CRUELTY UNCAGED:

A review of fur farming in North America

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TABLE OF CONTENTS

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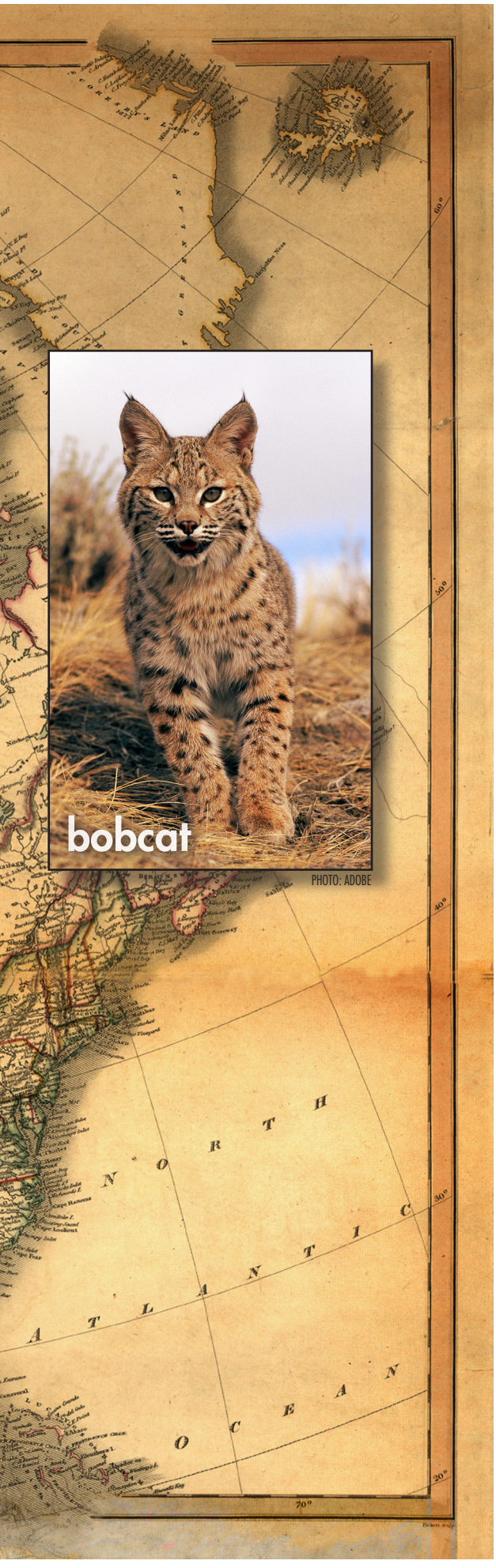

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INTRODUCTION

Few people could force an animal to live its entire life in a cramped, barren cage suspended over its own waste.

Likewise, most humane-minded people would agree that puppy mills which keep dogs in precisely such conditions are abhorrent and should be shut down.

So what if the dogs were being raised solely as a fashion accessory? Never mind tea cup Chihuahuas poking their heads out of celebrity handbags. What if they were being raised and skinned for their fur?

What if the animals were not domestic dogs, but wild animals scarcely different from our own native wildlife running free in our forests and mountains?

Finally, what if this treatment were completely legal and virtually unregulated?

This is precisely the situation that exists for millions of animals raised on North American fur farms.

The frivolity behind such treatment makes it particularly repugnant. Between 10 and 24 foxes and 36 to 65 mink are killed to make a single fur coat. While it may take fewer animals per coat to produce fur-trimmed garments, fur trim collectively may take more animal lives than do full-length fur coats due to its prevalence in today's fashion.

Globally the majority of fur used in fashion comes from animals raised on fur farms where they are forced to live in cramped confined conditions that fail to accommodate their natural behavior. Death provides their only release and is often precipitated by extreme fear, stress, illness, and pain.

Conditions on fur farms worldwide are nearly identical. Standard industry practices focus on maximizing profit and farmer convenience and minimizing costs. Animal welfare considerations that do not result in substantial profit margin increases or hedge against profit loss are ignored. Exceptions to this rule are found only in countries that have passed legislation that specifically requires fur farms to comply with certain animal welfare provisions or that prohibits particularly egregious practices.

In North America, such laws are sorely lacking. While fox, mink, lynx and bobcats may be tightly confined to their cages, fur farmers are virtually unfettered by government oversight despite industry claims to the contrary.

This report reviews the most recent scientific data relevant to the welfare of farmed fox and mink and examines the threats fur farms pose to the environment and wildlife in North America. Information and data collected from state agricultural and wildlife agencies in the United States and Canada are compiled and reviewed. Finally, the state of fur farming in North America is compared to countries in Europe, revealing that the U.S. and Canada are lagging far behind on this important issue.

The North American fur industry and its apologists want us to believe that fur farming is a humane, environmentally friendly, and highly regulated industry. This report reveals that nothing could be farther from the truth.

AN AGRICULTURAL PURSUIT

The fur industry claims that mink and fox raised for their fur are domesticated animals that have been selectively bred over generations to be adapted to fur farm conditions. Many U.S. states have likely been convinced of this claim and have deemed fur farming an "agricultural pursuit"; likewise fur farming across Canada is largely considered to be a form of agriculture.

In reality, mink and fox, bobcat and lynx have had very little opportunity to become truly domesticated. Mink and fox have been bred in captivity for a relatively short time and by and large have not been selectively bred to express traits that characterize domesticated animals or distinguish them significantly from their wild counterparts. Bobcat and lynx have been bred in captivity for an even shorter time than mink and fox.

Fox and mink have been bred in captivity for possibly 90 years (Trut 1995, Hansen 1996) which is less than 3 percent of domestication time of animals such as cattle, pigs, horses, and dogs, which have been raised in captivity by humans for more than 5,000 years (Nimon and Broom 1999, 2001). Given this, it is not surprising that farm-raised fox and mink have retained much of their wild instincts and have failed to express traits that are common in domesticated animals. Indeed, fox and mink have maintained their species' specific phenotypes, strong motivation to perform natural behavior, strictly seasonal reproduction patterns, and a preponderance of fearful-aggressive response to humans, all of which are characteristic of their non–captive-bred counterparts (Trut 1995, Nimon and Broom 1999, 2001).

For nearly 50 years geneticists at the Institute of Cytology and Genetics of the Russian Academy of Sciences, studying the process of domestication, have attempted to create a "domestic fox" by focusing selection on one single trait, "friendliness to humans" (Trut 1999).

PHOTO: CAFT UK

"FARMED FOXES ARE REPORTED TO EXHIBIT 'EXTREME FEAR' INVOLVING TREMBLING, DEFECATING, AND WITHDRAWING TO THE BACK OF THE CAGE."

~ THE WELFARE OF FARMED FOXES IN RELATION TO HOUSING AND MANAGEMENT: A REVIEW. *JOURNAL OF ANIMAL WELFARE*

PHOTO: RFA

"IT SEEMS VALID TO USE WOUNDS AND SCARS AS A SIGN OF POOR WELFARE IN MINK."
~ THE EUROPEAN COMMISSION SCIENTIFIC COMMITTEE ON ANIMAL HEALTH AND ANIMAL WELFARE

However, researchers still make a clear distinction between their farmed foxes and their experimentally produced "domestic foxes" and admit that even these "domestic foxes" fail to meet some criteria for being considered truly domesticated.

One of the key characteristics separating wild canines from domesticated dogs is breeding seasonality. Lyudmila Trut, head of the research group at the Institute of Cytology and Genetics of the Siberian Department of the Russian Academy of Sciences in Novosibirsk, points out that "fur farmers have tried for decades to breed foxes that would reproduce more often than annually, but their attempts have failed." Even the experimentally bred "domesticated" foxes at the research facility show little deviation from the natural breeding cycle of their wild relatives. Despite decades of selective breeding no offspring produced from out-of-season mating in the experimental population has survived into adulthood (Trut 1999), suggesting a lack of domestication.

Far from focusing on tameness, the focus of selective breeding on fur farms has been on fur quality (in terms of the market, not the needs of the species), body size, and litter size (SCAHAW 2001), while very little has focused on the human–animal relationship such as selecting for traits that reduce fear and aggression toward humans (SCAHAW 2001).

Indeed, despite years of captive breeding, behavioral studies have referred to farmed foxes as living in a state of "continuous fear" (Bakken et al. 1994) and farmed foxes are described as exhibiting "extreme fear" characterized by trembling, defecating, and withdrawing to the back of the cage (Tennessent 1988 cited in Nimon and Broom [2001]) in response to humans. In addition, studies comparing wild mink behavior with the behavior of free-living farmed mink who have escaped into the wild found no significant behavioral differences (Kidd 2008).

The fur industry, however, asserts that the behavior of farmed mink is much different than wild mink as a result of "domestication." The discrepancy between the claims of the fur industry and scientific evidence to the contrary may be explained because mink farmers are unlikely to test mink behavior in a systematic and scientifically verifiable way (Kidd 2008). Mink farmers are more likely to select against individuals who display nervous behaviors that result in the destruction of the pelt such as tail-sucking and thus impact them economically (Kidd 2008) whereas fearful and nervous behaviors that do not impact profitability are of little concern to the individual farmer.

While fur farmers may point to particular individual animals that appear passive or even calm in their cages as examples of habituation to the intensive farm environment, exhibiting very low or no activity is considered abnormal animal behavior and may be caused by

prolonged suffering.

Over time animals and humans exposed to ongoing uncontrollable aversive stimulation can develop a behavioral response termed "*learned helplessness*," in which they cease all attempts to escape or avoid the aversive situation and, as such, can appear "passive." Learned helplessness has been experimentally induced in humans, monkeys, dogs, cats, rats, mice, and even goldfish (Rollin and Kesel 1990) and may be a precipitating factor in the development of clinical depression and related mental illness in humans. Individuals suffering from learned helplessness have effectively "given up" or "lost hope" of escaping or controlling their current situation, a sign of profoundly poor welfare (Seligman 1975).

The issue of domestication in farmed fox and perhaps to a lesser extent farmed mink creates an interesting paradox for the fur industry. On the one hand, the industry needs to guard itself against charges that it mistreats wildlife by claiming that farmed fox and mink are "domestic animals" and attempting to akin itself to other animal-based agriculture. On the other hand, the industry must guard against comparisons of foxes and domestic dogs unless it is willing to defend the use of domestic dogs or cats for the fur trade — a practice that is so widely condemned that it has been banned in most developed countries including the United States.

WELFARE OF FARMED MINK AND FOX

Even if farmed mink and farmed fox could be accurately considered "domesticated" it would not guarantee good welfare on fur farms. Animals widely accepted as domesticated, such as pigs, dogs, laboratory rats and mice, have been found to have severe welfare problems when kept in barren or restrictive environments (Mason 1991, Fraser and Broom 1990, Broom 1996, Belz et al. 2003, Reinhardt and Reinhardt 2006). Like modern factory farms or confined animal feeding operations (CAFOS), stark, constrictive housing systems are hallmarks of fur farming (Bakken et al. 1994, Hansen 1998, Nimon and Broom 1999).

Whether wild or domesticated, it is widely accepted that animals suffer in captivity if they are strongly motivated to perform activities that their housing does not allow. Farmed mink and fox show strong motivation to perform many natural behaviors that are significantly denied them on fur farms (Nimon and Broom 1999, 2001). The idea that welfare is related to naturalness is implicit in the scientific approach to using animal biology in understanding and evaluating animal welfare.

It is indisputable that in the wild, mink live in aquatic habitats, and

"IN MINK, PLAY IS ENHANCED BY BEING HOUSED IN A SEMI-NATURAL ENVIRONMENT AS OPPOSED TO A CAGE…"
~ THE EUROPEAN COMMISSION SCIENTIFIC COMMITTEE ON ANIMAL HEALTH AND ANIMAL WELFARE

ONE OF THE MOST IMPORTANT HABITAT FEATURES FOR FOX IS COVER — DENS AND PLACES TO HIDE. FOR THE MAJORITY OF THE YEAR ON FUR FARMS FOXES HAVE NOWHERE TO HIDE.

typically occupy home ranges and territories along rivers and shorelines; their coat and feet are specially adapted for a semi-aquatic lifestyle (Vaughn 1986, Dunstone 1993). Swimming and diving are favorite activities of mink (Nimon and Broom 1999, Mason et al. 2001) and are typically denied them when raised for fur. Research on caged mink stress response has demonstrated that mink find being deprived of swimming water nearly as stressful as being denied food (Mason et al. 2001).

Mink are also highly active and inquisitive animals. In the wild they are almost constantly moving, often covering long distances. A study of wild mink in the United States measured a mean home range of about 3 to 6 miles (Stevens et al. 1997). Typical mink farm cages range from approximately 1 to 1.5 feet high, 8 inches to 1 foot wide, and 2 to 3 feet deep (SCAHAW 2001). Given the stark contrast between how mink live in the wild and how they are forced to live on mink farms, it's not surprising that studies of farmed mink have suggested that between 24 to 55 percent of adult mink on fur farms suffer from stomach ulcers (Wahlstrom 1987 cited in Nimon and Broom [1999], Harri et al. 1995). Ulcers are generally accepted to be as sign of poor welfare in mink (SCAHAW 2001).

Farmed mink also show high levels of stereotypies (abnormal repetitive behaviors not seen in the wild). Mink stereotypies are associated with frustration resulting from an inability to perform natural activities in restrictive and barren housing environments (Mason et al. 2001). In mink, stereotypies typically involve pacing along the cage wall, vertical rearing in a cage corner, repetitive circling or nodding of the head/front half of the body, and/or repeatedly entering and leaving nest-box (SCAHAW 2001).

In contrast, playful behavior is a sign of relaxation and calmness in mink and is enhanced by being housed in a semi-natural environment as opposed to a cage (SCAHAW 2001). However, all mink farmed for fur are caged.

Like mink, foxes are also highly active animals. Extensive studies of wild fox reveal that they are complex animals capable of a high degree of learning, and show evidence of lasting memory and cognitive ability (Nimon and Broom 2001). Also like mink, there is clear evidence that the welfare of farmed foxes in typical farming conditions is very poor (Nimon and Broom 1999).

