Good Breeding...

Over the past number of years, the Remitall program has been very fortunate to have enjoyed many successes! A lot of these successes are coming from the breeders who have used Remitall genetics.

They say that success most often goes to those who hang in there the longest. Which in our case may have some merit. At one time we were the new breeder on the block and now we are looked on as one of the older ones. Although, we feel two things have got us to this point today. Number 1, a stockman's eye and knowledge for selection. Number 2, consolidating these selections through line breeding.

On many occasions we are asked about line breeding and its merit. Sometimes it is out of curiosity, most often disbelief. Free advice is seldom used and often ignored, but we will continue to spread the knowledge of line breeding to those of you who would like to know more.

Good breeding doesn't exist without line breeding. Good breeding is sound breeding cattle that can consistently reproduce desired traits. In today's technique of breeding cattle, it is the most effective way of solidifying genetic traits.

If you step back and look at the landscape of the Hereford breed today, you will see that the Remitall line breeding program is

having a major and positive influence!

Strangely enough, line breeding is one of the most misunderstood concepts of breeding cattle. The paranoia of it all seems to confuse breeders. They want to group line breeding together with inbreeding which should not be the case. There is a difference!

Line breeding is a managed program designed to work within, while not exceeding the natural parameters of which nature guides itself. Inbreeding occurs when the natural parameters are exceeded. Let me explain further. Genetically you are 50% of your sire, 50% of your dam. If you go back a generation, you are 25% each your grandparents, 12.5% your great grandparents dividing this number in half each generation you go back. The figure of 50% is the one we want to pay attention to. If an individual appears in a pedigree more than once you should be able to add each of his genetic influences together and they should not exceed 50%. For example if Remitall Keynote 20X was in the pedigree as a grandparent on both the paternal and maternal side, he would be supplying a 25% genetic influence each time to total

Following this system allows you to keep track exactly the percentage of genetic influence any one individual supplies to a pedigree. A managed line breeding program will have elite and superior individuals in a position to contribute 25% to 50% of the genetic pull in a pedigree.

"If you are raising purebreds, you are already line breeding." The problem most breeders have is that they are not managing it to their advantage. They are not selecting and then consolidating those genetically superior individuals.

Inbreeding occurs most specifically when you breed an individual to their own descendants. For instance, if you were to breed Remitall Keynote 20X to his daughters, granddaughters or great granddaughters, etc., you can see that Remitall Keynote 20X would be 50%

at the front of the pedigree plus the addition of any other percentages of genetic influence further back. This would have him exceed 50%, the basis of which is above the genetic influence normally found in natures natural generation turnover. This rarely happens in nature because in a natural setting young bulls would quickly replace the older ones. With the advent of frozen semen and the management to selectively breed with bulls past their prime, we can easily create an inbreeding situation. Now just because you might on occasion exceed 50% doesn't mean the wheels will immediately fall off. Remember though when you are working towards intensifying a process past where it is meant to operate, or the comfort zone, it - like anything being pushed too far - loses it's advantages.

You often hear the term "outcross" being used by purebred breeders. This term is generally misleading especially to new breeders. It is trying to imply that somehow this particular bloodline is magically new and better. In reality it is not new and at some point is still related to others of its breed. What it does mean though is that at some point the descendants branched off and have remained relatively separate. This makes these bloodlines appear obscure to us and generally speaking not for the better. They may come from a situation of a

closed herd of many years or they are just blood lines that have operated in relative obscurity.

The problem most closed herds have is that they are not in step with the current trends and demands of the industry.

Plus they are selecting from a limited

herd size making adjustments more difficult. Bloodlines that have operated in relative obscurity usually have for a reason; they haven't produced good

enough results to garner any recognition or accolades. You will find using cattle from these situations usually moves you back two steps

instead of ahead.

Here are the main keys to line breeding:

- 1. Start with genetically sound individuals.
- Selection: Have in place the proper data and physical criteria to identify superior individuals.
- Consolidate these individuals and their genetic strengths by line breeding.
- 4. Turn the generations.

Breeding cattle is a long term project. It takes three generations to create a distinct trait and it takes five to make that trait start to breed true. Use a color trait for instance because it's easy to identify with, if you were to cross an Angus with a Hereford and then using only pure Angus from there on, it would take at least three generations to remove the white face and at least five to remove it to the point it didn't show up occasionally.

You can do the math yourself. If the average purebred breeder is in and out of the business in seven years, they only have time enough on their own to create a third generation. Time enough to create a certain type or trait, but not long enough to make it breed true.

"Time"...there's just not enough of it, that's why it's so important to work with a program that has already put the building blocks in place. You make your own decision, but remember you don't have to start at square one. We believe the sires in this brochure give you the best breeding opportunities and building blocks that Herefords have to offer! Look at the positive and major influence the Remitall program had on the 2004 U.S. Denver National show!

