FUR FARMING AND OTHER INTENSIVE ANIMAL PRODUCTION: REFLECTIONS ON THE ROLE OF THE VETERINARIAN

Animal Welfare in Practice 2014: Mink Farming

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OVERVIEW

- How is mink farming similar to other intensive livestock production?
- How does mink farming differ from other intensive livestock production?
- What are the responsibilities of the veterinarian and profession to the mink industry?
- What unique challenges and responsibilities does the mink industry pose for veterinarians?
- What can be done to overcome these challenges?

DEFINITIONS

- Intensive animal production (Wikipedia)
  - A modern form of intensive farming that refers to the keeping of livestock and fish at higher stocking densities than is usually the case with other forms of animal agriculture
  - Objectives: to get higher production rates at the lowest possible cost (with the least possible effort) by relying on economies of scale, modern machinery, biotechnology and global trade
  - Advances due to:
    - innovation in agricultural machinery and farming methods
    - genetic technology
    - techniques for achieving economies of scale in production
    - the creation of new markets for consumption

HOW IS MINK FARMING SIMILAR TO OTHER INTENSIVE LIVESTOCK PRODUCTION?

- Large numbers of animals housed in close quarters
- Risk of:
  - Overcrowding
  - Rapid spread of infectious disease
  - Focus on population, forgetting that the population is made up of individuals
  - Focus on economics
  - Catastrophic impact if mechanization fails, feed problem occurs, preventative measures fail
  - Huge welfare issues when things go wrong

REQUIREMENTS FOR PRODUCTION SYSTEM TO WORK WELL

- High level of organization (thorough, systematic approach)
- Many checks and balances [monitoring, e.g., feed and water intake, mortality; surveillance (if you don't look, you don't find); records; back-up plans]
- Preventative practices (e.g., vaccination, environmental enrichment, waste disposal), including biosecurity (fencing, signage, training, protocols)
- Rapid corrective actions/responses
- Shortcuts must be well thought out
- Expertise, experience, knowledge, training
- Strive for continuous improvement

HOW DOES MINK FARMING DIFFER FROM OTHER INTENSIVE LIVESTOCK PRODUCTION?

- Feed sources and feeding practices
- Rapid transition from one stage of production cycle to the next
- Susceptibility to stress
- Degree of domestication, or lack thereof
- Output – fur

FEED SOURCES

- Dry feed
  - Commercially available (National, Purina)
    - Used by most producers in New Brunswick
- Wet feed
  - Community kitchens/distributors
    - Used by most producers in Nova Scotia
    - Tremendous storage capacity
    - Ingredients vary with availability:
      - Fish
      - Poultry – cull hens, chicken “guts”
      - Meat products – organ meats (porcine, bovine)
      - “Mixed meat”
      - Cereals – 5-20% (required for best performance)
      - Vitamins, minerals
  - Home made

RISKS FROM FEED

- Feeds from animal sources
  - Pathogens (swine influenza, bacteria), toxins (botulism)
    - Use of feed acidifiers
  - Antagonists – thiaminase
  - Analysis of feed contents may not reflect what is getting into mink (sufficient vitamin E or iron may apparently be in feed but is somehow unavailable for absorption)
- “Mixed meat” (by products)
  - Bologna, salami, hot dogs, sausages, luncheon meats, ham
  - Past “best before” dates
  - Societal benefit – doesn’t go to landfill
  - Risks: preservatives (including salt, nitrates), toxins (botulism; may not affect all farms that use same feed source), spices (jalapenos, curry)

RAPID LIFE STAGE TRANSITION

- Production cycle changes occur very quickly
- Need for elevated protein when fur is developing in the fall; failure to provide may lead to hepatic lipidosis
- Different management needs around breeding and whelping time
- Can respond to changes very quickly when needs are adequately addressed

