AnimalKind

BCSPCA Accredited

Wildlife and Rodent Control Standards

BCSPCA

SPEAKING FOR ANIMALS

THE BRITISH COLUMBIA SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS

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Authored by: Science and Policy Division

Contents

Preface

The British Columbia Society for the Prevention of Cruelty to Animals (BC SPCA) developed the AnimalKind Accreditation Program and the AnimalKind Wildlife and Rodent Control Standards with funding from the Peter Wall Institute for Advanced Studies and the Vancouver Foundation. The AnimalKind Wildlife and Rodent Control Standards are based on widely accepted ethical principles and animal welfare science.

The BC SPCA is one of the largest animal welfare organizations of its kind in North America. Established in 1895 under the provincial *Prevention of Cruelty to Animals Act* (*PCA Act*), the Society's mandate is to protect and enhance the quality of life for domestic, farm and wild animals in British Columbia. As a registered charity, the BC SPCA operates community animal shelters, education and adoption facilities, veterinary and spay/neuter clinics, a wild animal rehabilitation centre and a provincial animal helpline. In addition to province-wide programs for advocacy, government relations, humane education, and scientific research, Special Provincial Constables enforce the *PCA Act* and *Criminal Code of Canada* to fulfill the Society's law enforcement functions.

Introduction

Purpose and Scope of the AnimalKind Accreditation Program and Standards

The AnimalKind Accreditation Program (the "Program") aims to decrease wild animal suffering by promoting Wildlife Control Service Providers ("WCSPs") who prioritize the use of non-lethal, removal-and-exclusion methods to resolve human-wildlife conflicts. In the limited cases where use of live capture or lethal control methods are justified, the Program supports only those methods that are legal and cause fewer harms to animal welfare. The Program contributes to public education by raising awareness of the animal welfare outcomes of traditional wildlife and rodent control methods.

Wildlife generally refers to animal species that have not been domesticated, and includes species that are introduced or native, and wild-born or captive-bred. The AnimalKind Wildlife and Rodent Control Standards (the "Standards") apply to free-living, vertebrate animals designated as wildlife by the *BC Wildlife Act Designation and Exemption Regulation* and any introduced wildlife species. Free-living refers to animals that are currently not living in captivity and independent of humans, therefore the Standards do not apply to wildlife permanently in captivity (for example, those held in zoos). Introduced species, which may or may not be cross-referenced in the *BC Wildlife Act*, include those that are an alien, exotic, foreign, introduced, or non-native species living outside of their natural range as a result of human activity.

Feral cats and feral horses are not designated as wildlife by the *BC Wildlife Act* and are domestic species so these Standards do not apply to them; however, feral rabbits and feral pigs are designated as wildlife by the *BC Wildlife Act* and the Standards would apply. The Standards also apply to the introduced species of commensal rodents, Norway rat (*Rattus norvegicus*), roof rat (*Rattus rattus*) and the house mouse (*Mus musculus*). Although negatively regarded as significant "pests" given their associations with zoonotic diseases and property damage, the commensal rodents have the same capacity to experience pain and distress as other vertebrates, and it is on this basis that animal welfare considerations in the Standards have been extended towards them.

The Standards were developed primarily for control of wildlife and rodents that come into conflict with humans in urban and residential settings (i.e. structural pest control). However, they could be used to guide control decisions and actions in other types of locations. Accreditation is intended for organizations or businesses that manage and/or provide wildlife or rodent control services, either for external customers or internally as part of maintenance of the organizations' or businesses' own facilities in British Columbia (B.C.). Accreditation may also

be considered for companies that perform wildlife and rodent control on an ad hoc basis (e.g. as part of lawn care or sign maintenance), for project-based conservation programs, or for companies that use detector dogs for insect pest control and wish to have third-party animal welfare accreditation for their use of working dogs. The Program does not currently accredit entities outside of B.C.

To be eligible for accreditation, a WCSP must adhere to the Standards, which outline acceptable and prohibited actions, and the terms and conditions of the Program, outlined in the AnimalKind Accreditation Program Operations Manual (the "Operations Manual"). In addition, accredited WCSPs are expected to adhere to federal and provincial acts and regulations, and municipal bylaws related to wildlife, pest management, animal cruelty and the laws of Canada. When wildlife-proofing structures, WCSPs are also expected to install materials in accordance with local building codes. The accreditation process is initiated when a WCSP submits an application to the Program and is followed by participation in an audit process to establish that the WCSP meets the Standards. Accreditation must be renewed yearly and may involve an annual re-accreditation audit. The Program recovers some operating costs through fees paid by WCSPs.

Background

Development of the Standards was informed by: applicable laws of B.C. and Canada; science-based animal welfare concerns identified in the *BC SPCA Humane Wildlife Control Evaluations* [1]; and the ethical guidance of the *International Consensus Principles of Ethical Wildlife Control* [2] developed by expert consensus at a workshop held at the University of British Columbia [3]. Ethical wildlife control is defined as the acceptability of a wildlife control action based on a comprehensive analysis that includes the control action's necessity, benefits, feasibility, costs to people and animals, alternatives, and effects on animal welfare in terms of the humaneness of the physical methods employed.

In particular, the following questions about wildlife control (derived from the *International Consensus Principles*) guided development of the Standards:

1. Can the problem be mitigated by changing human behaviour?
2. Are the harms serious enough to warrant wildlife control?
3. Is the desired outcome clear and achievable, and will it be monitored?
4. Does the proposed method carry the least animal welfare cost to the fewest animals?
5. Have community values been considered alongside scientific, technical and practical information?
6. Is the control action part of a systematic, long-term management program?
7. Are the decisions warranted by the specifics of the situation rather than negative categorization of the animals?

The Standards and wildlife and rodent control audit held third-party certification from the Professional Animal Auditor Certification Organization (PAACO) from 2017 to 2024.

Acknowledgements

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AnimalKind Wildlife and Rodent Control Standards

Standard 1: Business models align with a commitment to protect wild animal welfare

1.1. WCSPs must have a written wild animal welfare policy to communicate expectations for technicians regarding wild animal welfare (refer to Appendix 2 for required elements of policy).

1.2. Technicians must demonstrate awareness of the wild animal welfare policy.

1.3. Technician training must:

a) use Standard Operating Procedures (SOPs) (refer to Appendix 2 for required SOP topics); and

b) be documented with written records retained for at least 12 months.

1.4. The WCSP must identify a professional wildlife rehabilitator operating in their provincial region or one able to take animals from their region OR a local veterinarian in good standing with the College of B.C. Veterinarians who agrees to provide emergency euthanasia services for wildlife.

1.5. Technicians or the WCSP must not have been convicted of an offence involving wildlife or animal cruelty, and/or have not had animals seized under relevant legislation.

1.6. Concurrent operation of another non-accredited wildlife or rodent control business alongside the wildlife or rodent control business intended for accreditation is prohibited (including branches and franchises, but excluding the parent company of a subsidiary company).

1.7. Partnerships, subcontracting or referrals to another non-accredited wildlife or rodent control business is prohibited.

1.8. The sale, barter, trade, permanent display, or use of any wildlife or wildlife parts (i.e. pelts) for any purpose that does not conform to the Standards is prohibited to ensure there is no financial incentive for the WCSP to capture wildlife or use lethal control.

1.9. To prevent transmission of disease, equipment that comes into contact with animals or animal blood or feces must be cleaned prior to reuse.

