

# Testing Milk

(Continued From Page 1)  
 Gilmore added, "Protein content is higher than butterfat in some individuals. "We weren't too surprised to find that a few individuals had higher protein than fat content. But we were surprised to find entire herds with higher protein than fat readings."

A lot of variables enter into variations in fat and protein contents, Gilmore explained. Penn State's program is aimed

primarily at trying to pin down those variables. Gilmore's research team is trying to find out the role of genetics in protein production along with the effects of feeding and management programs.

Nearly all of milk's protein is found in the skim portion, although as a rule, when fat goes up, so does protein. Breeding, feeding and managing for protein, even at the expense of fat is a future possibility, according to Gilmore, and not just because of government regulations.

"Even today," he said, "there are some economic advantages to increasing milk protein. One pound of fat is worth 80 cents when it's turned into butter. But a pound of protein is worth 98 cents when it's made into cheese."

"If the demand for milk protein increases, dairies could start buying that basis, which means

# GEM

(Continued From Page 1)

been realized for quite some time with the knowledge that a dairyman's time for herd management is shrinking. Too, many dairymen want and need help with selecting service sires, record keeping, merchandising and other management decisions.

With this in mind, the GEM service began in the fall of 1971 with three definite goals:

1. Evaluating the herd to determine the strengths and

farmers would produce on that basis. If that ever happens we'll have the equipment to tell farmers exactly how their herds are doing, so they'll be able to produce milk that's marketable at the best possible price."

weaknesses of individual cows and heifers.

2. Develop a breeding program.

3. Evaluating herd management and offering suggestions for improvement.

To accomplish these goals, the GEM consultant identifies groups of cows within each herd that possess common physical strengths and weaknesses. Together he and the dairymen determine which sires can contribute the correct physical traits to a given group. In this way, a breeding program is established for the herd using a minimum number of sires.

To insure the success of the breeding program, the consultant also evaluates key management areas including calf raising, growth rate of heifers, average age at first calving and body weight following calving, herd removals for breeding purposes and herd losses due to sickness, disease, etc., average days open for breedings per conception. In addition, the average prices for animals sold for breeding purposes, the herd's production data, genetics of the herd's service sires and the pounds of milk produced per man per year are evaluated.

Elam Bollinger has been farming since 1946. "I started with grades," he said, "and I've had an upward climb, but I just don't think I've gotten as far as I should in breeding. So as soon as I heard about GEM, I asked Clarence Stauffer to evaluate my herd. I wanted help in mating the right bull to the right cows. Clarence helped me select two sires, quite a reduction from the nine I had been using. He also recommended that I continue to use my young sire on heifers and difficult breeders. I'm happy with the GEM service," Elam said. "I think it could help a lot of dairymen." Elam has indeed

made progress. He currently has a rolling herd average above 15,000 pounds of milk per cow or 39 Registered Holsteins.

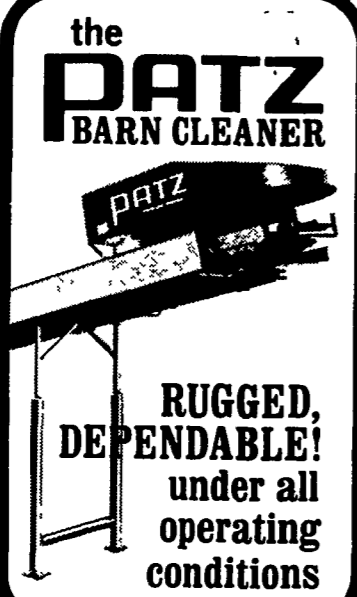
Roy Stoner, Lititz, farms in partnership with his son Ken milking about 75 Holsteins. Stoner went to GEM because, he said, "I wanted the service mainly to upgrade the herd ...increase production and improve feet and legs."

While production is needed to pay the bills, more and more dairymen are realizing that cows with wearing qualities and able to stand the strain of high production for a number of years are the most profitable.

Besides breeding and management assistance, GEM also offers buying and selling assistance and help with herd records. GEM consultants are authorized to help dairymen enrolled in the service locate buyers for animals they have for sale and locate animals for sale for them to buy.

GEM brings together the critical areas of dairy cattle breeding to help dairymen improve their herds. Dairymen who find it difficult to put modern genetics and sound management recommendations together in their herd will find GEM not only a convenience, but a very meaningful service.

the **PATZ** BARN CLEANER



**RUGGED, DEPENDABLE!** under all operating conditions

See your PATZ Dealer today  
 CALL 717-272-0871  
**MARVIN J. HORST**  
 Dairy Equipment and Ammana Appliances  
 R.D. No. 1 (Iona) Lebanon, Pa.  
 Located on Route 897 between Schaefferstown and Lebanon, over 30 years in business at same place.

