



Alberta Elk Ranchers' Commitment to Excellence

Our commitment to maintaining CWD-free domestic elk and elk products in Alberta

Overview



IN THIS ISSUE:

- Overview
- The history of chronic wasting disease in Alberta
- Security measures on Alberta elk ranches
- Important scientific facts
- Scientists speak on CWD
- Alberta elk products
- Elk ranching through the eyes of an Albertan
- Utilizing marginal land
- Summary

Alberta's elk ranchers are proud of their ranches and the products they produce. They care for their animals and respect the land and environment that supports their livelihoods. However, the elk ranching industry has come under attack by opponents who wish to see the industry dismantled. The predominant claim being made by opponents is that elk ranches, also known as game farms, serve as a source of chronic wasting disease (CWD), or at least serve to spread the disease as animals are moved from one ranch to another. The truth is that domesticated elk raised on Alberta ranches are vigilantly protected from CWD, unlike wild elk and deer populations that are free to roam, contracting and spreading the disease. By securing their herds against disease, elk ranches preserve the health of their animals, the health of their customers and the economic viability of elk ranching in Alberta, keeping it alive for future generations.

The History of Chronic Wasting Disease in Alberta

Chronic wasting disease (CWD) is a rare, progressive disease that affects North American cervids (hoofed ruminant mammals, with males characteristically having antlers). The known natural hosts of CWD are mule deer, white-tailed deer, elk, and moose. The disease was first identified as a fatal wasting syndrome in captive mule deer at a wildlife research facility in Colorado in the late 1960s, and all the cases of CWD on domestic cervid ranches in Canada can be traced back to that origin, although the disease may have been present in some free-ranging deer populations for at least 20 years prior.¹ CWD was recognized as a Transmissible Spongiform Encephalopathy (TSE) in 1978 and first seen in wild cervid populations in 1981.

In the fall of 1996, Alberta elk and deer ranchers, in cooperation with Alberta Agriculture, began conducting voluntary surveillance for CWD in their herds. On August 8, 2002, the Mandatory CWD Surveillance Program came into effect in Alberta, requiring cervid owners to submit the heads from all farmed cervids over one year of age that die or are slaughtered for CWD testing by Alberta Agriculture. More than 43,000 domestic elk and deer have been tested for the disease by Alberta Agriculture under this mandatory program and only three animals have tested positive. One case of CWD in a farmed elk was detected in Alberta in the spring of 2002, and two farmed white-tailed deer were confirmed positive for the disease in November 2002. From these affected farms, 100% of the deer and elk, as well as all animals that had been moved

continuing from page 1

from these farms within the past three years were euthanized, tested for CWD and found to be negative for the disease. The ranchers' stringent requirements for individual animal identification and traceability records proved to make the entire process highly efficient.

In contrast, Alberta Sustainable Resource Development (ASRD) has only tested 394 wild elk in Alberta since 2002 and none have been found to have CWD. ASRD has also tested 26,153 wild deer, of which, 61 have been positive for CWD, representing a prevalence rate of 0.00233 percent.



Security Measures on Alberta Elk Ranches

Elk ranching, in Alberta, is a government-regulated industry controlled under the Alberta Livestock Industry Diversification Act (LIDA). Strict requirements for perimeter fencing prevent wild animals with CWD and other diseases from infecting domestic elk. In addition, the Canadian Food Inspection Agency (CFIA) regularly inspects domestic elk herds and tests for illnesses such as tuberculosis and brucellosis. Every elk ranch is inspected by the Alberta government before it is populated and again on a regularly scheduled basis. In addition to this elk ranchers report all elk births, deaths and animal movements in and out of their facility to the provincial government.

Elk ranchers take every possible precaution to protect their herds from

disease. This includes annual herd inventory audits, annual veterinary inspections and mandatory animal traceability, as well as maintaining meticulous records on births, deaths, movements and antler production statistics. It is this high level of surveillance, bio-security and traceability taken by Alberta elk ranchers that has successfully prevented, detected and eradicated diseases from our domestic elk population for over 30 years. Alberta elk ranchers have also agreed to implement a national On Farm Food Safety (OFFS) program developed by the Canadian Cervid Alliance. This will provide even further documentation of good farming practices in alignment with all other CFIA regulated food animal industries as part of Alberta Livestock and Meat Agency's (ALMA) efforts to effectively break down foreign market barriers and improve the economic viability of all of Alberta's meat, milk and egg producers.