Standard 2: Ethical and legal business practices are followed

2.1 A valid business license must be held where required by municipal and/or regional bylaws.

2.2 Liability insurance must be held.

2.3 The WCSP must operate in compliance with WorkSafeBC regulations.

2.4 Technicians using rodenticides must hold valid pesticide applicator licenses in compliance with the *BC Integrated Pest Management Act* and Regulations.

2.5 Technicians using ladders or boom lifts must be trained on safety for working at heights.

2.6 Technicians using gases to kill wildlife must be trained on the safe and effective use of gas chambers.

2.7 Technicians using firearms to kill wildlife must be:

a) trained on the safe and effective use of firearms (e.g. calibre, body placement, accuracy); and

b) hold valid firearms licenses in compliance with the laws of B.C.

2.8 Technicians must be trained on how to prevent injuries from animals (bites, scratches) and how and when to use personal protective equipment.

Standard 3: Prohibited devices, trap types, poisons or killing methods are not used

3.1 Only wildlife and rodent control devices, trap types, poisons and primary killing methods that conform to the Standards may be used.

3.2 Use or sale of the following devices, trap types, poisons and use of the primary killing methods is prohibited:

Devices, trap types and poisons	
▪ limb-restraint/leg-hold/body gripping (e.g. Conibear) traps or snares including foot-encapsulating traps (e.g. EGG) and neck snares ▪ electrocution traps ▪ rodent glue traps ▪ poisons other than specific rodenticides allowed by provincial exemptions and named in the Standards ▪ avian adhesive gel repellents (optical & tactile) ▪ predator odour repellent derived from captive wild animals	
Primary killing methods	
▪ air embolism injection ▪ chloral hydrate ▪ chloroform ▪ decapitation of conscious animal ▪ drowning ▪ electrocution of conscious animal ▪ exsanguination of conscious animal	▪ falconry for lethal control of birds or small mammals ▪ freezing ▪ hypothermia ▪ maceration of conscious animal ▪ smothering/suffocation ▪ thoracic compression on conscious animal ▪ vehicle exhaust to deliver carbon monoxide

The above devices, trap types, poisons and primary killing methods are prohibited for one or more of the following reasons: the method is illegal; it may cause excessive pain, distress or physical injury to a conscious animal; it may result in an extended length of time to irreversible unconsciousness (TIU) to the target animal; it may result in an extended length of time until the death of a target animal; or evidence examining humaneness of the device, trap type, poison or killing method is unavailable.

AnimalKind Standards were developed from an animal welfare perspective and aim to prioritize control methods that cause fewer harms to animals, where possible. The assessments of control methods are informed by animal use and killing standards, guidelines and policies produced by relevant North American regulatory organizations and veterinary associations. However, AnimalKind assessments occasionally differ from the assessments of other expert organizations. These differences often arise from distinctions made between appropriate killing methods for domestic animals and wildlife maintained in captivity versus free-living wildlife. A lower standard of welfare is often applied to free-living wildlife for practical reasons (e.g. availability of equipment) or because the animal has been labelled a “pest” species. However, AnimalKind is aiming to create a consistent standard of care for all wildlife.

There are a variety of legal limb-restraint/leg-hold/body gripping traps or snares including foot-encapsulating traps (e.g. EGG), neck snares and body-gripping (e.g. Conibear) traps. These types of traps are prohibited by the Standards due to the excessive physical injuries that are caused to captured animals [4,5] and the potential for excessive psychological and/or physiological distress to animals left in live traps for long periods due to: exposure

to adverse environmental conditions, dehydration, energy deprivation, predation, self-mutilation and over-exertion [4–8].

Electrocution traps and primary killing by electrocuting a conscious animal are prohibited due to lack of assurances that TIU is short. Although there is limited evidence that electrocution implemented under ideal conditions, with unconscious animals and using specially designed equipment, may kill quickly [9], no evidence examining the effectiveness of electrocution traps or electrocution under field conditions without anesthesia has been published. The American Veterinary Medical Association (AVMA) does not list electrocution as an acceptable method for killing small rodents and some evidence suggests that electrocution may not result in death for small animals (<5kg) [10].

Glue traps used to capture rodents or other small animals are prohibited because glue traps merely capture but do not kill animals. Captured animals often suffer physical injury from struggling against the restraint of the glue, and may be alive 24 hours after capture before eventually dying from dehydration or exhaustion [11,12]. For these reasons, the use of glue traps for rodent pest control is not condoned by the Canadian Veterinary Medical Association (CVMA) [13] and the AVMA states that glue traps are not considered an acceptable means of euthanasia [10].

Also known as “sticky gels”, avian adhesive gel repellents (both optical and tactile types) are prohibited because the gels can stick to the feathers of birds that come into contact with them and disrupt preening behavior and the bird’s ability to fly [14].

Use of poisons to kill non-rodent wildlife in B.C. is illegal and thus is prohibited with the exception of use of specific rodenticides for commensal rodents exempt from provincial restrictions and that are named in the Standards. Predator odour repellents that are derived from captive wild animals, such as foxes on fur farms, are prohibited due to the severe negative welfare consequences that captive wild animals experience in fur farming facilities.

Prohibited primary killing methods include: air embolism injections into the vasculature of an animal because it may cause convulsions, opisthotonos (severe hyperextension and spasticity) and vocalization [10]; chloral hydrate because it causes death by hypoxemia and may be preceded by gasping, muscle spasms, and vocalization [10,12]; and chloroform due to length of TIU and distress. Both chloral hydrate and chloroform are considered unacceptable killing methods by the AVMA [10].

Prohibited physical primary killing methods include decapitation and exsanguination of conscious animals, which are both deemed unacceptable for use in conscious animals by the AAZV and the AVMA [9,10] (although decapitation is listed by the AVMA as a possible first-step method of euthanasia for small wild mammals and birds). Recent research has raised concerns that decapitation does not result in immediate unconsciousness [15]. Decapitation and exsanguination may be used as secondary killing methods on unconscious animals. Thoracic compression on and maceration of conscious animals are prohibited due to lack of clarity over the TIU or time to death of these methods when used on mammals and adult birds [10,16,17] (although thoracic compression is still considered acceptable for use in the field by some wildlife science organizations). Maceration involves the use of a specially designed machine with rotating blades that cause death by fragmentation. It has only been found acceptable for use on very young chicks (less than 72 hours old by the AVMA [10]; less than 2 days old by the Canadian Council on Animal Care (CCAC) [18]; and less than 1 day old by the World Organization for Animal Health (OIE) [19]) and there is uncertainty associated with accurately aging wild bird chicks to within these narrow age brackets.

Drowning has an excessively long TIU as animals take minutes to die from inadequate oxygen supply (hypoxia-anoxia) and experience hypoxemia-induced discomfort and distress prior to death [20]. It has been deemed unacceptable as a killing method by wildlife scientists [17,18] and veterinarians [9,10]. Smothering and suffocation (death by asphyxiation caused by physically preventing an animal from breathing) are also methods that cause excessive distress and a lengthy TIU [9,10]. Freezing, or causing death by hypothermia, can cause painful ice crystal formation within tissues [9]. In addition, some species may simply enter a state of torpor in cold temperatures but may awaken in a fully conscious state [21]. Falconry for lethal control is prohibited because of the limited research examining the welfare impacts of killing by this method and use of live prey for training. The use of vehicle exhaust to deliver carbon monoxide (CO) is prohibited due to the unreliability of the method and the pain and distress that it causes animals (i.e. from heat and inhaled particles) [17,18].