## Complete Dispersal

at New Holland Sales Stables  
**WEDNESDAY, NOVEMBER 29**  
**17 FRESH COWS AND SPRINGERS.**

Out of a herd of 50 head from Elmer Glick including 3 Purebreds, 13 cows and 4 first calf Heifers.

The following Sires and Dams of the first calf Heifers are: Seiling Rockman, Dam Felton Leslie RA Laddie; Lyn Hurst Pers Heilo, Dam C. Lyn Hurst Elaine Gaiety; Seiling Petro, Dam C. James Haven Topper Vera; 1 Grade Sire Gayview Sky Cross.

Cows milking 60 to 80 pounds.

Consigned by  
**GORDON FRITZ**



## CALL Elmer Beiler



### Choose your weapon

Easy does it with International Harvester snow removal equipment.

**TRUE TEMPER**  
 THE LIGHTWEIGHT POWER SNOW SHOVEL



## CALL Leroy Zook

### WEAVERLINE FEED CARTS

EARLY DISCOUNT on Lancaster Silo and Unloaders. Ryder Barn Equipment

## CALL Bob or Less

New 816-9 ft. Mower Conditioner \$1000.00  
 Just Received 1 Car Load of 1 PR PICKERS

1 PR Pickers Buy Now, Pay Next Year  
 Beat the Price Rise

### USED EQUIPMENT

- NH No. 27 Hopper Type Blower
- Used 234-2 row mtd. corn picker
- 503 Combine 6 Row Corn Head
- 101 I.H. Spreaders - Special
- 504 I.H. Diesel Tractor
- F 1206 with cab
- IH - 37 Baler with Engine
- N. H. Super 68 Baler w Engine
- Used Papec Grinder Mixer
- 1 806 Tractor
- J.D. 2010 Tractor & Loader
- Farmall 100 plow & Cultivator
- New Corn Cribs

### PARTS DEPARTMENT

## CALL Dick Bomberger

CALL US! IT COULD BE WE HAVE IT.

Do Your Xmas Shopping Now

Large Selection of Farm Toys Tractors, Trucks, Equipment etc.

**NOVEMBER SPECIAL**

**20% off on**

Storage Batteries Plus your old battery.

**International Anti-freeze** only \$1.69 gal.  
 in New Re-usable 1 gal. Jugs

## CALL Titus Burkholder

### INVENTORY SALE FROM LISTER

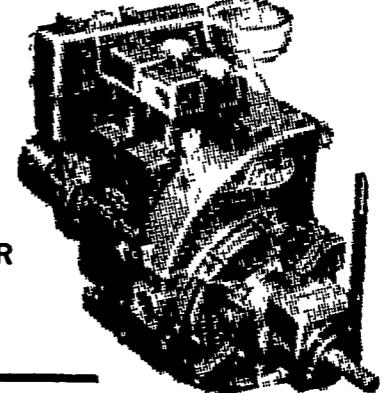
10 PERCENT OFF on all NEW Diesels While They Last

FOR SALES—SERVICE—PARTS

- + Used 10 H.P. Petter
- + Used 6 H.P. Lister
- + New 7 1/2 H.P. Slow Speed
- + New Quincy Air Compressors
- + New Listers with Lima Generators
- + Ask us about our new Automatic Control For Starter and Low Oil Protection.
- + Used H. R2 Lister 29 HP
- + Used F2L410 Deutz

We Have Some Very Good Buys On Used Diesel Engines.

### AREA DISTRIBUTOR FOR LISTER DIESEL ENGINES



### USED BULK MILK TANKS

- 1000 gal. Esco Island Mounting
- 1-600 gal. Jamesway
- 1-500 gal. Esco
- One Sputnik (milk transporter)
- 2-300 gal. Esco milk tank
- 1-500 gal. Milkeeper
- 1-Surge Aloma 50 plus Vacuum Pump.

Distributor for Milkeeper and Mueller Milk Tanks Complete line of Bulk Tank Kleansors New Model Klenzate Bulk Tank Washers 1500 series.

**RADIO CONTROLLED TRUCKS FOR BETTER SERVICE**

# C. B. HOOBER & SON

INTERCOURSE, PENNA. PHONE 768-8231