

New ideas and new technology only build upon the foundation of wisdom and knowledge tried and tested by the 'old timers'. New ideas seldom stand alone, without some previous solid foundation, developed by trial and error, and a great deal of insight and wisdom. Lets' look at a few examples.

How 'Old Timers' Did It

The tremendous strides in the development of high producing Dairy cattle of the past decade were possible only because of these

1. Domestication of animals. This began in the dim and distant

past and in many places. In an unknown valley in Eastern Europe, some decendant in Adam developed a liking for meat. Tired of hunting and tracking the wild beast, he built enclosures and herded them in for easy access when needed. Some animals were not easy to hold, or wouldn't breed in captivity, so he settled on the more doscile beasts, like goats and sheep, and eventually cattle. Now that he has a captive supply of animals, he soon developed a use for the other products they could supply — milk, fur, hid and bone. 2. Selection for desirable traits.

Evidence of breeding selection can be found in very early literature. Among the earliest and most fascinating is the account of how Jacob out-foxed his father-in-law Laban, in Genesis 30:32-43. The bargain was that Jacob should be paid for his labors with the speckled and spotted cattle and goats, while Laban would retain the brown ones. While the methods he used are a little far fetched, it is very plain that Jacob was an expert at selecting and breeding for the colors he wanted. "And the man increased exceedingly, and had much cattle". He of course selected and bred for the colors and markings that were to his advantage, and speckled and spotted ones.

3. Constant feed supplies. Early man, including Jacob, nomads. They moved their flocks wherever the grazing was good. Good grazing lands became the prime objective of competing tribes, and a leading cause of war between them. The planting and cultivation and improvement of grazing land for cattle came much later in history, after the nomadic tribes settled down in one spot and learned to select and nurture plants for food and forage. This was a tremendous milestone for the human race, for this was the

very beginning of agriculture.

4. Recognition of heritable traits. Some of the characteristics or traits that we like in our cattle are much harder to develop by breeding, and take much longer to improve. It took many centuries of selection, in many different parts of Europe and Asia, to find and improve the milk producing ability of cattle. It is still pretty much of a mystery to present day breeders to try to understand ALL of the many traits that contribute to high milk production. But the science of genetics, building on Mendels laws and a vast pool of experience, has enabled us to sift out those that are highly heritable from those that have very low heritability.

5. Production Testing. Actual production records only began in the early part of this century. The invention of the Babcock butterfat tester was the first breakthrough, leading to the formation of Cow testing Associations, and later to the formation of D.H.I.A. as we know it today. Everything before this was guesswork, and genetic selection was erratic and slow.

6. Artificial Insemination. Obviously, this discovery and its easy availability to all breeders through A.I. Co-ops had an immense impact on improving Dairy

production. For the first time, bulls known to sire high producing offspring were available to everyone.

7. Genetic Base Screening. The development of Genetic Base formulae by U.S.D.A. Scientists has at last brought together the vast pool of information now available on every Sire and Dam that is or has been on test. This would not be possible without the aid of large computers to store and evaluate the information.

Only since 1974, when the formulae for evaluating and comparing sires and dams were put into intensive use, have we seen such fast improvement in both type and production. The great bulls of the Sixties would be ordinary today.

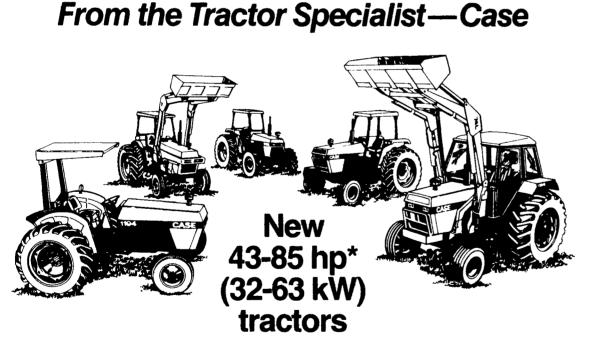
And the 1974 genetic base is already obsolete, and will be replaced with a new and better one next year. Thanks to Genetic science, building on the wisdom and foresight of the old timers', we can have a barn full of cattle that Grandpa could only dream about.

Cattle feeder meeting set

TERRE HILL - The Eastern Lancaster County Adult Farmer Program will conduct a meeting for cattle feeders on Tuesday December 6, at 7:30 p.m., at the Union Grove School. J. Paul Espy, cattle feeder from Huntingdon County, and president of the Pennsylvania Beef Council, will be the featured speaker sharing his ideas on purchasing, fattening, and marketing cattle.

Espy was named Cattleman of the Year for 1983. He started his operation in 1972 and now fattens 1000 head per year with all his own feed from 650 acres. His cattle average 2.75 lbs./day gain and his unique record system enables him to know what kind of cattle to

All interested persons are welcome. The Union Grove School is located near Terre Hill on route 625, 2 miles north of route 23. For information contact Donald Robinson at 445-5041.



Presenting a new generation of

high performance General Purpose field power

Featuring new styling ... new power ratings ... 12-speed power shift ... new cabs ... new instrumentation ... new loaders ... new state-of-the-art human engineering. General Purpose tractors at their best!

See and drive our new GP's

Mfr s PTO rating

AT YOUR LOCAL DEALER

C. H. WALTZ SONS, INC. RD1, Cogan Station, PA (717) 435-2921

> THE WARNER CO. "For You The Fermer"

Troy, PA (717) 297-2141

E. W. BILEWICZ EQUIP., INC. Elmer Rd., Richwood, NJ

(609) 881-2692

PEOPLES SALES & SERVICE

Oakland Mills, PA (717) 463-2735

BINKLEY & HURST BROS.

133 Rothsville Station Rd. Lititz, PA (717) 626-4705

STOUFFER BROS., INC.

1066 Lincoln Way West Chambersburg, PA (717) 263-8424

ZIMMERMAN'S FARM SERVICE Bethel, PA

(717) 933-4114

A. L. HERR & BRO.

312 Park Ave. Quarryville, PA (717) 786-3521

CASE POWER & EQUIP.

Montgomeryville, PA (215) 699-5871 New Castle, DE (302) 652-3028

C. & P. FULTZ EQUIP. RD 1, Spring Mills, PA

(814) 422-8805

PAUL SHOVER'S. INC.

35 East Willow St. Carlisle, PA (717) 243-2686 Loysville, Pa. (717) 789-3117



USED TANKS

500 Gal, Mueller "OH" 800 Gal, Mueller "M" 800 Gal. Sunset OTHER USED TANKS AVAILABLE

> Save Money and Get FREE HOT WATER!

The Model "D" Fre-Heater

24 HOUR SERVICE GEORGE M. PRIEST, JR. & SONS

RD 8, Box 142 Hagerstown, MD 21740 301-797-3921 or 301-733-6661