Standard 4: Human-wildlife conflicts are clearly diagnosed prior to the start of a control action

4.1 The animal species and legal status must be determined prior to initiation of the control action.

4.2 Relevant permits for the control of the target species must obtained (if applicable).

4.3 The animals' use of the customer's property must be determined, such as the location of a den, nest or access point into a structure (i.e. the human-wildlife conflict).

4.4 Presence and mobility of dependent young must be determined (exception: not required for mice and rats due to the difficulty and unlikelihood of finding commensal rodent nests).

Standard 5: Customers are proactively educated about wildlife and rodent control options

5.1 Customers must be provided in writing with accurate information about:

a) the species of animal;

b) the diagnosis of the conflict;

c) control options and the option that is recommended; and

d) recommendations for the prevention of future conflicts.

5.2 Customers must be informed of AnimalKind Accreditation by display of the AnimalKind logo on the company website or social media platforms.

Standard 6: Environments are modified to remove the reason for conflict and/or encourage animals to depart voluntarily

6.1 Food and water attractants must be removed, made inaccessible or the environment must be modified to make attractants less accessible and/or the attractants must be identified to the customer.

6.2 Unoccupied shelter and potential harborage sites must be removed, made inaccessible, or the environment must be modified to make shelter sites less desirable and/or accessible and/or these sites must be identified to the customer.

6.3 Environmental modifications to address conflicts with beavers must include the installation of flow devices and/or fences or devices to block access to culverts and trees.

6.4 Population reduction of Schedule C or Migratory birds (with relevant permits, as needed) is acceptable by:

a) removal of bird nests with no unhatched eggs or flightless young occupying them; or

b) egg addling; or

c) avian contraceptives (e.g. OvoControl P).

6.5 Young birds must have fledged and left the nest or be flighted before hazing can commence.

6.6 Hazing using humane harassment methods is acceptable when hazing does not result in:

a) direct contact with the animal;

b) physical injury to the animal; and/or

c) mother animals abandoning their dependent young.

6.7 Use of dogs or raptors (working animals) to haze Schedule C or Migratory birds (with relevant permits, as needed) provided hazing is not intended to result in:

a) direct contact with the target birds;

b) physical injury to the target birds; and/or

c) mother animals abandoning their dependent young.

6.8 Technicians must conduct a safety assessment of the hazing location prior to releasing working animals in order to determine potential hazards for the working animals (e.g. roadways, power lines).

6.9 Technicians must attempt to retrieve birds that are accidentally injured during hazing and transport them to a professional wildlife rehabilitation centre or veterinarian for treatment.

It is internationally recognized that human-wildlife conflicts arise from human activities and that alteration of human practices to prevent such conflicts, for example by removing attractants and wildlife-proofing structures, is the best strategy for achieving conflict-free coexistence with wildlife [2,22]. This has also been experimentally identified as an essential component for successful, long-term rodent control [23]. Aversive conditioning, also known as harassment or hazing, is the process of disturbing an animal's sense of security to such an extent that it decides to leave its location and move on [24]. This can include use of scare devices (noise, light) and controlled introduction of predators (i.e. falconry or dogs). Examples of hazing methods that would not conform to the Standards include: spraying pepper spray at the animal and using paint guns or pellet guns.

Standard 7: Removal methods that protect animal welfare are used to evict animals from structures and locations of conflict

7.1 When structure access points are closed off, at least one egress point must be left to allow the animal to exit the structure (exception: not required for mice and rats).

7.2 If immobile and dependent young are present in a structure (exception: not required for mice and rats), installation of an exclusion device, such as one-way doors, must only occur:

a) outside of the target species nursing season;

b) after the young are mobile and able to follow the mother out of the structure; or

c) if the structure will be entered to manually collect dependent young animals with the intention of reuniting with the mother.

7.3 Confirmation of the exit of target animals from a structure must be attempted by:

a) motion-triggered remote camera video recording of the animal(s) exiting;

b) visual inspection of the interior of the structure to verify animal(s) are no longer present;

c) direct observation by the technician of animal(s) leaving the structure; and/or

d) another method that shows the one-way door has been used.

7.4 Following departure of the target animal:

a) any eviction device must be removed and the entry point wildlife proofed to prevent animals from re-entering the structure; and

b) a technician must be available to return to the site during the 48 hours following closure of the entry point in the event that a customer suspects than an animal is still trapped inside the structure.

7.5 Use of one-way doors to evict bats[1] from structures may only occur from September to April (exception: one-way doors may not be used for Big Brown Bats after September 30 as they often hibernate in buildings and become active in winter). It is prohibited from May to August (inclusive) when bats are roosting and nursing dependent young.

7.6 Eviction by manual removal of immobile and dependent young animals (exception: immobile and dependent young bats and birds may not be manually removed) may only be justified if the animals' presence is:

a) a health and/or safety concern for the animal;

b) a health and/or safety concern for people; and/or

c) causing a structural or fire hazard.

7.7 During an eviction process, mother and dependent young must not be separated, or must be reunited if briefly separated (e.g. using heated reunion boxes).

7.8 Eviction by moving a nest with flightless young birds is prohibited unless the nest is in a location that:

a) presents a health and/or safety concern for people (such as a dryer vent or electrical infrastructure); or

b) is dangerous to the target birds (such as a car engine, roadway, structure about to be torn down, or a location posing immediate potential for separation of parent and young, i.e. boat leaving port).

7.9 If nests with flightless young birds are moved, young must be re-nested in a site nearby the original site, to allow parents to continue to care for them until they are flighted.

7.10 Resumption of parental care of dependent young must be confirmed within 24 hours following any separation.

7.11 If parental care is not resumed, orphaned young must be:

a) transported to a professional wildlife rehabilitation centre, or

b) killed using a primary killing method that conforms to the Standards if space in a professional wildlife rehabilitation centre is not available.

[1] In B.C., exposure to bats is only considered a reportable disease if a bat has come into unprotected contact or suspected unprotected contact with a person, or direct contact with a pet. Human exposure to other wildlife that may have come into contact with bats is not a reportable human health risk.

Standard 8: Cage-trapping and manual capture methods are rarely used

8.1 Healthy animals must not be cage-trapped or manually captured to:

a) resolve nuisance complaints (i.e. minor property damage, noise or smell complaints);

b) remove animals from a location that continues to provide access to food sources such as unsecured garbage cans and dumpsters or deliberate feeding; or

c) remove animals from a location that will continue to have ongoing accessibility to other animals in the population (e.g. open-air sheds, greenspaces, unmodified culverts).

8.2 The use of live capture may only be justified if it is legal and the animal:

a) is injured or diseased;

b) is a mother captured to facilitate collection of her dependent young for reunion;

c) is inside a building or structure and cannot find its own way out;

d) is in a location dangerous to itself (e.g. railway yard, construction site);

e) presents a health and/or safety issue for people that cannot be resolved by environmental modification, hazing and/or eviction-exclusion methods; and/or

f) is the target of legal and justified lethal control (refer to Standard 10).

8.3 Manual capture methods using hands, catchpoles or nets must be used in a way that does not cause physical injury to the animal.

