A Critique of the May, 1994 Report of the Long Range Planning Committee of the Belted Galloway Society, Inc.

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Proposed amendments to the regulations of any breed registry should meet at least the following requirements:

a.) Proposed amendments should be available, accurately worded and clearly identified as proposed amendments, to at least every member voting on the proposal, well in advance of the call for a vote.

b.) Proposed amendments should be designed so as to minimize any negative impact on all breeders.

c.) Proposed amendments should not include any recommendations.

With breed registries where regulation changes are approved by the general membership, proposed changes should be made available to all members. In the case of breed registries where regulation changes are made by elected representatives, it is still advisable to inform the entire membership of proposed change. Without an informed membership, representatives do not receive the feedback essential for decisions to reflect the needs and wishes of the membership. The information shared with members and representatives should be complete, accurate, and timely; not just topical. Any amendment should be available worded essentially as it is proposed to be included in the regulations (except perhaps for spelling and grammar). Without accurate wording (and knowledge of where the proposal is to be included in the regulations) those voting on the proposal will not be able to accurately decide how the proposal is likely to be interpreted and thus administered. If those voting cannot confidently predict how a proposal is likely to be administered, they cannot predict how the proposal will ultimately effect the breed and breeders. Without that knowledge voting is meaningless.

Regulation changes should be proposed if, and only if, the overall benefit to the breed of the proposed change is perceived to out weigh any negative impact on individual breeders. Even then, every possible effort should be made to minimize the negative impact on every breeder. It is the regulations effected by the proposed change that should be addressed: not the conduct of breeders who have followed those regulations. Every breeder who has been following the rules should be protected. To do anything less would be morally irresponsible and an open invitation to litigation. Thus:

a.) No regulation change should ever be retroactive.

b.) All regulation changes should be presented and implemented in as positive a manner as possible.

c.) All major regulation changes should be phased in.

Whatever is perceived to be accomplished by a proposed regulation change is different from what was in effect when members made past decisions. The rules can change after-the-fact, but, because of the nature of the cattle industry, the breeder cannot backtrack and undo past decisions. It is not possible to undo a mating that produced a calf on someone else's farm twenty years ago plus all the matings on all the farms between then and now. Even changes that only make otherwise available information more accessible could be negative for some breeders. Inaccessibility could have been a criteria effecting past decisions.

Any attempt to make a regulation change retroactive will also have a problem with
accuracy. Information gathered from memory and/or records can often not be crosschecked with current observation.

In addition, beware of the gestation length and paperwork time lags. The decision to make a particular mating is made several months before the application for registration of the resulting offspring. Thus to make regulation changes effective immediately is to, in effect, make the change retroactive to the last breeding season.

A serious breeding program involves generations of cattle and years of carefully planned matings. Thus, given cattle, land, and time, cattle breeding can be a major investment. Even without any retroactive aspects, some regulations can significantly reduce the value of that investment for individual breeders. Any proposed regulation change that could reduce the value of any breeder's investment must be carefully introduced so as to minimize that impact. One 'trick' is to present every regulation change as positive as possible—present the change as an improvement not as a punishment. If, for instance, it is decided to make distinctions between populations of animals currently registered in the same manner, consider creating new sections in the herd book with new criteria. 'Promote' some animals but only in ways that minimize the perceived 'demotion' of others. Carefully chose all terms to be descriptive but neutral. Take special care to ensure that everything that the registry does implies to the public that the new sections are an improvement because they are more accurate, or, in some way, more useful. Do not label any section in a way that implies the animals in that section are better, and thus more valuable, than the animals in any other section.

A second 'trick' is to phase in wherever possible. The way a regulation change with a potential for negative impact is implemented over time can significantly reduce its impact on individual breeders. The main point to consider is that cattle breeding is a long term investment and that the cattle themselves have several productive years. A simple notification of future implementation may be sufficient. In other cases it may be necessary to identify those animals in the system negatively impacted by a regulation change. Those particular animals can then be exempted from the regulation change for a specified period of time, or, possibly, for the duration of their productive lives.

