One factor which exerts a great influence on performance records is the manner in which different contemporary groups are submitted. In order to glean true and valid comparisons from AHIR (Angus Herd Improvement Records), a basic understanding of proper reporting procedures with regard to contemporary groups is needed.

A contemporary group is defined as a group of cattle approximately the same age which have been given equal management treatment.

Probably the best way to address this sub-

tem is simply to increase the average level of production of a given herd, thereby increasing efficiency and profit. For illustrative purposes, let us look at another example in which a breeder places 10 top calves and their mothers (from his herd of 50) on irrigated alfalfa pasture and Sweet Lassie feed. The remaining 40 unfortunate pairs dine on unimproved native grass in a dry year. If all calves are processed as one contemporary group, the top calf could have a whopping ratio of 180 while the worst of the unfortunates shows a lowly ratio of 20.

Contemporary Groups

by John Crouch Director of Performance Programs

ject is to pose a few questions which are directed to our office.

Can a group of calves which are weaned, weighed and reported at the same time be broken into different contemporary groups?

They certainly can and should be if the entire group was not given the same management treatment. To briefly explain, management code 1 should be used to denote non-creep fed calves, and management code 3 should be used to indicate creep fed calves. Also, for example, if one group of calves was developed on rye and clover pasture while another group only had access to fescue pasture, the breeder should use management codes 1A and 1B to separate the groups for comparative purposes. Even though these calves appear on the same AHIR summary, they will only be compared against the calves in the group in which they were reported.

Why bother? Why not just run them all together?

The whole reason behind any records sys-

This simply tells us the specially treated calves received an *unfair advantage*, whereas the abused calves were given an *unfair disadvantage*. One can readily see that comparisons made under these conditions are not valid—they reflect extreme environmental differences instead of genetic differences. Therefore, the breeder is just kidding himself.

How should sick or injured calves be handled?

If a calf has a pre-weaning sickness or injury that severely retards his growth, it is not fair to include him in a comtemporary group of normal calves. The sick calf should be treated as a contemporary group of one; thus, he will have a ratio of 100. This can be accomplished easily by assigning a separate letter of the alphabet to his management code. (For example, 1F).

One word of caution...this is not a license to sort off inferior calves out of lightmilking cows on the pretext of sickness or injury. It is simply a realistic way to arrive at the most meaningful comparisons possible.

Should bull and heifer calves be treated as separate contemporary groups?

No...unless they were given different treatment. AHIR will adjust *weaning ratios* to a steer basis for purposes of comparison unless the breeder specifies otherwise.

How large should a contemporary group be in order for comparisons to be valid?

Statisticians, animal breeders and researchers indicate that comparisons are meaningful if contemporaries number at least 10. However, larger numbers provide more meaningful comparisons.

Should first-calf heifers be included in the same contemporary group with mature cows?

In smaller herds where the number of first-calf heifers is less than 10, they should be included in the same contemporary group with mature cows. In larger herds where first-calf heifers are managed differently, the breeder may wish to break them into a separate contemporary group. Since so many different situations exist, I will not attempt to elaborate further except to say that each breeder must decide on the system which provides the most accurate comparisons within his own herd.

How are embryo transplants handled?

Since an embryo transplant calf is subject to an environment that has no genetic relationship to its real mother, it is virtually impossible to draw meaningful comparisons between progeny resulting from embryo transfer.

When embryo transplants are processed through AHIR, each calf is treated as a contemporary group of one, then given an adjusted weight and a ratio of 100. Individual records on embryo transplants *are not* included as a permanent part of the dam's record, nor are they considered in the estimation of breeding values.

Can yearling weights of bulls evaluated in central test stations be included in AHIR?

They certainly can be included, provided weaning weights already have been processed through AHIR and at least 10 Angus bulls were tested. In order to have the yearling weight record included, the breeder must identify test station bulls on the AHIR yearling report and attach a copy of the final test reults. AHIR will calculate an adjusted yearling weight in the normal manner; however, the yearling ratio will be figured by adding 40 percent of the weaning weight ratio and 60 percent of the average daily gain ratio.

One final thought.

On the reverse side of the green calving and weaning report form appears various reporting procedures. When all else fails, read the instructions. Call me if you have any questions or want to visit.