8.4 Cage traps must be labelled with the name, address and phone number of the WCSP.

8.5 Harmful outcomes to cage-trapped animals (e.g. dehydration, hypothermia) must be minimized by:

a) placing traps in locations sheltered from weather and safe from flooding;

b) protecting traps from temperature extremes; and

c) ensuring trapped animals are not without access to food or water for more than 12 hours (i.e. through provision of food and water in trap or by regular trap checking or use of trap signaling technology).

8.6 Electronic trap signaling technology must include a self-checking feature that alerts the user if the system malfunctions (i.e. stops working).

8.7 WCSP must not rely on a client or employees of a client for notification that an animal is caught in a cage-trap unless a technician is calling the client daily to remind them to check and keeping records of these calls.

8.8 A captured animal may be transported for up to 8 hours if the animal:

a) is free from severe injuries; and

b) is held in locations sheltered from weather, including heat or rain, and other stressors (pets, traffic); and

c) is handled in a way that does not cause physical injury; and

d) is not without access to food or water for >24 hours (e.g. combined capture and transport time).

8.9 Non-target animals caught in traps must be released immediately upon detection unless:

a) the animal is severely injured or diseased;

b) the animal is dependent orphaned young; or

c) release of the species is illegal (e.g. bullfrogs, red-eared slider turtles and European domestic rabbits).

Standard 9: Release and relocation procedures protect animal welfare

9.1 Healthy animals must be released on the same property the animals were captured on unless:

a) the capture site is a source of danger to the animal;

b) animal-proofing to prevent re-entry is not possible (i.e. construction site, open door warehouse); or

c) use of lethal control is legal and justified (refer to Standard 10).

9.2 If cage trapped mice or rats are to be released at the customer's request, release must occur on the same property the animals were captured on.

9.3 Manually captured bats[2] must be placed on the side of a tree or other vertical surface to enable climbing and flying away.

9.4 If captured animals cannot be released on the site of capture, release must:

a) occur within the animals' home range, near the vicinity of capture; and

b) must comply with legal relocation distances and locations for the species as per the *BC Wildlife Act Designation and Exemption Regulation*.

9.5 The WCSP is allowed to rehome legally non-releasable animals into the care of a sanctuary or adoptive guardian if one is available (for example red-eared slider turtles and European domestic rabbits).

9.6 Animals must not be released if:

a) the animal is severely injured or diseased;

b) the animal is dependent orphaned young; or

c) release of the species is illegal (for example, bullfrogs, red-eared slider turtles and European domestic rabbits).

Many wild animals live in a defined home range and removal from this area will cause them difficulty in locating food and shelter. For example, squirrels translocated from urban or suburban locations to forests experienced high mortality and lose access to stored food [25]. Relocated moles lose access to their run system and may have difficulty surviving if released into new areas [26]. In addition, urban-dwelling wildlife (raccoons, skunks) tend to have smaller and denser territories than rural-dwelling animals of the same species. Urban raccoons have different foraging habits than rural raccoons and may suffer in rural areas due to inexperience with food sources and predation [27]. Relocation attempts will be more successful if animals experience the least amount of stress possible during capture and handling and species-appropriate release and post-monitoring protocols are followed [28–30]. For example, squirrels can adapt to relocation if the stress of capture and transport is minimized by using covered traps, cone handling bags and short transport times [6,31,32].

In addition to welfare concerns for the relocated animal, conservation concerns may arise if non-native animals are released into an area and if new predators are introduced [33,34] as well as disease transmission concerns between areas or regions [35]. Commensal rodents are not legally classified as wildlife in B.C., but instead are

[2] In B.C., exposure to bats is only considered a reportable disease if a bat has come into unprotected contact or suspected unprotected contact with a person, or direct contact with a pet. Human exposure to other wildlife that may have come into contact with bats is not a reportable human health risk.

considered invasive species given their negative effects on novel environments. Release of captured commensal rodents, although legal, raises both conservation and human health concerns [36,37].

Standard 10: Lethal methods are only used when an animal's continued presence is an ongoing threat to human health and safety

10.1 Healthy animals must not be killed to:

a) resolve nuisance complaints (i.e. minor property damage, noise or smell complaints);

b) remove animals from a location that will continue to have ongoing accessibility to other animals in the population (e.g. open air sheds, greenspaces, unmodified culverts); or

c) cull populations of animals without scientific evidence supporting the feasibility of the cull goal and justification for the reason the animals are to be killed.

10.2 Lethal control methods may only be used if justified because the animal is:

a) severely injured;

b) injured or diseased without access to wildlife rehabilitation;

c) orphaned, dependent young without access to wildlife rehabilitation;

d) accidentally or purposefully brought into an area with no established population and where return to established population is not possible;

e) introduced onto a small island or into an isolated area and full eradication is achievable;

f) hand-raised and human-habituated, with no possibility for rehabilitation and release;

g) a species that cannot be legally released and a non-lethal option is not available;

h) continually returning to a site where it is causing a human health and safety threat that has failed to be resolved by environmental modification, hazing and/or eviction-exclusion methods; or

i) a commensal rodent (mice or rats) causing an ongoing health and safety threat to people that cannot be resolved using only environmental modification and/or removal methods (e.g. pre-existing infestations of commensal rodents; or infestations with irremediable environmental conditions, such as nearby food sources or poorly maintained residential buildings, that are out of the control of the WCSP or tenant residents to change).

10.3 Use of a lethal control method for an individual raccoon, goose or swan is additionally allowed if the animal is aggressive and food-conditioned, presenting an immediate public safety risk and hazing or relocation is no longer an option.

10.4 Lethal control must be accompanied by a plan to prevent or reduce recurrence of the conflict.

Standard 11: Methods causing the least possible pain and distress are used when lethal control is justified

11.1 Animals may be killed by:

a) a professional wildlife rehabilitator; or

b) a veterinarian or their designate; or

c) a trained technician using CO from a pure gas cylinder delivered into a sealed gas chamber with a regulator (exception: CO may not be used to kill beavers); or

d) a trained technician using CO_2 – only when CO cannot be used due to documented worker safety regulations and CO_2 is from a pure gas cylinder delivered into a sealed gas chamber with a regulator to achieve >40% concentration (exception: CO_2 may not be used to kill beavers).

11.2 Birds may also be killed by technicians trained to use:

a) CO_2 from a pure gas cylinder delivered into a gas chamber with a regulator to achieve >40% concentration; or

b) for small birds (approximately <250g), manually applied blunt trauma to the head followed by immediate use of a secondary killing method to ensure death; or

c) for birds <2.3kg, cervical dislocation followed by immediate use of a secondary killing method to ensure death; or

d) a captive bolt followed by immediate use of a secondary killing method; or

e) firearms to deliver a shot to a free-ranging bird followed by retrieval of the bird to confirm death; or

f) firearms to deliver a shot to the head of a captive bird.

11.3 Beavers, possums, rabbits, raccoons and skunks may also be killed by technicians trained to use:

a) firearms to deliver a shot to the head of a captive animal; or

b) firearms to deliver a shot to a free-ranging animal followed by retrieval of the animal to confirm death.

11.4 Captured mice may also be killed by technicians trained to use:

a) manually applied blunt trauma to the head followed by immediate use of a secondary killing method to ensure death; or

b) cervical dislocation followed by immediate use of a secondary killing method to ensure death.

11.5 Captured rats may be killed by technicians trained to use manually applied blunt trauma to the head followed by immediate use of a secondary killing method.

