## Swine Management News

## BREEDING LEAN

 HOGS GAINS FATTER PROFITSDr. Richard Barczewski Extension Agent U. of Delaware

For some producers, decisions on which animals to keep and which to cull can be difficult. These are individual judgments that should be based on the overall plan and goals you have for your swine operation.
During the past few months, many producers have felt the impact of the new Hatfield Packing plant pricing structure, which offers premium prices for animals with leaner carcasses and places
penalties on overly fat hogs.
Since that time, l've heard a number of hog producers discuss this initiative. Of course, producers of leaner hogs are happy with the incentive program, but producers of fatter hogs began to explore alternative markets. While seeking other options makes sense in the short term, hog producers eventually must face the fact that most packing houses will fall in line with Hatfield and reward producers of leaner hogs.
This makes culling decisions based on leanness more important than ever. Selection and genetics are the most important considerations in your ability to improve
your livestock. And it doesn't happen overnight. It takes time and planned effort on your part to achieve better carcass traits.
Improvement for any trait depends on several factors. First is the variation that exists for a given trait between the parents and the herd. For example, if you are selecting for backfat thickness and the sow and the boar you are mating averaged 1.2 inches at the last rib at 230 pounds, you can expect their offspring to be leaner than the herd average, even though the sow and boar are out of the same herd.
The second factor to be considered is that all traits are notequally inherited. Heritability for a specific trait is usually expressed as a percentage. This percentage is indicative of the amount of variation in a trait that can be inherited. Swine reproductive traits are generally considered to have low heritability. Litter size at birth has a heritability of 15 percent, litter size at weaning is 12 percent, and litter weight at weaning is 17 percent.

Performance rates are generally considered to be medium in their heritability. Daily gain from weaning to market weight has a heritability of 30 percent, while feed efficiency is 30 percent inherited. The greatest gains in inheritance can be oblained with carcass traits. Body weight has a heritability of 60 percent while fatback thickness, loin-eye area, and percent lean cuts (based on carcass weight) are 50 percent inheritable. This is an advantage to hog producers who are making the muve toward leaner hogs because improvements can be achieved more rapidly.
One final factor in the selection process is the variation that exists within a population. If wide variation exists, then producers have the potential to get outstanding individual animals for their breeding programs. If litule variation exists for a given trait, only a few will be able to achieve superior individual animals for their breeding programs.
As a herd approaches the upper limits of variations within a population of animals, improvements will be harder to come by because
the differences between the herd and selected individuals in the mating program will be smaller The good news is that producers who are unable to get incentives for the hogs they market should find it easier to obtain boars that have the potential of positively influencing their breeding program. These production-tested boars may cost a litule more money, but improvements made should go a long way to returning those costs to the operation. Producers who currently command incentive payments for their hogs w ineed to look harder for quality boars that are better than the herd average in order to continue to make improvements.
While it has been the practice of many farms in the past to restrict selection decisions for improvement on the boar alone, consideration can be given to the gilt pool. Use a fatback probe to select female replacements that are the leaner animals in your herd. Faster gains can be realized if you are able to select carcass traits in both your boars and sows.

"BELT BUSTERS" \$ave on Flat Belts for Your Farm Machinery! We Will Make the Belt You Need and Ship Same Day by U.P.S. - We're Fast!
$\star$ Bale Thrower Belts
$\star$ Round Baler
$\star$ Harvesting Machines Like Bean, Cherry, Grape, Etc. $\star$ Forage Box Belts for Gehl, Grove Kasten, New Idea, Etc. Quality Belts at Farmer Prices

SORRY, NO V-BELTS

## Agricultural Belt Service

10632 Rt. 75
Eden. New York 14057 PHONE 716-337-BELT

## MDiJ1M :TITIT <br> Since 1903 <br> - Horse Barns - Offices <br> - Riding Arenas <br> - Shops <br> - Garages <br> - Equipment Storage <br> - Warehouses <br> - Aircraft Hangars



MORTON BUILDINGS, INC.
Excellence - Since 1903


Overhead Door Division 717-656-051s 339 Monterey Rd., Bird-In-Hand, PA 17505

## Need Your Farm Buildings Painted?

Let us give you a price!
Write: Daniel's Painting
637-A Georgetown Rd.
Ronks, PA 17572
(or leave message)
(717) 687-8262

Spray on and
Brush in Painting

## FARROWING CRATES - GESTATION STALLS PENNING - FLOOR FRAMES - SCRAPER BLADES



Proven Solid Steel Rod Bow Bar Crate w/Front Arch


Solid Steel Rod Gestation Stalls


Solid Steel Breeding Penning


Round Bottom Stainless Steel Sow Feeders


Stainless Steel Feed \& Water Troughs


Solid Steel
Nursery Penning


Proctor Hydraulic Crate Prevents Crushing


Surprise Sow Feeding Systems

WE CAN CUSTOM FABRICATE EQUIPMENT TO MEET YOUR NEEDS - AT A PRICE YOU CAN AFFORD


Solld Steel
Solid Steel