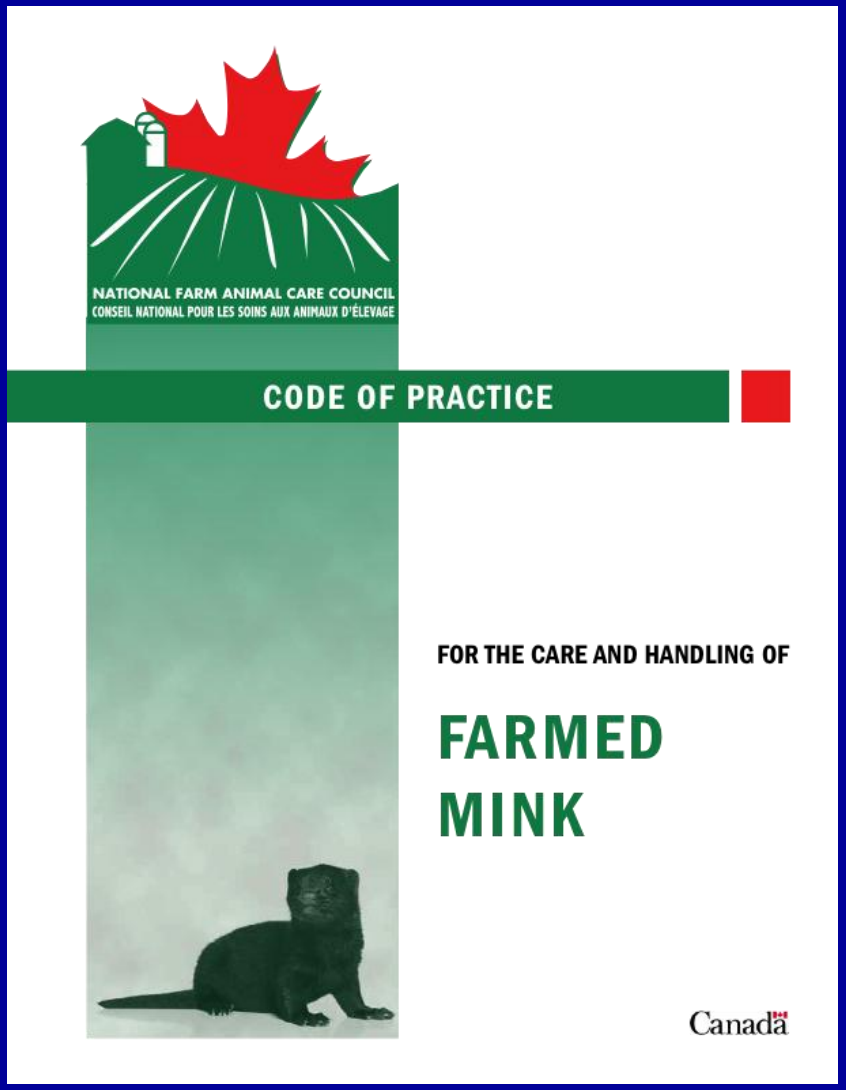
ARE MINK MORE PRONE TO STRESS THAN OTHER FARMED ANIMALS?

- Lesions attributed to stress-induced gastrointestinal hemorrhage very common in dead mink of all ages
- Hildebrandt: "Runt" kit study revealed that kits with stunted growth all had gastric ulcers; common for one mink kit to be unable to compete with others for milk and other food
- Occurs when management fails to anticipate or respond to needs
- Anecdotal claims that stress during breeding season/whelping times may have catastrophic negative effect on reproductive success
- Are claims of stress used as a scapegoat for other problems?
- Do better:
  - If 2 or 3 animals/cage vs 5
  - Environmental enrichment
  - More effective, less stressful catching and handling techniques
- No harm in striving to minimize/reduce stress

DOMESTICATION (?) OF MINK

- Can mink be considered domesticated?
  - Captive populations for 150 years
    - Dogs (15,000 years), sheep (10,000 years), cattle and pigs (8,000 years), horses (6,000 years), cats (1,000 to 4,000 years)
- Rapidly become naturalized when escape/released from captivity
- Many instinctive behaviours like wild counterparts
- Tend to mask illness, often observe mortality without morbidity

THE VETERINARIAN'S ROLE IN MINK HEALTH AND WELFARE



- "***All producers must estabish a valid veterinarian-client-patient relationship (VCPR)***"
- "Veterinarians are an important resource for helping producers establish and implement herd health programs."
- "The herd veterinarian should be consulted in the development of on-farm biosecurity and herd health programs, provide information and access to medications as required, and provide advice and direction on diagnosis and treatment of ill or injured animals."
- Denmark: all Danish mink farms are subject to annual, statutory veterinarian visits