11.6 Use of a lethal method must be followed by confirmation of the animals' death and/or use of a secondary killing method to ensure death (e.g. decapitation, exsanguination, CO_2 gas).

11.7 WCSPs must assume responsibility for the legal disposal of animal remains.

To confirm death, a combination of criteria is the most reliable including: lack of pulse; lack of breathing; lack of response when pupil touched or toe pinched; lack of respiratory sounds and heartbeat when listening with a stethoscope; and rigor mortis [10].

As discussed above, the Standards were developed from an animal welfare perspective and aim to prioritize control methods that cause fewer harms to animals where possible. Therefore, AnimalKind assessments are occasionally different from the assessments of other expert organizations.

The use of gas as a method of killing presents opportunities to minimize animal handling, and therefore distress, as often the cage enclosing the animal can be placed directly into a gas chamber. CO induces loss of consciousness without pain for many species [9,10]. However, there are considerable safety concerns for human operators of CO systems. CO_2 has been found to be acceptable for use as a killing method for birds by veterinary and scientific groups [9,18,38], although some research has identified that some bird species find CO_2 aversive [39,40]. In contrast, it has been definitively determined that CO_2 is aversive to mammals and been demonstrated to be aversive to rodents below the concentrations required to render the animals unconscious (>30%) [15,18,41].

Cervical dislocation presents several animal welfare concerns. First, recent science has demonstrated there is the possibility that cervical dislocation can result in lower spinal dislocation only and that the animal will continue to breathe and remain conscious [15]. For this reason, use of cervical dislocation must be followed by immediate use of a secondary killing method to ensure death. Second, proper implementation of cervical dislocation requires training that is often unavailable to technicians, who are generally unaffiliated with universities that provide such training to graduate students and animal care staff. Guidelines on cervical dislocation recommend that rodents be <200g for this method [9,10] while it can be used on birds up to 2.3kg [10]. Manually applied blunt trauma is only considered suitable for small animals with thin craniums and some neonates, however it is often the only option under field conditions and for individuals without access to controlled veterinary drugs [9,10]. Use of firearms also presents human safety concerns and is often not legal in residential areas.

Standard 12: Lethal 'kill-with-capture' rodent control methods causing the least possible pain and distress are used

12.1 Snap traps used to kill mice and rats must:

a) be the correct size for the target species; and

b) have springs with sufficient power to deliver an impact that quickly kills the target animal; and

c) be enclosed in boxes or placed in an area that non-target animals cannot access.

12.2 Penetrating captive bolt traps used to kill mice and rats must be:

a) the correct size for the target species; and

b) placed in an area that squirrels and other non-target animals cannot access or when outside, equipped with a blocker to prevent non-target animals from entering the trap; and

c) baited with a food product in accordance with the requirements of the Pest Management Regulatory Agency of Canada.

12.3 A method for killing mice or rats that are found injured, but not killed, by snap traps or penetrating captive bolt traps must be available during trap checking.

12.4 Injured mice or rats must be killed immediately when found.

12.5 Trained dogs (working animals) used to detect, capture and kill mice or rats must be:

a) only used to kill mice or rats; and

b) able to kill mice or rats immediately following capture; and

c) under the control of the handler.

12.6 Technicians must conduct a safety assessment of the hazing location prior to releasing working animals in order to determine potential hazards for the working animals (e.g. roadways, hydro wires).

12.7 Mice or rats caught by dogs must be immediately retrieved by the WCSP and if necessary subjected to a secondary killing method, such as decapitation, to ensure death.

The best designed snap traps kill instantaneously by crushing the skull and are enclosed so only animals of the correct size can access the bait [12]. There is variability between the mechanical performance of different brands and types of snap traps and therefore some traps kill more efficiently than others [42]. However, various snap trap designs for rats were found to kill the target animal quickly and consistently enough to meet humane guidelines in New Zealand [43]. Due to the frequency of non-lethal captures, ideal practice would be to use a method of ongoing trap checking or monitoring, although this is not a requirement of the Standards.

Penetrating captive bolt traps have been shown to render rats irreversibly unconscious in less than 30 seconds (as determined by absence of palpebral reflex) [44] and field observations found just one rat remained alive out of 125 rats that entered the traps [45]. Another study determined that death of wild-caught mice occurred within approximately 1 minute of bolt impact, and necropsies found the impact of the bolt killed the mice by crushing the spinal cord or crushing the spinal cord and skull simultaneously [46]. Penetrating captive bolt traps are legal for use in Canada and not subject to regulation under the *Pest Control Products (PCP) Act*, similar to snap traps. In contrast, currently the bait lure provided by the penetrating captive bolt trap manufacturer is considered a pest control product under the *PCP Act* because it is an attractant. Since the bait lure is not yet registered for use in Canada, it cannot be legally used with the trap. Instead, a food substance provided by the WCSP should be used as bait. When used outdoors, the manufacturer's blocker device has been shown to prevent non-target animals from entering the trap [47].

The use of specially-trained dogs to capture and kill rodents appears to result in instant loss of consciousness and/or death when rodents are captured. However, this is based on anecdotal observations in trials conducted by the BC SPCA and has not been confirmed through scientific studies. Therefore, it is essential for animal welfare for technicians to retrieve captured mice and rats and confirm their death.

Standard 13: Rodenticides are only used when the continued presence of mice or rats is an ongoing threat to human health and safety

13.1 When lethal control is justified (refer to standard 10) the following rodenticides may be used in accordance with the requirements of the Canadian *Pest Control Products Act*, the *BC Integrated Pest Management Act,* regulations, and Ministerial Order No. M307 (December 6, 2022)[48]:

a) diphacinone (indoor and outdoor use);

b) brodifacoum (legally designated essential services locations and indoor use only);

c) bromodialone (legally designated essential services locations and indoor use and outdoor use around structures only);

d) difethialone (legally designated essential services locations and indoor use only); and

e) chlorophacinone (indoor and outdoor use).

13.2 Rodenticides must be contained in locked, secured boxes (bait stations) and labelled with the name and contact information of the WCSP.

13.3 Written records of the following information must be maintained:

a) rodenticide bait station placement locations; and

b) bait station monitoring visits; and

c) retrieval of leftover bait; and

d) the method(s) used for killing any rodents found poisoned, but alive.

13.4 A method for killing rodents that are found poisoned, but alive, must be available.

13.5 Poisoned rodents found alive must be killed immediately upon detection.

13.6 The following rodenticides, although legal, are prohibited:

a) bromethalin; and

b) warfarin; and

c) zinc phosphide.

13.7 Placement of rodenticides in burrows is prohibited.

13.8 Rodent carcasses found at sites where rodenticide is being used must be collected and legally disposed of, ensuring no access by potential scavengers.

Rodenticides generally cause excessive pain and distress to the poisoned rodent and the TIU or time to death can be 3-7 days or longer [12]. The use of rodenticides also raises concerns regarding secondary poisoning of non-target animals that prey on rodents (particularly for anticoagulant rodenticides) [48,49], as well as accidental poisoning of other animals and people [49]. Unfortunately, there are currently no fast-acting or pain-free rodenticides available in Canada. To minimize exposure to non-target wildlife, and the environmental impact of discarded bait, rodenticides should only be used as a part of an Integrated Pest Management program and only for short-term baiting cycles to achieve satisfactory control and the leftover bait should be retrieved [50–52]. It is also recommended that WCSP's adapt their method of bait station placement from interval-based spacing to assessment-based placement which has been shown to improve efficacy, and decrease amount of wasted rodenticide [52].