The regulations, and thus any proposed amendments to the regulations, of any breed registry should not include any recommendations. If a procedure is 'recommended' rather than mandatory because it is unimportant enough that it need not be compulsory, then the recommendation belongs in the newsletter or other general communication between the registry and its members. If a procedure is 'recommended' rather than mandatory because it is contentious or expensive then to put the recommendation in the regulations is to put an unfair financial and/or, political burden on those breeders conscientious enough to follow the recommendation. Instead, any major issues should be thoroughly investigated and the best course (or courses) of action to resolve the issues should be presented. An appropriate procedure should then be implemented as a regulation applicable to all. Any burdens then become more equally shared by those involved.

The Rules of the Belted Galloway Society, Inc. state that the "...rules may be amended... by a majority vote of Council at any meeting provided notice of the meeting shall have contained a copy of proposed...amendment..." (Section XII). Reports from the Long Range Planning Committee of the Belted Galloway Society, Inc. as printed in the U.S. Beltie News of April, 1994 and May, 1994 were presented at the Council meetings of April 30,1994 and September 16, 1994 respectively. It is doubtful, however, if either presentation could have been considered to have been proper notification of proposed amendments to the Rules. All the portions of the Long Range Planning Committee report that required amendments to the Rules were not identified. The sections of the Rules that would have to *be* amended were not identified. And, any amendments required were not formulated and identified as amendments. Amendments could have been proposed by individual members, the Long Range Planning Committee, the Council, or the Executive. This failure to propose amendments by anyone concerned is difficult to understand. However, given the extraordinary powers of Council to amend the Rules at any meeting and call a meeting at any time with any given notice, proposed amendments to implement all, or part, of the Long Range Planning Committee report could be on the agenda of a Council meeting at anytime.

The balance of this document will deal with the report of the Long Range Planning Committee of the Belted Galloway Society, Inc. as printed in the U.S. Beltie News of May, 1994. (The Long Range Planning Committee report will *be* quoted point by point and identified by indented box.) The report titled "Belted Galloways and the Belted Galloway Society, Inc." by Hugh R. Crawford dated September 20, 1994 will be referred to for background information. (Any page numbers in brackets will refer to pages in "Belted Galloways and the Belted Galloway Society, Inc.") The report of the Long Range Planning Committee will be critiqued point by point in the order in which those points were presented in the U.S. Beltie News of May, 1994. Thus, the order of those points in this document does not necessarily imply their relative importance. Nor does the order of those points in this document necessarily imply the significance of any errors or oversights by the Long Range Planning Committee.

"1. Breed Positioning. The committee unanimously agreed that the Belted Galloway breed has two marketable attributes, in order of importance: (I) Color and color pattern, and (2) beef qualities."

There is absolutely nothing unique about the colour of a Belted Galloway. There are countless black-and-white (and dun-and-white and red-and-white) cattle. What is unique about the Belted Galloway is its colour pattern. The confusing and equating of colour and colour pattern diverts attention away from the perennial Belted Galloway problem of colour pattern genetics. A usefill analogy would be to compare the Belted Galloway situation to a vehicle with a fuel problem. To carefully monitor the level of the fuel and/or change the fuel supplier will not correct the fuel problem if the cause is carburetor adjustment. Similarly with a Belted Galloway, to pay careful attention to the colour (i.e. the fuel) does not correct the coloration problem because the problem is in the colour pattern (i.e. the distribution of that fuel, the carburetor.) Thus drop the words "...Color and...". (See "Belted Galloways...", page 2.)

"2. The Herd Book is to be left basically as is, allowing for the registry of correctly marked purebreds, both females and bulls, and correctly marked 15/16 females from the grading-up process. Also included may be females with white below the dew claw that are otherwise correctly marked. Such females would carry a permanent 'W' as part of their registration number. Black, dun, and red Belted Galloways are acceptable in the Herd Book and in the Appendix."

It is excellent that the Belted Galloway Society, Inc. plans to register red Belted Galloways.

However, this section leaves the 'white below the dew claws' rule intact. This rule presents several serious problems that should be addressed:

a.) the rule has no genetic basis.

b.) the rule has misleading implications.

c.) the information collected by the tracking established with the rule is of little value in understanding the inheritance of white feet and legs. d.) the rule is ambiguous and potentially difficult to administer as written.

At the very least, the phrase 'below the dew claw ' should be changed to read "below the level of the dew claw". (See "Belted Galloways...", pages 5 & 6.)

