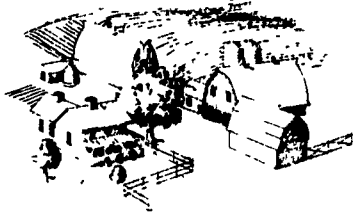


# FARM MANAGEMENT



## IMPROVING EFFICIENCY

**Roland P. Freund**  
Regional Farm  
Management Agent  
Penn State

In my last column, we looked at various efficiency measures and how to evaluate an enterprise.

It is quite simple for economists to tell us what we must do to improve efficiency, but a lot more difficult when we are in the real live farming situation. This time we will look at some specific practice changes which we might want to consider.

### Productive Efficiency

Theory says that the efficiency of an enterprise can be improved by reducing variable costs, or

increase the income, or both. For crop enterprises this can be done by:

- Using nutrient management and integrated pest management practices to apply only the required inputs and no more.
  - Where possible, use no-till and such practices to save machine time and labor.
  - Plan ahead to ensure that crops are planted and harvested as close as possible to the optimum time frame.
  - Maximize the use of rotational grazing during the growing season, to enable ruminants to harvest most of their hay-equivalent requirements at better quality and lower harvesting costs.
- Livestock enterprises will be more efficient when adequate attention is paid to:
- A comfortable (for the animal)

environment with sufficient ventilation and a dry resting place.

- The basics of nutrition to provide high intakes of excellent quality water and feeds, particularly forages for dairy animals. Don't pay big bucks for foofoo dust!
- Optimization calculations to see what is best for your situation. Particularly where land is expensive, it is inefficient to substitute intensive grazing for the much higher energy production per acre which can be supplied by corn silage. When grazing and/or a good forage program is supplying high protein, and corn silage furnishing cheap energy, grain intakes (particularly protein) can be reduced for a very efficient feeding program.
- Reducing the culling rate of breeding animals. This will provide for more breeding stock sales or more rapid herd expansion. It can be achieved by attention to all the details necessary to ensure reproductive performance: sound feet and legs, hygiene, and disease prevention.
- Raising healthy replacement breeding animals that are capable of achieving their genetic potential.

### Labor Efficiency

There is a big variation in labor usage between farms using the same production system. It is important to keep track of specific tasks and record just how much labor is devoted to each task on the farm. This can be very revealing, and can provide management with a lot of information to improve human resource management.

It might be possible to raise labor productivity considerably by:

- Taking time for management.
- Organizing and structuring the workforce, assigning responsibility and authority to workers.
- Planning ahead, with backup plans for when circumstances change.
- Doing preventive maintenance to ensure that all equipment is ready to roll as soon as conditions permit.
- Modifying routines to improve workflow and reduce backtracking.

The first thing we tend to think of to reduce labor is bigger and better equipment. This may or may not help. As a rule of thumb, a labor-saving investment of \$80,000 would need to save at least \$12,000 of labor costs a year before it is cost-effective.

Part-time and shift-work labor to do routine chores can sometimes be more economical than new equipment. Changing the system from conventional to no-till or hay to haylage might also be considered.

There will always need to be compromises between labor saving and capital investment. The average commercial dairy probably spends \$600 per cow per year for labor and family living. If this

figure is any higher, it makes it very difficult to retire debt.

All changes and system upgrades need to be planned to improve labor efficiency, not just on how cheaply they can be done.

### Capital Efficiency

Reducing the investment overheads for the enterprise, or spreading the same investment over more productive units, is easier said than done — especially when we are trying to improve productivity and labor efficiency at the same time. But there are some strategies that can help:

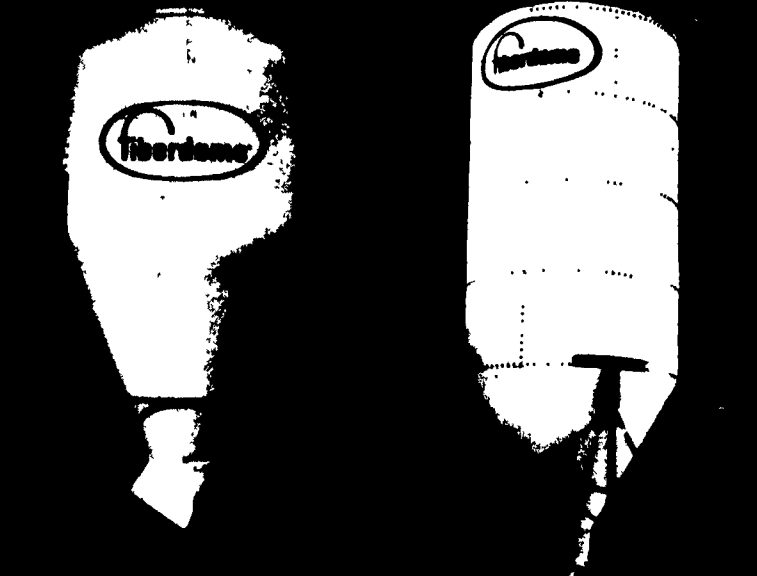
- Have a long-range plan of capital investments in attainable steps.
  - Build equity, not debt. Pay off small chunks of debt quickly and then move on to the next step in the plan. This ensures that debt service goes for principle and not just interest.
  - Avoid long repayment periods. If you can't pay for facilities in 10 years or less, you are probably better off without them.
  - Don't become land poor. Making debt payments of \$200 per acre for bare land that can be rented for \$70 makes sense only for the person who has little or no intermediate and short-term debt.
  - Get help from consultants. Engineers can help to identify potential bottlenecks and their elimination. Extension agents and specialists can advise on production practices, equipment, etc.
- Your farm management agent is available to help with labor management, business analysis, and strategic and cash-flow planning. We hope that we can help you to identify potential problems on paper — before you make them in concrete.