THE MINK VETERINARIAN'S CHALLENGES AND RESPONBILITIES

- Competence, credibility, confidence
  - Lack of formal training and experience
    - "There are few veterinarians who have training or experience working with mink" (NFAC Mink Code of Practice)
  - Few continuing education opportunities
  - Little published literature
- Need for better understanding of population medicine
- How to gain the confidence of producers
- Overcoming the stigma of fur production and being associated with it

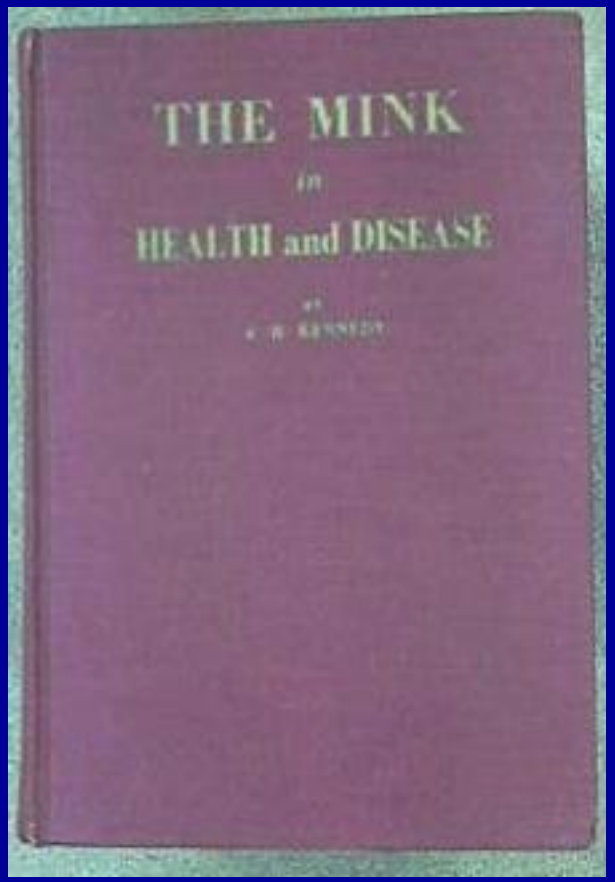
TRAINING AND EXPERIENCE

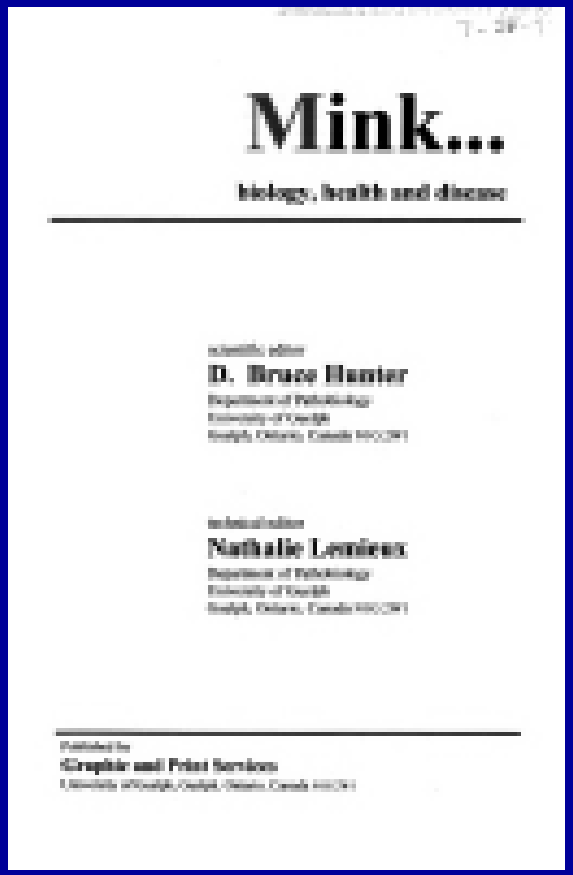
- Veterinary college curriculum
  - Often taught by pathologists
- Externships at veterinary colleges
- Animal science curriculum
  - Small monogastric animals (Dalhousie University, Truro; formerly NSAC) – expanding training