"3. Appendix registry will be continued with the following changes: Base females will continue to be unlimited as to breed but the breed of the base female must be designated utilizing the established breed code, and will remain part of the registry number. It is recommended that base cows be solid black or red and be genetically polled."

The base female in the Appendix must not be allowed to continue to be "...unlimited as to breed..." This flaw in the upbreeding program of the Belted Galloway Society, Inc. is possibly the single most significant error in the regulations of the Society. Until this error is corrected it will not be possible to control mismarking in the American Belted Galloway. (See "Belted Galloways...", pages 3 & 4.)

The breed of a base female in the upbreeding program can only be designated if the breed is documented, i.e. if the animal has a pedigree. All other base females must be designated 'XX' for 'Crossbred'. To use breed codes for other than pedigree animals of other breeds constitutes fraud. In addition, to allow any breed code designations without pedigrees would render the entire breed code designation procedure meaningless. The object is to provide useful background information, yet, without a pedigree, there is no background. An unpedigreed breed code, in effect, fabricates that missing background. If some background information is fabricated, and the fabricated information is not identified, any search through background information is useless. Note also that, although it may be useful to affix the breed code of pedigreed base females to percentage Belted Galloway registration numbers, breed code affixes must not be retroactive.

It is appropriate for the Long Range Planning Committee to make recommendations to the Council or to the membersliip. But it is not appropriate for a recommendation to make its way into the Rules.

The base females used must be more than just solid coloured and polled. The base females used must be homozygous solid coloured and homozygous polled. The only practical source of such females is the pedigreed females of solid coloured, polled breeds. (See "Belted Galloways....", page 4.)

There seems to be some confusion in the Belted Galloway Society, Inc. over the meanings of the words "hornless' and 'polled'. 'Hornless' is to not have horns. 'Polled' is to not be able to grow horns. Thus, although not all hornless animals are necessarily polled, all polled animals are genetically polled.

"4. Denotations in the Herd Book:
a) In both the main Herd Book and the Appendix, color will be denoted as part of the registration number. All dun animals will cany the letter T)'. All red animals will carry the letter "R'. Black animals will be undesignated."

Denoting colour as part of the registration number can be useful however denote black animals as 'B' do not leave them undesignated:

a.) Every effort should be made wherever possible to treat all animals equally. To leave black animals undesignated implies that they are different.

b.) An undesignated category as proposed will eventually include two groups of animals: the blacks that it is designed for and all errors where the colour designation has been omitted.

Is the colour designation to be a prefix or a suffix? With an Appendix designation, a percentage designation, a base breed designation, a mismark designation, and a colour designation, a registration number could become confusing. One alternative would be to put the colour designation in the name of the animal.

> **"4. Denotations in the Herd Book**
> **b.) In the Appendix registry the registration number will begin with the letter 'A'. Following the registration number the percentage blood of Belted Galloway and the base cow breed will be listed. Example: AOOOOX3/4BG-AN."**

Purebred males with upbred ancestry are not 100% Belted Galloway. Thus Appendix females sired by purebred males with upbred ancestry are not exactly 1/2, 3/4, or 7/8 Belted Galloway. One alternative would be to use percentages rather than fractions. (See "Belted Galloways...", page 4.)

> **"4. Denotations in the Herd Book:**
> **c.) In the Herd Book the breed of base cow will continue to be carried for animals attaining Herd Book status from the grading up process. Example: OOOOPB-AN."**

The rational behind an upbreeding appendix program is that at 15/16 or more of one breed the 1/16 or less of any other breeds is considered to be insignificant. If 1/16 or less is insignificant, then 1/16 or less does not warrant designation. The registration papers of purebred cows of Appendix origin would still bear base cow breed designations for two generations after entering the Herd Book as affixes to the registration numbers of the dams and grandams listed in the pedigree.

> **"5. Color designations for females in the Appendix. The following denotation will follow the registration number: MI = incomplete belt; M2 = no belt; M3 = white feet; M4 = white elsewhere on the body."**

The Belted Galloway has long needed a tracking procedure for mismarking. A tracking procedure could simultaneously fulfill two essential functions:

a.) collect raw data for use by professionals in a scientific interpretation of the mechanisms of inheritance involved in mismarking.

b.) identify individual mismarked animals and their ancestry for use by breeders in planning matings.

