

GENERALLY ACCEPTED AGRICULTURAL AND MANAGEMENT PRACTICES FOR PRIVATELY OWNED CERVIDAE

MANAGEMENT OVERVIEW

The Michigan Animal Industry Act, Act 466 of 1988, as amended, describes captive cervidae (hence known as privately owned cervidae, or cervids) as members of the cervidae family including, but not limited to, deer, elk, moose, reindeer and caribou living under the husbandry of humans. Because of their unique behavioral characteristics, a high degree of skill and sensitivity need to be exercised when raising cervidae in captivity. Cervids are generally less easy to tame than other domestic species and, therefore, have special management, environmental, facility and health care requirements. Though exact husbandry systems may vary by species and/or location, all farmed deer require adequate nutrition, shelter, holding/handling facilities, and health management.

MANAGEMENT PRACTICES

Handling: Handling cervidae requires care and caution to minimize undue noise and/or commotion, thereby avoiding over-excitement of the animals. To minimize stress, handling should occur as infrequently as possible. Routine management procedures such as weighing, identification, vaccination, and anthelmintic (dewormer) administration need to be carefully scheduled and performed simultaneously when feasible. To decrease the chances of animal or human injury during handling, antlers may be removed before the onset of rut. Handling equipment designed specifically for use with privately owned captive cervidae should be used.

Nutrition: Adequate feed and water are vital to all animals and farmed cervidae provide no exception. Access to clean, fresh drinking water is essential for all cervidae. Nutritional requirements vary both between and within species. There are differences between those species that are primarily grazers and those that prefer to browse. Within species, nutritional requirements differ among adult males, adult females, and growing animals. In addition, seasonal variation exists within each of these animal classifications.

Reproduction: Reproductive characteristics vary somewhat between cervidae species, but all are highly seasonal. Important management considerations to achieve good reproductive performance include: Paddock size and female:male ratio during breeding; aggressive behavior by males in the rut; normal parturition (birthing) behavior; environmental needs of newborns; and special requirements at weaning. Information from veterinarians, experienced individuals and/or reliable published sources can be valuable (see references).

Transportation: Transporting cervidae successfully requires specific attention to several important details. Cervids should be separated according to species, age, and sex when handling or transporting. Quiet handling and darkened transport crates or trailers tend to enhance outcomes.

Adequate ventilation is required, and confinement during transport for over 12 hours necessitates provision of feed and water. Extra caution should be exercised in transporting the following cervidae and should be done only when the cervidae welfare is at stake: 1) males with antlers in velvet; 2) females due to give birth within two months; and 3) lactating females and offspring when those fawns/calves are less than one month of age. Finally, transportation of cervidae should be avoided in extremely hot weather to minimize associated stress.

RECOMMENDATIONS FOR THE ENVIRONMENT

Farmed cervidae can be successfully raised under a wide variety of systems. Their environmental needs vary from those of major livestock species based mainly on their behavioral differences. Accordingly, requirements often differ among individual cervidae species. For example, paddock size and stocking density should be determined by species preference toward social and gregarious behavior, and the relative proportions of open pasture and forested land should be based on species preference for browsing vs. grazing. Cervidae must become habituated to their environment, and disruptions by people, other animals, or machines should be minimized. Newborn cervidae require cover for hiding and shelter from inclement weather in some situations. Though most cervidae are quite tolerant of climatic fluctuations, provision of shelter to temper climatic extremes can be beneficial. As with other aspects of cervidae farming, environmental design should utilize expert input.

FACILITIES AND EQUIPMENT

For the most part, the facilities and equipment needed for cervidae farming are dictated by the requirements in handling, nutrition, reproduction, transportation, and environment. Fences should be tall enough to avert jumping by the species of interest, and sharp protrusions in the confined areas should be strictly eliminated.

HEALTH CARE AND MEDICAL PROCEDURES

In managing the health of farmed cervidae, aggressive prevention of disease and injury is much preferred to treatment. Reliable success with both prevention and treatment is more likely if a veterinarian skilled in cervidae management is involved. Adherence to regulatory requirements must be observed in the transport and transfer of cervidae. Development of a herd-specific health management program in consultation with a local veterinarian is recommended. This program should incorporate routine herd health evaluations appropriate for the particular management, environment, and facilities

involved. Vaccination, anthelmintic administration, antler removal, and other health management practices can then be appropriately executed in a timely manner.

Euthanasia: Animals that are seriously injured or ill and show no promise for recovery should be euthanized immediately. Methods can be physical or chemical and one of the approved methods recommended by the AVMA Guidelines on Euthanasia (AVMA, 2007).

Dead Animal Disposal: Animal tissue, whole carcasses or portions thereof, must be disposed of according to the Michigan Bodies of Dead Animal Act, Act 239 of 1982, Amended Act No. 66, Public Acts of 2005, July 7, 2005.

REFERENCES

American Veterinary Medical Association. 2007. AVMA Guidelines on Euthanasia. Available at: <http://www.avma.org/issues/euthanasia.pdf>.

de Vos, A. (Editor). 1982. Deer farming. FAO Animal Production and Health Paper 27, Food and Agriculture Organization of the United Nations, Rome.

George, G. 1987. Deer: Welfare, Farm Production & Practice 880, Ministry of Agriculture and Fisheries, Wellington, New Zealand.

Haigh, J.C. and R.J. Hudson. 1993. Farming Wapiti and Red Deer. Moseby Year Book, Inc., St. Louis, Missouri.

Jordan, R.M., G. Wagner, and B. Lee (Editors). 1989. Deer farming symposium. Earle Brown Continuing Education Center, University of Minnesota, St. Paul.

Kerckerinck, J.V. 1987. Deer farming in North America. Phanter Press, Rhinebeck, New York.

Kirkpatrick, R.L. and P.F. Scanlon. 1984. Care of captive whitetails. In: L.K. Halls (Editor), White-tailed deer: Ecology and management. Stackpole, Harrisburg, Pennsylvania, pp. 687-696.

McKinnon, A.J. 1988. Livestock Welfare--Road Transport, Farm Production & Practice 892, Ministry of Agriculture and Fisheries, Wellington, New Zealand.

Michigan Bodies of Dead Animal Act. 2005. [http://www.legislature.mi.gov/\(S\(ekjsayev2vpg3m55sk05dg45\)\)/documents/mcl/pdf/mcl-Act-239-of-1982.pdf](http://www.legislature.mi.gov/(S(ekjsayev2vpg3m55sk05dg45))/documents/mcl/pdf/mcl-Act-239-of-1982.pdf). See also: http://www.michigan.gov/mda/0,1607,7-125-48096_48404---,00.html. Visited 5.22.08.