Use of some legally available rodenticides is prohibited by the Standards due to animal welfare concerns related to secondary and accidental poisonings. Bromethalin affects the central nervous system and results in paralysis and convulsions prior to death and there is no antidote for accidental poisoning [53]. Zinc phosphide, once ingested, produces phosphine gas in the stomach and respiratory distress prior to death, and the acute nature of this poison increases the risk to accidentally poisoned non-targets. Warfarin is the oldest of first generation anticoagulant rodenticides, and its extensive use resulted in the development of resistance in commensal rodent populations decades ago in North America [54,55]. Resistance, combined with low potency has meant that warfarin does not effectively reduce rodent populations, but still contributes to the risk of secondary poisoning in other wildlife [56].

Effective January 21, 2023, , the B.C. government amended the Integrated Pest Management Regulations to permanently restrict use of second generation anticoagulant rodenticides, specifically brodifacoum, bromadiolone, and difethialone [48,57]. These rodenticides may not be used in or around most residential buildings, office buildings, parks, schools or non-food retail shops. Exemptions apply to legally designated essential service businesses that provide:

- public health and safety
- critical infrastructure
- food supply
- transportation
- sanitation
- communications and information technology
- mortuary related services
- agricultural operations

Standard 14: The welfare of working animals used for wildlife and rodent control is protected

14.1 Working animals used for wildlife and rodent control must be trained to perform the desired behaviours using force-free humane training techniques that do not include the use of released live prey or restrained live prey in training.

14.2 Working animals used for wildlife and rodent control must be provided with species-appropriate retirement plans that include on-going care or re-homing options as follows:

a) dogs must continue to receive ongoing care, or appropriately re-homed to meet their needs. Killing of healthy working dogs for owner convenience is prohibited; and

b) raptors must either: continue to be housed and provided appropriate opportunities for exercise (as per Standard 14.9); or re-homed to an appropriate permit-holding guardian or facility. In the event of declining health and/or quality of life at the end of their working career, working raptors should be humanely euthanized to prevent further suffering.

14.3 If euthanasia of a working animal is required, it must be carried out by a veterinarian.

14.4 Facilities housing working animals used for wildlife and rodent control must have a written emergency response plan and readily accessible, written emergency contact information.

14.5 Dogs used in wildlife and rodent control or insect detection must be:

a) healthy and in good condition and have no visible untreated injuries or illness;

b) housed in accordance with Section 1 of the Canadian Veterinary Medical Association (CVMA) *Code of Practice for Canadian Kennel Operations, Third Edition* [58];

c) provided with food and water in accordance with Section 2 of CVMA *Code of Practice for Canadian Kennel Operations, Third Edition* [58];

d) provided with veterinary care in in accordance with Section 3 of the CVMA *Code of Practice for Canadian Kennel Operations, Third Edition* [58];

e) licensed as per municipal bylaws; and

f) permanently identified with microchips.

14.6 Dogs used in insect detection must be certified in insect scent detection by a professional canine detection certification organization.

14.7 Dogs transported to the worksite must:

a) be secured inside a crate and/or in the interior of a vehicle;

b) have sufficient space to stand, turn around and lie down; and

c) be contained in a well-ventilated part of the vehicle.

14.8 Raptors used in wildlife control must not be:

a) procured from the wild for the purposes of falconry; or

b) used in public display if showing signs of stress, aggression or other behaviour abnormalities.

14.9 Raptors used in wildlife control must be:

a) healthy and in good condition and have no visible untreated injuries or illness;

b) housed and cared for such that:

- a natural substrate (e.g. grass, dirt, pea gravel) is provided;
- enclosure walls are not likely to injure or compromise feather quality (e.g. no thin wires);
- visual and auditory stress is minimized through the use of mesh and other structural barriers or enclosure design;
- birds have access to a minimum of two (2) perches, that are appropriate for their foot size and offer opportunities for retreat from adverse weather;
- birds are provided with naturalistic enrichments; and
- birds are housed in an enclosure with minimum size dimensions: Small raptors (e.g. northern saw-whet owl, northern pygmy owl): 1.5 m (W) x 2.5 m (L) x 2.2 m (H); or Medium raptors (e.g. barn owl, barred owl, American kestrel): 3 m (W) x 3.7 m (L) x 3 m (H); or Large raptors (e.g. eagles, large hawks): 4 m (W) x 6 m (L) x 3.7 m (H);

c) provided with food and water such that:

- clean, fresh drinking water is easily accessible and provided daily;
- one or more shallow pans of water are provided that are a minimum of 5 – 15 cm deep, and wider than the length of the bird;
- food is placed in covered areas of the enclosure and raised off of substrate (e.g. on stumps, perches or platforms); and
- the feeding of live prey is never used;

d) provided with veterinary care from a veterinarian with avian expertise;

e) held in captivity legally with the relevant government permits;

f) wear an identification tag (e.g. leg band); and

g) provided with exercise a minimum of five days per week (excluding non-flighted moulting periods).

14.10 Raptors being transported to the worksite on public roadways must:

a) be secured inside a solid-sided, ventilated and darkened transport container;

b) have sufficient space to stand and turn;

c) have a suitable perch or floor covering for birds that prefer not to perch; and

d) be contained in a well-ventilated part of the vehicle.

14.11 A written plan outlining the steps a WCSP will take following the loss of a working raptor must be in place and include:

a) name of person(s) and organization(s) to be notified;

b) equipment required for raptor recapture; and

c) locations to search.

There are welfare concerns associated with raptors cared for in captivity. Before selection as a working raptor, individual birds should be evaluated to determine suitability and their potential to live a good life. The birds should be able to live comfortably and safely, willingly participate with trainers/handlers, be willing and able to perform normal self-care behaviours, and have a sense of choice and control over their environment [59,60].

Improper housing design and/or materials can result in physical damage such as leg and foot injuries, broken beaks and feather damage [60–63]. Raptors may also experience stress from the captive environment, which may result in physical and behavioural changes [63]. Physical signs of stress in captive raptors include feather plucking, chewing and self-mutilation [64]. Behavioural signs of stress in captive raptors include screaming for prolonged periods of time, excessive mantling (spreading wings to cover up food), and aggression to other raptors and human handlers [64].

Enclosures should be built in a way that does not compromise feather quality. Providing a variety of comfortable and species-appropriate perches is essential for good raptor husbandry – birds that are forced to accept less-than-ideal perches experience greater stress [63]. Clean, fresh, and species-appropriate food and drinking water should be provided daily [65]. Avoid placing drinking or bathing water under perches, to avoid soiling [60,62]. One or more large, shallow pans should be provided for drinking and bathing – bathing pools should be 5 – 15 cm deep,

and wider than the length of the bird [60,62,63,65]. To prevent ingestion/contamination with soil or substrate, place food in covered areas and off the ground using platforms, stumps, or perches [65].

The BC SPCA discourages bringing wild or exotic animals into a classroom or other unnatural setting for educational presentations, as observation of these animals outside of their natural habitat provide little educational benefit to students [66]. However, the BC SPCA recognizes that many raptors used in wildlife control are also used for display and educational purposes. In these cases, the hazing control work provides exercise and enrichment for captive raptors, as well as providing a non-lethal control option for human-wildlife conflicts. While full-time housing may be smaller than typical for working raptors given frequent opportunities for exercise outside the enclosure, this should not come at the cost of substandard permanent enclosures [60,67].

