

Milk Can Last Longer

Everybody knows milk is perishable — but apparently it is not nearly so perishable as we had thought.

Under household refrigeration (usually 45° to 50° F.) milk keeps an average of 7 days. But tests conducted under ARS research contract show that simply lowering the storage temperature to freezing or slightly above will extend the storage life to as long as 7 weeks.

Long-accepted ideas about milk perishability were in for even more of a jolt when the research showed that milk pasteurized under higher-than-normal temperatures would keep as long as 20 weeks and more.

These findings may well lead to drastic changes in the storage and distribution practices of the fresh milk industry.

The work was done by the Pet Milk Company under an ARS research contract. Both winter and summer milks were pasteurized under normal condi-

tions (165° to 172° F. for 16 seconds) at six Southern dairies. Then they were cooled to 32° F. and flown in ice to Pet Milk's Research and Development Center, Greenville, Illinois, where they were stored at 32 degrees, 35 degrees, 40 degrees, and 45 degrees F. Weekly bacteriological tests and evaluations by a trained taste panel indicated that at the two lowest storage temperatures some of the summer milks were still safe and flavorful after 7 weeks, and the winter milks after 4 weeks.

When these tests demonstrated the value of low-temperature storage for normally pasteurized milk, the scientists next tried higher pasteurizing temperatures to see if they could extend the storage life of milk even further. With their experimental equipment they pasteurized milk at 200° and 220° F. for the usual 16-seconds.

They also tried flash-pasteurizing at these temperatures for a half-second.

The milk samples were stored at the same 4 temperatures as the commercial samples and subjected to the same weekly bacteriological and taste tests. Only the samples pasteurized at 220° for 16 seconds were still acceptable by both of these criteria after 13 to 20 weeks of storage at 32° F. In general, the storage life of most of the samples decreased with milder processing conditions and with higher storage temperatures. The ultra-high pasteurization

temperatures did not destroy teurizing, but within the first milk flavor. Using fresh market week of storage, this off-flavor milk as a control, the taste disappeared. Although these results could panel evaluated sample each week. They did detect a cooked flavor immediately after pas- (Continued on Page 17)

SPECIAL CLOSEOUT SALE On Yardman 4 & 5 H.P. "Snowbird" Snow Throwers MARTIN'S HARDWARE

182 E. Main St., Leola, Pa.

Phone 656-3171

INVENTORY REDUCTION SALE CONTINUES

STORE HOURS:

Mon., Tues., Wed. and Sat. 9 to 5:30
Thurs. & Fri. Night 'Til 9 P.M.

GROFF'S HARDWARE

NEW HOLLAND

ATTENTION FARMERS...

WHY SHOULD YOU BUY A NEW CASE FARM TRACTOR NOW?

1. **25%** discount on any New Case tractor on our lot purchased during November.
2. Waiver of Finance Charges until spring.
3. 7% tax investment credit.
4. 20% depreciation allowance on 1968 tax return.
5. Protection from company price increases.

STOP IN TODAY FOR ANY EQUIPMENT NEEDS.

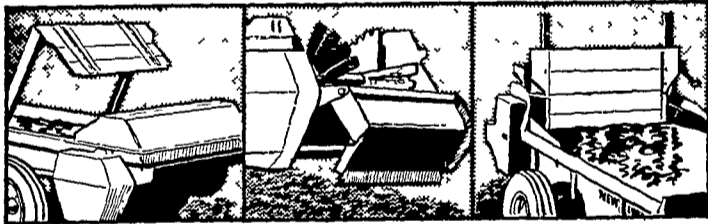
KINZER EQUIPMENT CO.

Box 23, Kinzers, Pa.

Phone 442-4186

sloppy manure

See how New Idea spreaders offer
3 low-cost ways to handle it.

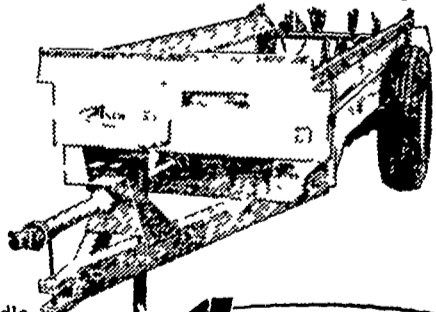


HYDRAULIC ENDGATE has finger-tip control, uses standard 8" single or double acting cylinder. Hand crank available. Fits all New Idea PTO spreaders.

PAN ATTACHMENT fits any New Idea Single Beater spreader. Lowest cost way to handle semi-liquid manure. Rubber flap seals pan in closed position.

MECHANICAL ENDGATE fits any New Idea Cylinder/Paddle or Flail Spreader. Closes with hand crank, opens from tractor seat. Fits snug for loading and hauling.

And don't miss seeing the tough New Idea PTO SuperSpreaders — here now!



Flail, Cylinder/Paddle and Single Beater in 135-, 165- and 195 bushel sizes



Wilbur H. Graybill
Lititz, R. D. 2

Chas. J. McComsey
& Sons
Hickory Hill, Pa.

Roy H. Buch, Inc.
Ephata, R. D. 2

A. B. C. Groff, Inc.
New Holland

Landis Bros.
Lancaster

Longenecker
Farm Supply
Rheems

Allen H. Matz
Denver

A. L. Herr & Bro.
Quarryville

LAST CHANCE!

BE SAFE - BE SEEN

FULO-PEP FEEDS

is supporting the U.S. Public Health Service Injury Control Program... for pedestrian visibility

SEE US ABOUT HOW YOU CAN GET YOUR
SAFETY JACKET FREE!
with the purchase **FULO-PEP**
of selected FEEDS

ACT NOW!
OFFER FOR A LIMITED
TIME ONLY



Grubb Supply Company
Elizabethtown

S. H. Hiestand & Company
Salunga

Harold H. Good
Terre Hill

Stevens Feed Mill, Inc.
Leola

Stevens Feed Mill, Inc.
Stevens