Farmed foxes are usually housed in closed or open-sided sheds holding from two to eight (commonly two) rows of cages. The cages are made of heavy wire mesh and raised above the ground to allow urine and feces to fall through, thus forcing animals live just above, and in close proximity to, their own excrement. Industry standard caging allows for a

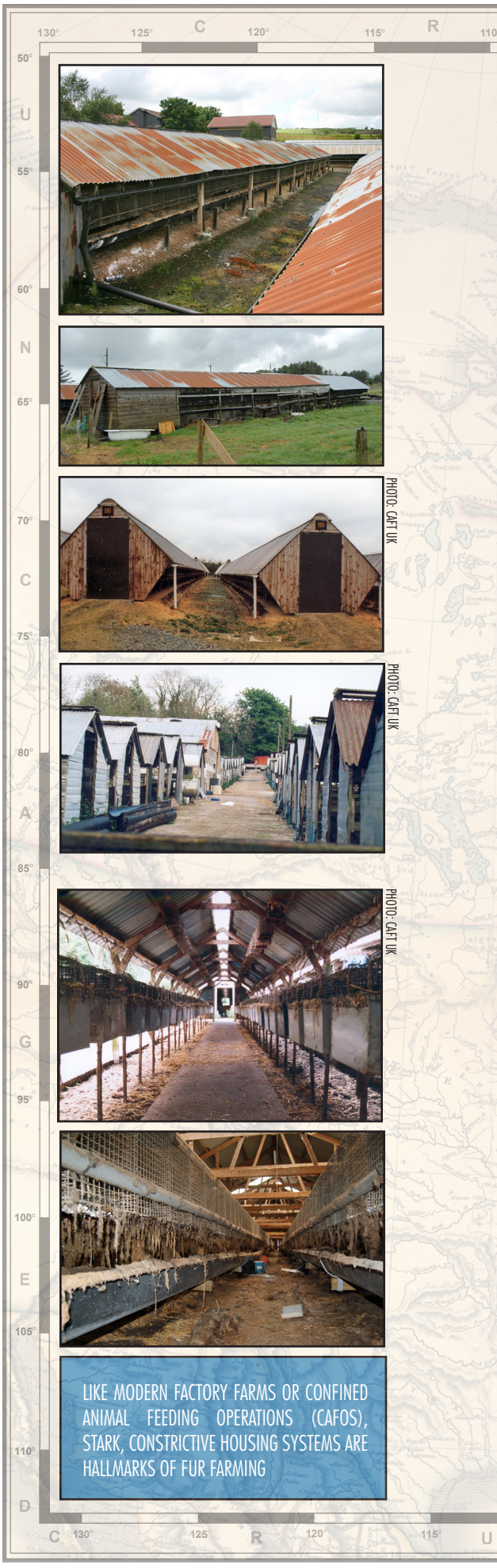
cage floor area that is approximately 2 to 2.5 square feet (occasionally 4 feet) and 2 to 2.5 feet high (Bakken et al. 1994, Nimon and Broom 2001, SCAHAW 2001). In the wild, fox home ranges vary considerably but are markedly larger than the area standard cages allow. Wild fox territories range between a low of 25 acres to more than 5 square miles (Nimon and Broom 2001, SCAHAW 2001). Moreover, housing conditions and amount of exercise affect the bone structure and strength, and weak bones are more likely to break during normal activity leading to poor welfare. Recent studies show that farmed fox are less likely to suffer from broken bones when provided with a larger cages and access to earthen floors (Korhonen et al. 2000).

Adult foxes are kept in solitary confinement for most of their lives. Again, this is in contrast to how the species would live in the wild. While often assumed to be a solitary animal, recent literature acknowledges that foxes have a complex social structure (Voigt 1987) and may live in female/male pairs or in a group consisting of a single male and multiple females which are usually related. Each member of these social groups typically maintains its own home range and dens and typically only the dominant females will breed, with subordinate nonbreeding females possibly acting as helpers (Voigt 1987). In the wild, male foxes are attentive fathers providing food to the female every four to six hours until pups are old enough for the mother to make brief trips out of the den. Researchers have seen fox fathers exhibiting much excitement about their pups, playing with them for extended periods of time and taking a lead role in teaching them how to forage for food. On the fur farm, fox fathers are never allowed to interact with or aid in the rearing of their young.

One of the most important habitat features for a fox is cover — places to hide, including dens. For the majority of the year on fur farms, foxes have nowhere to hide (Bakken et al. 1994, Nimon and Broom 2001). Nest boxes are typically provided only to breeding females at the beginning of mating season and until the weaning of the cubs at approximately 8 weeks after birth (Bakken et al. 1994, SCAHAW 2001).

It is clear that conditions on fur farms have been designed for the convenience of the fur farmer, not the welfare of the animals. As explained by the European Commission Scientific Committee on Animal Health and Animal Welfare (SCAHAW), major changes to current farming conditions would be required to improve welfare of farmed foxes but there has been little industry interest in making such meaningful changes.

> *"From the farmer's point of view, a barren interior is a guarantee of minimal fur damage and the wire mesh bottom is a guarantee of good health. On the other hand, a major part of the welfare critique is focused on the inside of the cage*



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LIKE MODERN FACTORY FARMS OR CONFINED ANIMAL FEEDING OPERATIONS (CAFOS), STARK, CONSTRICTIVE HOUSING SYSTEMS ARE HALLMARKS OF FUR FARMING

A STUDY OF WILD MINK IN THE UNITED STATES MEASURED A MEAN HOME RANGE OF ABOUT 3 TO 6 MILES WHILE TYPICAL MINK FARM CAGES RANGE FROM APPROXIMATELY 1 TO 1.5 FEET HIGH, 8 INCHES TO 1 FOOT WIDE, AND 2 TO 3 FEET DEEP.

THE ABOVE MINK-FARM CAGE MEASURES 23 CENTIMETERS, WHICH IS JUST UNDER 9 INCHES WIDE.

environment. Commonly used wire mesh cages are claimed to be too barren to guarantee reasonable welfare for foxes. As a result, the cage interior should be enriched with objects that meet the needs of fox. Enrichment in order to provide for the needs of foxes for locomotion, exercise, and appropriate stimulation might require a different housing system, such as those designed to replace confinement systems for sows and hens, but the studies which have been carried out with farmed foxes have been limited to relatively minor changes"

~ SCAHAW 2001

These findings are in stark contrast to the claims of the industry with statements such as, "It is a fact that fur farming and good welfare go hand in hand" (British Fur Trade Association), and "Providing animals with humane care is an ethical obligation of all livestock farmers, while for mink farms it also makes good business sense since the healthiest animals product the finest pelts" (Fur Commission website), and, "Fur condition is one of the primary indicators of an animal's health. Thus, animals raised on fur farms must be cared for properly — they are the farmer's source of livelihood" (Fur Institute of Canada).

The SCAHAW found no basis for correlation between good welfare and fur quality: "fur clarity and density do not correlate with any other welfare measure ... mink pelt condition is probably best considered a production measure rather than a sensitive welfare measure" (SCAHAW 2001).

Handling

Compounding the inherently stressful caging environments in which mink and fox are forced to live on fur farms is the brutal handling methods employed for a variety of procedures including fur grading, breeding, artificial or "forced" insemination, separation of cubs from mothers and, finally, killing and skinning.

The failure to significantly reduce fear in farmed fox and mink either through selective breeding or behavior modification or "taming" is the source of many welfare problems and handling is no exception. The most frequent method of handling fox on fur farms is to grab the animals with metal tongs around the neck and then grab them by the tail (Bakken et al. 1994) in order to avoid injury to the handler. Injury to the animal is always a risk and foxes will often bite at the tongs and may break their teeth (Bakken et al. 1994). Breeding foxes are exposed to stressful and aversive handling approximately 15–20 times a year (Bakken et al. 1994). Females may be handled up to 20 times in a six-week period for "heat detection and confirmation" which is particularly stressful as it involves prolonged and invasive handling. Artificial or "forced"

insemination procedures are also stressful requiring the insertion of a foreign object into the vagina and/or uterus of the vixen to deposit sperm. Lack of hygiene and ripping of membranes in the course of the procedure can result in infection and death (Animalia 1995). Sperm collection is similarly stressful with foxes struggling to escape during the procedure. The same male may be used and manipulated several times a week (Animalia 1995).

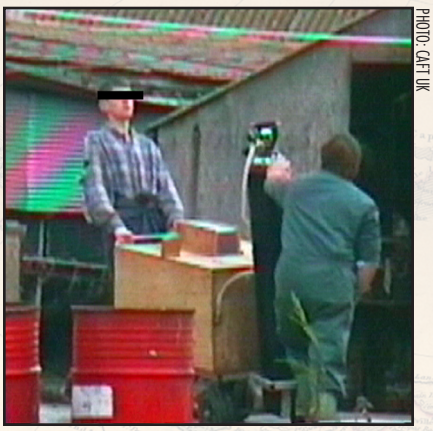
Killing

During the killing procedure both handled and unhandled mink tend to vocalize — a sign of stress and fear (SCAHAW 2001). Mink may be killed by cervical dislocation (neck breaking), or CO_2 or CO gas in a killing box. Exhaust gases from gasoline combustion engines may also be used. The extent to which each method is used on North American farms is unknown since no government agency collects these data.

While the Fur Commission claims that "*farmers adhere strictly to the recommendations of the American Veterinary Medical Association,*" there are no available data to substantiate this claim and compliance with these guidelines is not required by federal law nor routinely monitored by any state agency. Moreover the American Veterinary Medical Association (AVMA) recommendations include several caveats with regard to mink and fox killing whereby slight deviations from the prescribed methods could quickly render an "acceptable method" to be "unacceptable" by the AVMA.

The AVMA recommendations are also at odds with other authoritative recommendations. For example, because of animal welfare concerns, Dutch law forbids any use of CO_2 altogether, and a report of a European Commission Working Party on laboratory animals whose purpose is to provide recommendations as to what constitutes the least painful methods of euthanasia in modern practice, does not recommend its use for any carnivore because of the behavioral distresses it causes (SCAHAW 2001).

Under AVMA guidelines, however, CO_2 gas in cylinders is considered an "acceptable" killing method for mink despite acknowledgment that behavioral tests on mink have shown that, like humans, mink find CO_2 "highly aversive" (Cooper et al. 1998, AVMA 2007). In addition, although 100% CO_2 induces unconsciousness rapidly in mink, concentrations of 70% cause loss of consciousness without killing (AVMA 2007), creating the possibility of animals regaining consciousness during or after the skinning process as a result of improper gas concentration. Studies also demonstrate that mink find CO aversive and that the gas can be slow to take effect in mink (SCAHAW 2001) yet this gas is also deemed "acceptable" by the AVMA for killing mink (AVMA 2007).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MINK MAY BE KILLED BY CERVICAL DISLOCATION (NECK BREAKING), OR CO_2 OR CO GAS IN A KILLING BOX (SHOWN ABOVE). EXHAUST GASES FROM GASOLINE COMBUSTION ENGINES MAY ALSO BE USED. THE EXTENT TO WHICH EACH METHOD IS USED ON NORTH AMERICAN FARMS IS UNKNOWN SINCE NO GOVERNMENT AGENCY COLLECTS THESE DATA.


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THE MOST COMMON WAY FARMED FOXES ARE KILLED IS BY ANAL ELECTROCUTION (SCAHAW 2001), WHICH INVOLVES AN APPARATUS WITH TWO ELECTRODES, ONE BEING INSERTED IN THE RECTUM WHILE THE OTHER IS APPLIED TO THE MOUTH.

PHOTO: CAFT UK

THE MOST FREQUENT METHOD OF HANDLING FOX ON FUR FARMS IS TO GRAB THE ANIMALS WITH METAL TONGS AROUND THE NECK AND THEN GRAB THEM BY THE TAIL IN ORDER TO AVOID INJURY TO THE HANDLER.

In addition, because 30 to 50 mink at a time may be forced into a single kill box, animals may pile up and be killed in part by suffocation (SCAHAW 2001). The use of a gas apparatus in which each mink is individually placed in a tube could avoid this, but due to a lack of regulation and data collection it is unknown to what extent this apparatus is used on North American farms.

The most common way farmed foxes are killed is by anal electrocution (SCAHAW 2001), which involves an apparatus with two electrodes, one being inserted in the rectum while the other is applied to the mouth. It is believed to induce unconsciousness immediately if the apparatus is used properly, i.e., keeping the current at a correct intensity (0.3 amp, 110 V for 3–4 seconds) (SCAHAW 2001). Electrocution is considered "conditionally acceptable" for mink, fox, and other animals produced for fur when followed by cervical dislocation (cervical dislocation alone is not considered "acceptable" by the AVMA for mink or fox). Electrocution is also considered "conditionally acceptable" for domestic dogs (AVMA 2007).

In 2008, New York became the first and only state to ban the practice of anal and genital electrocution of furbearing animals, including mink, foxes, chinchillas, and rabbits. The misdemeanor is punishable by up to a year in jail. In the UK, the use of electrocution to kill foxes is not permitted. Killing farmed fox was achieved in the UK by lethal injection of a barbiturate (there are no farmed foxes in UK today). Lethal injection of barbiturates is listed as an "acceptable" kill method for fox by the AVMA but only when administered intravenously. While intravenous injection of barbiturates is often considered a humane method, it is difficult to administer an intravenous injection to a wild and fearful animal. On a fur farm the procedure would most likely be administered by a farmhand, not a veterinarian, leading to further welfare concerns. Further, the barbiturate recommended by the AVMA is sodium pentobarbital; however, as the AVMA guidelines point out, "current federal drug regulations require strict accounting for barbiturates and these must be used under the supervision of personnel registered with the US Drug Enforcement Administration (DEA)."

CARCASS DISPOSAL

The AVMA guidelines also point out that barbiturates "tend to persist in the carcass and may cause sedation or even death of animals that consume the body" (AVMA 2007). This is of some concern given the industry claim that carcasses of farmed mink and fox are sent to rendering plants where they may be used in livestock feed and pet food. It is also worrying that many fur farms "compost" carcasses on the farm or send carcasses to landfills (van der Marel et al. 2008) where

they may be scavenged by native wildlife, including birds of prey.

The fur industry claims that carcasses of mink are part of the "agricultural chain" and are used to produce animal feed for livestock including cattle, as well as pet food and even food for animals held in zoos or aquariums (Fur Commission 2009). However, a recent review of fur farms in Northern Canada stated, "Currently it appears that the majority of the farms are burying their carcasses in landfills. This process, easy as it may be, has a number of negative consequences" (van der Marel et al. 2008).

Further, in 1997, the US Food and Drug Administration, the body that regulates the safety of agricultural produce, banned the use of almost all slaughtered animal parts including mink in livestock feed because of the risk of bovine spongiform encephalopathy (BSE) or mad cow disease. Mink tissue was specifically prohibited from the "agriculture chain" because of known cases of transmissible spongiform encephalopathy (TSE) in mink raised in the U.S. The disease was first diagnosed in 1947 on a commercial mink farm in Wisconsin; the disease caused several additional outbreaks during the '60s, '70s, and '80s in the U.S., as well as isolated outbreaks on mink farms in Germany, Finland, and Russia (NeuroCenter). Also as a result of BSE, mink fat and other rendered mink products are no longer being recycled into consumer products as they once were (Ontario Animal Research Services Committee 2004).

ENVIRONMENTAL IMPACTS

Carcass disposal is not the only challenge faced by fur farms. Fur farms, like any other factory farm, produce loads of animal waste (manure) that are too intensely concentrated to be neutralized by natural processes. As a result, farms require large amounts of land for spreading manure (van der Marel et al. 2008) and manure must be composted in order to reduce odors and pathogens (van der Marel et al. 2008). Each mink produces approximately 44 pounds of feces per year (Bursian et al. 2003). Manure is often stored outdoors on cleared land (van der Marel et al. 2008).

