

*With DHIA testing*

# Computer tells farmer about his cows

When God invented dairy cows, he didn't think it was important to include built-in meters to measure how much milk they produced. But to modern dairy farmers, how much milk each cow produces is important. Cows that don't produce much milk are better off as hamburger to be replaced by more productive animals.

In the days when cows' output went into a bucket, all the farmer had to do was look into the bucket to see how much milk each cow produced. But in these days of large dairy herds and milk flowing from milking machines through piping into a bulk tank, that's not possible. That's where the Dairy Herd Improvement Association and Sylvester Abraham come in.

Abraham, of Garfield Street, Cass City, is one of the eight DHIA technicians in the upper Thumb. Their job, simply put, is to measure the output and

content of milk of the dairy cows of their clients.

DHIA is a cooperative organization, with boards of directors in each county and for the state, loosely affiliated with Michigan State University.

Abraham, 62, has been a DHIA employee nine years, after a varied career, including working at the Nestles plants in Ubyly and Cass City, selling insurance and hauling milk. He was working at the now-closed elevator in Bay Port just prior to going to work with DHIA.

It isn't mandatory that dairy farmers belong to the association, but it is to their advantage to do so, Abraham explained. "If you have a pipeline (milking system), you wouldn't have any idea what each cow produces." Farmers who use buckets could weigh them, but as mentioned, very few still do. (Abraham has two customers who use buckets.)

TESTING OF A DAIRY herd must be done once a

month, within three days plus or minus of the date done the previous month.

Samples must be taken during both the morning and afternoon milkings, which means Abraham and the other DHIA technicians must get up even before the dairy farmers do since they have to drive to the farms. One of his clients starts milking at 4 a.m. each day.

Those joining DHIA have two choices. The official test must be done by the DHIA technician. The unofficial test means the DHIA sup-

plies the equipment, but the work must be done by the farmer.

The fee is based partially on herd size. For a herd of 50 cows being milked, it would cost the dairyman \$60 for the official test. If he did the work himself, what is known as owner-sampler system, it would cost \$37.

EITHER WAY, THE testing is the same.

The test instrument used is called a milk meter. Hoses connect it with the regular milk lines.

Milk coming from the

milking machine flows into the meter, off which can be read the number of pounds of milk the cow gave. A sample is drawn from the meter into a jar, after which the rest of the milk flows back into the pipe to the bulk tank.

A sample is kept for each cow. A truck making the rounds picks up the bottled samples each Wednesday and Saturday and takes them to the DHIA office in East Lansing, where tests are run for butterfat content and, if the farmer is paying extra, for mastitis, and

progestin, to determine pregnancy.

Milk from cows with mastitis must be thrown away and the animal must be given an injection each time it is milked. The test shows whether the cow is on the verge of getting the disease, has it or is getting over it.

ABOUT A WEEK AFTER the tests are made, the farmer receives a computer printout from DHIA listing the test results for each cow.

The printout not only lists pounds of milk per cow and butterfat content, it also lists other information, such as when pregnant ones will calve (if the progestin test is performed), how much feed to give to the cows (if the

farmer submits feed reports), and sire and dam identification.

The information obviously can be quite useful. Based on it, Abraham advised one dairyman to get out of business, that he wasn't making any money milking cows. The man took the technician's advice.

BECAUSE HE IS IN A lot of milking parlors, he is often asked for advice. The question may concern feed, cows or equipment. When the situation warrants, Abraham will refer the dairyman to another expert.

Abraham has 25 farmers on official test, and 15 on owner-sampler. For the latter, he only has to drop off

and pick up the equipment and samples. The customers range as far away as Frankemuth and Caseville.

His clients are loyal, and also persuasive. Abraham, a widower, was thinking of retiring last year, but his customers persuaded him to stay on.

In 1974, he won an outstanding technician award from DHIA and last year received \$200 in savings bonds for similar efforts.

