### Farm Calendar



#### (Continued from Page A10) saturday, October 12

National 4-H Week Eastern Pa. 4-H Beef Lamb Sale, Allentown Fairgrounds, 10

a.m. Franklin Co. Roundup, Greencas-

tle Livestock Market. Pa. Holstein Association Junior

Executive Committee meeting, Pa. Holstein office, State College, 10:30 a.m.

Sire Power Open House, Frederick, Md.

Washington Co. Sheep and Wool Growers banquet, Washington Co. Fairgrounds, 7 p.m. Sunday, October 13

#### Monday, October 14

Columbus Day Poultry Management and Health Seminar, Kreider's Restaurant, Manheim, noon.

Wednesday, October 16 Basic Arboriculture, Fairmount Park, Phila., Oct. 16-18 and Oct. 21-25.

**Juesday**, October 15

Dillsburg Community Fair, Dillsburg, thru Oct. 19.

Thursday, October 17 Lancaster Co. 4-H Swine Club annual banquet, Bird-In-Hand Family Restaurant, Bird-In-Hand. 6:30 p.m.

National Meeting on Poultry Health and Condemnations, Sheraton Ocean City, Ocean City, Md., thru Oct. 18.

York Co. Holstein Banquet, Winterstown Fire Hall, 7 p.m.

Lehigh Valley Beekeepers Association annual meeting, Lehigh Valley Area Vo-Tech School, Schnecksville, 6:30 p.m.

## **Cow Comfort And A.I. Get Results**

**GEORGE F. W. HAENLEIN Extension Dairy Specialist** University of Delaware

NEWARK, Del. - No one would argue that in our region this year temperatures became hotter sooner and to a higher degree than in previous years.

This situation immediately suggests possible trouble in getting our dairy cows bred, which is a source of continual concern for the dairy farmer.

As soon as temperatures go above 80 degrees Fahrenheit, our cows, especially Holsteins, are out of their physiological comfort zone. To counteract this, cows try to adjust metabolically, usually by

Ag Issues Forum, Willow Valley Resort and Conference Center, Lancaster, 7:30 a.m.-9 a.m.

reducing the activities of estrus, eating and milk production.

One result is that conception rate is lower than it should be.

Studies in Florida as well as here in Delaware have shown that directly hosing down cows' bodies with water and then blowing air generated by fans over their backs to evaporate the water is an effective way to cool them down.

Under these conditions, normal conception rates, body temperatures, eating and milk production are soon restored to normal.

Automatic sprinkler systems, the kind usually used on lawns and fields, turned upside down and fastened to the rafters of the cow barn keep cows wet and cool. This innovation works very well.

Casualties in Delmarva broiler houses are not uncommon on very hot days, but dairy cow managers seem to know how to control the overheating problam for their animals.



National Corn Growers Association

#### HYBRID SELECTION

HYTEST Territory Managers and Regional Agronomists are trained to select the best variety for your particular growing conditions. They follow up with technical assistance right through harvest time.

PRESIDENTS CHOICE Each season HYTEST President, Joe Butwin selects a list of favorite varieties after reviewing test plots, demonstration plots and numerous growers' fields. Both old standbys and choice experimentals are often included.

THE 1991 CHOICES ARE: North

HTX7224-SX-90 Day HT318-SX-100 Day HT474-SX-105 Day

South HT512-SX-108 Day HTX7728-SX-116 Day HT744-SX-118 Day

YOUR CHAMPIONSHIP SEASON Winning championships is great, but more important for you is producing the highest grain and forage yield in the most cost efficient manner. HYTEST hybrid corn seed allows you to do just that! It's been proven season-after-season!

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Another approach to better conception rates has been to bring in a natural service bull as a supplement to or substitute for A.I.

The thinking on this is that a bull is a much better spotter of estrus in cows than even the best and most conscientious herdsperson.

This practice is not uncommon in the South, where temperatures are often much higher than they are here

What then are the results?

Research work in Georgia reveals some interesting data. Two groups of dairy herds from the Georgia DHIA were compared. The first group bred 90 percent or more of their cows to a natural service bull.

The second group used A.I. on 90 percent or more of their cows.

If the assumption is correct that bulls are better settlers of cows than A.I. because they are better estrus spotters, then one would expect superior reproductive data in herds using natural service bulls.

The 62 Georgia DHIA herds using mostly bulls averaged 154 "days open," 70 "days dry" and 14.3 "months calving interval."

In comparison, the 122 Georgia DHIA herds using mostly A.I. averaged 146 "days open," 70 "days dry" and 14.0 "months calving interval."

Few differences were in evidence, but if any differences did exist, they favored A.I.

The real differences in this study surfaced in milk production.

The herds on which A.I. was predominantly used averaged 16,832 pounds milk and 587 pounds fat versus 14,139 pounds milk and 501 pounds fat for the natural service herds.

At \$12 per hundredweight of milk, this 2,693 pounds milk advantage translates into a plus of \$323.16 per cow per year for the A.I. herds.

Many factors may be at work here.

To explain more fully these variations, however, the bottom line is that dairy farmers who used bulls instead of A.I. to breed their cows did not achieve better reproductive performance in their herds to justify this seemingly physiological advantage for the price of a genetic disadvantage.

They may even have had an inferior reproductive performance, not to mention the headache of keeping a bull around. And they certainly had inferior herd milk production at a money differential that could even have paid for some very expensive A.I. semen.

This brings us back to the strategy of keeping our cows watered down and fan cooled to lower body temperature, which ensures their eating well and pro-

# THA CHAMPIONSHIP **SEASON!**

#### **NCGA CHAMPIONS**

HYTEST SEEDS has announced its 1990 winners in the National Corn Growers Association Yield Contest. James C. Justice, Beckley, WV was named National Champion, Class A, nonirrigated div. with a yield of 228.6753 bushels per acre using HYTEST HT686.

Joe Hasbrouck Jr., Kingston, NY was named New York State Champion, Class A non-irrigated div., with a yield of 202.7297 bushels per acre using HYTEST HT65OA.

#### **PROVEN PERFORMANCE**

HYTEST with 9 state winners in 1990, has placed in the top four nationally for 4 years. It's a record of performance that many large seed companies envy.

#### **RESEARCH AND** DEVELOPMENT

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ducing milk better.

In the end, it is a question of how we manage the energy metabolism of our cows.

If cows need energy to keep themselves cool, then they will breed and produce less.

Following this same line of thinking, we are beginning to feed our cows better during the first part of the lactation, a period dairy managers used to take for granted that a cow would be in negative energy balance. With today's high-producing cows, we cannot afford to let them be in negative energy balance.

Using what we know and putting these new ideas into action can make our dairy operations significantly more profitable, even without going back to using bulls.