Manure produced by carnivores is not a preferred source of fertilizer for crops. Even factory farms producing the more preferred cow, pig, or chicken manure have difficulty managing waste because the physical properties of the land limit the quantities of nutrients from manure that can be applied. Excess nutrient buildup in soil can harm plants and has the potential to harm nearby water bodies and people downstream. In addition, the long distances between animal farms and cropland favor the use of commercial fertilizers due to the high cost of manure transportation (Paudel et al. 2008).

PHOTO: CAFT UK

WHILE THE FUR COMMISSION CLAIMS THAT "FARMERS ADHERE STRICTLY TO THE RECOMMENDATIONS OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION," THERE ARE NO AVAILABLE DATA TO SUBSTANTIATE THIS CLAIM AND COMPLIANCE WITH THESE GUIDELINES IS NOT REQUIRED BY FEDERAL LAW NOR ROUTINELY MONITORED BY ANY STATE AGENCY.

PHOTO: CAFT UK

PHOTO: CAFT USA

EACH MINK PRODUCES APROXIMATELY 44 LBS. OF FECES PER YEAR. EXCESS NUTRIENT BUILDUP FROM MANURE IN SOIL CAN HARM PLANTS, WATER BODIES, AND PEOPLE DOWNSTREAM.

Those living near mink farms often complain about the abundant flies and nauseating smell that emanates from farms and are often concerned about subsequent loss of property value (van der Marel et al. 2008, CBC News 2009 a, CBC News 2009 b, KIDK TV 2007). Water quality is another concern for nearby residents of fur farms, and for good reason.

In Nova Scotia, Canada, many residents blame mink farms for the blue-green algae coating some area lakes. A provincial Environmental Department study revealed that high nutrient levels were found in some lakes and mink farms were identified as potential sources of the pollution (Chronicle Herald 2009).

Excessive nitrogen and phosphorus are the most common causes of water pollution in the United States. The U.S fur industry adds almost 1,000 tons of phosphorus from mink feces to the environment annually (Bursian et al. 2003). In 1999, a fur farm in Washington State was fined $24,000 for six separate violations that resulted in polluting creeks and streams that drained into a major river. The pollution was found only after two separate investigations by the state Department of Ecology working to uncover the cause for fecal *E. coli* from levels in local streams that were up to five thousand times the allowable level for the state (Washington Department of Ecology 1999).

In addition, environmentally harmful chemicals including chromium and formaldehyde are used in the processing and tanning to keep the hides and fur from rotting. In 1991 six New Jersey fur processors/tanners were fined more than 2 million dollars for releasing toxic waste into the environment (EPA 1991). Tanneries more than any other business are on the Environmental Protection Agency's Superfund list that identifies the priority environmental clean-ups.

IMPACT ON WILDLIFE

The establishment of harmful invasive species is a hallmark of the fur industry. While the industry is fond of blaming farm escapes on isolated events such as liberations by animal activists, the truth is, the escape of animals from fur farms is a historic and chronic occurrence.

It has been documented that mink escaped and colonized the island of Newfoundland, where they are not native (Northcott et al. 1974), long before widespread concern over ethics of fur farming and associated liberation activities which are still rare. Similarly, the establishment of non-native nutria in the United States, muskrats and American mink in Europe, and bushtail possums in New Zealand is credited entirely to the fur industry, the impacts of which are still felt today.

More than 70 years after escaping from captivity the nutria populations continue to thrive and impact native wildlife habitats in the United States despite control attempts. Likewise muskrats (native to North America) escaped fur farming enterprises in the former Czechoslovakia as early as 1905 and from farms in Belgium and France during the early 1920s. By 1940 escaped muskrats had reached the Netherlands where they continue to damage native ecosystems and impact agriculture, leading to ongoing and costly control efforts (van Troostwijk 1978). Similarly, bushtail possums now occupy most of New Zealand and eradication attempts have done little or nothing to control the population (Landcare Research New Zealand Ltd 2008) and have resulted in massive amounts of the highly toxic (USDA 1994) and inhumane poison Compound 1080 (sodium fluoroacetate) being spread across New Zealand (Markey 2006).

Mink escapes have also historically been a problem in every country where mink farming exists or has existed. The European mink (*Mustela lutreola*), one of the most threatened land mammals in the world, has been negatively impacted by escaped American mink from mink farms (Mañas et al. 2001). Current research also suggests that farmed mink may be having a serious impact on North American wild mink through competition, hybridization, and disease introduction (Kidd 2008, Bowman et al. 2007).

Escape of farmed mink from North American farms has been described as a "chronic," "common," and "widespread" (Kidd et al. 2009, Bowman et al. 2007) problem dating back over 100 years when mink ranches first appeared in North America. So common are escapes that recent studies show a majority of mink living near mink farms in Canada are actually escaped farmed mink or hybrids (Kidd et al. 2009).

Shockingly, up to 81% of mink sampled in populations in close proximity to mink farms were either farm escapees or descendants of escapees (Kidd 2008). Several hybrids were also found in regions thought to be too distant from mink farming, demonstrating the far-reaching impacts (Kidd et al. 2009). Moreover, because mink ranches occur across North America and typically in good mink habitat (Jorgensen 1985), the potential impact to the species is further magnified (Kidd et al. 2009).

The potential of captive-bred animals to reduce the fitness of wild populations is well documented in scientific literature (Rhymer and Simberloff 1996, Allendorf et al. 2001, Lynch and O'Hely 2001, Ford 2002, Garrant et al. 2003, Hutchings and Fraser 2008). Hybridization and associated genetic transformations may eventually result in the natural population being incapable of sustaining itself (Lynch and O'Hely 2001), leading to species endangerment and extinction. Hybridization has been shown to be a critical threat to the recovery of several at risk species including the Grey wolf in Europe, the Red wolf in North

ESCAPE OF FARMED MINK FROM NORTH AMERICAN FARMS HAS BEEN DESCRIBED AS A "CHRONIC," "COMMON," AND "WIDESPREAD" PROBLEM DATING BACK OVER 100 YEARS. SO COMMON ARE ESCAPES THAT RECENT STUDIES SHOW A MAJORITY OF MINK LIVING NEAR MINK FARMS IN CANADA ARE ACTUALLY ESCAPED FARMED MINK OR HYBRIDS.

THE POTENTIAL OF CAPTIVE-BRED ANIMALS TO REDUCE THE FITNESS OF WILD POPULATIONS IS WELL DOCUMENTED. HYBRIDIZATION AND ASSOCIATED GENETIC TRANSFORMATIONS MAY EVENTUALLY RESULT IN THE NATURAL POPULATION BEING INCAPABLE OF SUSTAINING ITSELF, LEADING TO SPECIES ENDANGERMENT AND EXTINCTION.

America, the European wildcat, and the Atlantic salmon.

The spread of disease is another concern. Outbreaks of toxoplasmosis and canine distemper (CDV) have been reported on farms in North America since the late 1950s (Frank 2001). In 1998, a large Wisconsin mink farm experienced an outbreak of canine distemper, followed by an outbreak of toxoplasmosis in 1999 (Frank 2001). The farm had 7,800 breeding females, 400 breeding males, and 35,000 kits. During the CDV outbreak 80% of the kits were affected and experienced watery eyes, difficulty breathing, and bleeding noses; 997 died from the disease (Frank 2001). In the toxoplasmosis outbreak that followed, 1,976 (26%) of the females lost their litters and as a result were killed in the course of farm management (Frank 2001). Total kit mortality attributed to the toxoplasmosis outbreak was 10,408 (Frank 2001). The frequency of disease outbreak on U.S. mink farms is unknown since no state or federal agency facilitates or requires collection of these data. Data on frequency of Canadian fur farm disease outbreaks could not be found.

While toxoplasmosis and CDV can impact wildlife, the most concerning disease is Aleutian mink disease parvovirus (ADV), a highly infectious and often fatal virus highly prevalent on mink farms (Bloom et al. 1980, Mañas et al. 2001) that may be introduced to natural mink populations via contact with farmed mink. ADV is of further concern because it is highly persistent in the environment (Hansen 1985), may be spread by asymptomatic carriers (mink that show no sign of the disease), and can be transmitted via urine, feces, or saliva as well as from mother to offspring (Kenyon et al. 1963). In addition to direct mortality, ADV infection can lead to wild mink population declines by causing a decrease in fertility and spontaneous abortions (Padgett et al. 1967, Mañas et al. 2001).

In fact, ADV may have the potential to impact many native North American species, including short-tailed weasel, fishers, marten, river otters, striped skunk, raccoons, and foxes (Kenyon et al. 1978, Mañas et al. 2001, Fournier-Chambrillon et al. 2004). Moreover, vaccination against ADV is not effective (Aasted 1985); as such, there is no way to prevent the spread of the disease in the wild via vaccination (Fournier-Chambrillon et al. 2004).

Similarly, there is no easy way to eliminate free-living farmed mink or mink hybrids from the environment. Eradication of free-living farm-bred mink or hybrids in Europe has had mixed results, with some efforts limiting the population while others appear to have resulted in population increases (Kidd 2008). Control efforts in North America would be additionally complicated and probably detrimental to native mink populations, because it would be nearly impossible to avoid capturing native mink in the pursuit of free-living farmed mink and hybrids (Kidd

2008). Moreover, due to the inherently indiscriminate nature of traps and snares any such control effort would also place other species at risk including endangered species and domestic dogs and cats.

FUR FARMING IN THE UNITED STATES

The United States is the fifth largest mink producing country in the world. The U.S. produces approximately 5.8% of the global farmed mink production, behind just four countries: Poland 6.2%, Netherlands 8.7%, China 25.3%, and Denmark 27.2%. In terms of animal lives this amounts to approximately 3 million farm-raised mink killed annually for their pelts in the United States alone (Fur Commission 2007). Additionally, approximately 659,400 breeding female mink (USDA 2009) are held on U.S. fur farms. These numbers do not include the number of female mink not bred, the number of breeding males, the number of kits kept for breeding purposes, or the number of kits and adult mink not pelted for profit due to early death, escape, or poor pelt condition. Reliable data on the total number of farmed fox, and farmed bobcat or lynx raised or pelted in the U.S., are not available.

Federal Regulations

No federal regulations govern how animals on fur farms are to be housed or killed. Animals raised for fur are not covered under the federal Animal Welfare Act. The slaughter of furbearing animals is also not covered by the federal Humane Slaughter Act. Slaughter of fur-farmed animals typically takes place on the farm, and equipment and methods used are not regulated by any federal agency and were not found by Born Free USA's survey to be regulated by any state agencies in states where fur farming exists.

The USDA National Agricultural Statistics Service (NASS) collects data on the number of mink farms, the number of mink pelts produced broken down by color class, value of pelts, and the number of female mink bred, and the percentage of each fur color class the females were bred to produce. This information is compiled in an annual market report as are other agricultural commodities. The NASS does not collect data on farmed fox, lynx, or bobcat fur production.

According to the NASS, mink production reports are based on "a census of all known active producers." The list of "active producers" is compiled from "various sources" and the census is conducted via mail or telephone. In most cases NASS representatives do not actually visit the farms in the course of the census (pers. comm. Chris Hawthorn USDA 06/25/09). According to the 2008 census there were between 274 and 283 mink farms in the United States. However these numbers

NO FEDERAL REGULATIONS GOVERN HOW ANIMALS ON FUR FARMS ARE TO BE HOUSED OR KILLED.

ANIMALS RAISED FOR FUR ARE NOT COVERED UNDER THE FEDERAL ANIMAL WELFARE ACT. THE SLAUGHTER OF FURBEARING ANIMALS IS ALSO NOT COVERED BY THE FEDERAL HUMANE SLAUGHTER ACT.

may not tell the whole story.

Most states where fur farms exist don't require farms to be licensed and state agriculture departments may not even be aware of the location, status, or existence of some farms. It is also possible that the NASS has knowledge of fur farms that the state agriculture or wildlife agencies are unaware of (pers. comm. Hawthorn).

Independent surveys (counting mink, fox, and lynx/bobcat farms) indicate there are significantly more fur farms in many states than are reported in the NASS. While the presence of fox and lynx/bobcat farms in alternative data explains some of the discrepancy, the alternative data also indicate a greater number of mink farms (Table 1).

Some differences in numbers may be the result of how farms are counted. The NASS data do not distinguish between single location farms and farms with multiple locations; the data collected are entirely dependent upon how the producer collects data. So if a producer operates three farms but records the data collectively, the three farms are counted as one, but if the producer keeps separate records for each farm and reports each of them, the farms would be counted individually (pers. comm. Hawthorn).

Some variation in data may also be explained by lack of disclosure. The NASS records nine farms as being assigned to "other states" when in fact the information is not from farms in "other states" at all, but from states listed in the report that were counted differently to "avoid disclosing individual operations."

Additional discrepancies can be found in the estimates of total number of mink pelts produced. The NASS reported that in 2007 a total of 2.83 million mink pelts were produced (USDA 2009). Data from the Fur Commission USA sourced from Oslo Fur Auctions estimate 3 million farmed mink pelts were produced that year (Fur Commission 2007). This amounts to hundreds of thousands of mink pelts possibly uncounted for by the USDA, further calling into question the accuracy of the USDA's annual mink report.

The NASS has also begun reducing the amount of data collected and published. The NASS used to note the total number of U.S. mink farms that also reported raising fox (although these data were never broken down by state or fur value). In 2006, 16 mink farms reported also raising fox (down from 19 in 2005). However, the 2007 NASS report contained a "special note" informing that "the number of mink farms also raising fox will no longer be published." Another "special note" included in the 2008 NASS report (released July 10, 2009) stated, "The number of operations by state will no longer be published on an annual basis. State level numbers will only be published in conjunction with

the Census of Agriculture every five years. The number of operations at the U.S. level will continue to be published on an annual basis" (USDA 2009).

Table 1:
Below is an estimate of the number of fur farms by state including the USDA data as well as independent surveys of farms (also includes fox and bobcat/lynx farms).

STATE	USDA DATA (mink only)	INDEPENDENT SURVEYS (includes mink, fox, lynx, bobcat)
Colorado	0	2
Idaho	24	25
Illinois	7	16
Indiana	0	9
Iowa	17	17
Massachusetts	0	1
Michigan	9	16
Minnesota	23	49
Missouri	0	9
Montana*	8	8
Nebraska	0	3
New Hampshire	0	1
New York	0	7
North Dakota	0	8
Ohio	9	10
Oregon	18	31
Pennsylvania	11	16
South Dakota	3	10
Utah**	65	90
Washington	9	20
Wisconsin	71	106
"Other States"	9	-
Total	**283*** **	**454**

* Montana has 14 bobcat/lynx farms licensed by the Department of Fish Wildlife and Parks as "fur farms" although these animals are raised for various purposes including pets, attractions, urine, trophies, and pelts.