Standard 15: Acts of cruelty and neglect are not tolerated

15.3 Acts of cruelty must not occur, including:

- capture using a prohibited method
- killing using a prohibited method
- dragging of a conscious animal by any part of its body
- malicious hitting or beating of an animal
- disposing of an animal's body without ensuring it is dead

15.4 Acts of neglect must not occur, including:

- failing to check on a set cage trap to see if it has been triggered
- failing to check on a cage-trapped animal once notified that animal is captured
- cage-trapping animals in conditions that lead to pain, distress and/or death
- holding cage-trapped animals for an excessive length of time before releasing or killing them
- failing to attempt to reunite a dependent young animal with their mother
- after confirmation of death of a mother animal or abandonment by a mother animal, failing to:
  - transport orphaned dependent young animals into the care of a professional wildlife rehabilitation centre; OR
  - kill dependent young animals if professional wildlife rehabilitation is not available
- failing to euthanize a severely injured animal in a timely manner
- releasing an injured animal
- failing to confirm the death of animal and/or use a secondary killing method

If an act of cruelty or neglect is witnessed, the Auditor may intervene when reasonably and safely possible. In accordance with the *PCA Act*, the activity may be reported to the BC SPCA Cruelty Investigations Department.

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Appendix 1 – Definitions

Animal welfare: An animal's quality of life. An animal's welfare depends upon both his/her physical health and affective state. Animals experience good welfare when they are able to experience positive feelings arising from pleasurable activities and the fulfillment of behavioural needs, and when they are free from poor physical health and negative feelings (e.g. pain, discomfort, hunger, fear, frustration).

Audit: An audit is a planned and documented activity performed by qualified personnel to determine by investigation, examination, or evaluation of objective evidence, the adequacy and compliance with established procedures, or applicable documents, and the effectiveness of implementation.

Audit instrument: The audit instrument is a document that is compiled by a qualified auditor to collect data on the implementation of the humane wildlife control accreditation standards.

Audit process: The audit process is the method by which the audit instrument is used to collect data.

Cage trap: A trap designed to capture a live animal(s) after they enter the enclosed space of the trap and cannot exit; includes box traps, tip traps and hoop traps (excludes multiple capture mouse traps).

Commensal rodents: Rodents with a close association to and reliance on humans for food and shelter.

Cull: Intentional and often indiscriminate killing of members of a wild animal population, regardless of age class or family status.

Decapitation: The severance of the head from the body.

Distress: A negative affective state caused by physical and/or psychological factors: physical distress may arise when an animal is hungry, thirsty, too hot, too cold, diseased, injured or in pain to an elevated degree; psychological distress may arise when an animal experiences fear, anxiety, frustration, depression or anger to an elevated degree.

Environmental modification: Changes made to modify the environment occupied by an animal in order to make the location less attractive to the animal so that it departs voluntarily.

Eradication: Complete removal of a population of animals from a location.

Euthanasia: An act of humane killing causing a minimum of pain, fear or stress for the purpose of ending suffering.

Exsanguination: The action of draining an animal of blood leading to death.

Exclusion: Non-lethal methods which aim to reduce conflict without direct animal contact, whereby animals are denied access to areas of interest (e.g. one-way door).

Feral animals: Domesticated animals who have partially or fully readapted to natural, wild habitats.

Free-living: Wild or domestic animals who are currently not living in captivity and may be independent of humans.

Hazing: A process of disturbing the animal's sense of security to such an extent that it decides to leave its location and move on.

Humane: Actions that promote good welfare and minimize suffering.

Humane killing: A method that ensures an animal is either killed instantly or that involves rendering an animal insensible to pain until death ensues.

Humane training: Training or caring for an animal without using pain, fear, physical or verbal intimidation techniques.

Humane wildlife control: Wildlife control through techniques that minimize animal pain and distress, are reliable, reproducible, irreversible, safe and rapid.

Human-wildlife conflict: The interaction between wild animals and people and the resultant negative impact on people or their resources, or wild animals or their habitat.

Invertebrate: An animal which does not possess a central nervous system and backbone (e.g. insects, worms, mollusks).

Introduced species: Alien, exotic, foreign, non-indigenous, non-native species living outside of its natural range as a result of human activity; does not presume impact on native species.

Kill-with-capture method: A control method that is designed to kill the animal at the moment the animal is physically captured.

Lethal control: A control method that is intended to kill the target animal.

Multiple capture trap: A box shaped trap that mice can enter but not exit; these can be used with glue traps inserted inside or without (i.e. tin cat traps, multi-catch traps and rodent repeater traps).

Non-lethal control: A control method not intended to kill or cause long-term harm to target animal.

Non-target animal: Animals or species that are not the object, or target of wildlife control activities that may incur unintended effects.

Nuisance wildlife (pest): Any wild animal who is perceived to be in conflict with humans, other animals or property.

Nuisance wildlife control: Lethal and/or non-lethal management of vertebrate animals defined as wildlife, which aims to restrict the activity (i.e. killing, relocation, translocation, exclusion) of animals that are deemed troublesome to people through their direct or indirect activities.

One-way door: A device installed over an existing entry point that allows an animal to exit a structure but not get back in.

Pest: An ambiguous, value-based term for unwanted wildlife; see “Nuisance wildlife”.

Pest control: An industry term used to describe the lethal and/or non-lethal management of invertebrate and vertebrate animals, which aims to restrict activity (i.e. killing, relocation, translocation, exclusion) of animals that are deemed troublesome to people through their direct or indirect activities.

Primary killing method: The first killing method that is used on an animal; may be followed by a secondary killing method to ensure death.

Professional wildlife rehabilitator: An individual with formal training in wild animal care and natural history, permitted by applicable government agencies to provide medical treatment and husbandry to injured and orphaned wildlife. Such persons should adhere to international *Minimum Care Standards for Wildlife Rehabilitation*, participate in regular professional development and maintain membership to regional and national wildlife rehabilitation associations.

Relocation: Transfer of an animal between locations but remaining within the animal’s home range.

Reunion box: A box in which young are placed after removing them from inside a structure that is secured next to the original entry point on the exterior of a structure, allowing the mother to retrieve her young and move them to an alternate den site.

Secondary killing method: A killing method employed after a primary killing method to ensure death of an unconscious animal before it can recover consciousness.

Standard operating procedure (SOP): Established or prescribed methods to be followed routinely for the performance of a designated operation or in designated situations.

Structural pest control: Commercial and industrial practices for controlling wood-destroying organisms or household pests (invertebrate and vertebrate) in and around commercial or residential buildings and structures.

Target animal: An animal or species that is the object of wildlife control activities.

Technician: Any individual performing the wildlife control services; can be owners of the wildlife control business or employees.

Translocation: Transfer of an animal from one location to another and outside the animal's home range, with the goal being the animal does not return to its original location.

Vertebrate: An animal member of the subphylum Vertebrata. Also known as chordates who have backbones and spinal columns, vertebrates include, but are not limited to, fish, amphibians, reptiles, mammals and birds.

Wild animals or Wildlife: Species that have not been domesticated. Wild animals have evolved in complex ecosystems resulting in mutual interdependencies with other animals and the surrounding environment. Wild animals may be introduced or native, and wild-born or captive-bred.