Why settle for 2nd best when Fiberdome now manufactures the most advanced fiberglass bulk bin available!

- Eliminates bird and rodent damage
- Cut heat buildup and condensation
- Food stays fresh in any weather

- Precast, engineered for long life
- Unique 5 year warranty
- Adaptable to any amount of feeding by design



For more information, contact your nearest dealer or call 1-800-673-2580.



P.O. Box 11 • Lake Mills, WI 53551  
(414) 848-8376

...made to last

Contact your nearest dealer.

<b>SOLLENBERGER SILO</b> Chambersburg, PA 717-264-9588	<b>HOOVER EQUIPMENT</b> Tyrone, PA 814-684-1777	<b>CEDAR CREST EQUIP.</b> Lebanon, PA 717-270-6600
<b>ROVENDALE AG &amp; BARN SUPPLY</b> Watsonstown, PA 717-538-9564	<b>LANCASTER SILO</b> Lancaster, PA 717-299-3721	<b>BIG VALLEY FEED &amp; GRAIN</b> Belleville, PA 717-935-2163
<b>NISSLEY FEEDING EQUIPMENT</b> Wilow St., PA 717-786-7654	<b>McMILLEN BROTHERS</b> Loyville, PA 717-789-3981	<b>BENCE'S FARM EQUIPMENT</b> Bedford, PA 814-623-8601
<b>DETWILER SILO</b> Newville, PA 717-776-8321	<b>GNEGY SURGE SERVICE</b> Washington, PA 412-222-0444	<b>WIGGERS FARM EQUIPMENT</b> Corry, PA 814-664-2661
<b>FICKES SILO CO.</b> Newville, PA 717-776-3129	<b>BHENNER DAIRY EQUIPMENT</b> Spartansburg, PA 814-854-7309	<b>BADGER SALES &amp; SERVICE</b> Spring Mills, PA 814-422-8279
<b>SOMERSET BARN EQUIPMENT</b> Somerset, PA 814-445-5555		

## HELP FOR A BUDGET HEADACHE

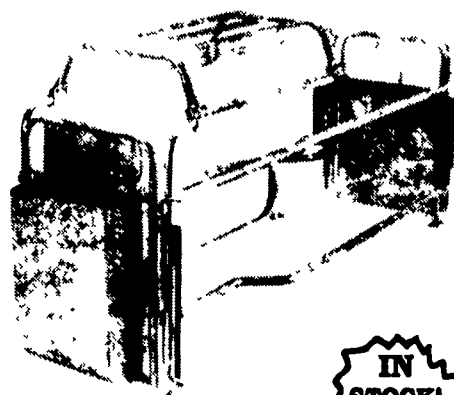


## IN THE WANT ADS

# Prevent Piglet Crushing

with the

## MODEL 90 FARROWING CRATE



IN STOCK!

Contracts available for hogs, finishing and sow units. For more information call 1-800-673-2580.

Constructed from heavy gauge materials, this crate is designed to reduce crushing with sow comfort in mind. The bowed bottom bars make for a comfortable 33" crate width when the sow lays down, yet the adjustable anti-crush bars eliminate the sow from carelessly dropping on the piglets. This movement restriction does not hamper the sow as she lays down, or wants to stand up, as the bars slide up and out of her way.

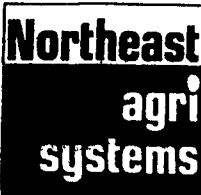
**GALVANIZED!**

INTRODUCING...

INEXPENSIVE...



Strong Glass Reinforced Flooring With V-Bar Shaped Slat For Ease Of Cleaning. Available With Two Opening Sizes: Comfy II Junior For Pre-Nursery And Comfy II Senior For Grower And Finisher.



Northeast Agri Systems, Inc.

Flyway Business Park  
139A West Airport Road  
Lititz, PA 17543

Ph: (717) 569-2702

STORE HOURS Mon-Fri 7:30 to 4:30  
Sat. 8:00 to Noon  
24 Hr. 7 Day Repair Service

1-800-673-2580