He also had a role in another honor. In 1978, the cows of one of his clients, Harold Gremel of Canboro Road, Sebawaing, recorded the most pounds of milk per cow of any dairy herd in the state.

## Hot weather cuts milk yield

A dairyman milking on a hot, sweltering day not only has to fight the sweat dripping from his brow but a reduction in his herd's efficiency.

Hot summer weather is just around the corner, bringing with it production problems in dairy herds, according to Dr. R.W. Stanley, chairman of the animal science department at the University of Hawaii.

Dr. Stanley's studies at the University of Hawaii have shown that dairy cattle gain excess weight, consume less roughage and show a drop in butterfat test and milk production when temperatures soar above 80 degrees.

Although Hawaii is blanketed by 80 degree temperatures all year, dairy herds in midwestern and northern states also suffer from reduced production brought on by high temperatures and humidity in the summer, Dr. Stanley says.

Research has shown that acid builds up in rumens of cows subjected to these temperatures, he explains, and that reduces appetites and feed efficiency.

Digestive acids are normally neutralized by sodium bicarbonate, a natural part of cows' saliva. But under high heat conditions, additional sodium bicarbonate may have to be fed to keep rumen acids in balance. "Under high heat conditions we can modify the ration by feeding sodium bicarbonate to enhance fat test and get a more efficient and persistent animal," says Dr. Stanley.

In an 18-week study done by Dr. Stanley and Dr. L.

Kung of the University of Hawaii, cows fed sodium bicarbonate gave more milk and butterfat, rid themselves of excess body fat and were more feed efficient than those without the feed ingredient.

Cows fed sodium bicarbonate in the grain ration outperformed the control group in butterfat production. Those Holsteins fed 1.8 percent sodium bicarbonate produced milk containing 3.55 percent butterfat on the average, while the control group averaged 3.29 percent. The group fed 2.8 percent bicarb in the ration averaged 3.2 percent butterfat test.

More milk was produced by bicarb-fed cows; those receiving 2.8 percent sodium bicarbonate did best, averaging 52.49 pounds of milk per day. The control group averaged 51.74 pounds per day.

Both groups fed sodium bicarbonate lost weight, indicating increased metabolic efficiency, Dr. Stanley adds.

The ration dairy cows receive -- and how much is fed -- determines the amount of supplemental sodium bicarbonate necessary to insure optimum production in hot weather, Dr. Stanley says.

Dr. Stanley suggests dairymen to start feeding bicarb at a low level -- 0.25 pounds per day -- as a general rule of thumb.

"Increase sodium bicarbonate levels at increments until you hit an optimum, then keep it there when results are noted," he explains.

Maintaining ration fiber levels during high temperature periods will also help keep butterfat tests from dropping, concludes Dr. Stanley.

## Your Neighbor says Gas rationing is silly

In an effort to avoid a gas shortage that could cripple U.S. transportation, President Carter has proposed a standby rationing program that is expected to pass in both houses of Congress very soon.

However, such a program is "silly" according to Ted Schulz of River Road in Cass City.

The main problem with gas rationing is if it is used, those people who need the gas for their work will suffer most, he said.

Schulz is a good example. He is employed by Howard Masonry of West Branch, a construction firm that works in the Saginaw-Bay City area. In driving to work every day, Schulz uses a good deal of gas even though he drives a motorcycle to cut costs.

Rather than implement the forced conservation that rationing would bring, Schulz favors a sense of conscientious conservation by people now using gas.

He also claims that at the moment there is no shortage of gasoline, although there could be if foreign sources decide to cut back production.

Another alternative to rationing is the increased production of alternative fuel sources.

Schulz said he thinks sources such as alcohol fuels, commonly called "gasohol," and fuels derived from wood and animal waste have been effective in tests and could be developed on a larger scale.

With the present energy situation, everyone feels the pinch at the pumps but Schulz feels there is no need to go to the drastic measure of rationing.