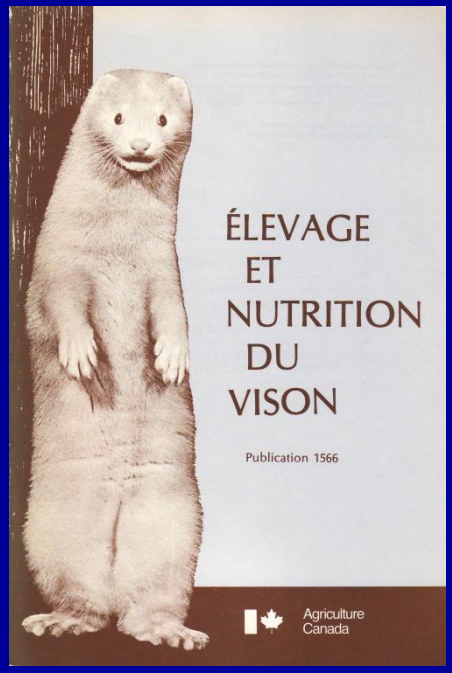
CONTINUING EDUCATION OPPORTUNITIES

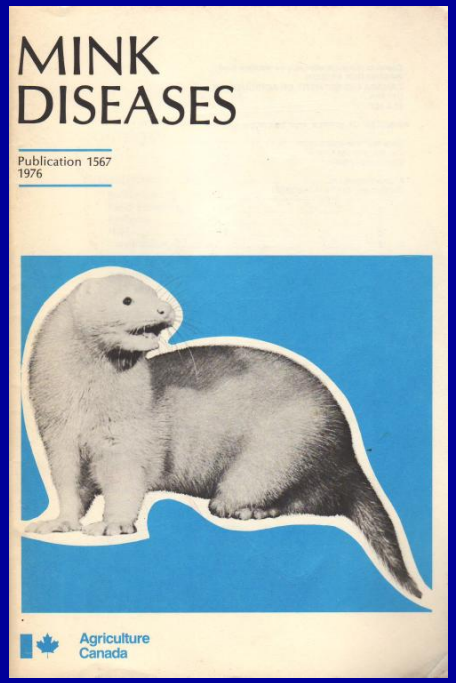
- International Fur Animal Scientific Association (IFASA) – meeting every 4 years, Copenhagen 2012
  - Norway – NJF – subgroup of IFASA, meets annually, 30-40 veterinarians (3 from North America), helps steer direction of IFASA meeting
- Few opportunities in North America
  - Events at Veterinary Colleges
  - Newfoundland veterinarians (August 2014)
  - Canada Mink Breeders Association
- Canada Mink Breeders Association subsidize some veterinarians to go to IFASA