** Utah has 2 active permits for fur breeding of captive-raised bobcat, lynx, and marten issued by the Utah Department of Wildlife. Animals held under this permit may be pelted or sold.

*** Total: The NASS reported 271 mink farms in the U.S. However, the state-by-state

NO FUR FARMING STATES HAVE ESTABLISHED CARE, HOUSING, OR VETERINARY REQUIREMENTS FOR ANIMALS HOUSED ON FUR FARMS.

FUR FARMS ARE VIRTUALLY UNREGULATED IN EVERY STATE WHERE FUR FARMING EXISTS.

data provided in conjunction with information on pelts produced by color class inexplicably reflect a greater number of farms.

State Regulations

"As with all America's livestock producers, fur farmers are regulated by state departments of agriculture."
~ The Fur Commission website

"The Indiana Department of Agriculture is not a regulatory department. As a result we do not have any regulations relating to fur farming. In addition, we do not have any information regarding the number of fur farms in Indiana or the species raised on any such farms." ~ Indiana Department of Agriculture

"The Illinois Department of Agriculture does not have the statutory authority to regulate this industry."
~ Illinois Department of Agriculture

"The Pennsylvania Department of Agriculture does not have any responsibilities in the regulation of fur farming."
~ Commonwealth of Pennsylvania Department of Agriculture

A survey of state agencies in fur farming states conducted by Born Free USA demonstrates a distinct lack of regulation and enforcement at the state level as well as frequent confusion between government agencies regarding which agency has regulatory authority over fur farms.

State Departments of Agriculture often stated that regulating fur farms was the duty of each state's Natural Resource or Wildlife Department because mink and fox are wildlife or "domestic wild animals," while state Wildlife and Natural Resources Departments frequently pointed to the state Department of Agriculture as having responsibility for "agricultural pursuits." In a few cases state agencies pointed to the USDA as the regulatory authority.

No states reported having comprehensive laws specific to the regulation of fur farms and no states monitor the care and treatment of animals housed and killed on fur farms. As a result, fur farms are virtually unregulated in every state where fur farming exists.

In response to formal requests for information from Born Free USA, the vast majority of Departments of Agriculture in fur-farming states reported having no specific responsibilities or regulatory authority over fur farming in the state. Of those states reporting that their Department of Agriculture has statutory authority to regulate fur farms (Idaho, Massachusetts, Michigan, Minnesota, New York, South Dakota), none had exercised this authority by issuing regulations.

In addition, no fur farming states have established care, housing, or veterinary requirements for animals housed on fur farms. Only two states (Minnesota, Oregon) had specific regulations relevant to carcass or waste disposal for fur farms. No states with active fur farms required farms to keep records of any type.

New York was the only state found to have a provision relevant to the killing of animals on fur farms. Article 26 of the state Agriculture and Markets Law prohibits electrocution as a means to kill furbearing animals. However, it is unclear how this prohibition is enforced since slaughter of animals takes place on the farm with no inspection or oversight from any state or federal agency.

In response to Born Free USA's requests pertaining to the regulation of fur farms, some state Departments of Agriculture asserted that in lieu of specific department regulation, fur farms would be covered under general state laws that govern environmental protection and animal treatment.

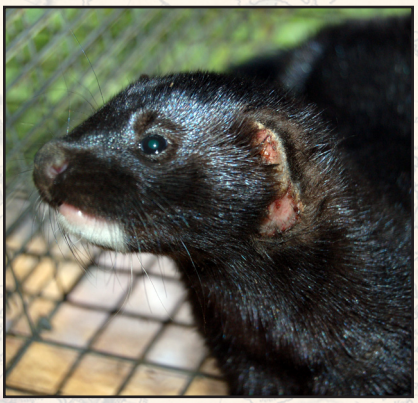
While fur farms may fall under general environmental protection laws at the state or even federal level, without licensing or inspection, disease outbreaks and pollution may go unreported, unnoticed, or detected only after significant damage has occurred. Indeed, with regard to fur farms, state and federal agencies appear to have a "don't ask, don't tell" and a "don't look, don't find" policy.

For example, the Illinois Department of Agriculture does administer the Illinois Humane Care for Animals Act and responds on a "case by case basis" when it is advised of "legitimate complaints from citizens of suspected mistreatment or neglect of animals." However, without routine inspection by any agency and with little or no public access to fur farms, the chances of poor conditions and inhumane treatment being reported are extremely rare. Moreover, "normal good husbandry practices" are exempt from the Act, placing much cruelty beyond the reach of the law if it is considered "customary or "common" in the industry.

Further, other common problems associated with fur farms, such as odor, flies, and subsequent loss of surrounding property value, typically fall outside general state environmental laws and local zoning ordinances.

With regard to general anti-cruelty laws, in most fur farming states such laws either don't apply or are typically not enforced on farms. In a majority of states where fur farming exists, the anti-cruelty laws contain provisions that exempt "common," "customary," or "accepted" farming practices, thereby placing fur farmers beyond the reach of the law. Moreover, the apparent lack of inspection by state agencies means there is little or no opportunity for treatment that falls outside "common" or "customary" practices to be reported and, as such, no opportunity for enforcement action.

IN A MAJORITY OF STATES WHERE FUR FARMING EXISTS, THE ANTI-CRUELTY LAWS CONTAIN PROVISIONS THAT EXEMPT "COMMON," "CUSTOMARY," OR "ACCEPTED" FARMING PRACTICES, THEREBY PLACING FUR FARMERS BEYOND THE REACH OF THE LAW.



"SELECTION FOR SUPERIOR ANIMALS THAT CAN THRIVE UNDER RANCH CONDITIONS HAS BEEN ACHIEVED, SINCE ONLY FOXES THAT COULD FUNCTION NORMALLY AND SUCCESSFULLY IN CAPTIVITY HAVE CONTRIBUTED TO THE SUBSEQUENT GENE POOL."

~ AGRICULTURE CANADA RECOMMENDED CODE OF PRACTICE FOR THE CARE AND HANDLING OF RANCHED FOX,1989

While mink and fox are defined as furbearing animals under Fish & Wildlife and Natural Resources Department codes, in every state where fur farming is known to exist, mink and fox raised commercially for fur fall outside these departments' regulatory authority.

States may specifically exempt farmed mink and fox from rules that apply to other captive furbearing species. For example, in Montana and Utah, mink and fox are not included under the fur-farm or fur-breeding licenses issued by the Montana Department of Fish, Wildlife and Parks or Utah Department of Natural Resources respectively, but these states do issue licenses for the breeding and use of lynx, bobcat, and marten for fur production.

Mink and fox raised on commercial fur farms may also be exempt from rules that apply to captive mink and fox produced for other purposes such as hunting or dog training. For example, in Missouri, Iowa, and Illinois, fur farms are specifically exempt from rules that apply to state game farms or "furbearing animal breeders." Likewise, the Minnesota Department of Natural Resources reported 134 active licenses for game farms which may raise mink, fox, bobcat, bear, beaver, cougar, wolf, coyote, rabbit, and other animals for various purposes. However, the department does not license or regulate the state's 23 to 49 commercial fur farms.

It is important to note that regulations set forth by state game commissions governing game farms and "furbearing animal breeders" are typically limited to licensing and record-keeping, not animal welfare. In Iowa, for example, the Department of Natural Resources (DNR) requires that animals on game farms be pen-raised for at least two generations and requires that game breeders file an annual report detailing the acquisition, production, and disposition of animals. The DNR commission may adopt rules which "ensure that all game birds, game animals, and fur-bearing animals are provided with humane care and treatment," but it has not done so.

Voluntary Guidelines

Three states (Michigan, Idaho, Ohio) reported that fur farms in their states were "encouraged" to follow voluntary industry codes of practice in lieu of enforceable regulations, licensing, or monitoring. Only Michigan and Idaho had incorporated such guidelines into documents maintained and provided by the Departments of Agriculture.

The Idaho State Department of Agriculture reported that while it does not have specific requirements for fur farms it does have "a voluntary program that certifies minimum requirements for the humane raising

and handling of fur farm animals. The program is modeled after the minimum standards issued by the US Fur Commission." The standards provided by the Michigan Department of Agriculture are also said to be compiled primarily from the guidelines developed by the "Fur Commission U.S.A."

As indicated by the Departments, the voluntary standard provided by these two state agencies largely reflect standard industry practices primarily designed to maximize efficiency, profit, and convenience for the farmer. Recommendations relevant to animal welfare are vague and lack measurable outcomes. It is now widely recognized that to be effective guidelines should be specific and measurable. Words such as "properly," "adequate," and "sufficient" are open to wide interpretation and do not provide meaningful guidance (Grandin 2004).

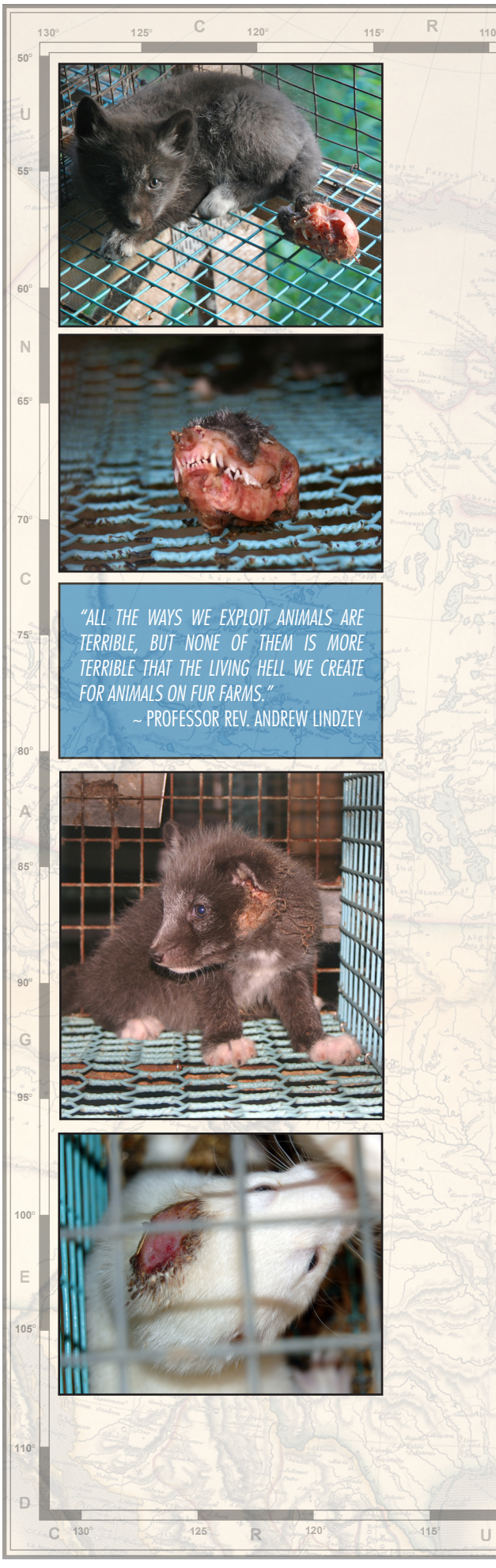
For example, with regard to enclosure size, Idaho's guidelines recommend that cages be of "sufficient size to allow exercise, normal postural adjustments, and freedom of movement, elimination of wastes and for mink to remain dry and clean." Michigan's guidelines suggest that "mink and fox pens should be of sufficient size to promote the general welfare of the animals and allow them to perform normal physiological functions, including rest, sleep, grooming, defecation, breeding, whelping, and raising young."

However, merely allowing an animal to sleep, turn around, groom, breed, and defecate does not guarantee good welfare. Survival and successful breeding alone do not guarantee good welfare (Fraser and Broom 1990). Provisions that allow for the animals' normal behavioral functions and other relevant welfare measures such as enrichment, provision of swimming water for mink, and elevated platforms, are also never mentioned in either set of guidelines.

Specific recommendations relevant to environmental protection such as carcass and waste disposal are also vague. The voluntary guidelines recommend that manure not be allowed to accumulate under cages and that farms be located in "appropriate areas" and "good" or "adequate" drainage.

Both sets of guidelines refer to establishing a program of disease control and prevention, but do not provide details or examples. Likewise both guidelines advise that sick and injured animals be treated or humanely euthanized but do not define treatment or euthanasia protocols for such animals.

Idaho's guidelines provide recommendations for the killing of animals for fur harvest. These recommendations include the use of carbon monoxide generated by a gas-combusting motor, and cyanide, both contrary to the American Veterinary Medical Association (AVMA) guidelines on



"ALL THE WAYS WE EXPLOIT ANIMALS ARE TERRIBLE, BUT NONE OF THEM IS MORE TERRIBLE THAT THE LIVING HELL WE CREATE FOR ANIMALS ON FUR FARMS."
~ PROFESSOR REV. ANDREW LINDZEY

"ONLY A PERSON WHO IS INTERESTED IN ANIMALS, AND TRULY CARES FOR THEM, CAN BECOME A SUCCESSFUL FUR FARMER."
~ FUR INSTITUTE OF CANADA

euthanasia. According to the AVMA guidelines only bottled carbon monoxide is considered an acceptable agent for killing mink; the guidelines warn that mink require high concentrations of the gas for it to be effective and that equipment must be properly designed and operated to be acceptable. Cyanide is considered an unacceptable agent for euthanasia by the AVMA guidelines.

Michigan's guidelines mention that the Fur Commission USA "recommends acceptable procedures for euthanasia of mink and fox that are identified in the report of the AVMA Panel on euthanasia" but does not provide them.

Neither state enforces these recommendations or collects data on the number of farms utilizing them; it is therefore unknown what effect these recommendations have on the welfare of farmed fox and mink.

The Fur Commission USA (FCUSA) boasts that "the overwhelming majority of mink farms in the U.S. are members of FCUSA and participate in the Merit Award certification program," which is ostensibly awarded only to those members who meet "the strict criteria set forth by the FCUSA Animal Welfare Committee in its 'Standard Guidelines for the Operation of Mink Farms in the United States.'" However, as previously discussed, such guidelines tend to merely codify and mirror existing industry practice.

Moreover, certification and inspection by an entity simultaneously concerned with industry promotion and membership recruitment create a considerable conflict of interest. Ultimately, to be meaningful, guidelines, codes of practice, or recommendations need to be legally enforceable by an independently objective, appropriately mandated agency.