Important Scientific Facts

Promising diagnostic research: Promising research has been conducted at the University of Calgary's Faculty of Medicine regarding the development of a simple, inexpensive and rapid live blood test for TSEs. The research project initially focused on developing a test for CWD in cervids and then shifted towards BSE in beef and dairy cattle. Alberta elk ranchers are encouraging the funding and direction of this work to continue to include CWD. We trust the Alberta and Federal governments to include this focus in the near future because this tool can play a critical role to safeguard Alberta's domestic and wild elk populations.



Two studies confirm a species barrier protecting humans and dogs: A study at Colorado State University evaluated the threat of CWD to non-cervid species including: transgenic mice used to genetically mimic people, prairie dogs and coyotes. The results were 100% negative and demonstrated a substantial "species barrier" exists that prevents people, dogs and other species from developing CWD.²

More than six years of ongoing studies involving Macaque monkeys, which are the closest genetic animal to humans, have confirmed that continuous oral exposure of the monkeys to CWD prions has failed to yield a single positive case. The National Institute of Allergy and Infectious Diseases in Hamilton, Mont, published the results of this study in the July 2009 edition of the *Journal of Emerging Infectious Diseases*. The conclusion states that the CWD infectious agent shows an inability to spread to people. This study has further supported the conclusions of other research that there exists a substantial "species barrier" preventing people from developing CWD.

CWD facts:

1. No human has ever contracted CWD.
2. No dog has ever contracted CWD.
3. There is a significant "species barrier" preventing people, dogs and other non-cervids from contracting CWD⁴

Scientists Speak on CWD

"We have very stringent rules in place to help ensure we don't have CWD [in Albertan elk ranches]. With surveillance, the national eradication policy, strict import requirements and ongoing testing, the risk of having a case of CWD in Alberta is extremely low. There's no such thing as zero risk, but you have to put risks into perspective. We have not been ignoring CWD over the last 10 years. Furthermore, there is a natural species barrier with CWD, so the risk of CWD

transferring to people is highly unlikely. To the best of our knowledge, CWD does not affect humans."

- Dr. Gerald Hauer, Chief Provincial Veterinarian, Dept. of Agriculture and Rural Development, Alberta



"(I want to)"reinforce, there is no CWD human health link."

- Mark Needham, Assistant Professor, Recreation, Tourism & Human Dimensions of Natural Resources, University of Oregon, During a speech at the 2009 CWD symposium in Utah.

"The World Health Organization found "no scientific evidence to suggest that CWD in deer and elk can be transmitted to humans."

- Dr. Al Klemmer, DVM, Inspection Manager - Animal Health, Canadian Food Inspection Agency (CFIA) - during a presentation at the 2009 CWD symposium in Utah.

Alberta elk ranchers agree with noted authorities on Chronic Wasting Disease - we should be spending our resources and energy on disease monitoring and prevention and developing a screening test for the disease in live animals.

Elk Products from Alberta

Elk ranchers produce four value-added products:

- Elk Velvet Antler, used as an important nutritional supplement for people and their pets. *Our Elk Velvet Antler Enriches Lives around the World*
- Lean, nutritious elk meat served in destination restaurants around the world
- Hard antler used by world class artisans to create artistic works, fixtures, furniture and jewelry.
- Trophy bulls from Alberta are some of the most magnificent creatures that walk the earth.



Utilizing Marginal Land to Preserve a Magnificent Creature

Domestic elk are uniquely suited to thrive by grazing on the natural forages and plants found in Alberta's marshy, hilly and rocky scrub land that is unsuited for most other domestic livestock.