REFERENCE BOOKS

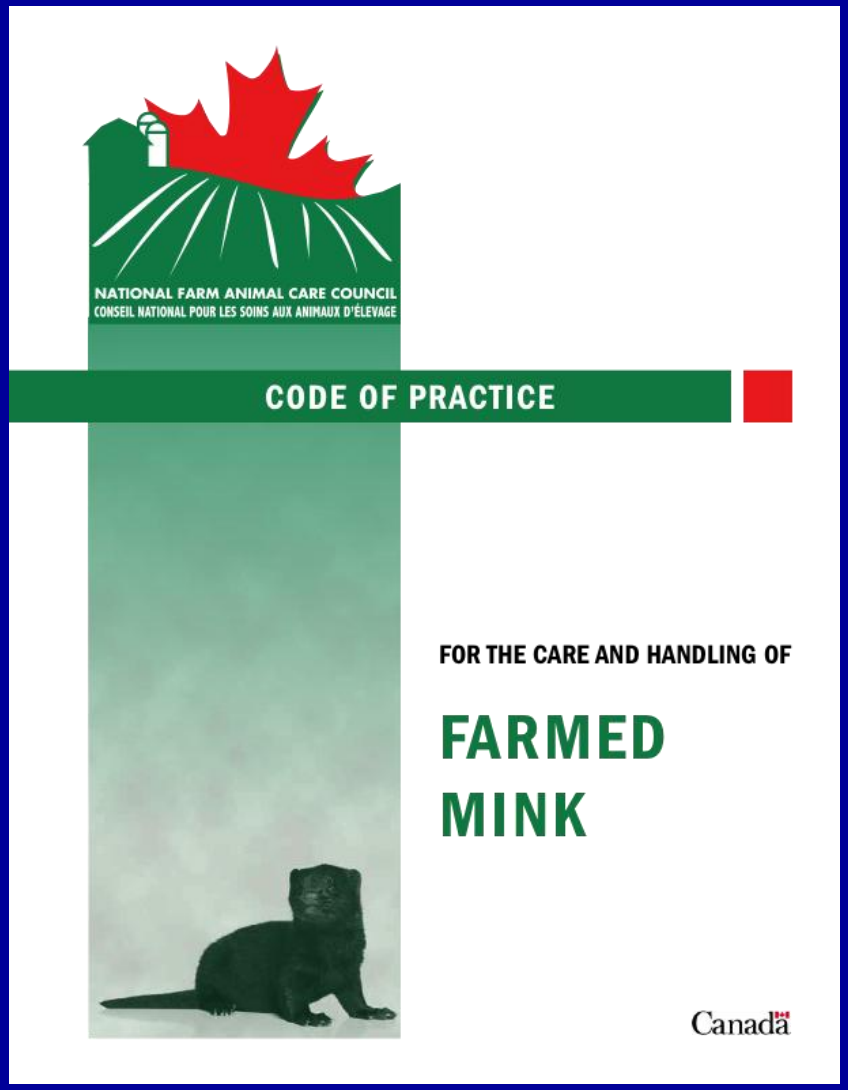








ANIMAL WELFARE TOOLS



- "Animal health is a reflection of animal welfare."
- AVMA euthanasia guidelines
- World Organization for Animal Health (OIE)
- UK Farm Animal Council
- Five freedoms:
  - from hunger & thirst
  - from discomfort
  - from pain, injury or disease
  - to express normal behavior
  - from fear and distress.

UNDERSTANDING POPULATION MEDICINE

- Challenge: perspective – population and individuals analogous to forest and trees
- Be observant:
  - Look for the big things that are happening; pattern recognition
  - Understand and strive to reduce normal background loss
  - Recognize when something changes, or goes wrong
- Be flexible, adaptable
  - Extrapolate your skills from other livestock production species and systems
  - But learn the intricacies of mink production systems
- Be analytical
  - What is the primary problem (e.g., vaccine failure, new disease, feed issue); skills in epidemiology are crucial

WHAT CAN VETERINARIANS OFFER THE MINK INDUSTRY?

- Some mink farms have never had a veterinarian on them
  - It's difficult to solve problems quickly when it's your first visit
- Herd health provides opportunities for assessment, advice, implementing change
  - Pregnancy checks (early detection) and milk quality are foundation for herd health in dairy cattle
- Herd health in mink must have different focus:
  - Monitoring and improving nutrition
  - Monitoring and reducing mortality (set goals), increasing productivity
  - Training of industry staff (e.g., how to do preliminary necropsies)
  - Reviewing, verifying and enhancing biosecurity
  - Assessing, addressing and enhancing animal welfare (don't feel awkward or be reluctant to talk about it)

Take initiative: keep in touch; call, text, email

SOME EMERGING ISSUES

- Aleutian Disease
  - Eradication vs selection for tolerance
- Canine distemper
  - Recent US outbreaks due to apparent vaccine failure
  - PCR positive, but not immunohistochemistry
- Astrovirus
  - Kits with tremors, meningoencephalitis
  - Increasing prevalence (used to be 0.1%, now 10-20X greater)
  - Self limiting infection in affected herds within a few years
  - Problem first noticed 3-4 years ago; PCR developed

OVERCOMING THE STIGMA OF INTENSIVE ANIMAL PRODUCTION

(Controversies and Criticisms - from Wikipedia)

