

Dairy nutrition school held

NAZARETH — Lehigh-Northampton County Cooperative Extension services held a three-day advanced Dairy Nutrition School on March 13-15. The 14 students came from Monroe, Lehigh and Northampton Counties in Pennsylvania and Warren County in New Jersey.

The group consisted of dairy farmers and feed company representatives. Instruction was handled by Dr. Charles Gardener, veterinarian at the Ackermanville Veterinary Hospital; Richard

Adams, Dairy Specialist at Penn State; and County Agents David Dunbar from Lehigh County and Greg Solt from Northampton County.

"We crammed a graduate level college nutrition course into three days" reports Greg Solt. "We worked them hard and long and they still wanted more according to the evaluations they returned to us."

"The type and level of instruction at a meeting like this just isn't available to the dairymen from any other source except a

resident college program" explains Solt. "There probably aren't 25 other people in the counties represented, including feed company representatives, who have as up-to-date information on energy and protein utilization and requirements."

"Did it sink in?" "Well, our post quiz was taken directly from a graduate level rumenology course I had at Penn State several years ago," Solt responded. "The average score was over 70%". "I think that proves our clients can handle it."

The course included anatomy and physiology of the digestive tract, the chemical theory of feeds, energy and protein metabolism and requirements, the fads and future of feeding, ration formulation, and considerations in feeding the cow.

Selenium need discussed

COLUMBUS, Oh. — Dr. Harlan Bigbee, Director of Clinical Research for Schering Corporation's Animal Health Division, recently addressed members of the Ohio Veterinary Medical Association about the biological importance of selenium and vitamin E. He described disorders in livestock caused by deficiencies of these nutrients, and how they can be prevented by supplementation.

Bigbee explained, "Selenium is a component of the enzyme glutathione peroxidase, which prevents damage to cell membranes by harmful byproducts of metabolism. Selenium combines with vitamin E to act in other important biological processes, including reproductive, liver and cellular mitochondrial functions."

Disorders caused by selenium/vitamin E deficiencies include white muscle disease (nutritional muscular dystrophy) in cattle and sheep, and Mulberry heart disease and liver disorders in swine. "Sometimes little or no success is had treating these disorders, since damage is usually irreversible by the time symptoms

appear," Bigbee warned.

Dr. Bigbee stressed that "prevention is the best way of avoiding selenium/vitamin E responsive diseases." Preventative injections of selenium and vitamin E are extremely effective in assuring adequate protection for cattle, sheep and swine. Selenium and vitamin E-containing feed additives are also available. Supplementation is especially needed in areas of selenium-deficient soil.

Bigbee noted "the extent of selenium-deficient areas in the U.S. is growing, largely due to effects of modern high production agriculture." He also stated that "acid soils render naturally-occurring selenium biologically unavailable to the animal. Vitamin E is not stored well in the animal's system, and is broken down rapidly in stored feed and grain treated with propionates."

Dr. Bigbee summarized by urging the veterinarians to make producers more aware of problems caused by selenium/vitamin E deficiencies and let them know that these problems can be avoided by supplementation.



David Dunbar, Lehigh County Agent, standing, and Allen Minnich, Northampton County dairy farmer, study calf tissue samples during two-county Dairy Nutrition School.

Chester seeding sale set

WEST CHESTER — The 1984 Annual Chester County Tree Seedling Sale will be held in nine locations around Chester County on April 13 and 14, Harold Kulp, Chairman of the Chester County Conservation District announced.

Trees are obtained and distributed to civic organizations, which use the tree sales as a fund raising activity as well as helping residents aid the environment.

Varieties available will be White Pine, Blue Spruce, Douglas Fir and Hemlock. A few locations will have White Spruce and Norway Spruce.

The seedlings will be packaged in bundles of ten trees for \$4.00.

Organizations assisting in the

sale, sales locations and times are: (Sales start: Friday evening, 6:30 p.m., Saturday morning, 9:30 a.m.) B.S.A. Troop 70, (Downing Center Superfresh-Downingtown, ACME--Thorndale, Croppers Market--Guthriesville); Central Chester County League of Women Voters, (Fiore's Market--Marchwood, West Goshen Shopping Center); F.F.A. Northern Chester County Vo-Tech School (Greenhouse behind school off Charlestown Rd.); Professional Secretaries International, (Stoltzfus I.G.A.--Honeybrook); Red Clay Valley Assoc., (Tunis Bros.--Kennett Square, Greenbank Station of Wilm. & Western RR, Rt. 41 N. of Princes Corners--Saturday).

Correspondence courses

available

UNIVERSITY PARK — People who keep small flocks of poultry or numbers of rabbits in their backyards can take correspondence courses from Penn State to learn how to manage these operations.

The following courses are available:

Poultry Keeping - Correspondence course No. 92, (\$10.75). Covers quality egg production and marketing, management, breeds, varieties, housing, equipment, feeding, nutrition, disease control, brooding and general care of chickens.

Rabbit Production -

Correspondence course No. 109, (\$6.75). Includes lessons on housing, equipment, feeding, nutrition, disease control, breeding, marketing and management.

Turkey Production - Correspondence course No. 106, (\$9). Covers producing, managing, breeding, feeding and handling turkeys for market acceptance.

To obtain any of the above courses write to The Pennsylvania State University, Box 5000, University Park, PA 16802. Be sure to list course number and title and enclose a check payable to: The Pennsylvania State University.

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