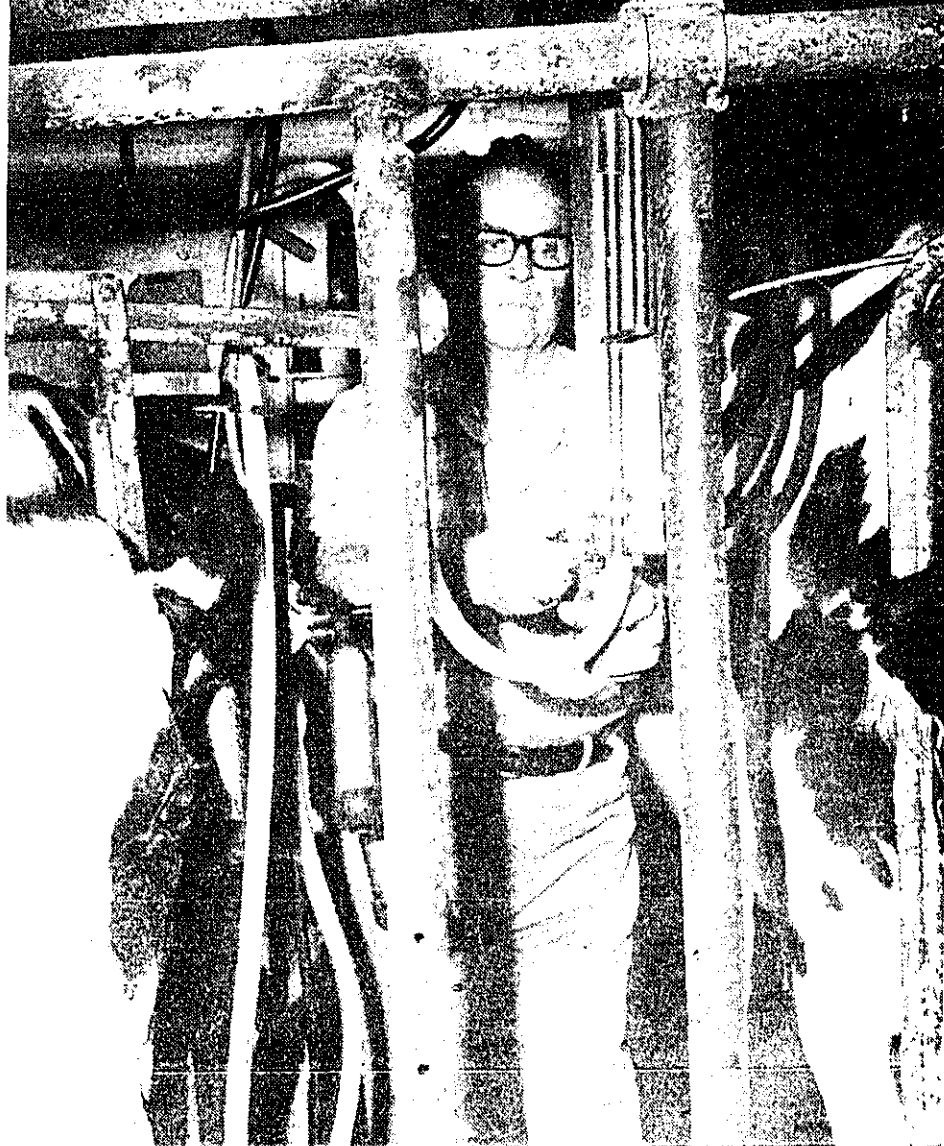
Ted Schulz

LIONEL "ROY" EMERY  
FOR TUSCOLA COUNTY DRAIN COMMISSIONER

Republican

PAID FOR BY: EMERY FOR DRAIN COMMISSIONER COMMITTEE

1515 Phelps Lake Road  
Mayville, MI



MILK CHECK -- Drawing a sample into a jar from the milk meter is Dairy Herd Improvement Association technician Sylvester Abraham. The pounds of milk are measured in the large tube in the meter. Laboratory tests of the milk in the jar will reveal butterfat content and other information.

