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**Four Sections** 

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Farmers started to cut tobacco already last week, as the dry weather brought the crop to early maturity. John Yocum, extension director at Penn State's Manheim field research lab., said the crop will be better than expected. The recent rains have helped to add weight to the leaves, and the dry weather made blue trails almost non-existing that the crop will be crop varies from farm to farm, Yocum estimated that the crop will be seen to be percent of normal. The market is all appreciative, and account to the paint two years in the barns. Acreage is down and if what we another bad market year, the number of acres will see another sharp decline for next year. On the other side of the market picture, some farmers with good clean Pennsylvania type tobacco sold for really good prices. This may be why some new tobacco sheds were built in the southern

end of the county.

Overall, the Pennsylvania Ag Statistics Service reported improved conditions for soybeans and corn statewide due to rains last week. But the crop remains short, and many farmers are already feeding winter supplies to their cattle. Fruit harvest is about the normal pace for this time of year. Statewide, apple condition improved due to significant rainfall. Growing appeared that their fruit was of good quality but small in size. Vegetable growers continued to report low yields that great crop loss.

In the photo, this farm family was found third at work in the tobacco field along North Shirk Road between Ephrata and New Holland. Photo by Everett Newswanger, editor.

## Drought-Year Feed Dangers Under Scrutiny At First Silage, Forage Expo

ANDY ANDREWS Lancaster Farming Staff

CORNWALL (Lebanon Co.)

— Drought year dangers that dairy
and other livestock managers
should be keenly aware of were
under discussion here Wednesday
at the first Penn State-sponsored
Silage and Forage Expo conducted
at the Glenn Krall and family dairy

While head managers are looking for ways to maximize silages and forages in a drought disaster, take heed: silage nutritional value can be saved. So can forages if the proper management techniques are adopted now.

About \$3 silage and forage producers and agri-industry representatives attended the Expo. Several Penn State crop experts were on hand to present strategies to successfully manage crops in a drought disaster that has drastically affected many counties in the southeastern Pennsylvania region.

To get more out of silage, according to Dr. David Wolfgang, director of field investigations for the Pennsylvania Animal Diagnostic Laboratory System and Penn State dairy specialist, "chop it finer and make it wetter," he said. Wolfgang reviewed the strategies for dairy nutrition in Krall's farm site feed room next to the TMR mixer.

"Chop silage more finely this year and a little more on the wet

side," Wolfgang told producers. This year, the dairy specialist indicated, could present a challenge to "make diets that complement the rumen."

Of course, different feeds are maintained for different age animals on the dairy. With the dry conditions persistent throughout the summer, the results will be a high-lignin, high-cellulose corn silage. As a result, producers should take time to chop the silage finer and provide more "ends" for digestion.

More grain can also be fed to supply the high energy needs of lactating animals, but producers should consider by-products, such as beet pulp, citrus pulp, apple pomace, and other items.

Producers also have to worry about nitrate in corn. After sitting near dormant, the corn crop takes up a surge of nitrogen after a rain, which becomes nitrates in the crop. Nitrates, converted to nitrites by the rumen, can result in cow abortions and even death.

Wolfgang said silage samples from Lancaster County are testing high in nitrates, from 1.3 to 1.7 percent. "We like com silage to be 1 percent or less," Wolfgang said. He noted that early chopped corn can run high in nitrates.

Wolfgang noted that livestock being fed high-nitrate silage can digest the material and can be used safely only if fed at extremely small percentages. If used in heavy concentrations, all at once, livestock can be poisoned.

Poisoning can result in abortions in adult cattle and, in some cases, death. In beef cattle, if the silage isn't mixed with grain, nitrates can prove toxic.

And the nitrates can be concentrated in certain sections. If using thick plastic wrap bags, there is "variability in where the hot spots are," said Wolfgang, compared to a silo or trench/bunker system.

If silage is the only thing that is fed, without hay or alternative feedstuffs (not forage extenders), the mono-diet "may even kill it, or certainly cause abortion," he said.

The decision is out on whether or not to use additives to silage, including bacteria or acids, in a drought year. There are a lot of factors and variables that need to be considered, and opinions vary.

Regardless, it is important to feed that rumen "24 hours a day," said the dairy specialist.

Silage feeders should also check high pHs in feed, using a test strip, to ensure they don't go over a pH of 5, to prevent botulism.

With the dry weather followed by rain in many parts of the state, the nitrates in corn silage "are higher today than two weeks ago," said Paul Craig, regional forage specialist. Forage testing will be critical in this drought year, Craig told those at the field day.

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## Penn State's Animal/Dairy Science Dept. Conducts Special-Fed Veal Research

LOWELL L. WILSON PROFESSOR EMERITUS OF ANIMAL SCIENCE

The special-fed veal industry is the subject of perhaps more widespread public criticism and question than any other farm animal production enterprise, both in the United States and internationally. The reasons for these criticisms include: (1) veal systems use young animals which tends to stimulate an emotional response; (2) some aspects of the system are unique (such as use of individual stalls, liquid diets, lower hemoglobin levels than in calves of similar age on grain and pasture); and (3) the US veal industry is newer and smaller than

most other farm animal industries.

Bull calves born on dairy farms can be used for meat

production in several different ways: (1) bob veal with live weight less than 150 pounds; (2)

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## From the Department of Dairy and Animal Science

This regular column from Penn State's Department of Dairy and Animal Science features the research findings, student opportunities, and reports on other important topics generated in the Department. The back issues of the column are archived on Lancaster Farming's Internet www.lancasterfarming.com home page. Look for them.