

Electronic Identification of Horses

By Ralph C. Knowles, DVM

The Basic Reasons For Horse Identification

1. To preclude substitution in racing, exhibition and sales.
2. To preclude thievery.
3. As an aid to controlling infectious diseases.
4. As an aid in horse breeding farm management (such as parentage of foals).
5. As an aid for insurance purposes.
6. As an aid in bill collection and other litigious matters.
7. To improve confidence in pedigrees.

History of Horse Identification Methods

During the last 100 years horse identification methods that were used are: diagrams of physical markings, hot iron branding, lip tattoo, photographs, freeze marking, electronic measurement of chestnuts on horses' limbs, and blood - typing.

While these methods of identification have offered a measure of satisfaction, they all have certain deficiencies.

Electronic Identification "Comes of Age" For Horses

In today's society, we depend on computerization for rapid record keeping. Electronic identification is computer compatible.

The European Union Nations will soon require that all horses entering these countries be accompanied by a horse passport. This passport should be "backed up" by electronic identification.

Horse farms that want precision in record keeping for purposes of pedigree verification and immunization or testing for certain diseases can utilize electronic identification.

Blood - typing and DNA finger printing are very definitive methods of identifying individual horses. Correlating these methods with electronic ID can enhance their usefulness by linking them into a computer compatible system.

Often thievery is a problem, where horses can be shipped to slaughter. A tamper proof ID method such as electronic implanted transponders is superior to other methods and can measurably help stop thievery.

Lip tattoos are used for identification at horse race tracks. Electronic ID is a more rapid method of horse identification, especially when lip tattoos fade out.

Future Actions For Electronic ID of Horses

All credible vendors of electronic ID equipment need to accomplish the following:

1. Transponder fragility tests to be completed in the laboratory.
2. Tests to be completed in field trials as follows:
 - a. Tissue migration studies.
 - b. Tissue acceptance studies (Do transponders cause undue abscess?).
 - c. Tissue reaction studies — What is the histologic picture at the implant site?
 - d. Skin preparation studies — What should be standard for skin preparation in the area of shaving or clipping of hair, followed by the application of anti-microbial substances?
 - e. Target tissue studies on how to best keep transponders out of the horse meat that may be harvested from certain horses.
 - f. Studies on transponder implantation techniques — Can the average person reasonably be expected to implant a horse in tissues not intended for food in Europe?
 - g. Studies on the breakage rate of transponders under certain field conditions, during the implant procedure.

All manufactures of electronic ID equipment must make interrogators (readers) that will cross read other ID systems.

Summary

1. The jet age has caused old horse identification methods to be inadequate for today's world.
2. The technology is available to adequately electronically ID horses in a practical manner.
3. Thievery, substitution and animal health matters provided ample motives for moving forward to a better horse identification system.

Current Activities

The American Veterinary Medical Association (AVMA) has recognized the importance of electronic ID and has ruled that the injection procedure constitutes the practice of veterinary medicine, and therefore must be performed by a licensed veterinarian or under the direction of a licensed veterinarian in an institutional environment.

The Louisiana Department of Agriculture and Forestry, under the direction of the State Veterinarian Dr. Maxwell Lea, Jr., implemented an EIA control program to include permanent identification by hot brand, cold brand or electronic ID at the time of annual EIA testing. At the 1994 United States Animal Health Association Conference, Dr. Lea stated that two items were very satisfactory: the quarantine and testing of horses on premises adjacent to EIA affected premises and that the use of electronic ID works well in this EIA control program.

All raptures must be electronically identified before entering the United States, per USDA regulation.