



Hey Neighbor

## For The Love Of Horses

By Frank J. Buchman

### Freeze brands are a popular form of horse identification

Today's most popular, convenient and recognizable method of horse identification is freeze branding.

While the majority of horses today still have no permanent identification, many owners now feel the need for identifying horses in case of theft and to discourage fraudulent practices with registration papers. Other horse owners want to distinguish the horses they have bred, and some breeders desire to identify specific animals within their own herds.

Hot iron branding, as done in the West over a century ago, is still used by some horsemen, but it is sometimes considered less humane and will often result in a blotched, unreadable brand.

Microchip implants are sometimes used for permanent horse identification, but are invisible and can

only be read with a scanner. Lip tattoos are permanent identification on race horses and only require a check of lips to read.

Registration papers and photographs can be used for identifying horses in limited situations, yet they are usually not readily available and can be fraudulently altered.

Brands on horses once had a bad connotation, indicating ownership had changed several times and the animal might be an outlaw. That attitude has generally changed with most horsemen only considering a brand permanent identification. Show judges largely accept that branding has no detrimental effect.

Ownership brands are typically on the shoulders or hips, but some owners prefer a brand on the horse's jowl. Side brands are uncommon on horses.

More owners are now

also number branding their horses vertical on the hip near the tail, for individual herd identification. This is typically done in large operations where many of the horses look similar, such as all being white in color.

Branding regulations vary from state to state. A brand can not be chosen and used at random. In Kansas, brands and their locations on horses must be registered with the brand division at the Kansas Animal Health Department in Topeka.

"Freeze branding became popular because it is safe, economical and easy to do," according to Melanie Pittman, Belle Fourche, S.D., horse breeder who has been freeze branding horses for five years.

"The freeze brand is legible, permanent and can be read from a distance and is

relatively painless for the horse," Pittman added.

Two different follicles in hair are affected by contact to cold branding irons: the pigment producing follicle and the hair shaft growth follicle. Contact time is regulated to destroy the ability of the pigment producing follicle without affecting the hair shaft growth follicle. As such, a brand can be applied that discolors (whitens) the hair at regrowth.

If the contact time is lengthened, the cold will destroy both the pigment producing and hair shaft growth follicles, so there will be a hairless or "bald" brand.

"Irons made of brass or copper give the best results for freeze branding because

they hold the cold better," Pittman said.

Existing metal hot brand irons can be used, but they may not give the best results. Several companies make brands to owner specification, and some welders have the ability to make branding irons. Number brands are readily available from many firms.

"Consideration should be given to the size of iron used, because the brand will grow with the horse. We use a smaller iron for colts," explained Pittman, who had just branded their weanlings a few days earlier.

The Pittman uses a 1 1/2 to 2-inch iron for foals and only a 3-inch brand for mature horses.

She recommended liquid nitrogen, such as used in storing frozen semen, for cooling the branding iron. A mixture of dry ice and alcohol can also be used, and is a preference of others. Liquid nitrogen is available from frozen semen distributors, while dry ice can be hard to locate in certain areas.

It is best to have a chute or stocks to keep the horse confined, with three people assisting during the procedure. "Twitching the horse might be needed to maintain a good brand contact," Freeman said.

The area to be branded should be shaved with a No. 10 surgical clipper blade in a square area two or three times larger than the brand.

When the branding irons are first exposed for cooling, the liquid nitrogen in a small styrofoam cooler will bubble for a minute or more, Pittman said. Irons are cool when bubbling is minimal.

The clipped area should be soaked with 99 percent alcohol from a squirt bottle to provide a good medium of temperature transfer. "It is important to use the 99 percent alcohol because it gives a cleaner surface, conducts cold better and does a better job of branding," Pittman said.

"Wearing a glove for hand protection, the brander should squarely apply the cooled iron to the site," Freeman recommended. "Use a gentle rocking mo-

tion for the required time to insure good contact."

Timing with a stop watch is critical, and experience is the best teacher, with recommendations varying from person to person.

Freeman suggested seven to eight seconds for dark horses and 12 to 13 seconds for light horses. Pittman said they brand dark horses 10 to 12 seconds

and light horses 15 to 17 seconds. Irons generally need to be left on longer during the cold time of the year.

