

Beef Cattle Identification

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A workable system of identification is basic to an accurate beef cattle records program. Purebred herds must keep accurate records for registration purposes. Purebred and commercial cattle must be accurately and positively identified for production records and culling purposes.

Methods

The herd owner must select a method of identification which will be positive, simple, easy to read and economical. The various methods are described as follows:

1. **Metal Ear Tags** - Self-piercing aluminum or steel ear tags are inexpensive and easy to apply. They work especially well for identifying calves at birth and are the only identification needed up to weaning. This type tag should be placed on the top side of the ear near the head, leaving at least 1/2 inch for growing room. If the tag is put into the ear too tightly on the young calf, infection may result.
2. **Tattoos** - Tattoos are essential on purebreds. Tattooing may be done on the baby calf but is generally more satisfactory if done 3 to 7 months of age. Needed equipment includes the tattoo instrument, a clean rag or cotton, and rubbing alcohol or other cleansing agent for removal of dirt and wax inside the ear, and tattoo ink (paste type). The same number should be tattooed in both ears in the clear area above the top rib of the ear. Once the ear is cleansed, the tattoo instrument

is used to perforate the desired number in the skin. Ink is then vigorously rubbed into the perforations with the thumb or forefinger. The tattoo instrument should be disinfected between cattle.

3. **Large Rubber-type Ear Tags** - There are several types of these easily readable, large, flexible tags on the market. The smaller size tags are excellent for use on young calves up to weaning age, while the large size ones are very good for young cattle as well as cows. These tags can be ordered pre-numbered or as blanks with ink, allowing the user the option to number the tags. This type tag should be applied according to manufacturer's instructions and may be expected to last some 3 to 5 years. Losses should be minimal, but some tags will require replacement.
4. **Hot Iron (fire) brands** - Fire brands are satisfactory and practical for number or ownership (holding) branding. Fire brands are quickly applied and inexpensive, producing a permanent, hair-free scar in the shape of the iron used. Hair should be clipped in the fall or winter ahead of calving to make brand numbers completely legible. A certain degree of experience is needed in applying fire brands. Overbranding or underbranding produces poor legibility.

Equipment Needed includes:

- (a) **Irons** - a complete set of number irons (0 thru 9) with 4 to 6 inch numbers with 1/4 or 3/8 inch thick faces. Commercially available electric branders work well also.

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- (b) **Heater** for irons (wood or bottled gas for fuel).
- (c) **Clippers** - cattle clippers or sheep shears.
- (d) **Chute** - a substantial squeeze chute for firm restraint of the animals.

Branding Procedure is as follows:

- (a) **Placement** - Brands are usually placed on the hip, but may be placed on the rib, shoulder or thigh.
- (b) **Age of Animal** - Normally for identification purposes, only yearling replacement heifers and cows are branded. Holding brands may be put on any age animal including young calves.
- (c) **Clip Hair** - Clipping the brand site is not mandatory but is recommended.
- (d) **Apply Iron** - The iron should not be too hot. It should be ash grey in daylight or cherry red if held in the bottom of a 5 gallon bucket. Hold iron on skin firmly with slight rocking motion until the branded area is a rich buckskin color. Avoid overbranding and never brand wet cattle.

5. **Freeze Brands** - Freeze brands excel for permanent number or holding branding of animals with black or red hair coats. Freezing produces a white hair number or figure due to killing color producing cells in the hair follicles via freezing with a super-cooled iron.

Equipment Needed

- (a) **Chute** - squeeze preferable.
- (b) **Irons** - a complete set (0 thru 9) of 4 inch number irons (copper) with either 3/8 or 5/8 inch thick faces for yearling and adult cattle. Smaller irons for young calves.
- (c) **Clippers** which will clip very close to the skin (small animal clippers or cattle clippers with special thin blades). Close clipping is mandatory.
- (d) **Coolant** - either dry ice and alcohol (95

percent ethyl, methyl or isopropyl) or liquid nitrogen.

- (e) **Insulated Container** - for coolant and irons. A styrofoam picnic cooler is excellent for dry ice and alcohol, but a wide-mouth container is preferred for liquid nitrogen.

Branding Procedure

- (a) **Cooling Irons** - For dry ice and alcohol, break the ice into small pieces in the container and pour in sufficient alcohol to cover heavy portion of irons. Proportions are not critical. Add dry ice as needed. For liquid nitrogen, pour into the container a sufficient quantity to cover the heavy part of the iron. Keep irons in coolant. Irons are as cold as the coolant, and ready to use or reuse, when bubbling over the iron has subsided.
- (b) **Prepare area** to be branded by first clipping as closely as possible then cleansing the clipped area with a brush if necessary. Finally, wet and clean the area with air temperature alcohol.
- (c) **Apply Super-cooled Iron** - with firm pressure hold each iron on the prepared area for the correct time. Underbranding, caused by too little time, produces poor results, while overbranding, caused by too much time, kills hair follicles and produces a hair-free brand. Use a stop watch or one with a sweep second hand to time according to the table below:

Age of Animal	Contact Time (Seconds)	
	Dry Ice Alcohol	Liquid Nitrogen
Up to weaning (4-8 mo.)	25	15
Yearling (9-18 mo.)	30	20
Adult (over 18 mo.)	35-40	25-30