However, to fulfill both functions a 'genetically friendly" tracking procedure would probably have to be designed in consultation with persons knowledgeable in the inheritance of bovine colour patterns. The mismark tracking program outlined in the Long Range Planning Committee report does not fulfill the first function and, therefore, only partially fulfills the second. (See "Belted Galloways...", pages 6 &7.)

There are four problems with the mismark tracking program as outlined:

a.) Some terms are not self-explanatory. What is an incomplete belt? Does white feet also include white hooves and/or white legs? Does 'white elsewhere on the body' include extra wide belts.

b.) Some forms of mismarking are grouped together, e.g. 'white elsewhere on the body".

c.) Some forms of mismarking are omitted. The entire group of mismarkings that involves extra colour (or lack of white) is represented by only one category, i.e. incomplete belt.

d.) One form of mismarking that should be culled is instead tracked and thus encouraged to be retained and used, i.e. no belt.

Animals with Belted Galloway parentage but with no belts fall into one of two categories:

a.) Most non-belted animals with Belted Galloway parentage did not inherit any genetics for belting from either parent. Thus, if only the sire was belted, the sire was heterozygous belted. And, if both the sire and the dam were belted, both the sire and the dam were heterozygous belted. These non-belted animals are themselves homozygous non-belted.

b.) A few non-belted animals with Belted Galloway parentage inherited the genetics for belting (probably only one gene and are thus heterozygous) but also inherited enough modifying genetics to 'shutoff or 'cover-up' the belt. Although these animals do not have an obvious belt, they are actually extremely imperfectly belted. Only a breeding test involving matings to homozygous solid coloured animals can differentiate between these two types of non-belted animals.

The first type of non-belted animal—those with no belting genetics—should only be used in a Belted Galloway breeding program as base animals to produce half bloods. (Note: This is the first type. Only a breeding test can differentiate between the first and second types.) The belted progeny of these 'first-type' non-belted animals mated Belted Galloway will, like all half bloods, be heterozygous belted. Half of the progeny of these first cross animals, when mated to homozygous belted animals, will also be heterozygous. As will one-quarter of the grandchildren, one-eighth of the great-grandchildren, etc. All inheritance is particulate: a gene is never diluted out. Through time (i.e. successive matings) a gene becomes more diffused through the population, and thus more difficult to find, but the gene does not disappear. In fact without negative selection pressure (in this case an active test for, and elimination of, heterozygosity), the frequency of occurrence of a gene in the population remains constant. To use 'first-type' non-belted animals other than to produce half-bloods is to restart the diffusion of non-belting in the Belted Galloway population at a point farther into the upbreeding process.

The second type of non-belted animal—those with extreme modification—should never be used in a Belted Galloway breeding program. The modifiers that shutoff belts, put spots in belts, and/or take bites out of belts are, to the Belted Galloway, genetic defects. Any animal with enough modification to completely shutoff or cover-up a belt should be treated like any other seriously genetically defective animal. They should be culled.

In review:

a.) There are two types of non-belted animals with Belted Galloway parentage.

b.) The first type of non-belted animal has limited use.

c.) The second type of non-belted animal should not be used.

d.) The two types of non-belted animals can only be differentiated by breeding tests involving matings to homozygous solid coloured animals.

Therefore, the Belted Galloway Society, Inc. should discourage the use of non-belted animals with Belted Galloway parentage.

At the present time, non-belted animals with Belted Galloway parentage can be registered in the Appendix to the Herd Book of the Belted Galloway Society, Inc. Luckily, most Belted Galloway breeders have enough common sense not to register them. However, to create a specific mismark tracking category for non-belted animals with Belted Galloway parentage will encourage their registration, and thus, indirectly, encourage their use.

"6. Tattoo Procedures. Every animal registered or recorded must be tattooed, preferably in the left ear, with

tattooing in both ears laeing optional. Tattoo must include a letter designating year (such as T)' for 1994) as the first character, followed by up to three numbers. A maximum of four characters (alpha numeric) are allowed. An optional farm designation of up to three letters to be selected by the breeder is allowable, and must be tattooed in another location in the left ear. Any breeder using such a farm/ranch denotation must have same on record with the Secretary of the Society."

