**DHIA Members** Need To Vote

**Chester County DHIA members** need to vote on the proposed merger with Pennsylvania DHIA.

They can return their ballots by May 18, or attend the director's

meeting on that date at the Chester County Extension office, Suite 370, in the Government Services Center, 601 Westtown Road, West Chester.

Members not casting a vote will be counted as a "yes" vote, approving the merger.

### **Tunnel Ventilation**

(Information in this part of the column is excerpted from a fact sheet by Dan McFarland, Penn State Extension agricultural engineer.)

Those hot, steamy days of summer will be here before we know it. And, along with them will be a drop in milk production, unless some plans are made for summertime cow comfort.

One of the ideas that has gained

## Nutrient Management Seminar.

(Continued from Page A31)

p.m. to 3 p.m., at the specified sites. No registration is needed.

On May 23, a demonstration is to be held at the Westmoreland County Extension office; on May 24 in the Penn State Agricultural Sciences and Industries Building (ASIB), Rm. 118, University Park; and on May 25 in the Berks County

Extension Office

According to Peter Bohn, one of the creators of the program, the demonstrations are mainly to allow people interested in using the software to see how it is used.

Registration is needed, however, in order to attend one of a series of three actual workshops scheduled for July.

Registration is needed, because each workshop is limited to 18 participants each because of computer access.

These workshops are designed to be fullday, hands-on, computer training sessions.

Three dates have been scheduled — July 10, 12, and 21 — all to be held at the Main Campus of Penn State University, in State College.

For more inforantion on the computer workshops call Pete Bohn at (814) 865-3774. Or fax a registration to (814) 863-7043.

**Background Training** 

For those wishing to develop or enhance their knowledge of background subjects necessary as a prerequisite to being able to comprehend and complete nutrient management planning training, a series of September workshops have been planned to be held at the Main Campus of Penn State University.

These workshops will not qualify a participant for credits necessary for certification as a nutrient management, but they will help those who intend to participate in mandatory training sessions to be scheduled.

Because the regulations aren't expected to be finalized until at least early fall, an official certification program can't begin until afterward. In the meantime, education toward eventual certification can proceed.

Dr. Douglas Beegle and Bohn, of the PSU Agronomy Department, as well as representatives of the NRCS, DER, the state Conservation Commission, and vocational-agriculture educators have been working together in developing an effective, ongoing educational program that supports the certification of nutrient management planners.

That work is ongoing and proceeding well. The background workshop series were designed by Beegle and Bohn specifically as opportunities for those who could use the education or refreshing in the subjects in order to be prepared for the eventual certification courses and examinations.

Specifically, on Sept. 12, a conservation planning workshop is to be held; on Sept. 19, a workshop dealing with soil fertility is scheduled; and on Sept. 26, a workshop on manure management has also been set.

To register for any or all of these workshops, call Bohn, or fax a registration.

### Interagency Newsletter

For those who would like to register to receive a free copy of the official Pennsylvania Interagency Nutrient Management Newsletter, a periodic publication devoted to the issue, send a letter requesting it, along with your name and address to: Pennsylvania Interagency Nutrient Management Newsletter, 116 ASI Building, University Park, PA 16802.

The newsletter was created to serve as a centralized source of information on nutrient management.

popularity in recent years for stall barns is "tunnel" ventilation.

Cows can produce 5 gallons or more of moisture per day through respiration. There needs to be an air exchange in the barn to remove this moisture, introduce fresh air, and reduce hot spots.

When the temperature exceeds 75 degrees, cows really appreciate a breeze of 2 to 5 miles-per-hour. A properly designed tunnel ventilation system will provide unifrom air movement the entire width of the barn - feed alleys, service alley, and over the cows.

The system is simple.

Put fans at one end of the barn to draw air from inlets at the opposite end. Most systems are designed for a 2.5 mph "breeze" (220 feet-perminute) or greater, which results in the air in the housing area being exchanged in one minute or less.

The key measurements are:

 The width times the height of the housing area, multiplied by the desired air speed in feet-perminute, results in the total fan capaticy required.

As an example, a 38-foot wide barn, that is 8 feet high, results in a surface area of 340 square feet. Multiplying the 304 square feet times an air speed of 220 feet-perminute results in a fan requirement of 66,880 cubic feet per minute (cfm).

• The inlet area size is calcualted by multiplying 2.5 square feet of inlet for every 1,000 cfm of fan capacity.

As an example, using the above fan capacity, multiply by 2.5 square feet by 67 (a rounded off figure from taking 66,880 cfm divided by 1,000 cfm) and the result is 168 square feet of inlet needed. (Using the width of the barn as the limit for one side of the vent opening needed, divide that into the square feet of inlet

needed.) This requires an opening of about 4.5 feet high and 38 feet wide, at the opposite end of the

Some key points to remember when installing and operating a tunnel ventilation system are:

1. It is basically a hot weather system and will not be effective in cold weather. An alternate system is needed for wintertime.

2. A "trap-door" type opening with mesh or grating over the inlet (Turn to Page A38)

CHESTER COUNTY DHIA-April 1995 Cows producing over 800 lbs. protein are:
Breed Age Milk Fat Fat Pro Joseph & Sandra Lusby 25,607 888 834 Ken & Marilyn Umble Myra Gerald L. Kulp Sons 25,967 1072 830 28.768 100 6-04 734 806 249 4-02 24,548 1088 803 Ardrossan Farms **BR Tree** 4-03 28,112 870 24,637 T Bell 3-11 845 804 Merle J. King 6-03 3-05 24,872 23,371 Nancy 867 816 Florie 833 824 **Dunwood Farm** Н Dori 3-01 27,525 1154 944 Crystal-Ray Farm 6-00 26,090 874 828 Peg Melwood Farm Secret 5-08 28,587 945 902 26,771 28,564 Ollie 3-00 966 854 Tonia 3-03 905 1202 Breck-A-De-Farm 6-09 26,357 934 801

5-10

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32,485

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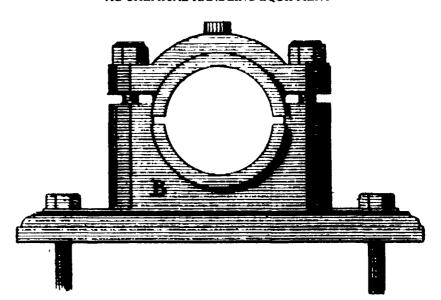
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