Wildlife control: Lethal and/or non-lethal management of vertebrate animals defined as wildlife, which aims to restrict animal activity (i.e. killing, relocation, translocation, exclusion).

Wildlife control service provider (WCSP): An individual, organization or business that manages and/or provides the wildlife control services.

Appendix 2 – Standard Operating Procedure Required Topics

Standard 1.1. WCSPs must have a written wild animal welfare policy to communicate expectations for technicians regarding wild animal welfare.

The following elements must be included in the policy (a template is available from AnimalKind upon request):

- the business is committed to protecting the welfare of wild animals
- animals are handled and treated with respect
- employees report observations or information related to animal mistreatment by another employee
- name of person responsible for responding to allegations of employee mistreatment of animals

Standard 1.3. Technician training must: a) use Standard Operating Procedures (SOPs).

The following topics must be included in the SOPs that are used by the WCSP to train technicians. How to organize and integrate the topics into SOPs is at the discretion of the WCSP (an individual SOP for each topic is not needed). SOP templates are available from AnimalKind upon request.

Relevant Standard	**SOP Topics- General**
1.9	cleaning of equipment after contact with an animal
2.5	safety when working at heights
2.6	safe and effective use of gas chambers
2.7	safe and effective use of firearms (e.g. calibre, body placement, accuracy)
2.8	prevention of animal injuries (e.g. bites, scratches)
2.8	how and when to use personal protective equipment
11.7	legal disposal of animal remains
14	care of working dog
14	care of working raptor
Relevant Standard	**SOP Topics- For Each Controlled Species**
6, 7, 8, 9	non-lethal control methods used for the species (e.g. exclusion, removal, live capture, release)
10, 12, 13	lethal control methods used for the species (e.g. kill-with-capture, rodenticides)
11	killing method(s) used for the species
11.6	procedures for confirming death in the species

Appendix 3 – Prohibited Poisons and Rodenticides

Standard 3.2 Use of poisons (other than specific rodenticides allowed by provincial exemptions and named in the Standards) is prohibited by the Program. This includes (but is not limited to):

- Alpha-chloralose rodenticide
- Avitrol Whole Corn (active ingredient 4-Aminopyridine)
- Avitrol Chop Corn (active ingredient 4-Aminopyridine)
- Calciferol and Cholecalciferol
- Hydrogen Cyanide fumigant
- Phosphine Gas fumigant
- Strychnine
- Sulphur Dioxide fumigant

Standard 13.6 The following rodenticides are prohibited from use by the Program:

Active Ingredient	**Brand Names (Manufacturer)***
Bromethalin	Fastrac Water-Resistant Blox (Bell) Rampage Water-Resistant Blox (Motomco) Terminator Mouse and Rat Water Resistant Bait (Neogen) Tomcat Rat Killer (Motomco)
Warfarin	Wilsarin Rat & Mouse Killer Pellets (Wilson)
Zinc phosphide	ZP Tracking Powder (Bell)

*list of brand names does not include all brand names registered with Health Canada

Appendix 4 – Brand Names of Permitted Rodenticides

Standard 13.1 When lethal control is justified (refer to standard 10) the following rodenticides may be used in accordance with the requirements of the Canadian *Pest Control Products Act*, the *BC Integrated Pest Management Act,* regulations, and Ministerial Order No. M307 (December 6, 2022):

Active Ingredient	Brand Names (Manufacturer)*	Legal Locations of Use
Diphacinone	Ditrac Blox (Bell) Ditrac Super-Size Blox (Bell) Liqua-Tox II (Bell)	Indoor and outdoor
Brodifacoum	Final Blox (Bell) Final Pellets (Bell) RATAK Rodenticide Pellets (Syngenta) TALON Rodenticide Pellets (Syngenta) WEATHERBLOK XT Bait (Syngenta) Jaguar 50 Bait Chunx (Motomco) Havoc XT Blok (Neogen)	Legally designated essential services locations and indoor use only
Bromodialone	Contrac All-Weather Blox (Bell) Contrac Meal Packs (Bell) Contrac Grain Bait (Bell) Contrac Rodenticide Pellets (Bell) Contrac Super-Size Blox (Bell) Maki Mini-Blocks (Liphatech) Maki Pellets (Liphatech) Resolv Soft Bait (Liphatech) Boothill (Liphatech) Revolver (Liphatech) Hawk All Weather Bait Chunx (Motomco) Brigand SB (Pelgar) Decimax Soft Bait (Decimax)	Legally designated essential services locations and indoor use and outdoor use around structures only
Difethialone	First Strike Soft Bait (Liphatech) Generation Mini Blocks (Liphatech) Generation Pellets (Liphatech) Blue Max (Liphatech) FastDraw Soft Bait (Liphatech) Hombre Mini Blocks (Liphatech) Hombre Pellets (Liphatech) Hombre Mini Place Packs (Liphatech)	Legally designated essential services locations and indoor use only
Chlorophacinone	Ground Force (Liphatech) Mhouse (Liphatech)	Indoor and outdoor use

*list of brand names does not include all brand names registered with Health Canada

Appendix 5 – Critical Criteria for Animal Welfare

Some standards have been identified as "critical criteria for animal welfare". Failing one or more of these during an audit may result in accreditation being withheld, regardless of conformance with other standards.

- Technicians with wildlife or animal cruelty convictions or animals seized (standard 1.5)
- Operating a non-accredited wildlife control business alongside the business intended for accreditation (1.6)
- Partnering, subcontracting or referring customers to another non-accredited wildlife control business (1.7)
- Displaying, selling, bartering, trading, given to persons or using wildlife or wildlife parts in another way that does not conform to the Standards (1.8)
- Releasing animals that are a) injured or diseases; b) orphaned young; or c) a species that is illegal to release (9.6)
- Killing animals to resolve nuisance complaints (i.e. minor property damage, noise or smell complaints) (10.1a)
- Killing animals to remove them from a location that will continue to have ongoing accessibility to other animals in the population (e.g. open air sheds, greenspaces, unmodified culverts) (10.1b)
- Culling populations of animals without scientific evidence supporting the feasibility of the cull goal and justification for the reason the animals are to be killed (10.1c)
- Placing rodenticides in burrows (13.7)
- Procuring raptors from the wild for the purposes of falconry (14.8a)
- Using raptors that show signs of stress, aggression or other behaviour abnormalities in public display (14.8b)
- Acts of cruelty or neglect (15.1 & 15.2)

Acts of cruelty include:

- capture using a prohibited method
- killing using a prohibited method
- dragging of a conscious animal by any part of its body
- malicious hitting or beating of an animal
- disposing of an animal's body without ensuring it is dead

Acts of neglect include:

- failing to check on a set cage-trap to see if it has been triggered
- failing to check on a cage-trapped animal once notified that animal is captured
- cage-trapping animals in conditions that lead to pain, distress and/or death
- holding cage-trapped animals for an excessive length of time before releasing or killing them
- failing to attempt to reunite a dependent young animal with their mother
    - after confirmation of death of a mother animal or abandonment by a mother animal failing to:
    - transport an orphaned dependent young animal into the care of a professional wildlife rehabilitation centre; OR
- killing the dependent young animal if a professional wildlife rehabilitation centre is not available
    - failing to euthanize a severely injured animal in a timely manner
    - releasing an injured animal
    - failing to confirm the death of animal and/or use a secondary killing method