## Dairy's future the topic at Lancaster's Dairy Days

since he feels it is an inefficient way to get the same high quality as haylage.

Wenger explained that he cuts his haylage coarse in order to keep his fat test up. He also pointed out that by maintaining the fer-tilization of a field, the protein and yield levels were also maintained.

Since he feeds all of his forage in the form of hay, Hershey noted that by using a preservative he was able to make quality forage at different moisture levels. He also stated that by using preservative on his high moisture ground ear corn, it developed less heat damage in his conventional sito.

Hershey explained that all the cows in his barn wear colored tags which correspond to the amount of grain they receive. All of his cows are fed in a stanchion barn setup.

Presently, Hershey said, he and his brother are milking and feeding three times a day. One of their concerns is feeding too high of a level of energy. They are able to avoid this by feeding hay six times a day compared to grain which is fed three times daily.

Kissling explained that his cows are separated into a high and a low group. He feeds with a TMR system twice a day. This ration is balanceu to production and body plained that one has to work hard weight.

Burkholder noted that he is usually the only feeder. Since he according to their production

Emphasizing the need for good quality forages, Wenger stated that he attempts to keep energy levels up and protein down. He pointed out he only groups his herd into dry or milking cows.

Kisslinger urged the group use a balanced feeding program and get the highest level of production possible from that feed. He ex-

at little things at times to make the whole feeding program work.

All of these panelists agreed that knows his cows, he is able to feed top production doesn't always insure top dollar return.

Dr. James Ferguson, VMD, New Bolton Center, explained the relationship between nutrition and reproduction.

The diet is important, Ferguson noted, since an adequate amount of protein is necessary to get a cow to consume enough dry matter. Dry matter intake, he continued is directly related to energy consumption. An insufficient level of energy in the diet can cause many health and reproductive related problems, he added.

Ferguson pointed out that while a protein level of 18 to 20 percent is optimum level for maximum milk production, it is also the level where problem develop reproductively. Cows receiving this level of protein have a harder time settling, Ferguson explained.

He said the reason for this is that feeds with this protein level are using a highly degradeable source, such as urea. Most of this protein, he continued, breaks down in the rumen. The cow then has problems converting this protein to utilizable form of microbial protein.

Ammonia, which is highly toxic, then increases and is absorbed through the rumen walls Ferguson said. To prevent toxicity, the body channels this ammonia to the liver where it is converted to urea. Ferguson continued. This urea then either recycled back to the rumen or it is excreted. Basically, Ferguson noted, this serves to waste energy and protein.

Fans



James D. Ferguson

Factors influencing the urea levels of the blood include protein and energy levels of the ration, and rumen degradability of protein Ferguson pointed out. He also explained that as the urea levels increased, conception level decreased.

He suggested this was an area that could be investigated when no other reasons for reproduction problems could be found.

Mineral deficiencies such as phosphorus, can also cause reproductive problems, Ferguson explained. He noted that the phosphorus calcium ratio was unrelated to reproduction as long as the phosphorus level was no less than four milligrams.

Ferguson concluded by stating there were three things that must be done on a farm twice every day, milking, feeding, and checking for heats. He explained that there were no substitutes for checking heat at least two times every day.



Stephen Graybeal, left, Robert Kindig, Robert Dever, Gordon Hoover and Daniel Martin made up the panel for the discussion on the future and how we adjust to it.

## NTIVE PROGRAMS Elder For Details



- Grain Bins
- Grain Legs Heaters
- Dryers Scales
- Feed Bins







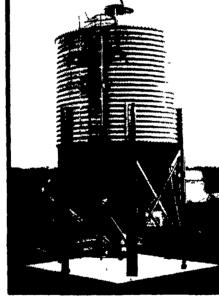


GRAIN BINS, GRAIN LEGS, DRYERS, FANS,

**HEATERS, SCALES** 







**COMPLETE LINE** OF FEED BINS IN STOCK

AT YOUR

TLER

MARCH 31st

Builder to Agri-Builder

CONSTRUCTION CO, INC. <sup>841</sup> Jerry's Road reet, MD 21154 H 301 692 5350

TRI-STATE MARINE DIST. INC. PO Box 121 Deale, MD 20751 PH 301-867-1447

**PHIC BUILDERS** 435 King Street Pottstown, PA 19464 PH 215-323-4070

W.R. MOODY. CONTRACTOR 113 Walnut Lane West Newton, PA 15089 PH 412-872-6804

EARLY ORDER DISCOUNT PRICES

**Now in Effect** 

**BINTRIM BUILDERS** 204 Hoover Road New Castle, PA 16101 PH 412-924-2698

BUTLER Attn PE Hess P O Box 337 Oxford PA 19363 I m interested in more information on Butler products 🔲 Buildings 🔲 Grain Bins 🔲 Feed Bins ☐ Grain Legs ☐ Dryers ☐ Scales Name State Phone LF (Include area code)

O A NEWTON & SON CO., INC. P O Box 397 Bridgeville, DE 19933

PH 302-337-8211

**FOUR COUNTIES** CONTRACTOR, INC. R D . Box 816 Coalport, PA 16627 PH 814-672-5751

H.R. WEAVER CONSTRUCTION RD 3, Box 403 Annville, PA 17003 PH 717-838-3753

CLIFFORD E. BOLLINGER **ASSOCIATES** RD 4. Box 197 Denver, PA 17517 PH 215-267-6046