

**DAIRY FARM
MANAGEMENT
BASICS**

A Farm Management Course by
Glenn A. Shirk
Penn State Extension Agent
Lancaster County, Pennsylvania

Archived at Internet Home Page www.lancasterfarming.com

Vaccinations - Article 27

The second form of immunity is that which is acquired through vaccinations. Because vaccines differ in the way they function, it is helpful to have some knowledge of vaccines and cows' immune systems.

Immunization and vaccination can be very complex. In the interest of trying to explain it as simply as possible, the information presented below may not be 100% technically correct. When trying to understand immunization and vaccinations, it is convenient to think in two's because a lot of the things seem to happen in two's, as you will see below.

- Cattle have two different immune systems
 - They work independently of each other. Each system protects different parts of the animal's body and offers protection against different diseases and infections.
 - Both systems must function well for the cow to have good immunity.
- There are two types of vaccines - killed and modified live virus (MLV)
 - Killed vaccines work effectively with only one of the cow's 2 immune systems, and generally are more effective against viral infections than bacterial infections.
 - Modified live vaccines can effectively stimulate both of the cow's 2 immune systems, and generally offer greater protection against viral and bacterial infections. Because it is a live virus, it gives cattle a light touch of the disease. Thus, it generally triggers a more severe response than killed vaccines, and can cause abortions.
- It takes 2 initial shots to stimulate an effective immune response. The second shot is given 2 weeks to 2 months after the first. The first shot "wakes up" the immune system so the second shot can "take hold" and offer lasting protection. Once this immunity has been established, it can be maintained with periodic booster shots. The two-shot setup and periodic booster shots are VERY IMPORTANT concepts to keep in mind when vaccinating animals.
 - Be sure you are actually getting good immunity with your "shots" and not just spending money for a false sense of security -- and getting little to no immunity!
 - Review your health records to make sure all animals got the 2 setup shots initially. This applies to calves, older heifers and cows, and to all new cattle coming into your herd from other farms, even though they have health charts and supposedly have had "all their shots".
- Vaccinate cattle only when they are healthy, not severely stressed. Do not vaccinate 2 days before nor 5 days after calving.
- Do not administer more than 2 bacterial vaccines at one time. It's too much stress on the animal and it may reduce the effectiveness of the vaccine. A 3 or 5-way leptospira vaccine is considered as one vaccine, but two additional bacterial vaccines in combination with leptospira could be too much.
- Some diseases to consider vaccinating for include BVD, IBR, BRSV, PI3, Lepto, Haemophilus coliform mastitis, etc.
- Store, administer and use vaccines as per label instructions.
- Immunization is complex, so discuss these concerns with your veterinarian and design a vaccination program specific for your farm. Do it right!

New IPM Video Available

UNIVERSITY PARK (Centre Co.) — Why are more and more agricultural producers adopting Integrated Pest management, or IPM?

You can find the answer in a new video produced by the Pennsylvania IPM program, a collaboration between Penn State's College of Agricultural Sciences and the Pennsylvania Department of Agriculture.

"Why IPM?" explains that Integrated Pest Management is playing an increasingly important role for Pennsylvania's agricultural industry due to the loss of key pesticides, heightened awareness of worker safety, and enactment of the consumer- and environment-driven Food Quality Protection Act of 1996. The video focuses on IPM as an environmentally friendly, economically viable pest management program that reduces risk

while improving crop consistency, yield and quality.

"Why IPM?" features testimonials from farmers and growers, including Dennis Spangler of New Berlin, Brooks Way of Way

Fruit Farm and Steve Layser of Layser Greenhouses, as well as representatives of the Pennsylvania Bureau of Forestry.

The video can be obtained by contacting any county office of

Penn State Cooperative Extension, the Pennsylvania Department of Agriculture at (717) 772-5204 or the Pennsylvania IPM Program at (800) PENN-IPM.

Randall G. Renninger

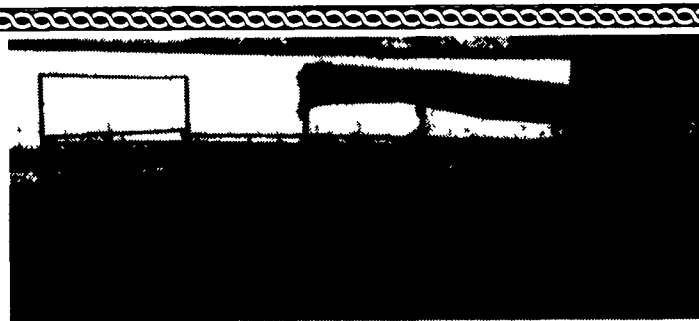
Certified Public Accountant

Specializing in agriculture and construction industries

"We help business people discover ways to cut costs, save taxes, and be more profitable"

Call about our **FREE** seminars

535 W. Orange Street, Lancaster, Pa. 17603
(717) 299-6480 ♦ Fax (717) 299-6390



Look at farming from a different view.
Calf Nurseries on wheels

Grow 'em on grass

- No manure hauling or storage
- reduce feed cost
- reduce disease and mortality
- increase health

8' by 20' houses 6-10 calves \$1000

Also Hen house on wheels-eggs as good as home grown tomatoes.

Give us a call at 9:00-10:30 am Mon. thru Sat. 410-542-5657

No Sunday Calls - Mom and Pop operation

DAVID S. KING

IRON WORKER
Manufacturer of
Church Bench
folding hinges.

SCOTCHMAN BEWO
CIRCULAR COLD SAW

CHECK US FOR USED
IRON WORKERS

Selling:
Scotchman Uni-
Hydra and Mubea

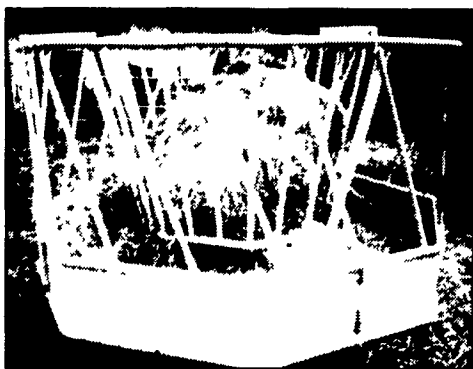


UNI-HYDRA
IRONWORKER
35-120 TONS

873 South Railroad Street,
Myerstown, PA 17067
717-866-6556

LEBANON VALLEY ENTERPRISES, INC.
Manufacturing • Powder Coating • Precast

- ✕ Saves feed by keeping feed off the ground
- ✕ High yield steel tube construction
- ✕ Baked on high gloss, high impact and acid resistant TGIC polyester powder coating
- ✕ Feeder comes disassembled for ease of hauling
- ✕ High Quality
- ✕ Parts easily replaced with bolt together design
- ✕ Affordable Prices
- ✕ Pulling lugs to move feeder from one area to another



**BALE
FEEDER**

P.O. Box 187, Myerstown, PA 17067 • (717) 866-2030

Call us for your nearest Dealer!

**North Brook Farms
COW MATTRESSES**

"simply the best!!"



** **TOPCOVER:** 80 oz. exclusive fabric design. Heaviest, Toughest, Non-abrasive, Field-tested, **WATERPROOF**

** **MATTRESSES:** Unique Woven Seam Construction: 130# of rubber - 30% more Cow Comfort

Compare Prices, Quality, Innovation, and Performance

"The Ultimate Cow Comfort Combination"

\$\$ Reduce Injury \$\$

\$\$\$ Reduce Bedding Costs \$\$\$

Custom Lengths Available

The Original Since 1989

North Brook Farms Weedsport, New York
call toll free: 877-624-2638 For Lowest Retail Prices