After removing the iron, brand marks will appear indented, and in about 10 minutes a raised welt will be visible. In one to two months, the top layer of skin sheds, and after two to three months, white hairs start growing in.

If the brand is streaked or does not show up, length of branding was too short.

Some horse supply catalogs have advertised a procedure using a stencil of the brand, holding it against the horse and spraying an aerosol coolant onto the hair to freeze brand. No more information was readily available.

## Correction to last week's edition

The "For the Love of Horses" column on freeze branding was missing an identification of a source.

David Freeman is an equine specialist with the Oklahoma State Extension Service.

Freeman detailed that two different follicles in hair are affected by contact to cold branding irons: the pigment producing follicle and the hair shaft growth follicle.

Contact time is regulated to destroy the ability of the pigment producing follicle without affecting the hair shaft growth follicle. As such, a brand can be applied that discolors (whitens) the hair at regrowth.

If the contact time is lengthened, the cold will destroy both the pigment producing and hair shaft growth follicles, so there will be a hairless or "bald" brand, Freeman said.

## Freeze Brands Popular Horse Identification

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"Freeze branding became popular because it is safe, economical and easy to do," according to Melanie Pittman, Belle Fourche, S.D., horse breeder who has been freeze branding horses for five years.

"The freeze brand is legible, permanent and can be read from a distance and is relatively painless for the horse," Pittman added.

"Also called cryogenic branding, freeze branding uses extreme cold to alter the growth of the hair in the brand contact area," described David Freeman, Oklahoma State Extension equine specialist.

Two different follicles in hair are affected by contact to cold branding irons: the pigment producing follicle and the hair shaft growth follicle, Freeman related.

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Existing metal hot brand irons can be used, but they may not give the best results. Several companies make brands to owner specification, and some welders have the ability to make branding irons. Number brands are readily available from many firms.

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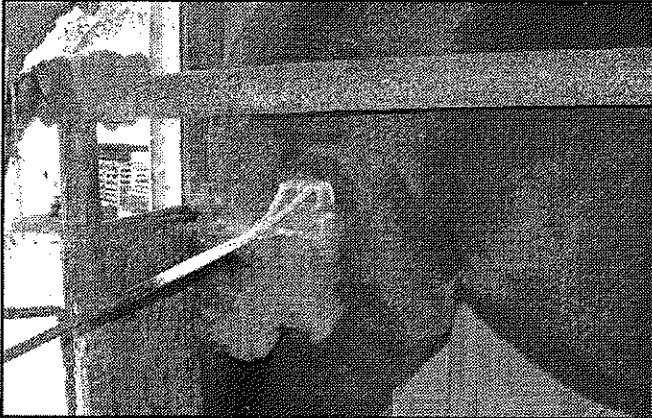
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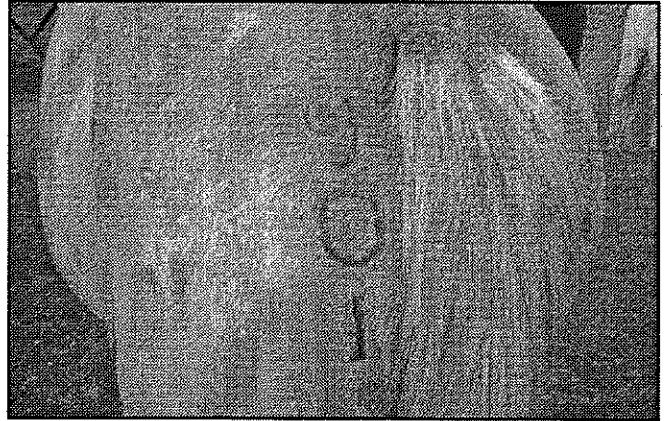
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"We are very pleased with the results of freeze brands and would recommend the practice of freeze branding to other horse owners," Pittman concluded.



After clipping the hair on the area to be branded and soaking it thoroughly with 99 percent alcohol, the cooled brand should be applied for a specific time to kill the pigmentation of the hairs.



Breeders sometimes number brand on the hip near the tail to identify animals in herds with many horses of the same color, such as all white. This is a "bald" brand on a palomino mare.