First, nine problems with the tattoo procedure as outlined:

a.) With tattooes restricted to either the left ear or both ears, animals with no left ear could present a problem. Instead specie the ear of choice and oblige the membership to report the location of the tattoo.

b.) Although a year letter designation is currently used in most countries other than the U.S.A., the use of year letters is, unfortunately, not internationally standardized. The letter used, the year used, and the letters omitted vary from country to country. In Canada, 1994 is T)'; the year is the calendar year, and the letters I, 0, Q, and V are not used.

c.) The tattoo should be placed in the ear such that when the tattoo is recorded on paper the numbers are between the year letter and the herd designation. Thus if the herd designation is above or to the left of the 'year-letter-number' tattoo, the year letter should be a suffix. And, if the herd designation is below or to the right, the year letter should be a prefix.

d.) The 'year-letter-number" tattoo should not be restricted to four characters. If there is a legitimate reason to keep the numbers small, require each breeder to start each year at number one and number the year's calf crop consecutively. To restrict the tattoo to three numbers is to restrict the size of the largest herd (or ownership unit) to less than one thousand animals.

e.) The phrases 'herd letters' or 'herd designation' are more accurate terms to use than 'farm designation' or 'farm/ranch designation'. The letters are assigned to an owner for exclusive use in a particular herd. The farm or ranch that the herd resides on is not important. More than one herd may share the same farm or ranch. A herd may occupy more than one farm or ranch at any given time. And a herd may be moved from one farm or ranch to another.

f.) A herd designation should be two or more letters. A one letter herd designation could be confused with a year letter.

g.) Some breed registries have found it necessary to allow up to four letter herd designations in order to have enough appropriate combinations available.

h.) Herd designations must be more than just "...on record with the Secretary..." Each herd designation must be unique: do not allow any duplicates.

i.) It is appropriate to charge a fee for registration of herd letters, to have a procedure for the forfeit of herd letters (e.g. non-use for an extended period), and to have a procedure and fee for the transfer of herd letters.

The most important issue with regard to tattooes, however, is that the registry should require herd designation letters and no pedigree should be issued without a herd letter tattoo in place. It is essential that all pedigreed animals in any given breed be uniquely, permanently identified (i.e. have a unique tattoo). If tattooes can be duplicated then animals can be confused. If the identification of any given pedigreed animal in the breed could be confused with that of another, then all pedigrees in the breed are questionable. Accuracy of pedigree is what breed registry is about. The simplest, most effective way to ensure that all permanent identifications (i.e. all tattoos) are unique is to use registry coordinated herd designations. The combination of herd letters, animal number, and year letter makes each tattoo unique regardless of sex, year, or owner. The work in tattooing is in catching and restraining the animal not in applying the tattoo pliers. Once tattooing is in progress, the application of an additional herd designation takes only minutes. (See "Belted Galloways...", pages 14 & 15.)

" 7. Blood Typing Program to consist of:
(1) Selecting and contracting with a blood typing laboratory to handle all Belted Galloway blood typing, the results of which would be furnished to the breeder and would be kept on permanent record by the Society."

Do not make arrangements with a laboratory that in any way obliges the laboratory to share all its Belted Galloway results with the Belted Galloway Society, Inc. Breeders should be allowed to use the laboratory of their choice for private work. The laboratory of choice would probably often be the laboratory with the most Belted Galloway experience—the one contracted to the Belted Galloway Society, Inc.

"7. Blood Typing Program to consist of:
(2) Requiring that all sires utilized through A.I. be blood typed, and all donor cows, sires, and calves in E.T. programs be blood typed, and the results be kept on permanent record by the Society. Costs are the responsibility of breeder."

'Blood typing' (a technical laboratory process) has been confused with 'parentage
verification' (a professional interpretation of laboratory results). A.I. sires should have a blood. type on file as a reference for possible future parentage

verifications. But, E.T. calves should require parentage verification as a condition of registration. Parentage verification is essential to demonstrate that a calf is the result of E.T. and not the natural offspring of a recipient dam. (See "Belted Galloways...", page 16.)

Parentage verification through the comparison of blood types is readily available and reasonably priced. However, blood type comparison is not the only form of parentage verification available. Also, blood type comparison is not necessarily the most accurate form of parentage verification available. The Belted Galloway Society, Inc. should allow the use of other forms of parentage verification; most notably, parentage verifications utilizing DNA (chromosome) comparison.

