

## Grangers attend Northeast Leadership conference



Maryland's representatives to the Grange Leadership Conference held last weekend in Carlisle paused to pose for a photo. From front row left are Mary Riley, Jarrettsville, Nancy Wolfe, lecturer, Louisa B. Hott, women's activities, Janet Wiles, youth director, back row, meeting speaker, Jack Owens, University of Maryland ag information specialist and former Lancaster Farming editor; Alan Braver, Sr., Frederick Pomona Master; Ethel Braver, junior director; Jean Myers information director; State Master Rodman Myers; and Maurice Wiles, state grange overseer.



Members of the Pennsylvania Grange attending the Northeastern Leadership Conference Friday and Saturday included, from left, Carl Deibert, state secretary; Pa. Master Charles Wismer; Sandy Westover, Jr. director; William Buffington, Vernon Cox; Mary Buffington, National Womens Director; Roy Williamson and Linda Williamson; Jeanette Tewksburg; and Doug Bonsall, youth director. In addition to round-table discussions, several speakers were presented.

## Artificial lighting changes mares' breeding times

LANCASTER, — The reproductive ability of mares is influenced by season.

In the Northeast the breeding season for horses begins in mid-February and normally ends in mid-July. However, mares are most susceptible to being bred from mid-April to late May or early June. That's when they usually experience regular heat periods.

Ovulation occurs about 24 to 48 hours prior to the end of heat. The complete cycle takes about 21 days.

Seasonal influences on the estrus cycle of the mare are related to length of daylight, nutrition, and climatic factors such as temperature, according to Delaware extension equine specialist C Melvin Reitnour.

The ratio of hours of daylight to darkness throughout the year acts on the horse's optic nerve. Along with the horse's nerve impulses, this causes the horse's pituitary gland to produce FSH, or follicle stimulating hormone.

FSH acts on the ovary, causing it to produce estrogen, which brings the

mare into physical signs of heat. As daylight periods increase, the estrus cycle begins.

Through the use of artificial lighting, the hours of daylight can be increased to bring the mare into season about six weeks earlier than normal, says the specialist.

Studies show that 16 hours of light per day will bring on estrus and ovulation. Thus the mare that normally conceives on April 15 may get in foal sometime in February. This practice may result in two additional

foals in the mare's lifetime.

Reitnour recommends the use of a 200-watt light bulb in a box stall to extend the hours of light to 16 hours daily. Beginning the light treatment now, the mare may be bred during February.

Artificial lighting is an innovative and successful method of improving the reproductive efficiency of mares, Reitnour concludes. It will result in earlier than normal initiation of the estrus cycle in barren and maiden mares.

## Jersey calf first at show

FARM SHOW — Selina is the preferred name of the new addition in the 1981 Pennsylvania Farm Show dairy barn, the first calf of this year's show, born at 7 a.m., Tuesday morning.

Selina, the new Jersey calf, was up and trying out her new legs 15 minutes after being born, according to her owner Karen Hobaugh of Hanover, Adams County. Karen is the daughter of Bruce and Jean Reeve.

Selina's mother, 'Samsons Sweet Sandy' will

celebrate her first birthday this Sunday. She placed first in the Jersey junior division and took fifth place honors in the Jersey open show held Tuesday afternoon.

Owner Karen is a member of the Adams County 4-H Dairy Club.

'I've been showing cows ever since I can remember,' she said.

Karen is a senior at Spring Grove High School and was recently named winner of the Northeast Regional 4-H Veterinary Science Award.



Having a quick word with the boss, Mary Buffington of Chadds Ford confers with National Grange Master Edward Andersen during the Northeast Grange Leadership Conference held this past weekend in Carlisle.