Table 2:
Below is the summary of state fur farm regulatory authority, licensing, and inspection. *Information from state agency response to the Born Free USA survey of states where fur farming is reported to exist (Table 1). States with no reported fur farms were not surveyed.*

State	Dept. of Ag.	Dept. of Wildlife	Licensed	Inspections
Colorado	No	No	No	No
Idaho	Yes[1]	No	No	No
Illinois	No	No[2]	No[2]	No
Indiana	No	No	No	No
Iowa	No	No	No	No
Massachusetts	Yes[3]	No	Yes[3]	Yes[3]
Michigan	Yes[4]	No	No	No[4]

Table 2: Continued

State	Dept. of Ag.	Dept. of Wildlife	Licensed	Inspections
Minnesota	Yes[5]	No	No	No
Missouri	No	No	No	No
Montana	No	Yes[6]	No	Yes[6]
Nebraska	No	No	No	No
New Hampshire	NR	No	No	No
New York	Yes[7]	No	No	No
North Dakota	NR	NR	NR	NR
Ohio	No	No	No	No
Oregon	Yes	No	Yes[8]	Yes[8]
Pennsylvania	No	NR	No	No
South Dakota	Yes[9]	No	No	No
Utah	No	No	No	No
Washington	Yes	No	Yes[10]	No
Wisconsin	No	No	No	No

* See after Table 3 (p. 23) for exception number descriptions

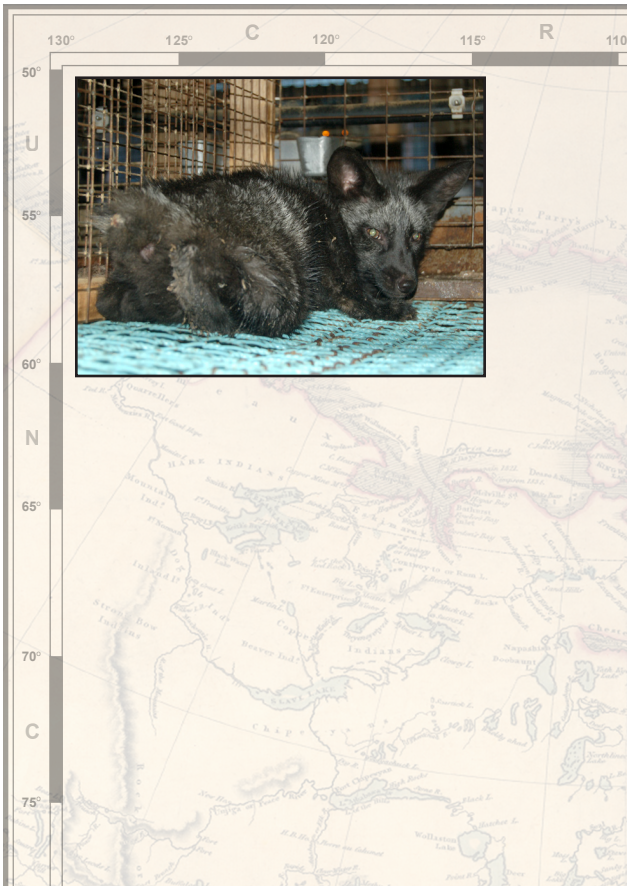


Table 3:

Below is the summary of State Regulations Specific to Fur Farms. *Information from state agency response to the Born Free USA survey of states where fur farming is reported to exist (Table 1). States with no reported fur farms were not surveyed.*

State	Housing, Cage size, Feeding, Enrichment	Carcass and Waste Disposal	Vet Care	Disease Control	Record Keeping	Killing Methods
Colorado*	No	No	No	No	No	No
Idaho*	No	No	No	Yes[1]	No	No
Illinois*	No	No	No	No	No[2]	No
Indiana*	No	No	No	No	No	No
Iowa*	No	No	No	No	No	No
Massachusetts	No	No	No	No	Yes[3]	No
Michigan*	No	No	No	No	No	No
Minnesota	No	Yes[5]	No	No	No	No
Missouri*	No	No	No	No	No	No
Montana*	No	No	No	No	No	No
Nebraska*	No	No	No	No	No	No
New Hampshire	No	No	No	No	No	No
New York	No	No	No	No	No	Yes[7]
North Dakota	No	No	No	No	No	No
Ohio*	No	No	No	No	No	No

Table 3: Continued

State	Housing, Cage size, Feeding, Enrichment	Carcass and Waste Disposal	Vet Care	Disease Control	Record Keeping	Killing Methods
Oregon*	No	Yes[8]	No	Yes[8]	No	No
Pennsylvania*	No	No	No	No	No	No
South Dakota*	No	No	No	No	No	No
Utah*	No	No	No	No	No	No
Washington*	No	Yes	No	Yes[9]	No	No
Wisconsin*	No	No	No	No	No	No

"FRUSTRATED ANIMALS SUCH AS FEMALES WHOSE YOUNG KITS ARE REMOVED, ALSO SHOW HIGH LEVELS OF RUNNING IN AND OUT OF THE NEST-BOX, AND NODDING UP AND DOWN AGAINST THE CAGE WALL, BOTH POSSIBLY THE INTENTIONAL MOVEMENTS OF SEARCH."

~ THE EUROPEAN COMMISSION SCIENTIFIC COMMITTEE ON ANIMAL HEALTH AND ANIMAL WELFARE

* States with anti-cruelty statutes that specifically exempt customary or accepted farming practices

[1] ID Fur farming is deemed an agricultural pursuit (title 25 Ch30) and the Department of Agriculture "division of animal industries" has authority to inspect fur farms at any time (title 25 Ch30 Idaho Code), but no regulations exist and the number of existing farms is unknown since no license is required. Disease: "Fur farms may possess or import any domestic fur bearing animals with a certificate of veterinary inspection and domestic fur-bearing animals may be sold, traded, bartered or exchanged between fur farms" (Title 25, Ch2). However, it is unclear how this requirement is enforced without licensing or inspection.

[2] IL Those breeding mink and fox are exempt from the requirement to obtain a furbearing mammal breeder license from the Department of Natural Resources if "(1) they are defined as farmers for Federal income tax purposes, and (2) at least 20 percent of their gross farm income as reported on Federal tax form Schedule F (Form 1040) for the previous year is generated from the sale of mink, red fox or arctic fox as live animals, pelt or carcasses."

[3] MA $25 annual listing fee. Certificate issued, and must be posted in a conspicuous place on the premises at all times. The department "may inspect at any reasonable time." (However, maintaining breeding records is the only requirement and the Department is unaware of any fur farms in the state.)

[4] MI Department of Agriculture has authority to regulate fur farms but does not do so. The Public Acts of 1941 were amended in 1948 to include "An act to license and regulate domestic mink farms, and to prescribe the powers and duties of the state department of agriculture with respect thereto." This act was repealed in 1955.

[5] MN Department of Agriculture has the authority to license and regulate but does not. Fur farms are required to comply with general agricultural carcass disposal requirements which include a special exemption for trucks transporting carcasses to fur farms.

[6] MT Fox and mink are not included under the fur farm licensing requirements. The Department of Fish, Wildlife and Parks "periodically" inspects farms raising beaver, otter, muskrat, marten, fisher, wolverine, bobcat, and lynx.

[7] NY Fur farms are within its jurisdiction but there are no regulations and the state does not enforce the Article 26 of the Agriculture and Markets law that prohibits electrocution of furbearing animals.

[8] OR Only fur farms with a liquid waste handling or storage system must register for an Oregon CAFO General Permit. Farms without such systems are not licensed, registered or inspected. Only 11 out of the 18–31 fur farms in Oregon are registered as CAFOs. Department of Agriculture asserted that it is responsible for disease protection and control for livestock; however, it did not explain how this is achieved without licensing and inspection of farms or even knowledge of farm whereabouts.

[9] SD In jurisdiction of Department of Agriculture but no regulations or license required.

[10] WA A small business license is required. The Department has the ability to quarantine animals on fur farms.

THE DIRTY DOZEN:
12 WORST FUR FARMING STATES

1. Wisconsin

Wisconsin tops the list for having the greatest number of unregulated fur farms in the country, with 71 mink fur farms counted by the USDA and possibly as many as 106 total fur farms when fox and alternative sources of information are included.

Wisconsin is also one of a handful of states with government regulatory agencies that are likely unaware of the lack of regulation of this industry in their state despite the potential impacts on other agriculture and other wildlife. The Wisconsin Department of Agriculture, Trade and Consumer Protection and the Wisconsin Department of Natural Resources both erroneously implicated the other as having regulatory oversight of fur farms.

"The Department of Natural Resources regulates fur farm in Wisconsin"
~ Wisconsin Department of Agriculture,
Trade and Consumer Protection

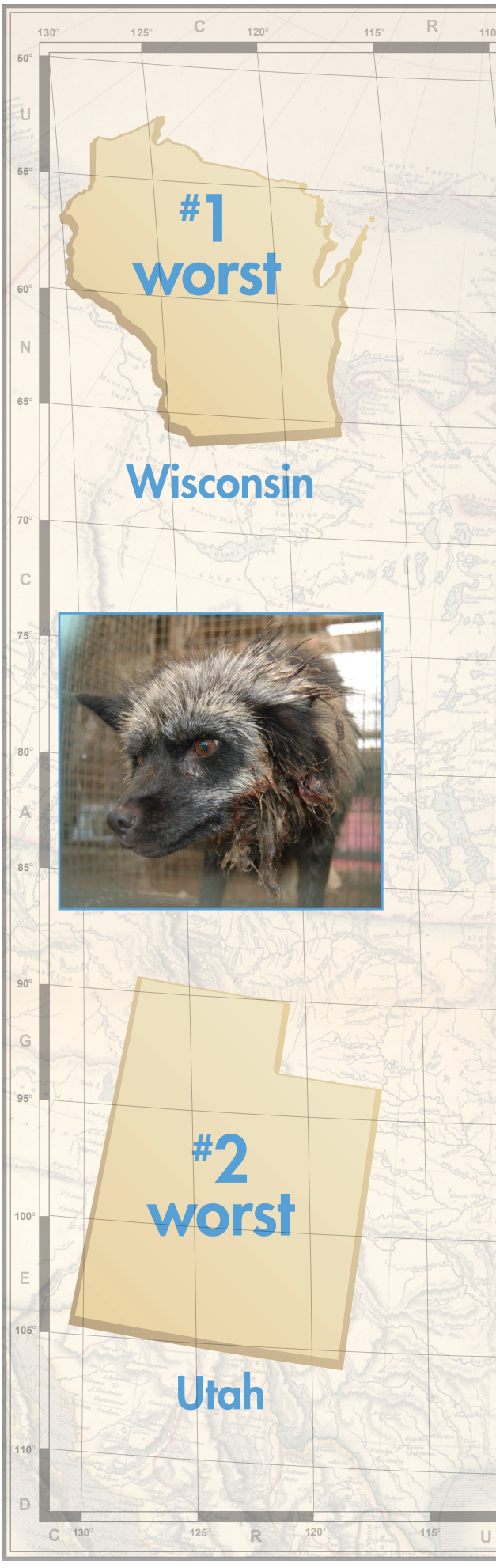
"[Fur farms are] regulated by the Dept of Ag & Consumer Protection"
~ Wisconsin Department of Natural Resources

2. Utah

Utah comes in second to worst for having at least 65 fur farms that are completely devoid of any agency oversight or specific regulations. Moreover the Utah state code specifically states that *"animals kept or owned for agricultural purposes in accordance with accepted husbandry practices"* are not included within the cruelty statute. The raising of animals for fur would most likely be considered an agricultural purpose, thereby placing the cruel but commonly accepted practices endured by farmed mink and fox outside the reach of state anti-cruelty laws.

While commonly considered an agricultural pursuit, mink and fox farming is likely of little or no concern to the Utah Department of Agriculture. In response to the Born Free USA questionnaire the Utah Department of Agriculture provided a handwritten response scribbled across the top of the questionnaire that read, *"Fur farms are not regulated by the Utah Department of Agriculture,"* with no salutation or signature.

On first glance it might appear that fur farming is regulated by the Utah Department of Natural Resources because this agency issues "Certificates of Registration" for "fur breeding." However, "fur breeding" refers only to the propagation of captive-raised bobcat, lynx, and marten. The progeny of these animals may be pelted or sold. There are currently 2



active fur-breeding farms of this type in Utah. The Department clarified that in regard to farm-raised mink or fox, *"the division does not have jurisdiction over these animals."*

3. Idaho

Idaho takes third place in the "dirty dozen" for its high number of unregulated mink farms, for having a Department of Agriculture that has authority to inspect fur farms but from our research appears to not, and for having one of the broadest anti-cruelty statute exemptions in the country. Idaho code dismisses all "normal and accepted" common industry practice that might otherwise be deemed cruelty to animals, especially if the Department of Agriculture were not charged with enforcing the code.

As mentioned in the above notes, because fur farming has been deemed an "agricultural pursuit" the Division of Animal Industries has authority to inspect fur farms at any time; however, because no implementing regulations exist and no licensing is required, having "the authority to inspect" is practically meaningless especially in regard to animal welfare. Since no license is required to operate a fur farm in the state, and no record-keeping is required, farms may be in operation that the Department has no awareness of and therefore no way to enforce the "certificates of veterinary inspection" that are ostensibly required for fur farms to "possess, or import domestic fur bearing animals."

4. Minnesota

Minnesota comes in at a close fourth place behind Idaho with nearly as many unregulated mink farms (23), but without the broad anti-cruelty statute exemption. However, the same cruel common industry practices likely take place unabated on Minnesota fur farms and no agency inspects or licenses the farms despite the authority of the Department of Agriculture to do so.

Minnesota does offer a "voluntary program of registration and annual report of pelts sold." The only thing voluntarily registered fur farms are required to do is have a Minnesota business tax ID number and file a report of the number of pelts of each species of furbearing animal sold during the preceding calendar year. Nothing relevant to environmental protection or animal welfare is required.

This voluntary program may be what the Department of Natural Resources was referring to when it informed Born Free USA that the Minnesota Department of Agriculture "regulates" and "licenses" fur farms.

As in other states the Department of Natural Resources does enforce

regulations pertaining to "game farms" and "shooting preserves." The Department reports having 134 active licenses for game farms and lists mink and fox among the animals included on such farms but apparently draws a distinction between mink and fox raised on "game farms" and those raised on fur farms, although the actual basis for such a distinction is not clear.

5. Oregon

Like other "dirty dozen" states, Oregon has multiple mink farms (18) and no welfare-related regulations. In fact, according to the Oregon Department of Agriculture, it does not have regulatory authority over how animals are raised or treated on fur farms.

