## **Caring For Pasture During Dry Times**

UNIVERSITY PARK (Centre) — Even after a dry winter, dairy farmers can put their cows to pasture, according to Dr. Gerald Jung and Dr. William Stout, research agronomists at Penn State's U.S. Regional Pasture Research Laboratory. "The extent to which dry weather affects herbage production depends on the water-holding capacity of soil, grazing management, and the species of grass being grazed," Jung said.

Soil type is the least controllable element, according to Jung and Stout. "If you have shallow, shaley, or sandy soil, there's not much you can do in dry weather because it won't hold much water," Jung noted. "You'd need frequent rains to keep your pasture plants growing."

But for farmers with betterquality soil, Jung and Stout say a few practices will help improve pasture production during dry seasons. Dairy farmers should rotate their cows throughout their pastures more often than they would in wet weather. Rotation gives plants a chance to grow new tillers, or shoots, in order to produce more leaves and roots. However, in wet spring weather, light grazing may reduce the quality of a pasture. Plants that are left to grow too long will produce new flower heads. Once plants are allowed to bloom and go to seed, they produce fewer new leaves. "It is important to keep the grass in a vegetative growth stage," commented Jung. "Just as one should do with a well-kept lawn, farmers shouldn't allow their grass to grow flower heads.

"It's also a good practice to rotate grazing in pasture to keep plants growing new roots," said Jung. The more roots a plant has, the more water it can collect from the soil. Continuous heavy grazing results in smaller root systems because there is insufficient energy in the plants for root production.

Jung and Stout note that the species of grass can be important. "Is the grass shallow rooted like timothy or deep rooted like bromegrass?" Jung questioned. "There also are big differences in water use of different grasses. Native warm-season perennial grasses such as switchgrass and bluestem are very efficient users of water. They produce much more grass per inch of precipitation than do most cool-season grasses.

"According to data that we collected in Pennsylvania, some of the forage grasses are showing a lot of potential for resisting dry weather," he added. "We've found drought-resistant grasses for both cool and warm seasons."

One cool-season grass is from New Zealand called Matua Prairie Grass. Similar to a perennial bromegrass, it yielded six cuttings last summer during test trials. Other drought-resistant native grasses such as switchgrass and big bluestem can substantially reduce the risks a farmer faces in dry weather.

Jung, Stout, and other researchers in Penn State's College of Agriculture have been investigating ways to lower dairy and animal production costs by utilizing pasture. During the last 30 years, farmers have been reluctant to feed their cows from pasture because of the difficulty in controlling a cow's diet and the expense of erecting fences. However, because of rising costs of silage and grain storage, new developments in portable electric fences and improved methods in testing forage quality, many farmers have

MDA Offers Records

## Wallet For Exhibitors

ANNAPOLIS, MD — The people who enter animals at the state's many fairs and shows this year are going to have an easier time of it thanks to the Animal Health Section of the Maryland Department of Agriculture (MDA) which has prepared a handy records wallet for exhibitors.

"We thought we'd provide a quality folder for animal health records so exhibitors could keep them handy and secure," says MDA's State Veterinarian Dr. Henry A. Virts.

Besides being a handy way of keeping the important health certificates together, the folder gives a list of before and after do's and don'ts for exhibitors and explains the basic rules of complying with animal health regulations at fairs and shows.

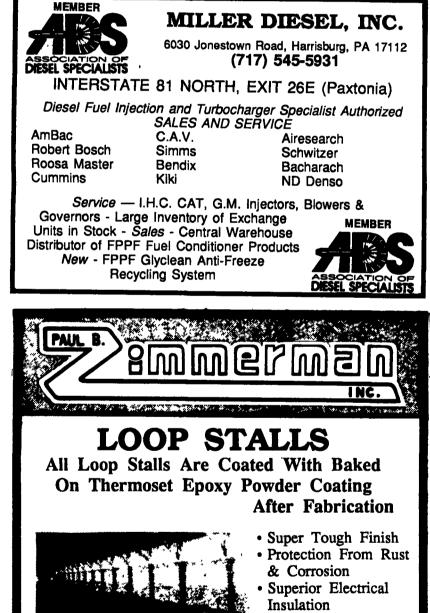
been using their fields to graze

cows instead of using these field to

Each year, some 100 fairs and horse shows are held throughout the state and each requires proper papers on hand for each animal exhibited. This involves papers on about 12,000 animals each year.

Copies of the records wallet can be obtained at the 24 offices of the Maryland Cooperative Extension Service in the state. Inspection, copies may be obtained by contacting the Animal Health Section of MDA at the following telephone numbers:

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