Permanent Identification of Horses

Permanently identifying horses serves many purposes. It can deter theft and help prove ownership. It enables people to differentiate among horses at one location, such as a band of brood mares or a remuda of ranch geldings—important for recording keeping and for information about a specific horse in a group.

Permanent identification can aid breed associations in registration. It promotes accuracy in transfers of horse ownership and in parentage verification. It is also important for disease control and can help in securing equine insurance. Some ranches or farms use customized brands that become recognized by horse industry participants to the point that they become a form of advertising.

Identification also increases the percentage of stolen horses recovered. Theft is essentially impossible to prove unless identification is absolute, and the burden of proof always seems to lie with the victim. Therefore, permanent identification can aid law enforcement agencies and livestock investigators in theft cases.

In September 1997, Texas legislation took effect to help prevent and investigate horse theft. The law directs the Texas Agricultural Extension Service to teach horse owners about theft awareness. It also encourages horse owners to permanently identify their horses. Horses can be marked and identified in several ways.

**Hot iron branding**

Also called fire branding, this method uses a heated iron. Traditional irons are heated by fire, but electronic irons are also available. Although it is the oldest method of permanent marking, hot branding of horses has lost popularity in recent years to other methods. With few exceptions, hot brands identify the horse with a mark belonging to a specific farm or ranch. Larger hot brands are usually fairly easy to see and read unless hair has grown over the brand (Figure 1).

**Freeze branding**

This method makes a permanent mark using extreme cold. Freeze-branding irons are chilled in liquid nitrogen before being applied to the horse. Intense cold marks the brand site, which fills in with hair that has no pigment, resulting in a white brand (Figure 2). On lighter-colored horses, the iron is sometimes applied longer to create a bald brand that may show up better. The freeze-branding process appears to be relatively painless to the horse.

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Some larger farms or ranches place single- or double-digit numbers or letters on horses’ shoulders, hips or buttocks. These freeze brands allow individual horses, such as those in a band of brood mares, to be identified quickly. Although not necessarily identifying the ranch, farm or horse facility, numbered brands deter theft and help in positively identifying stolen horses (Figure 3).

Most breed associations require that papers of horses be returned after a horse is branded so that the mark can be recorded on the registration certificate.

Another system of freeze branding is the alpha angle code system. Horses freeze-marked by this procedure are entered automatically into a national data bank. For example, when an Arabian horse is marked using this system, the Arabian Horse Registry of America is notified and that horse’s identification is recorded (Figure 4).

For a complete explanation of freeze-branding procedures, see Extension publication L-5084, “Freeze Branding Horses.”

Electronic identification

Horses can be identified by microchip implants—tiny, passive transponders encapsulated in biocompatible glass and placed in the horse’s upper neck. Although this method is invisible, each implant has a unique code that can be read with a scanner.

Implanting is simple and relatively painless, similar to a typical injection. Some horse owners prefer electronic identification because it does not change the horse’s external appearance.

At equine slaughter facilities that process and export meat for human consumption, brand inspectors use scanners to check for microchips in horses fitting the description of reported thefts.

Photo: Figure 1. A fire brand on a 25-year-old horse.

Lip tattoo

In 1947, the Jockey Club began placing tattoos on the underside of Thoroughbred horses’ upper lips. Now race tracks require lip tattoos on all horses to keep them from being substituted at the track. Electronic passports are being developed in addition to lip tattoos to make it easier for racing stock to be shipped internationally.

Lip tattoos are used outside racing also. Through Certified Pedigree Option clinics conducted by inspectors for the Appaloosa Horse Club Inc., lip tattoos can be placed on Appaloosa horses 1 year old or older. Some breeds require percentage verification before a lip tattoo is applied (Figure 5).

Photographs, illustrations and natural markings

Owners should keep clear photographs of individual horses on file with other paperwork such as registration papers and health records. Precise photographs can help law enforcement authorities and brand inspectors identify stolen horses.
Most useful in identifying horses with unique markings on the head and legs, a good photograph is also important for horses from color breeds with markings on the main part of the body.

Signalment, the presence and location of color on a horse, is best recorded in clear photographs and careful drawings incorporated into registration papers. The American Paint Horse Association affixes photographs to registration certificates for Paint horses.

Patterns in a horse's hair — whorls or cowlicks (trichoglyphs) — also differ somewhat among horses. Found in areas such as the forehead, neck and flank area, whorls are difficult to evaluate except when observed closely. Some breed associations use these patterns on registration papers for identification.

**Parentage verification**

Parentage verification is a determination that a horse is actually from reported sire and dam. Several methods are used by U.S. horse registries or associations. Blood typing is used for Jockey Club Thoroughbreds. The Arabian Horse Registry implemented blood testing procedures in 1991 and is expected to adopt DNA testing using hair samples by the year 2000.

The American Quarter Horse Association requires that DNA testing verify race horses' parentage before a lip tattoo can be applied. The association sends a kit to the horse owner, who places a sample of the horse's hair into the kit and sends it to a national testing lab. The DNA testing process takes about three weeks.

The American Paint Horse Association requires parentage verification on solid-colored horses, also using hair. The Appaloosa Horse Club requires parentage verification for all solid-colored horses, using either blood- or hair-testing procedures. Trichoglyphs are also identified on the registration papers of weanlings in that breed.

**Registering a brand**

Legislation that became effective in September 1997 encourages Texas horse owners to register their brand or mark with the county clerk's office in the county where the horses live. Horse owners considering developing a personalized brand should check with the county clerk's office to be sure the brand or mark is not already being used by another horse owner, ranch, farm or facility.

**Contacts/resources**

To learn more about permanent identification, owners of registered horses can call the respective breed association's field services department. Such groups usually maintain a list of technicians who brand, lip tattoo or implant horses with microchips. Breed registries allow various methods of permanent identification, provided that nothing about the horse and/or registry is hidden or changed when the permanent identification is added.
Some equine veterinarians also are trained in various identification practices. In certain counties, various law enforcement agencies have become involved with horse groups in hosting public identification clinics, whereby horses are branded or marked for a fee. Other information sources include:

- Texas and Southwestern Cattle Raisers Association, (817) 332-7064;
- Texas Agricultural Extension Service horse specialists in the Equine Science Section of the Animal Science Department at Texas A&M University, (409) 845-1562; and
- Extension publication L-5210, “Horse Theft Awareness and Prevention: 15 Steps to Minimizing Theft of Horses, Facilities and Equipment,” developed to help horse owners lower their risk of theft.

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