## 'Forage Suitability' Can Be Plotted

CAMP HILL (Cumberland Co.) -Best results from those who want to begin grazing begin with planning. And producers who want to invest in a grazing system for their farm need to look at the details and come up with an overall plan that fits their soil conditions, livestock, climate, and other items specific to their operation.

Producers need to invest in an integrated forage livestock system, not just a grass grazing system, noted Edward B. Rayburn, extension forage agronomist with West Virginia University in Morgantown.

Rayburn spoke to more than 100 producers and grazing representatives earlier this year at the Grazing In the Northeast Workshop at the Radisson Penn Harris Hotel and Convention Center in Camp Hill.

Graziers need to remember they are "harvesting sunlight and converting itto cash," Rayburn said. There is a science and an art to forage and livestock system management. "Managers need to understand the biology and ecology of the systems they are working with."

Until now, there has been little data about what types of soil conditions favor certain types of forage mixtures. However, work being undertaken by the USDA's Natural Resources Conservation Service (NRCS) could change all that.

James B. Cropper, forage management specialist with the USDA NRCS at the Pasture Systems and Watershed Management Research Laboratory in University Park, spoke about forage suitability at the conference.

What kind of forages would be suit-

able for grazing? A new assessment procedure has been proposed by the University of Wisconsin Cooperative Extension and the NRCS Grazing Lands Technology Institute, according to Cropper.

The procedure rates the condition of a pasture site. The pasture condition rating worksheet is in early stages of development. Based on a Wisconsin extension publication, it rates the condition of a pasture based on the following characteristics: plant desirability, density, vigor, percent legume in the stand, uniformity of use, presence of sheet and rill erosion, stream bank and gully erosion, concentrated livestock areas, soil compaction, and site resilience. Plant vigor causative effects are soil fertility, soil pH, severity of livestock use, and forage species adaptation.

Another way to assess pastures is through forage suitability group (FSG) formulation and documentation in the NRCS "National Range and Pasture Handbook."

Not all areas have been documented at this time. However, one sample shown at the conference details an FSG for the eastern Allegheny Plateau and mountains. The FSG sheet provides detail for suitable forage crops based on deep, channery, welldrained, strongly acid, and moderately steep upland soils, consisting of Hartleton channery silt loam, Hazelton channery loam, and Leck Kill channery silt loam.

Provided are adapted forage species for the soil types and climatic conditions of those areas.

These tools, according to Cropper of NRCS, can help producers select species for forage production, what to use to get production, and specific management practices to sustain production.

In a short time, according to Cropper, "new tools will be ready to do an even greater job" of proper resource management," he noted.

According to Rayburn of West Virginia University, another vital link to improved forage systems is getting the right animal genetics.

"Animal genetics and herd health go a long way to make any grazing management program look good,' Rayburn said.



## ECONOMICS SURVEY OF **GRAZING DAIRIES IN** NORTHEAST OHIO

A study was conducted in northeast Ohio to collect economics data from dairy farms using Management Intensive Grazing (MIG). This study was part of a larger study looking at overall dairy farm businesses for the production years 1994 and 1995.

Net return per cow for the MIG farms in 1994 and 1995 was \$447 and \$468 respectively whereas the average for all farms (including MIG farms) showed \$400 and \$429 net

returns. Averaged over both years, farms using MIG in generated gross farm incomes of \$2,223 per cow compared to gross incomes of \$2,581 per cow for all farms.

However, the total costs per cow was \$1,765 for the MIG farms compared to \$2,115 per cow for all farms.

Although the dairy farms utilizing MIG had lower gross incomes, the savings in total operating costs made MIG farms more profitable than the average of all farms in the study.

> Source: Tom Noyes **Ohio State Univ.**



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