Approximately 25,000 domestic elk are currently living on ranches throughout Alberta. The animals graze naturally in their environment, without the use of hormones, steroids and antibiotic-laced feed. When necessary, ranchers provide domestic elk with supplemental minerals and feed that has always been free of animal by-products.

"My elk aren't fed anything that doesn't grow on the land they roam."

- Frank McAllister, Elk Valley Ranch - Kitscoty, Alberta



Twenty years ago, I left the city of Edmonton to become a farmer's wife. Since then, my husband and I have made our living on a multi-generational farm where we raise diversified livestock, including beef cattle and domestic elk. We and our three children work hard, love our animals and value our rural lifestyle. We also are extremely proud of our accomplishments, not just because they support our way of life, but because our products – such as elk velvet

antler -- enrich the lives of our customers in Alberta and all over the world.

Antler velvet has been used in Asia as a traditional medicine for more than 2000 years, and modern research conducted in North America, New Zealand and Australia have demonstrated it to be effective in strengthening people's immune system, reducing inflammatory joint conditions and improving athletic performance and muscle endurance.

Here in Canada, velvet antler provides relief for many people as well as their companion animals suffering from joint stiffness and pain. As an iridologist and herbalist, I have personally taken antler velvet every single day for 15 years. I trust it because I know the safeguards we have in place. As a mother, an

Albertan and an elk farmer, I can testify to the stringent regulations and precautions that we maintain to ensure the quality and safety of our products. We welcome any visitors to come out and see our commitment firsthand. In choosing to farm as a family, we have dedicated our lives to the production of safe and value-added agricultural products that improve people's lives. We do this every day, despite the uncertainty of markets, prices, weather and the recession. We want Albertans to know they can continue to trust and be proud of our agricultural products and the families that produce them.

*Sincerely,
Dawn Bidulock
Bugling Flats Wapiti Farm
Hairy Hill, Alberta*

Keys to the Future Success of Alberta's Elk Industry

1. Consolidate all regulatory responsibility and authority for Alberta elk ranches under Alberta Agriculture. This will provide elk ranchers with clear and concise expectations and regulations to preserve the safety of our animals and increase our ability to access and compete in the global markets.
2. Continue to participate as a full and active partner with the Alberta Livestock & Meat Agency (ALMA) to achieve their goal of, "creating the capacity necessary to build a high performing, sustainable and self reliant industry that is both profitable and recognized as a world leader."
3. Deliver a simple, inexpensive and rapid blood test to detect CWD in live animals.



Real People. Real Pride. Summary

Alberta elk ranchers follow very specific animal husbandry guidelines and protocols, and adhere to the highest federal and provincial standards in Canadian agriculture. Consolidating all regulatory responsibility and authority for Alberta elk ranches under Alberta Agriculture will provide them with clear and concise expectations and regulations to preserve the safety of their animals and increase their ability to access and compete in global markets.

Alberta's elk ranchers are proud of their ranches and the products they produce. They take great care for their animals. They respect the land and environment that supports their livelihoods. By securing their herds against all diseases, they protect the health of their animals, the health of their customers and the economic viability of elk ranching in Alberta, keeping it alive for future generations.

RESOURCES

- 1 Chronic Wasting Disease of Deer and Elk: A Review with Recommendations for Management Author(s): Elizabeth S. Williams, Michael W. Miller, Terry J. Kreeger, Richard H. Kahn, E. Tom Thorne Source: The Journal of Wildlife Management, Vol. 66, No. 3 (Jul., 2002), pp. 551-563.
- 2 Kurt TD, Telling GC, Zabel MD, Hoover EA. Department of Microbiology, Immunology and Pathology, College of Veterinary Medicine and Biomedical Sciences, Colorado State University.
- 3 Angers RC, Seward TS, Napier D, Green M, Hoover E, Spraker T, et al. Chronic wasting disease prions in elk antler velvet. Emerging Infect Dis. 2009 May.
- 4 Chronic wasting disease of elk: transmissibility to humans examined by transgenic mouse models, Q. Kong et al, Department of Pathology, Case Western Reserve University.



ALBERTA ELK COMMISSION

For more information
780.980.7582 | www.elkranchers.ca

September 2009