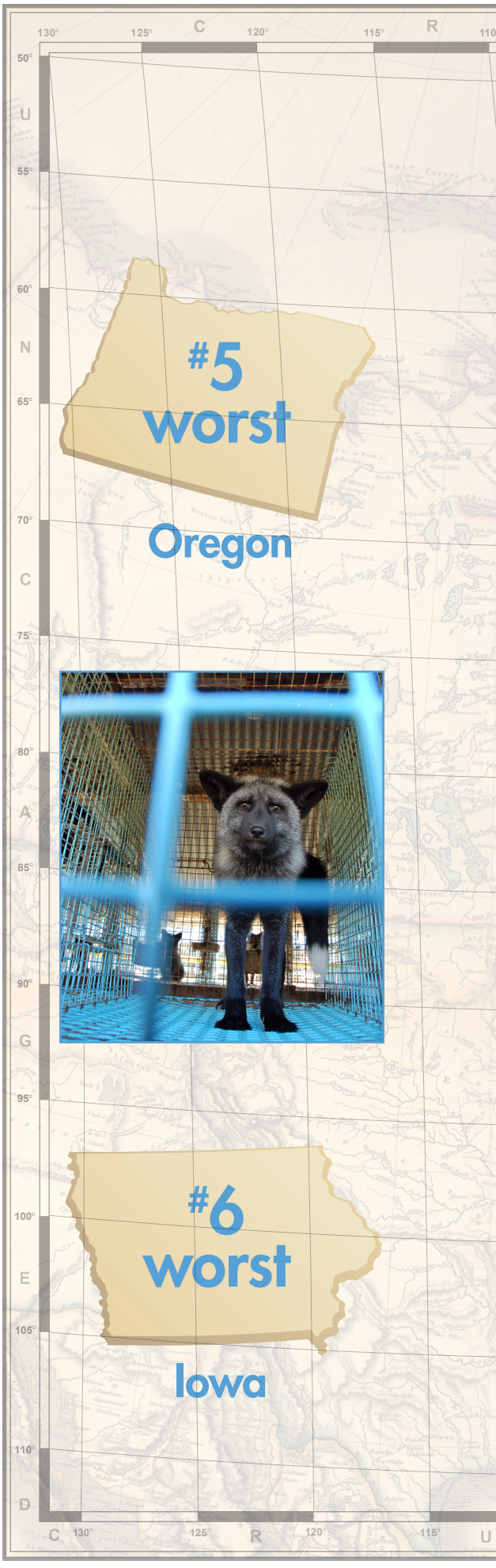
The Department gains a few positive points for at least acknowledging that permits are required for some farms — those with a liquid waste handling or storage system. These farms are considered "Confined Animal Feeding Operations" (CAFOS) and, as such, are required to obtain a "National Pollutant Discharge Elimination System Permit" compliant with the Clean Water Act.

Ironically, farms with no waste handling systems are apparently of little or no concern. As a result, only 11 of the 18–31 fur farms are accounted for and inspected annually. The Department of Agriculture asserts that it is only responsible for disease protection and control for livestock; however, it is unclear how such control is exercised if the majority of fur farms are not licensed or inspected.

The Oregon Department of Fish and Wildlife has no authority over commercial fur farms and erroneously indicated that the US Department of Agriculture issues permits for propagating furbearers on commercial fur farms in its response to Born Free USA. As noted in the report it is not uncommon for state agencies to wrongly assume that commercial fur farms are regulated by federal agencies.

6. Iowa

Iowa has 17 mink farms, none of which appear to be regulated in any significant way. The only thing remotely remarkable about Iowa was the lack of response from the Iowa Department of Agriculture; however, a search of the Department's website does not turn up any regulations or permits specific to fur farms and furbearing animals are not included among the list of animals requiring a permit. The Department of Natural Resources however was very responsive to our request for information, but does not regulate captive-raised mink and fox. It does provide licenses for "game breeders" which may include furbearers other than farmed mink and fox. "Game breeders" are "periodically" inspected by state conservation officers according to the



Department. The Department may adopt rules to ensure "humane care and treatment" of animals raised on "game farms" but has yet to do so.

7. Pennsylvania

Pennsylvania has fewer documented fur farms (11) than Iowa and was equally unresponsive to questions about fur farming in the state. In the case of Pennsylvania, however, it was the Department of Wildlife that failed to provide the courtesy of a response to questions.

The Pennsylvania Department of Agriculture, on the other hand, was prompt and concise in reporting that the agency "does not have any responsibilities in the regulation of fur farming." The agency also suggested that the Department of Wildlife was responsible for the raising of "wild animals for fur"; however, no definition of "wild animal fur" was provided and no definition could be found under the provisions of the Department of Wildlife, which was unable or unwilling to clarify this matter.

8. Michigan

According to Michigan's State Veterinarian and Division Director of Animal Industry Division, Michigan's fur farms are not regulated or inspected because no license is required and likewise no records are available.

Interestingly, Michigan briefly attempted to license fur farms in the 1940s. The Public Acts of 1941 were amended in 1948 to include "An act to license and regulate domestic mink farms, and to prescribe the powers and duties of the state department of agriculture with respect thereto." This act was repealed in 1955 leaving Michigan fur farmers free from any regulatory oversight.

9. Washington

As in many states, fur farms in Washington can be quarantined if a disease problem is detected or can be fined or cited under applicable environmental protection laws, again if a problem is detected. But also like most states, there is no system in place to inspect, approve, or even to document the size and location of fur farms.

While the Department of Agriculture reports that it can quarantine fur farms if there is a disease problem, it also reported that it does not keep records or information on the total number of fur farms in the state. It did, however, report that fur farms are required to obtain a small business license, but these licenses are not shared with the Department.

While the Department admitted that it does not inspect fur farms,

nor keep any records relevant to fur farms, it did report that specific requirements were required for killing, waste disposal, carcass disposal, disease control, recordkeeping, and animal identification, but is apparently unaware of what those requirements are, and doesn't enforce them. The Department did provide a copy of the Revised Codes of Washington (RCW) where fur farming is mentioned. However, these codes merely provide definitions and establish that fur farming is to be "deemed an agricultural pursuit," that wild-caught furbearers must be obtained lawfully, and that fur farmers "may" mark any fox, mink, or marten with a brand for identification — but it is not required.

The Washington Department of Fish and Wildlife also reported that it does not manage, permit, or license fur farms, and advised that Washington Department of Agriculture be contacted for "records concerning fur farms."

10. Illinois

Illinois is in the number 10 spot for its rather incongruous regulations of fur farming in the state.

On one hand, the Illinois statute states that those breeding or raising live furbearing mammals must obtain a furbearing mammal breeder license from the Department of Natural Resources (DNR). A permit costs just $25 and license holders are required to maintain records for two years on the sale, disposition, and acquisition of each live animal or green hide. License holders are not required to follow any care or housing standards. By the DNR definition, mink and fox are "furbearing animals"; however, the animals are treated differently under the law depending on how large the operation is. Those raising mink and fox who make at least 20 percent of their gross farm income on the sale of mink, red fox, or arctic fox as live animals, pelts, or carcasses, are not required to obtain a furbearing mammal breeder license from the DNR and the operation is deemed an "agricultural pursuit" under the law (520 ILCS 5/3.25).

It seems the designation of commercial fur farming as an "agricultural pursuit" serves only to ensure that the farms are exempt from regulatory oversight. According to the State Veterinarian, "The Illinois Department of Agriculture does not have the statutory authority to regulate this industry." So, ironically, the larger the operation the less likely it is to be regulated in Illinois.

11. Ohio

The fact that Ohio has fewer total farms than some states is the only reason that Ohio rates a bit better than the very worst states — it also lacks meaningful regulations.

According to the State Veterinarian with the Department of Agriculture, "The Ohio Department of Agriculture does not regulate animal welfare issues in Ohio, nor do we impose any specific housing or care requirements for any animal, no matter the species. The responsibilities of the Ohio Department of Agriculture, Division of Animal Industry are to provide disease control and eradication support services for the purpose of protecting the health of Ohio's food/agricultural animals and public health."

As with other states, the Department provided no explanation for how disease control responsibilities are carried out in absence of licensing, inspection, or specific regulations.

The State Veterinarian erroneously suggested that the Department of Natural Resources licenses mink farms and also incorrectly asserted that "care standards" on fur farms are regulated by the USDA under authority of the Animal Welfare Act.

12. Montana

Like other states, Montana fails to regulate mink and fox fur farming and is unaware of the number and whereabouts of all fur farming operations in the state.

Montana stands out, however, for sanctioning the captive breeding of lynx and bobcats for fur and other purposes but providing no significant welfare regulations for these animals. Montana also makes the list for having two state agencies that provided erroneous information regarding the regulation of fur farming in the state.

Both the Montana Department of Livestock and the Montana Department of Agriculture denied any responsibility for overseeing fur farms in the state and both indicated that Montana Department of Fish, Wildlife and Parks was responsible.

However, the Montana Department of Fish, Wildlife and Parks only licenses farms raising beaver, otter, muskrat, marten, fisher, wolverine, bobcat, and lynx. Mink and fox are not included under fur farm licensing requirements.

The regulations for the furbearers that are covered by the Montana Department of Fish, Wildlife and Parks are minimal. To receive an annual fur farm license one must pay a $25 fee for the initial application and an annual $15 renewal fee, own or lease the premises where the farm exists, and the property must be "properly fenced" so as to prevent escape of fur farm animals into the wild.

In addition, licensees must keep records of the number and species of

furbearers purchased, transferred, or sold and the name of each person to whom or from whom such furbearers were purchased, transferred, or sold. While the Department has the authority to adopt and enforce rules governing care and treatment of furbearers held by fur farm operators, it has not done so.

There are 14 bobcat/lynx farms licensed by the Department of Fish Wildlife and Parks as "fur farms"; these animals are raised for various purposes including pets, attractions, urine, trophies, and pelts. One fur farm reported pelting 6 lynx and 130 bobcats in 2008.

FUR FARMING IN CANADA

Canada produces approximately 4.5% of the global farmed mink production, making it the 6th largest mink producer in the world just behind the United States. According to data collected by Oslo Fur Auctions and reported by the Fur Commission USA, 2.3 million farm-raised mink were killed and pelted in 2007 (Fur Commission 2007). Data collected by Statistics Canada report fewer pelts for the same year: 1,810,400 (Statistics Canada 2007). These numbers do not include the number of breeding animals or the number of animals not pelted for profit due to early death, escape, or poor pelt condition. However, unlike the United States, Canada does collect these data.

In 2007, an additional 113,300 mink died or escaped in Canada and were not pelted; a further 458,500 mink were reported "on farms" — this largely consists of breeding animals. There were a total of 219 mink fur farms in Canada (Statistics Canada 2007).

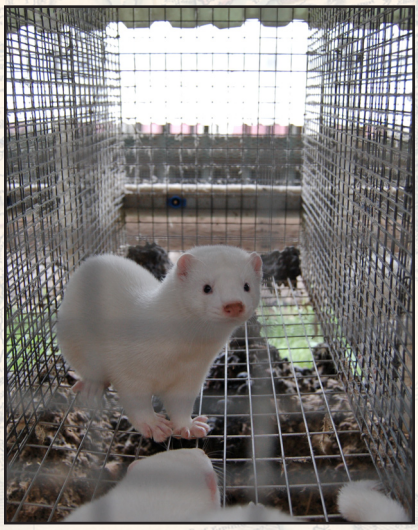
Also in contrast to the United States, Canada collects detailed data on fox farms. In 2007, there were 82 fox farms in Canada (Statistics Canada 2007) which collectively killed and pelted an estimated 8,750 foxes. An additional 510 died or escaped (not pelted), and an additional 4,320 remained on the farms likely as breeding animals (Statistics Canada 2007).

Statistics Canada surveys mink and fox farms to produce annual estimates of fur farm pelts produced in Canada and to produce provincial estimates of inventories, peltings, and values to aid in determining production value and to identify industry trends (Statistics Canada 2007). While information on the number of fox and mink who die or escape prior to pelting is collected, no other potential welfare or environmental indicators are collected. The data are collected from "all known mink and fox ranches," as compiled by the "Census of Agriculture" and questionnaires are sent by mail. Response is voluntary. This may explain the discrepancy between the substantially higher numbers of farmed Canadian mink pelts reported by the Oslo Fur Auction, although

PHOTO: CAFT UK

IN CANADA INFORMATION ON THE NUMBER OF FOX AND MINK WHO DIE OR ESCAPE PRIOR TO PELTING IS COLLECTED; NO OTHER POTENTIAL WELFARE OR ENVIRONMENTAL INDICATORS ARE COLLECTED. ADDITIONALLY, THE FUR FARMERS' RESPONSE IS VOLUNTARY AND THERE ARE NO NATIONAL OPERATING REQUIREMENTS SPECIFIC TO FUR FARMS IN CANADA.

PROVISIONS SPECIFIC TO ENVIRONMENTAL ENRICHMENT AND PSYCHOLOGICAL WELL-BEING OF FARMED FOXES ARE GLARINGLY ABSENT IN CANADIAN CODES OF PRACTICE.



Statistics Canada asserts that its data are highly accurate (Statistics Canada 2007).

There are no national mandatory reporting or operating requirements specific to fur farms in Canada. While a few provinces and territories in Canada have regulations relevant to fur farming, most are limited to carcass and waste disposal, licensing, escape prevention, and reporting. There are a few notable exceptions yet few of these have regulations relevant to animal welfare.

Canadian Codes of Practice

In lieu of national regulations, The Codes of Practice for the Care and Handling of Farm Animals have set the minimum standard for animal welfare across Canada for over two decades. The Canadian Agri-Food Research Council is responsible for managing the codes.

The ranched fox and mink codes of practice were developed in 1998. The codes set forth voluntary housing and management practices for farmed fox and mink (each species is covered in separate documents). While the codes cover some basic care requirements such as sanitation, provision of adequate and potable food and water, and that sick animals be "treated immediately" or "destroyed humanely," there are many shortcomings. For example, in fox codes of practice, important considerations such as cage size merely adopt standard industry cage sizing — 12 square feet. In addition the recommended method of killing farmed foxes is electrocution via charged probes inserted into the fox's mouth and rectum.

Further, the codes specifically recommend against use of intravenous injection of barbiturates and use of gas such as CO and CO_2. These recommendations are in stark contrast to the AVMA guidelines. Electrocution is considered only "Conditionally Acceptable" by the AVMA for killing foxes and only when followed by cervical dislocation (AVMA 2007), while barbiturates and CO and CO_2 are considered "Acceptable" by the AVMA (AVMA 2007). Lastly, provisions specific to environmental enrichment and psychological well-being of farmed foxes are glaringly absent in the codes of practice.

The codes of practice for the care and handling of mink are similar in scope and shortcomings. Minimum cage sizing is based on standard industry practice; as a result, minimum size for individual mink is a paltry 325 square inches (2.25 square feet). The codes also fail to recommend or even mention environmental enrichments for mink such as swimming water and other items shown to stimulate mink activity and reduce stress in caged mink (Nimon and Broom 1999, Mason et al. 2001).

Because the codes of practice are not linked to a verification program that ensures the codes are being followed, it is unknown what effect these codes have on the welfare of farmed fox and mink.

Ironically, the introduction to the voluntary codes of practice state, "Domestication and artificial selection of livestock have made farm animals dependent on humans. Consequently, according to the currently accepted moral and ethical standards of our society, humans have *no choice* but to avoid suffering at all stages of their lives. This *voluntary* [emphasis added] Code of Practice represents a step toward meeting that responsibility."

Indeed, across Canada fur farmers have lots of choices when it comes to the care and treatment of fur farmed animals, as there is little they are legally obligated to do.