- Advocates
  - Intensive animal agriculture has led to the betterment of housing, nutrition, and disease control over the last twenty years
- Opponents
  - “Factory farming” harms (pollutes) the environment, creates health risks, and abuses animals (inherent low level of animal welfare standards)
  - Large concentration of animals, animal waste, and dead animals in a small space
  - Issues regarding whether intensive livestock production is sustainable and ethical

ANIMAL WELFARE IMPACTS OF INTENSIVE FARMING

- Close confinement systems (cages, crates) or lifetime confinement in indoor sheds
- Discomfort and injuries caused by inappropriate flooring and housing
- Restriction or prevention of normal exercise and most of natural foraging or exploratory behaviour
- Restriction or prevention of natural maternal nesting behaviour
- Lack of daylight or fresh air and poor air quality in animal sheds
- Social stress and injuries caused by overcrowding
- Health problems caused by extreme selective breeding and management for fast growth and high productivity
- Reduced lifetime (longevity) of breeding animals (dairy cows, breeding sows)
- Fast-spreading infections encouraged by crowding and stress in intensive conditions

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-Roberto Cavalli

ORIGIN ASSURED

"To be luxury assured be Origin Assured."

-John Galliano

ORIGIN ASSURED

PUBLIC OPINION ON ANIMAL WELFARE AND FUR PRODUCTION

- Check the internet

Fur Council of Canada
http://www.furisgreen.com/furisgreen.aspx

Minks freed from Quebec farm at centre of cruelty allegations
http://www.ctvnews.ca/canada/minks-freed-from-quebec-farm-at-centre-of-cruelty-allegations-1.1967963#ixzz3Ezkji6Bt

- Banned in Austria (6/9 states), United Kingdom, Croatia (10 year phase out beginning 2007); none in Switzerland due to strict regulations on fur farming
- Holland: Fur production was to be banned by 2024; ban rescinded in September 2014

OVERCOMING THE STIGMA OF FUR PRODUCTION

- MacHattie: "Mink industry is coming out of the closet"
- Industry strategies
  - More proactive, open attitude, invite visitors, pride in sharing accomplishments and progress
- Canada Mink Breeders Association http://www.webtext.ca/canadamink.ca/cmbwelfare.shtml
  - Leadership, commitment to animal welfare
  - Responsibility to incorporate good animal welfare practice into farm operations
  - "In Canada, farmers abide by minimum industry standards in National Code of Practice for the Care and Handling of Mink"
  - Origin Assured program:
    - demonstration of fur industry's commitments to assurance of the humane treatment of animals
    - transparency in the way in which products are produced
    - information on where products are sourced
    - assurance that the labelled fur originates from a country where national or local regulations or standards governing fur production exist (approved species, countries)

OVERCOMING THE STIGMA OF FUR PRODUCTION

- Fur Council of Canada http://www.furisgreen.com/furisgreen.aspx
- Kopenhagen Fur
  - 1985 – guidelines for fur animal welfare established; at a time when no guidelines existed for other livestock farming
  - 30 years of Danish research in fur animal welfare
- EU Welfare Quality Project http://www.welfarequalitynetwork.net/network
  - Objective to certify animal welfare at farm level
  - Provide individual fur farmer with a tool to map and correct any welfare problems
  - Map and plan farm management according to animal welfare status
- European Fur Bearers Association http://www.efba.eu/welfur/
  - WelFur animal welfare program; solid certification protocol; third party audit
  - Goal to promote and ensure good welfare standards on all fur farms
- Strategies for the veterinary profession
  - Scientific objectivity, commitment to improve animal welfare; if we aren't there, we can't help; if we do nothing, we accept the status quo

WHAT CAN YOU DO TO HELP MINK AND THE MINK INDUSTRY?

- Embrace culture of continuous learning, skill development
  - Population medicine
  - Mink biology, nutrition, production, diseases
  - Animal welfare complexities for mink
- Research
- Publication (cases, research)
- Use inherent skills/qualities more fully – innovation, adaptability, creativity, analytical skills, resourcefulness, problem-solving abilities
- Be receptive to new challenges
- Recognize your limitations and overcome them
- Cultivate a network of mentors, resources
- Learn to market skills (Here's what I can do to help you…..)