

Technical Bulletin

CONTEMPORARY GROUPING: SEPARATING ENVIRONMENT FROM GENETICS

Contemporary grouping is one of the hardest things to understand when submitting data to the American Gelbvieh Association (AGA).

Expected Progeny Differences (EPDs) were developed to measure an animal's genetic value after environmental effects have been removed. To separate genetics from environment, we need to accurately identify an animal's environment, and the effects that environment may have on performance. Contemporary groups define an animal's environment, so that genetic and environmental effects can be separated correctly.

If animals within a contemporary group are similar in terms of their management and environment, then differences in the performance of the animals can probably be attributed to genetics. Thus, proper contemporary grouping is important, even essential, to obtain accurate and predictable EPDs.

By definition, a contemporary group consists of at least two calves of the same sex. Ideally, contemporary groups should be ten animals or larger with at least two sires represented to provide accurate comparisons. However, smaller breeders may not be able to form contemporary groups of that size.

Each producer is ultimately responsible for reporting the accurate contemporary grouping of his or her animals. The American Gelbvieh Association (AGA) helps producers by placing animals in the correct contemporary group, by sex, when information arrives in the office. But producers must carefully group animals according to other factors, like health and feed.

In most cases, calves born within a 90-day period on the same farm can be grouped together. However, consideration should always be given to the way the calves are managed and to their nutrition. A group of cows and calves grazing on improved bluegrass pasture should not be compared to a group of cow/calf pairs grazing on endophyte-infected fescue pasture. The management and nutrition of these two groups are different.

Similarly, if illness caused poor performance in some calves, they should not be compared with other, healthy calves. Any variation in management practices that may change—either by benefiting or adversely affecting—an animal's performance requires that those animals be put into different contemporary groups.

For a contemporary group to be useful in comparing sires, at least two sires must be represented in a contemporary group and at least one of those sires should be a reference sire—a sire that has previous progeny records reported. Contemporary groups

that represent several sires allow for comparison of different sire's progeny in a similar environment.

On the AGA Registration Application (see **Figure 1**), as well as on the Weaning and Yearling Worksheets, there are boxes for birth group, weaning group and yearling group. Those are boxes used to indicate an animal's contemporary group. Use those boxes to note the exceptions such as animals that were ill, animals treated differently than the rest of the herd (bull test, show, sale, etc.) or to group cattle by pastures if the nutrition level is different in the pastures.

The American Gelbvieh Association recommends reporting data on all calves, whether registered or computed. First, complete reporting of all calves makes the best calves look even better. Secondly, complete contemporary groups provide more information for calculation of EPDs.

Table 1 demonstrates the advantage of reporting data on all calves. If you have 10 calves and elect to keep the top five, reporting the data on all 10 yields ratios above 100 for all the keepers.

Table 1. The Effect of Reporting all Calves – Whole Herd Reporting

Calf ID	Adj. 205 Day Wt.	Ratio – all Reported	Ratio – top 5 Reported
1	742	119	110
2	694	111	103
3	655	105	97
4	643	103	95
5	639	102	95
6	606	97	–
7	605	97	–
8	578	93	–
9	562	90	–
10	524	84	–

Instructions on Reverse Side

REGISTRATION APPLICATION

Please send more registration applications.



10900 Dover Street
Westminster, CO 80021
(303) 465-2333
Fax: (303) 465-2339
www.gelbvieh.org
info@gelbvieh.org

FOR OFFICE USE ONLY

Received _____
 Ck # _____ Amount _____
 Punched _____ Date _____
 Verified _____ Date _____

I hereby certify that the below is true and correct to the best of my knowledge.

Date Sent _____

Name _____ AGA # _____
 Address _____
 City, State, Zip Code _____
 Phone # _____

Check here for address and telephone change

Dam's Prefix & Tattoo		Dam Breed		Dam Reg. #		Dam Year Born		Repro Code		Status Calving		Dam Disposal Code		AI PE ET (Check One Box)		A.I. Date/E.T. Implant Date		Pasture Exposed		Sire Breed		Sire Reg. #															
Calf Prefix		Calf Tattoo		Birth Date		Sex		H/P/S		Color		Birth Wt.		CE		# Born		Birth Group		Dam's Udder & Birth test		Dam temp		Calf Name (24 positions, including spaces - do not include prefix)		Calf Disposal Code											
Weaning Wt.		Weaning Ht.		Weaning Date		Weaning Group		Calf Temp.		Dam wt. @ wean.		Dam ht. @ wean.		Dam BCS @ wean.		Yearling Wt.		Yearling Ht.		Yearling Date		Yearling Group		Scrotal		Pel. Ht.		Pel. Wd.		Device		Register		Compute (Check One Box)		Transfer	
Dam's Prefix & Tattoo		Dam Breed		Dam Reg. #		Dam Year Born		Repro Code		Status Calving		Dam Disposal Code		AI PE ET (Check One Box)		A.I. Date/E.T. Implant Date		Pasture Exposed		Sire Breed		Sire Reg. #															
Calf Prefix		Calf Tattoo		Birth Date		Sex		H/P/S		Color		Birth Wt.		CE		# Born		Birth Group		Dam's Udder & Birth test		Dam temp		Calf Name (24 positions, including spaces - do not include prefix)		Calf Disposal Code											

Figure 1.

At the academic level, contemporary grouping is easy. But in real life it can create many difficult decisions but provides the ability to compare animals in an "apples" to "apples" approach. Keep these helpful hints in mind when completing your data to submit to the AGA office:

- Use group codes on the AGA registration application forms or AGA HerdTrack (see Figure 2) to put calves into contemporary groups according to how they were managed prior to weaning. Also, use the group code to put a sick calf in a single-animal contemporary group if performance is affected.
- Don't worry about grouping by sex, or ET status since the AGA performance

program handles those items automatically.

- Take weaning weights and measurements on all calves in a group on the same day (when a majority of the calves are between 160 and 250 days of age). Try to get as many calves as possible in one contemporary group.
- Weigh and measure all animals before separating them. If possible, weigh and measure all bulls before castrating. Try to weigh and measure before separating off show calves and bulls for test stations.
- Have more than one sire represented in a contemporary group when possible.

- Choose a day to take yearling weights and measurements when all animals are between 330 and 410 days of age.
- If an age spread is greater than 90 days, select two different weigh dates. Use the least number of weigh dates possible.
- Try to take scrotal circumference, pelvic area and hip height on the same day as yearling weights.
- Do not weigh each calf individually as it reaches 205 days of age.
- Do not include calves receiving special treatment (show, bull test or sale) in the same group with those who were not receiving special treatment.

Figure 2.

Animal Main

Tag: 32 Name: 32 Sex: Cow [Save]

Prefix: DTR Birth Date: 1/6/90 Disposal: 0 - Active [Cancel]

Tattoo: 32 1990 Registration: AMGV 263055 [Register... Register]

General Birth Weaning Yearling Health EPD Pedigree More...

Birth Calculations:

Breeding Type: Artificial Insemination

Birth Weight: 94 Breeding Date: 3/29/89

Calving Ease: 1 - Unassisted

Number Born: Single

Adj. Weight: 101

Ratio: 0

Rank in Group: 1

Number in Group: 1

Gestation Length: 283

Contemporary Group Code: 1

Work Order #: 19902270014

Comments:

Label 1: STG Label 2: SC Label 3: Label 4: [More >>]