Table 4:
Number of Mink and Fox Farms by Province (Source: Statistics Canada 2007)

Province	Number of Mink Farms	Number of Fox Farms
Newfoundland and Labrador	18	6
Prince Edward Island	7	6
Nova Scotia	93	11
New Brunswick	7	19
Quebec	11	14
Ontario	58	9
Manitoba	11	6
Saskatchewan	0	5
Alberta	2	5
British Columbia	12	1
Total	**219**	**82**

Alberta

Alberta has a "Fur Farm Act." While the Act provides for inspection authority, it does not require it. In addition the regulations are limited to keeping the premises in a "clean and sanitary condition" and to having cages that prevent "animals from escaping and to prevent other animals from entering." The Act also includes restrictions on importing and exporting animals and requires reporting of "any outbreak of sickness or disease." But again while it provides authority for quarantine, it does not require it in the event of a disease outbreak. The Act does not

BECAUSE THE CANADIAN CODES OF PRACTICE ARE NOT LINKED TO A VERIFICATION PROGRAM THAT ENSURES THE CODES ARE BEING FOLLOWED, IT IS UNKNOWN WHAT EFFECT THESE CODES HAVE ON THE WELFARE OF FARMED FOX AND MINK.

address caging standards, animal care, and enrichment, or handling or killing methods. Interestingly the Act does explicitly allow fur farm owners or workers to kill any dog found to be "terrifying the fur-bearing animals." There are 2 mink farms and 5 fox farms in Alberta (Statistics Canada 2007).

British Columbia

British Columbia also has a "Fur Farm Act" which is a little more detailed than Alberta's. It too requires fur farms to acquire a license but unlike Alberta it requires record-keeping, including sales, purchase of live animals, pelt shipments, births, and deaths. Also in contrast to Alberta's Act, British Columbia's Act contains some minimal requirements for animal care but only under the auspices of disease control — not welfare. Animals must be supplied with "an ample supply of wholesome food and clean, fresh water," and farms must "maintain animals in good general health and free of disease." Also of note, the Act requires that licensed farms have "equipment adequate" for the "humane dispatching of animals to be pelted"; however, it does not contain actual provisions for carrying out "humane dispatching." There are 12 mink farms and 1 fox farm in British Columbia (Statistics Canada 2007).

Saskatchewan

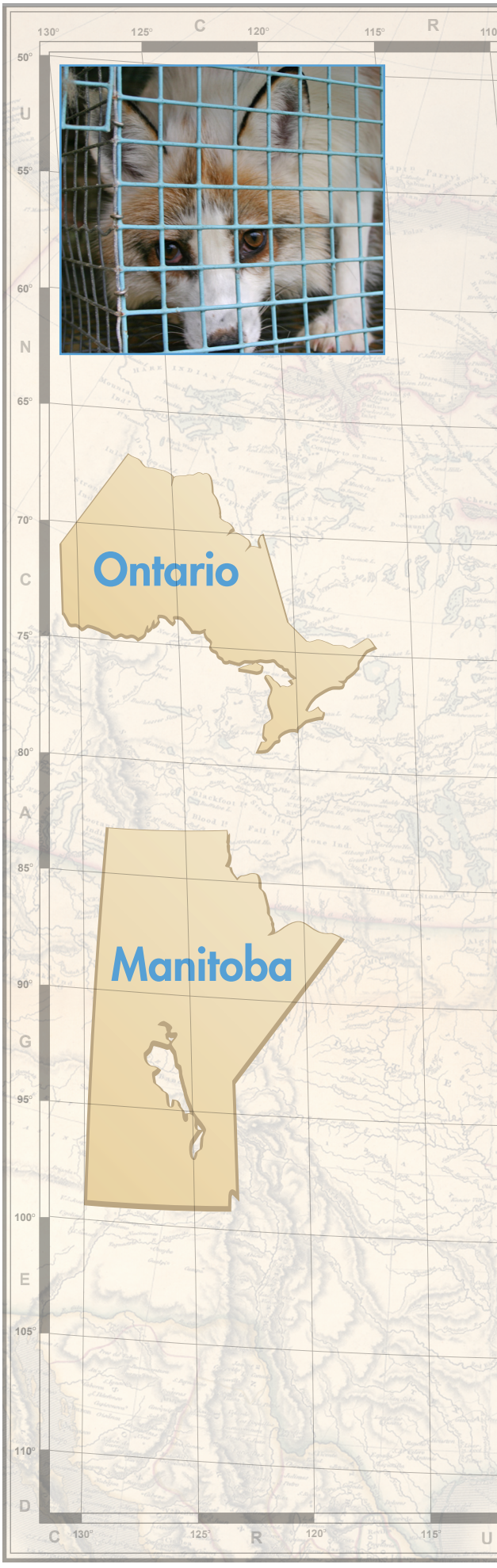
Saskatchewan has, under "The Animal Products Act," regulations cited as "The Fur Farming Regulations" which require that fur farms be licensed. A license is obtained by submitting an application to the minister with "any information that the minister considers necessary" and a $40 CND application fee and must be renewed annually. The regulations prohibit release of animals and require reporting of escapes to a wildlife officer and require record-keeping of all births, deaths, purchases, and transfers.

The regulations do contain vague provisions relevant to welfare. The regulations explicitly state that animals shall be handled in a "humane manner" and that they shall be destroyed in "as painless and humane a manner as possible." However, what constitutes humane handling and killing is not defined or spelled out. The regulations do contain minimal cage sizes for coyote, fox, lynx, and mink. Individual adult fox cages cannot be less than 11.84 square feet (not including the nesting area) and cannot be less than 2.49 feet wide or high. (Note: This is slightly smaller than the standard industry fox cage which is 3x4 feet.) There are 5 fox farms in Saskatchewan and no mink farms (Statistics Canada 2007).

Nunavut

Nunavut, a Canadian territory, has regulations governing fur farms

under the "Wildlife Business Regulation," although it is unclear if there are any fur farms in Nunavut. (This territory is not included in Fur Statistics collected by Statistics Canada.) Nonetheless, regulations are in place requiring fur farms (and game farms) to obtain an annual license with a fee of $200 CDN for first time applications and $100 CDN for renewals. Of note, fur farm operators are required to provide enclosures that "meet the security, biological and aesthetic requirements of the fur-bearing animals." In addition operators are required to "provide veterinary services for sick or injured animals within an enclosure," and may not keep or permit animals to be "kept in a stressful, unsanitary or overcrowded environment."



Ontario

Regulations set forth in Ontario's Fish and Wildlife Conservation Act require fur farmers to report escapees and to be held liable for costs associated with their recovery (Kidd 2008); however, enforcement of this provision is reported to be low since the removal of licensing authority over mink farms in the 1990s (Kidd 2008). Ontario's Fur Farms Act was repealed in 1997. Fur farms are still required to follow general agricultural requirements such as those governing carcass and manure disposal. Ontario has 58 mink farms and 9 fox farms (Statistics Canada 2007).

Manitoba

Manitoba's fur farms are governed by the "Animal Care Act."

The Act prohibits confining animals to "an enclosure or area

(I) with inadequate space,
(II) with unsanitary conditions.
(III) with inadequate ventilation, or
(IV) without providing an opportunity for exercise so as to significantly impair the animal's health or well-being."

It appears, on first glance, the conditions under which mink and fox are customarily kept would clearly violate the Act. However, the Act contains an exemption for "accepted activities." An "accepted activity" includes "agricultural uses of animals" and any activity that is "consistent with generally accepted practices or procedures." Therefore certain practices, no matter how inhumane, are outside the reach of the Act if they are "accepted agricultural practices." As a result the Act fails to ensure the welfare and humane treatment of farmed mink and fox in Manitoba.

The Remaining Canadian Provinces:

Similar to Ontario and Manitoba, the remaining Canadian provinces (which contain more than half of all mink farms in Canada) — Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador — have very few laws specifically governing fur farms and no laws specifically governing the welfare or humane treatment of animals on fur farms (CanLII 2009).

In fact, the lack of appropriate regulation of mink farms has recently become a pressing issue in Nova Scotia, which has seen the number of farmed mink triple over the past 10 years to about 1 million (CBC News 2009 b) with local residents demanding new rules citing water pollution and other environmental concerns.

Even when rules and regulation exist, enforcement is a problem. Evidence suggests that even laws designed to protect the environment are often unenforced. A recent report on fur farm waste management in Newfoundland and Labrador concluded, "Due to the overall lack of enforcement of waste management practices, mink farming has become what some consider a non-controlled industry" (van der Marel et al. 2008).

The same report also noted that "most documents pertaining to fur farming are not legally binding." The "Environmental Farm Practices Guidelines, "and the "Recommended Code of Practice for the Care and Handling of Mink" were listed as examples (van der Marel et al. 2008).

Finally, the report cited a problem that is common across Canada — enforcement agencies are charged with conflicting responsibilities. According to the report, "There is an identified conflict of interest for agriculture representatives; one cannot expect an extension officer to provide assistance and recommendations on compliance while simultaneously issuing a fine" (van der Marel et al. 2008).

Indeed, across Canada those charged with overseeing the fur industry and those charged with promoting the industry are one and the same. Allowing the industry to essentially police itself, especially in regard to animal welfare, is not unlike having vampires guard the blood banks.

COMPARISON TO EUROPE

Precise regulatory measures governing the raising and killing of fur animals have already been adopted in a number of European countries and some have banned fox and/or mink farming on humanitarian

grounds. As a result, Canada and the United States lag far behind other long-industrialized countries in regulating fur farming especially in regard to animal welfare.

After reviewing available scientific data relevant to the care and treatment of fur-farmed animals, the Council of Europe set forth several recommendations for fur farming. Many issues identified by the Council of Europe are issues that are largely or entirely ignored by U.S. and Canadian laws, voluntary programs, and industry standards.

For example, the Council of Europe recommends that each weaned fox should have access to an elevated resting platform or nest box on the top of which it can rest and inspect its surroundings. This recommendation is under implementation in the European Union. In addition, the provision of suitable material for gnawing has also been recommended for foxes and it has been reported that an increasing number of farms in the European Union are adopting this measure.

The benefits of providing enrichment in the form of platforms, play balls, or cylinders to farmed mink are well documented. Again, in contrast to recommendations and industry standards in the U.S. and Canada, the benefits of enrichment have been acknowledged and incorporated in many European countries.

In the Netherlands, farmers are strongly encouraged to enrich mink-cages; as a result about 25% of Dutch mink have either a wire-mesh platform or a plastic cylinder and all mink are provided with straw or another type of litter for at least part of their life (SCAHAW 2001). In Norway, 88% of mink are provided with activity objects (SCAHAW 2001). In Scandinavian countries, all mink have access to straw at all times (SCAHAW 2001). In recognition of the importance of swimming water for mink, as of 2008 all mink farms in Italy were required to provide swimming water, plus allow for more space and place pens on the ground.

Many countries have moved beyond incremental welfare improvements. Even after the required provision of bedding and enrichment for mink, in 2009 a majority of the Dutch Parliament agreed that mink farming is unethical and voted to ban mink production in the country. If approved by the Dutch Senate the ban will come into effect in 2018.

The Netherlands banned fox farming due to humanitarian concerns in 1995, making it the first country in the world to ban fox farming. Sweden too took a strong position on fox farming in 1995 when an amendment to the Animal Protection Ordinance banned the keeping of foxes in cages and required that foxes be kept in such a way that they can be active, dig, and socialize with other foxes. As a result, fox farming is no longer economically viable in Sweden

"24 TO 55 PERCENT OF ADULT MINK HOUSED UNDER STANDARD CONDITIONS MAY SUFFER FROM STOMACH ULCERS."
~ JOURNAL OF ANIMAL WELFARE

THE SITUATION IN THE UNITED STATES IS PARTICULARLY ABSURD WITH FEDERAL AGENCIES, STATE AGRICULTURE AGENCIES, AND STATE WILDLIFE AGENCIES ENGAGING IN PROVERBIAL BUCK-PASSING AND FINGER-POINTING OVER WHICH HAS RESPONSIBILITY AND AUTHORITY TO REGULATE THIS INDUSTRY. AS A RESULT, THE INDUSTRY IS VIRTUALLY UNREGULATED.

and since 2000 all fox farms in the country have been shut down. Currently, Sweden's Social Democratic Party and the Green Party are supporting legislation to ban all fur farming in the country.

In 2009 a bill banning fox farming in Denmark passed with a phase-out of 15 years for those who have more than 50% of their income from fox farming and 8 years for those who have less than 50% of their income from fox farming. No compensation will be paid to the farmers due to the long phase-out.

The ban was passed based on the understanding that it is impossible to raise foxes in captive conditions that protect their welfare and that earlier regulations passed in 2007 failed to enhance welfare to acceptable levels; as such, it is considered unethical to farm foxes. The ban also includes the raising of foxes for dog training.

Summary of European Fur Farming Bans

Austria	All fur farming banned 2004
Croatia	All fur farming banned in 2007 with a 10-year phase-out
Denmark	Fox farming banned 2009 with a 15-year phase-out
Italy	Welfare requirements have severely restricted fur farming
Netherlands	Fox farming banned 1995, ban on mink farming pending 2009
Sweden	Welfare requirements have effectively eliminated fox farming
Switzerland	Welfare requirements have effectively eliminated fur farming
United Kingdom	All fur farming banned

England and Wales — All fur farming banned under the Fur Farming (Prohibition) Act of 2000
Northern Ireland and Scotland — All fur farming banned in 2003

CONCLUSION

In the last 50 years, concern for animals has increased in many countries, resulting in an increase in animal welfare–related legislation and prohibition of acts considered to be unacceptably cruel.

However, fur farming suffers a relatively low position on North American political agendas. As a result, the United States and Canada lag far behind European countries in addressing fur farming.

In the United States the situation is particularly absurd with federal agencies, state agriculture agencies, and state wildlife agencies engaging in proverbial buck-passing and finger-pointing over which has responsibility and authority to regulate this industry. As a result, the industry is virtually unregulated. In Canada, fur-farmed animals don't fare much better; most regulations relevant to welfare are voluntary and enforcement of regulations is reported to be poor.

While the cruelties and environmental threats of the fur industry have received little political attention, consumers and companies are increasingly turning their backs on fur. In a 2002 national poll of upscale U.S. consumers, conducted by Decision Research, 81% considered selling fur products to be socially irresponsible. At the same time many national and international retailers have ceased selling fur and have put their fur-free commitment in writing by signing on to the international fur free retailer program.

While the fur industry has attempted to market itself as an environmentally friendly industry that cares about animals, conscientious consumers and companies aren't buying their message. They, like many European governments, have recognized there simply is no right way to do the wrong thing.

It is time for the United States and Canadian governments to match public opinion and international progress on this important issue.