The perfect gift... a Keepsake diamond

Chosen once...cherished forever... guaranteed for perfect clarity...precise cut... fine white color. You can choose no finer diamond ring.

**Keepsake**  
Registered Diamond Rings

Brides-to-be in our Bridal Registry  
Keri Dillon  
Loretta Morawski

### SUPER SUMMERTIME GIFT SELECTIONS

Now On Display At McConkey Jewelry and Gift Shop

- Juice and Beverage Sets
- Wooden Salad Sets
- Cutting Boards, Spice Racks, Candlesticks, Coasters
- Libbey Water Glasses
- Chip and Dip Sets
- Lazy Susans - Ice Buckets
- Many, Many More

A gift from McConkey Jewelry and Gift Shop is Always Something Special.

**McConkey**  
Jewelry & Gift Shop  
6458 Main Cass City

### Brooks earns BA degree

David Brooks, son of Mr. and Mrs. Oscar Brooks of 6398 S. Seventh Street, Cass City, received his bachelor of arts degree from Calvin College in Grand Rapids May 24.



David Brooks

A humanities major, Brooks plans on working a year then going on to law school at Valparaiso University in Valparaiso, Ind. He is presently employed at M.C.'s, a sporting goods store in Grand Rapids. Brooks is a 1974 graduate of Cass City High School.

### SPECIAL OF THE WEEK

1977 Oldsmobile 98 Regency  
4 dr., Air Cond., Vinyl Roof, Full Power, Cruise, Tilt Wheel, Other Extras  
**\$3995**  
Plus taxes & plates



<p><b>1978 Pontiac Trans AM</b> T-roof, auto. trans., power, stereo, air cond., lots of extras.</p>	<p><b>1978 Silver Anniv. Corvette Cpe.</b> Alum. wheels, air, spec. tires, loaded with extras, local car, like new.</p>	<p><b>1976 Camaro</b> Rally sport, small V-8, auto., P.S., P.B., rally wheels.</p>
<p><b>1979 Ply. Horizon</b> 4 dr., frt. wheel drive, radio, and 4 sp'd. trans., good gas mileage.</p>	<p><b>1979 Chevrolet 1/2 Ton Pickup</b> 6 cylinder, standard transmission, radio, real clean.</p>	<p><b>1977 Olds Cutlass Cpe.</b> Auto. trans., PS &amp; PB, only 27,000 miles.</p>
<p><b>1976 Chevrolet Impala Custom Cpe.</b> Auto., vinyl top, P.S. &amp; P.B., rust proof, white walls. One owner. Low mileage. Sharp.</p>	<p><b>1979 Ford 150</b> Super cab pickup, V-8, auto., P.S., P.B., two-tone, dual tanks, camper cover, full bench rear seat.</p>	<p><b>1979 Chevy Caprice Station Wagon</b> Wood grain, full power, air cond., and stereo radio, lot of other extras.</p>
<p><b>1977 Olds Cutlass</b> 4 dr., auto. trans., air cond., PS &amp; PB, like new.</p>	<p><b>1977 Pontiac Trans AM</b> Red, auto. trans., P.S., P.B., extra clean car, and a good buy.</p>	<p><b>1978 Chev. 1/2 Ton Van</b> 125 wheel base, tilt wheel, auto. trans., PS &amp; PB, 24,000 miles.</p>

**OUVRY**  
CHEVROLET-OLDS, INC.  
Cass City Phone 872-4301

**LAWRENCE INSURANCE AGENCY, INC.**

LIFE - HOME - CAR - BUSINESS - BONDS - FARM

124 N. STATE ST. CARO PH. 673-4141

6265 MAIN ST. CASS CITY PH. 872-4343