambs, a Cargill seed dealership, some services such as trucking and snow removal, and you have a farming lifestyle based on cooperation, an approach that was started several generations ago with Elwood's father and Russell's grandfather.

In their operation, Elwood owns most of the equipment, sprays the crops, studies marketing strategies, and makes mosts management decisions. Mike does just about all of the planting. Keith tills, fertilizes, and limes. Russell puts his agronomy degree and work experience as a Lancaster County crop consultant to use as field scout and crop analyst. Barb keeps the record books and handles the day-to-day "911" farming distress calls.

All of them place high priority on machinery maintenance. All in all, Elwood jokingly says they all get their 40 hours in each week.

"Our farmland won't allow for just the corn and soybean rotation. You can't do the same thing in every field," said Elwood, a Pennsylvania Master Corn Growers Association board of director. "Timing is all important. We don't have the luxury of Hagerstown soils. We farm from shaley hills to creek bottoms. When spring comes, we start at the top and work our way down."

"We have fields you can walk on all day and never get off the rocks!" Russell said with a laugh. (Humor and patience are on the list of crop additives!) "We can document corn yields from below 50 to 200 bushels per acre."

"In selecting hybrid seeds, the vareity has to be able to handle stress. We've had a number of droughts since 1988. We select for high tests weight, too," said Elwood said. They plant 105 to 115-day corn.

Corn yields average 130 bushels per acre. Elwood said that in 1984, com planted early on the hill "got hammered" while combining their first 200-bushel per acre on the bottomland. Kyper improves soil conditions with conservation practices such as strip farming. Installing sod waterways, subsoiling, and installing tile in the bottomland.

Most of the corn is shelled as dry grain with a John Deere side hill combine, some is chopped for silage, and about 4,000 bushels are picked as dry ear corn. Russell soil tests every three years. They use conventional and notill planting, and varying degrees in between.

Phosphorus (10-34-0 liquid) is applied with the planter while nitrogen is either applied with the herbicides or sidedressed. They feed 40 percent of production to the livestock and market 60 percent to other farmers and area feed mills.

Elwood tends to shy away from quoting a specific cost of com production per acre because of all the variables.

"Other businesses seem to be able to come up with an accurate cost of production. We as farmers are in business. But it's hard to put a dollar cost on things. There are so many variables. Land costs, for example, are different in different areas."

Kyper concentrates instead on better marketing and cutting costs. He gets together with several area farmers to reduce costs by buying 12 to 15 load of nitrogen, shopping by phone for the best price. Kyper's operation uses five loads.

He also believes producers

as a group could pool their corn to take advantage of the higher price that goes along with higher volume - if they would all agree to sell at the same time.

Kyper checks the market price of corn every day. "I haven't contracted for 1996 yet. Last year we contracted 7,000 bushels. I would like to use futures and options more."

Elwood jokingly said he never got far in life because the farm shop is only a mile up the road. But Elwood's desire to learn has taken him further.

"I like to know what's going on and to have input. I'm interested in corn production and marketing. When you're involved, you share ideas and learn from others."

Elwood is serving his second out of four years as a director for the Pennsylvania Master Com Growers Association. He is a Walker Township superviser, wildlife coordinator, and past president for Huntingdon County Farm Bureau, and has served nine years on the ASC committee. He is a member of



AILK

Pennsylvania Master Corn Growers Association board member Elwood Kyper of McConnelistown does his marketing homework to get the most for his corn.

the American Farm Bureau Grain Quality Advisory Committee.

The Kypers are proud of their community, their cooperative way of farming, and of seeing their three daughters



CORN SILAGE EXTREMELY VARIABLE

R. S. Adams Dept. of Dairy And Animal Science Penn State

The drought and atypical conditions last fall have resulted in numerous problems related to corn silage quality. In some corn silage, soluble

protein levels are considerably below expected. These should be confirmed by testing another sample since sampling errors and laboratory errors may occur in some cases.

If verified, the low soluble protein values may be related to lack of fermentation because of low moisture or sugar contents in drought-stricken areas, as well as other factors. Silage with a pH of more than 4.8 also may present greater risk of mold, mycotoxin, and other microbial problems, as well as higher dry matter losses. Acid detergent fiber (ADF) and neutral detergent fiber (NDF) are unusually low in some silages due at least in part to lack of plant growth and/or early maturing grain and proportionately higher grain content. Since energy estimates on forage test reports usually are based on fiber content, TDN

and net energy values may be

unreasonably high.

Practical energy maximums for corn silage fed to cattle are 72 percent TDN and .74 Mcal NEL per pound of dry matter (DM). Conversely, unusually high fiber contents in corn silage may result in reported TDN and NEL values that are appreciably below expected minimums of 60 percent and .63 Mcal NEL per pound, respectively for use in ration formulation. — Ann Reynolds, Amy Smith, and Sandy Bednoski through college.

"We have to do as good a job as we can with what we have to work with," Elwood said.

The TDN and NEL values of corn silages with hard overmatured kernels may need to be reduced by an absolute 4 to 6 percent TDN and .04 to .06 Mcal of NEL per pound DM, unless other factors, such as moisture content have been used by the laboratory to adjust for hard grains. Such would not be necessary if harvesters were equipped with kernel breakers.

When low fiber values occur, it is important to make certain that adequate forage NDF is present in the diet via heavier feeding of silage or other forages and by including some byproduct feeds with higher NDF content in the concentrate portion of the ration, if necessary. High fiber values may stem from pollination failure or extremely growthy corn plants with a low proportion of grain, as well as excessive DM losses during storage from seepage or lack of preservation.





Machinery maintenance ranks high in priority on the Kyper farm. Russell, right, and Elwood prepare an IH 544 for painting.