CITATIONS

Aasted B 1985 Aleutian disease of mink. *Virology and Immunology. Acta Pathologica, Mirobiologica et Immunologica Scandinavica* 93: 1–47

Allendorf F W, Leary R F, Spruell P and Wenburg J K 2001 The problems with hybrids; setting conservation guidelines. *Trends in Ecology & Evolution* 16: 613–622

Animalia 1995 *Fur Farming in Finland an Animal Welfare Angle:* Report, Federation for the Protection of Animals

AVMA 2007 American Veterinary Medical Association Guidelines on Euthanasia

Bakken M, Braastad BO, Harri M, Jeppsen L L, Pedersen V 1994 Production Conditions, Behaviour and Welfare of Farm Foxes. *Scientifur* 18 (4): 233–236

Belz E E, Kennell J S, Czmbel R K, Rubin R T, and Rhodes M E 2003 Environmental enrichment lowers stress responsive hormones in singly housed male and female rats. *Pharmacology, Biochemistry and Behavior* 76: 481–486

Bloom M E, Race R E, Wolfinbarger J B 1980 Characterization of Aleutian disease virus as a parvovirus. *Journal of Virology* 35: 836–843

Bowman J, Kidd A G, Gorman R M, and Schulte-Hostedde A I 2007 Assessing the potential for impacts by feral mink on wild mink in Canada. *Biological Conservation* 139: 12–18

Broom D M 1996 Animal welfare defined in terms of attempts to cope with the environment. *Acta Agricultrae Scandinavica, Section A: Animal Science, Supplement* 27: 22–28

Bursian S J 2003 *The Use of Phytase as a Feed Supplement to Enhance Utilization and Reduce Excretion of Phosphorous in Mink, 2003 fur Rancher Blue Book of Fur Farming* East Lansing: Michigan State University Department of Animal Science

CanLII 2009. Federation of Law Societies of Canada http://www.iijcan.org/en accessed 06/18/09

CBC News 2009 a *Mink stink makes Heart's Delight miserable, farmer told:* http://www.cbc.ca/canada/newfoundland-labrador/story/2009/05/08/mink-farm-smell-509.html accessed 06/05/09

CBC News 2009 b *Mink farm opponents want new rules* http://www.

cbc.ca/canada/nova-scotia/story/2009/08/18/ns-mink-farms.html accessed 08/19/09

Chronicle Herald 2009 *Mink ranch detractors say the plan stinks* http://thechronicleherald.ca/NovaScotia/1137043.html accessed 08/19/09

Cooper J, Mason J G, Raj M 1998 Determination of aversion of farmed mink (*Mustela vison*) to carbon dioxide. *Vet. Rec.* 143: 359–361

Dunstone N 1993 *The mink.* T & AD Poyser Ltd: London, UK

EPA 1991 *EPA seeks $2.2 Million in Penalties from Six NJ Firms in the Fur Industry for Hazardous Waste Violations.* U.S. Environmental Protection Agency News Release, New York: 8 October 1991

Ford M J 2002 Selection in Captivity during Supportive Breeding May Reduce Fitness in the Wild *Conservation Biology* 16 (3): 815–825

Fournier-Chambrillon C, Aasted B, Perrot A, Pointier D, Sauvage F, Artosis M, Cassiede J, Chauby X, Dal Molin A, Simon C, and Fournier P 2004 Antibodies to Aleutian mink disease parvovirus in free-ranging European mink (mustela lutreola) and other small carnivores from Southwestern France. *Journal of Wildlife Diseases* 40 (3): 394–402

Frank R K 2001 An outbreak of toxoplasmosis in farmed mink (*mustela vison* S.) *J Vet Diagn Invest* 13: 245–249

Fraser A F, and Broom D M 1990 *Farm Animal Behavior and Welfare*, 3rd Edition, bailliere Tindall: London UK

Fur Commission 2007 *World Mink Production Continues to Soar* Fur Commission USA Press Release http://www.furcommission.com/news/newsF10l.htm accessed 08/04/09

Fur Commission 2009 *Fur Farming in North America* Fur Commission website http://www.furcommission.com/farming/index.html accessed 06/03/09

Garrant D, Flemming IA, Einum S and Bernatchez L 2003 Alternative male life history tactics as potential vehicles for speeding introgression of farm salmon traits into wild populations. *Ecology Letters* 6: 541–549

Grandin T 2004 *Farm Animal Audits: Meat Processors.* Animals in the Food System Conference, Kellogg Biological Station, Hickory Corners, Michigan. C.S. Mott Group for Sustainable Food Systems

Hansen M 1985 Diseases and Hygiene. *In* G. Joergensen (ed.). *Mink production*, 1st Edition. *Scientifur*, Hilleroed, Denmark: 261–340

Hansen S W 1996 Selection for behavioral traits in farm mink. *Applied Animal Behavior Science* 49: 137–148

Hansen S W 1998 The cage environment of the farm mink — significance to welfare. *Scientifur* 22 (3): 179–186

Harri M, Nurminen L, and Filen T 1995 Stomach ulcer as an indicator of stress in farm mink. *Acta Agriculturae Scandinaviaca* Section A: Animal Sciences 45: 204–207

Hutchings J A, and Fraser D J 2008 The nature of fisheries and farming-induced evolution. *Molecular Ecology* 17: 294–313

Joergensen G 1985 *Mink production*, 1st Edition. *Scientifur*, Hilleroed, Denmark

Kenyon A J, Helmboldt C F, and Nielsen S W 1963 Experimental transmission of Aleutian disease with urine. *American Journal of Veterinary Research* 24: 1066–1067

Kenyon A J, Kenyon B J, and Hahn E C 1978 Protides of the Mustelidae: Immunoresponse of mustelids to Aleutian mink disease virus. *American Journal of Veterinary Research* 39: 1011–1015.

Kidd A 2008 *Mink gone wild: hybridization between escaped farm and wild American mink (Neovison vison) in a natural context.* Masters thesis School of Graduate Studies Laurentian University, Sudbury, Ontario

Kidd A G, Bowman J, Crossbarred D and Schulte-Hostedde A I 2009 Hybridization between escaped domestic and wild American mink (Neovison vison). *Molecular Ecology* 18: 1175–1186

KIDK TV 2007 Malad Residents Furious about Mink Farm http://www.kidk.com/news/8777667.html accessed 06/05/09

Korhonen H, Niemela P, Jauhiainen C, Typasela T 2000 Effect of space allowance and earthen floor on welfare-related physiological and behavioral response in male blue fox. *Physiol Behav* 69: 571–580

Landcare Research New Zealand Ltd 2008. *Possums — their introduction and spread*

Lynch M and O'Hely M 2001 Captive breeding and the fitness of natural populations. *Conservation Genetics* 2: 363–378

Mañas S, Cena J C, Ruiz-Olmo J, Palazon S, Domingo M, Wolfinbarger J B, and Bloom M E 2001 Aleutian Mink Disease Parvovirus in Wild Riparian Carnivores in Spain. *Journal of Wildlife Diseases* 37 (1): 138–144

Markey S 2006 *Alien Possums Gobbling New Zealand Forests, Birds. National Geographic News.* April 25, 2006.

Mason G J 1991 Stereotypies: a critical review. *Animal Behaviour* 4: 1015–1037

Mason G J, Cooper J, and Clarebrough C 2001. Frustrations of fur-farmed mink. *Nature* 410: 35–36

NeuroCenter: Reference laboratory for spongiform encephalopathies in animals. Swiss Federal Veterinary Office http://www.neurocenter-bern.ch/tse_e.shtml accessed 06/03/09

Nimon A J, and Broom DM 1999 The welfare of farmed mink (*Mustela vison*) in relation to housing and management; A Review. *Animal Welfare* 9: 205–228

Nimon A J, and Broom DM 2001 The welfare of farmed foxes (*Vulpes vulpes* and *Alopex lagopus*) in relation to housing and management; A Review. *Animal Welfare* 10: 223–248

Northcott T H, Payne N F, and Mercer E 1974 Dispersal of mink in insular Newfoundland. *Journal of Mammology* 55: 243–248

Ontario Animal Research and Services Committee 2004 *Ontario Aquaculture, Research and Services Coordinating Committee, 2004 Strategic Report.* (Ontario: Ontario Animal Research and Services Committee)

Padgett G.A, Gorham J R, and Henson J B 1967 Epizootiologic studies of Aleutian disease. Transplacental transmission of the virus. *Journal of Infectious Disease* 117: 35–38

Paudel K P, Bhattarai K, Gauthier W M, and Hall L M 2008 Geographic information systems (GIS) based model of dairy manure transportation and application with environmental quality consideration. *Waste Management* 29 (5): 1634–1643

Reinhardt V, and Reinhardt A 2006 *Variables, Refinement, and Environmental Enrichment of Rodents and Rabbits kept in Research Institutions.* Animal Welfare Institute. ISBN 0-938414-99-2

Rhymer J M, and Simberloff D 1996 Extinction by hybridization and introgression. Annual review of *Ecology and Systematics* 27: 83–109

Rollin B, and Kesel M 1990 *The Experimental Animal in Biomedical Research: A survey of scientific and ethical issues for investigators.* CRC Press

SCAHAW 2001 *The Welfare of Animals Kept for Fur Production*. The European Commission Scientific Committee on Animal Health and Animal Welfare

Seligman M E P 1975 *Helplessness: On Depression, Development, and Death*. San Francisco: W.H. Freeman. ISBN 0-7167-2328-X

Statistics Canada 2007 *Fur Statistics* http://www.statcan.gc.ca/pub/23-013-x/23-013-x2007001-eng.pdf accessed 06/12/09

Stevens R T, Ashwood T L, and Sleeman J M 1997 Fall early winter home ranges, movements, and den use of male mink, Mustela vison, in Eastern Tennessee. *Canadian Field Naturalist* 111: 312–314

Trut L N 1995 Domestication of the fox: Roots and effects. *Scientifur* 19 (1): 11–18

Trut L N 1999 Early Canid Domestication: The Farm-Fox Experiment. *American Scientist* 87: 160–169

USDA 1994 *Animal Damage Control Program. Final Environmental Impact Statement*

USDA 2009 *Mink* National Agricultural Statistics Service Agricultural Statistics Board, U.S. Department of Agriculture

van der Marel R C, Pickthron K E, and Duniker P N 2008 *Review of Waste Management Options for Fur Farming in Newfoundland and Labrador* Final Report. Center of Environmental Excellence, Sir Wilfred Grenfell College, Memorial University of Newfoundland, Corner Brook, and the Agrifoods Branch, Department of Natural Resources, Government of Newfoundland and Labrador

van Troostwijk W J 1978 Muskrat Control in the Netherlands. *Proceedings from the 8th Vertebrate Pest Conference*. University of Nebraska–Lincoln http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1048&context=vpc8 accessed 08/21/09

Vaughn T A 1986 *Mammology* Harcourt Brace Jovanovich. Orlando, Florida

Voigt, D R 1987 Red fox *In* M. Nowak, J.A. Baker, M.E. Obbard and B. Malloch (eds). *Wild furbearer management and conservation in North America*. Ontario Ministry of Natural Resources: 379–392

Washington Department of Ecology 1999 *Whatcom county mink farm fined $24,000 for water pollution*. Press release http://www.ecy.wa.gov/news/1999news/99-264.html accessed 06/05/09

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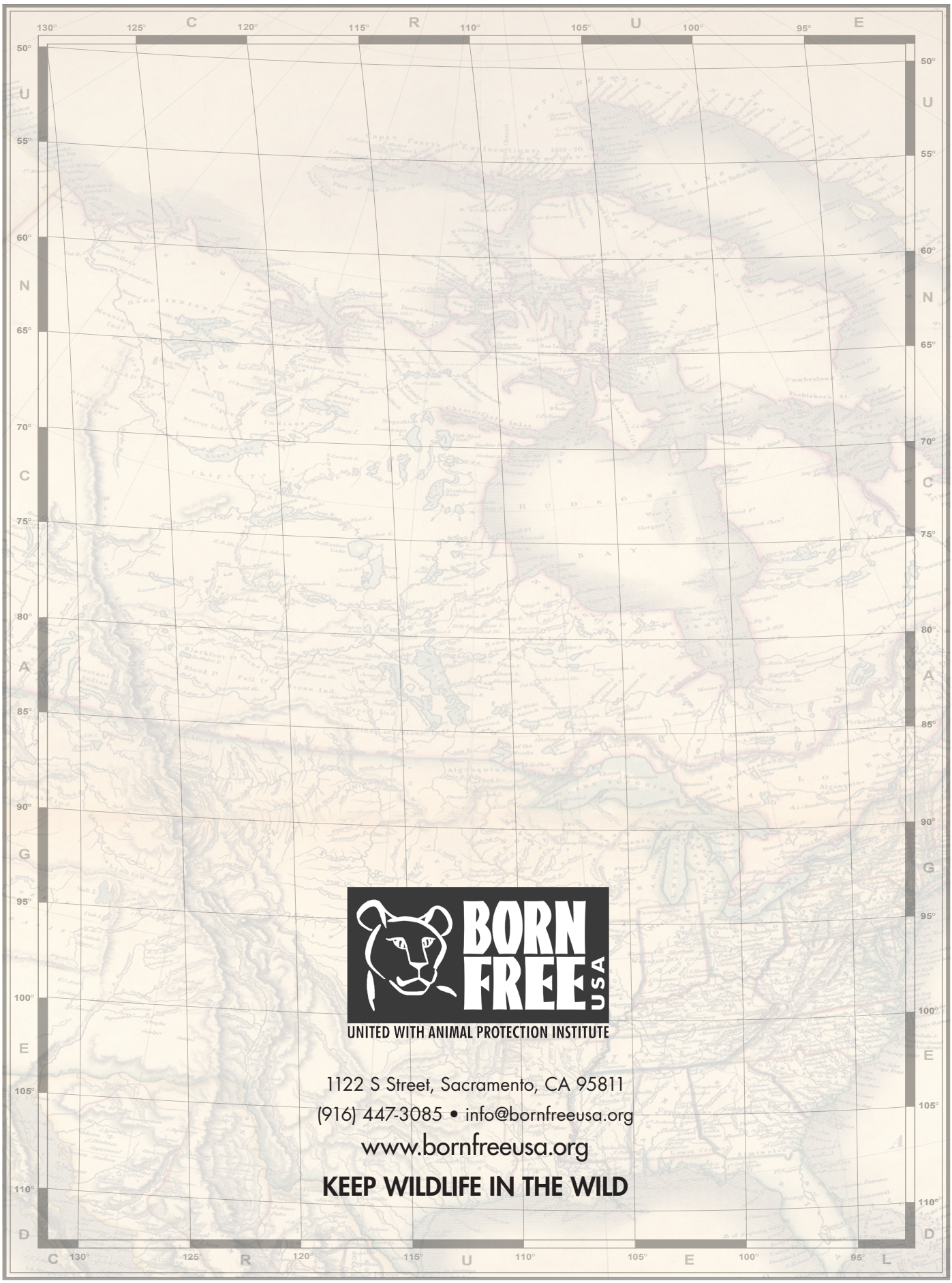

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