> **"7. Blood Typing Program to consist of:**
> **(3) Requiring Society pre-approval for all multiple-sire matings, based on blood typings."**

Multiple-sire matings may be appropriate under some circumstances. However, multiple-sire matings are still considered to be questionable breeding practice by most breed registries. All progeny of all multiple-sire matings should be parentage verified. The blood types of the sires are irrelevant, and can thus be an unnecessary restriction on the groups of sires used, if the parentage verification used depends on DNA comparison. With a three part parentage verification program as outlined below, it is not necessary to have a specific multiple sire regulation (and thus draw attention to the practice). Under the program as outlined below all progeny of all multiple-sire matings would automatically require parentage verified because all parentage would questionable.

> **"7. Blood Typing Program to consist of:**
> **(4) Requiring random blood typing on every 25th male and every 100th female calf registered, and the calfs sire and dam to be blood typed, within 180 days of the Society's request. Blood samples to be taken by a licensed veterinarian. Required random blood typing costs to be funded by the Society."**

This section again confuses 'blood typing' (the technical process) with 'parentage
verification' (the professional interpretation). Again, the Belted Galloway Society, Inc. should not be restricting itself to the use of the 'blood-type-comparison' form of parentage verification.

A parentage verification program should involve three aspects:

- **a.) obligate the membership to verify all questionable parentage.**

b.) empower the registry to request the parentage verification of any animal to be entered in any section of the herd book.

c.) implement a random parentage verification program.

Random parentage verification can effectively encourage accuracy and discourage dishonesty if the program involves an element of surprise. Thus do not test, for example, every one-hundreth female. Instead test a long term average of one out of every one hundred females. No breeder should be aware of when the next test is due. Unless there is a major problem with inaccuracy and/or dishonesty, the element of surprise can add enough significance to random parentage verification that it is necessary to actually test very few animals. Two or three a year could suffice. (See "Belted Galloways...", page 14.)

Occasionally when an individual animal is selected for random parentage verification the necessary tests cannot be completed because a sire or dam is not available. When this occurs the herd should be considered to have been selected for a parentage verification rather than a specific animal. The 'countdown' to the next parentage verification should continue uninterrupted. The registry then continues to pick animals, at random, from the selected herd until a parentage verification can be completed. In some cases it may be necessary to use an animal from a subsequent calf crop.

Many breed registries with an upbreeding provision use the term 'registration' to refer to pedigrees for purebred animals and the term 'recordation' to refer to pedigrees for percentage animals. Section D, Rule 2 of the Rules of the Belted Galloway Society, Inc. implies that the Society also makes a 'registered-recorded' distinction. If the Society does make a 'registered-recorded' distinction, this portion of the Long Range Planning Committee report refers only to purebreds 'registered' in the main Herd Book. [The previous point in the report ("6. Tattoo Procedures ...") uses both terms—registered and recorded.] It is not clear, however, if the Belted Galloway Society, Inc. makes a consistent 'registered-recorded' distinction. If a distinction is intended the two terms are confused at least four times in the Rules. At three points 'recorded' should read 'registered': Section D, Rule 2, e), (i). A; Section D, Rule 2, e), (i), B; and Section Q, Rule 2, e), (ii), G, (1). And at one point 'registered' should read 'recorded': Section H, Rule 2, e). (i), C. Random parentage verification should apply to both purebred and percentage animals in both the Herd Book and the Appendix.

Blood samples for parentage verification should be drawn by a licensed veterinarian other than the owner of any of the animals involved. The Belted Galloway Society, Inc. should not be responsible for the costs involved in a random parentage verification that fails. The Society should consider itself responsible for only those costs over which it has some control (i.e. the laboratory costs). In addition, the breeder should be responsible for any laboratory costs greater than the costs of a standard 'blood-type-comparison' parentage verification.

> **"After discussion. Council also agreed that institution of the tracking system (extended registration numbers) would be started retroactively with all Herd Book entries to date, and that the base cow's breed designation as originally submitted by the breeder would be used in the code, whether or not the base cow was registered purebred of another breed."**

Never make any regulation change retroactive. The problems of the Belted Galloway Society, Inc. are caused by inappropriate regulations over an extended period of time. Correct the causes of those problems. Do not go on a witch hunt. Flagging animals will not solve any of the problems of the Belted Galloway Society, Inc. if the causes of those problems remain. Flagging animals will, however, impose unfair financial hardship on members whose only''crime' has been to follow the rules. The Rules, and the Councils who made and administered the Rules, are to blame for the current problems of the Society: not the members who have been following the Rules. The Belted Galloway Society, Inc. has a moral (and legal?) obligation to protect the investment of its members.