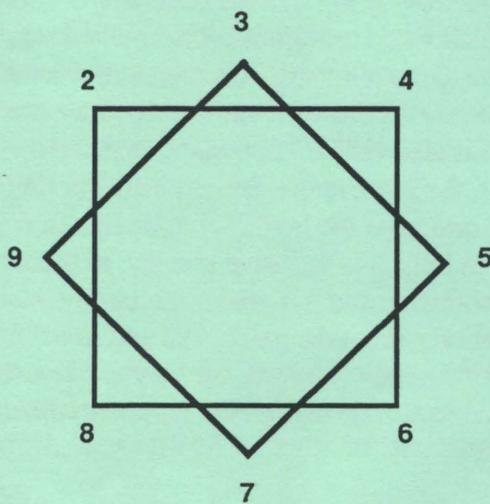
Mature animals with thicker hides should use the higher times.

- (d) **Results to Expect** - The super-cooled iron freezes the skin. As it thaws, swelling and

reddening will be observed. When hair grows back, it will be white. The white hair number will be complete in about 3 months.

Branding can be done anytime but the best time is in the fall or very early spring, coinciding with normal hair regrowth patterns.

There is a code system which can be used in lieu of numbers. Only two irons are used (| and L) though 2 or 3 of each will speed the job.



- | | |
|------|------|
| 1= | 6= ⌋ |
| 2= ⌒ | 7= ∨ |
| 3= ^ | 8= ⌑ |
| 4= ⌓ | 9= < |
| 5= > | 0= — |

Example: 0236= — ⌒ ^ ⌋

Systems

The two major criteria of a workable identification system are that it be simple and prevent duplication. There are two basic systems for consideration.

1. Identifying Calf with Dam - This system is designed for use in herds where cow herd numbers are randomly assigned and it works best in small to medium size registered herds where identification of calves to correspond to dam herd numbers is desired. The calf number (tattoo and

ear tag) is the same as the dam's herd number except that the last digit of the year of birth is added as either the first or last digit of the number.

Example -Using year designation 5 for birth year 1985.

Dam Herd Number	Calf Number
50	550 or 505
251	5251 or 2515

The same system is workable using an alphabetical letter for birth year designation such as T for 1985, U for 1986 and so on. Under this system a heifer retained for herd replacement will not be assigned a herd number identical with her tattoo and ear tag but will be assigned a unique herd number different from any other cow in the herd.

2. Identifying Calves Consecutively Within a Year - This system is preferred by most commercial cattlemen and operators of all sizes of registered herds. It is generally preferable to use consecutively numbered ear tags for tagging calves at birth. The last digit of the year of birth is the first number on the tag, designating year of birth. For example, in herds of up to 100 cows, tags for 1985 are numbered 501 to 599. In herds of up to 1000 cows, tags are numbered 5001 to 5999. Calves so tagged at birth can be tattooed with the same number then or when worked at a later time (3 to 7 months) if tattooing is needed or desired.

Any heifer retained as a herd replacement will be assigned a herd number (big ear tag or brand) the same as her calf number. Thus, no animal ever has but one identification number. Under this system there should be no confusion nor duplication in a 10-year period.

One can prevent any possible duplication of numbers which might possibly occur in replacement females when this system is used longer than 10 years. To guarantee no duplication, it may be desirable to assign the low numbers in a year to heifer calves and the high

numbers in that year to bull calves for the first 10 years and switch to low numbers for bulls and high numbers for heifers at the start of the second 10-year period.

For example, if the system is initiated in 1985:

	Heifer Calves		Bull Calves	
	Under 100 cows	Over 100 cows	Under 100 cows	Over 100 cows
1st 10Year Period Beginning 1985	501 up to 549	5001 up to 5499	550 up to 599	5500 up to 5999
2nd 10Year Period Beginning 1995	550 up to 599	5500 up to 5999	501 up to 549	5001 up to 5499

Another system of designation year is to use an alphabetical letter (such as T for 1985) as the first character in the calf ear tag and tattoo number. This system absolutely prevents duplication. In the year 1985 in a herd up to 100 cows, the number series would begin with T01, and in a herd up to 1000 cows with T001, and in either case run consecutively.

Some breeders like to use an alphabetical letter as the first character of the calf number to designate ownership. This practice is most useful in small herds.

No system should require more than four characters (alpha and/or numeric) in an animal's number.

Use of Animal Number in Registered Name

This applies only to registered animals. For the sake of simplicity and usefulness, it is highly desirable to carry the tattoo number in the registered name. Anytime the registered name is seen, the tattoo number is also visible. In naming registered animals, the farm, ranch, breeder name or prefix used to designate the herd should be first in the name. In bulls it is the usual practice to use the sire line designation and in females the family line designation next in the name. An additional unique name for the individual may or may not be used. The final part of the name is the tattoo number. For example:

Breeder designation - Boulder Farm. A 1985 bull calf tattoo **T13** by **Clearview Consort 904** could be named **Boulder Consort T13**. A 1985 heifer calf tattoo **T69** out of **Boulder Butterfly 873** could be named **Boulder Butterfly T69**.

Keep names simple, yet meaningful.