Do not use a breed code, other than "XX' for Crossbred, for any unregistered base cow. To use a breed code other than "XX when there is no pedigree is fraud. To use a breed code other than "XX' when there is no pedigree is to fabricate a background and thus contaminate the registry with disinformation.

Belted Galloway animals have problems in two general areas: colour pattern and beef production. There is, at least in part, a causal connection between the two problem areas. Persistent colour pattern problems have significantly harmed beef production characteristics. With persistent colour pattern problems Belted Galloway breeders must continually re-select for colour pattern. And with a constant need for colour pattern selection, less emphasis can be put on beef production characteristics. (See "Belted Galloways...", page 2.)

Colour pattern problems or mismarking can be divided into three main groups by cause:

- **a.) those without a specific genetic cause.**
- **b.) those caused by a lack of belting genetics.**
- **c.) those caused by the addition of other colour pattern genetics.**

The first—no specific genetic cause—is a random result of the action of the belting gene in the early stages of development of the fetus. This form of mismarking cannot be predicted and thus cannot be planned against or worked with. It is a possible cause of some imperfect belts. The second—the lack of belting genetics—causes only one form of mismarking, i.e. no belt. The third—the addition of other colour pattern genetics-causes most forms of

mismarking. (Even a few 'no-belts' are caused by extraneous colour pattern genetics.)

The main source of the genetics for the extra colour patterns that cause most of the mismarking in the American Belted Galloway is an error in the upbreeding program of the Belted Galloway Society, Inc. That error is to not have any colour pattern restrictions on the base females used to produce half-blood Belted Galloways. Base females with the genetics for other colour patterns pass some of that genetics for extra colour patterns on to their half-blood offspring. In other words, half-bloods from dams with extra colour pattern genetics inherit mismarking genetics directly from their dams and, in turn, pass that mismarking genetics on to subsequent generations. Thus, females with any colour pattern genetics other than the original (or "wild') type, i.e. solid coloured, should not be used as base females to produce half-blood Belted Galloways.

Base females should therefore be homozygous solid coloured. The only practical source ofhomozygous solid coloured females is the pedigreed females of solid coloured breeds. Given that the Belted Galloway is polled, and that polled is dominant to (and can thus cover up) horns, there should be a second restriction on base females. They should also be homozygous polled. Again, the only practical source ofhomozygous polled females is the pedigreed females of polled breeds. The Belted Galloway registries in the United Kingdom, Canada, and Australia have always restricted any non-Belted Galloway in the pedigree of Belted Galloways to pedigreed animals of solid coloured, polled breeds. The Belted Galloway Society, Inc. must do the same.

It follows then that the three most urgent problems facing the Belted Galloway in the U.S.A. today are:

a.) To cut off the source of extraneous colour pattern genetics, i.e. to stop adding more mismarking through the use of inappropriately colour patterned base cows in the Appendix.

b.) To control the mismarking already incorporated into the population, i.e. to monitor mismarking and assist breeding decisions in consultation with appropriately qualified personnel.

c.) To correct the mismanagement that lead to the current situation, i.e. to reform the organization of the Belted Galloway Society, Inc.

The May, 1994 report of the Long Range Planning Committee:

a.) does not propose closing the hole in the Appendix through which new mismarking genetics continually enters the Belted Galloway population.

b.) does not initiate a genetically constructive mismarking identification and education program.

c.) does not address the organization of the Belted Galloway Society, Inc.

Instead, the May, 1994 report of the Long Range Planning Committee:

a.) proposes to initiate a witch hunt that could significantly reduce the value of the cattle belonging to some members.

b.) proposes to contaminate the herd book with disinformation.

c.) proposes to encourage the spread of non-belting through the Belted Galloway population.

As well as a host of other suggestions that are confused and inappropriate but not necessarily destructive.

The only recommended change, totally appropriate and constructive for the Belted. Galloway, as presented in the May, 1994 report of the Long Range Planning Committee is to recognize red Belted Galloways.

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