# Wildlife Rehabilitation Society of Saskatchewan

## Volunteer Manual

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# 1. Welcome to the WRSOS

Thank you for your interest in the Wildlife Rehabilitation Society of Saskatchewan (WRSOS). We hope to encourage your fascination and enthusiasm for wildlife. We want to make your time with us safe, fun, and fulfilling, in order to maximize your wildlife education potential.

## 1.1. About the WRSOS

The WRSOS is a volunteer driven, registered non-profit organization in Saskatchewan. The organization was founded in 2006 and has been dedicated to protecting Saskatchewan wildlife. WRSOS aims to promote education, respect, understanding, and appreciation of wildlife and the environment so that humans and wildlife can successfully coexist.

The WRSOS' most valuable service is the emergency hotline, which operates 12 hours per day, 365 days per year. Our volunteers and summer student employees are trained to advise callers on how to handle a range of situations and to help prevent or solve human-wildlife conflict. Through the hotline, we not only improve wildlife protection, but we also raise wildlife conservation awareness in Saskatchewan.

Demand for WRSOS' services are growing rapidly due to an increase in urbanization and encroachment onto wildlife habitat, greater awareness of our organization, and referrals to our services by local, provincial and federal governments. In the 11 years since WRSOS was founded, we have experienced a dramatic increase in calls – from 177 in 2006 to nearly 3,000 in 2017 – highlighting the need for an organization like the WRSOS in Saskatchewan.

## 1.2. WRSOS' Purpose

- To conserve and protect wildlife and their habitat.
- To prevent the unnecessary removal of wildlife from their natural habitat.
- To prevent accidental injury or illness to callers or wildlife.
- To provide information and education to the public about wildlife issues.
- To provide rescue and transportation for the wildlife that needs help.
- To ensure the return to the wild of medically assisted and rehabilitated wildlife.

## 1.3. WRSOS' Goals

- Ensure success of the ever-growing wildlife emergency hotline.
- Advancement of wildlife awareness and conservation in Saskatchewan through community events, social media and the hotline.
- Quality public education through the hotline, newsletters, social media and our website.
- Increased tolerance for wildlife and more animals left unaffected in their natural habitat.
- Increase in memberships, volunteer participation, sponsorship and public outreach.
- Sustainable funding sources for the long-term success of WRSOS services.
- Improved ability to assist government and non-government organizations regarding emergency wildlife responses.

# 2. Volunteering with the WRSOS

Volunteers are critical to the success of this organization, so thank you for joining our team! Your responsibilities as a WRSOS volunteer are as follows:

- To help ensure that injured and orphaned wildlife receive the care they need.
- To provide educational information and advice to the public concerning wildlife issues.
- To encourage coexistence with wildlife and to help keep Saskatchewan's wildlife wild.

There are many perks to volunteering with us. Not only will you expand your knowledge on wildlife and gain new experiences, you will also meet people who have similar interests. The personal satisfaction of helping the public and wildlife is very fulfilling.

All volunteers are expected to sign our Volunteer Agreement stating that they understand our volunteer policies and guidelines, and a waiver stating that they understand the risks involved with working with wildlife. WRSOS volunteers are also asked to hold a current membership with the organization. Memberships can be purchased on the WRSOS website or by contacting our Membership Coordinator.

## 2.1. Hotline Volunteering

Our hotline volunteers can do this work from home. The volunteer will be responsible for directing people with wildlife issues to target veterinary clinics or rehabilitators, arranging for pickups, coordinating rescues, and providing valuable information to callers.

## 2.2. Rescue Volunteering

Volunteers will collect or capture wildlife in need and transport the animal to a target veterinary clinic or to a wildlife rehabilitator. The volunteer will be responsible to respond to rescue needs in their geographic area and promptly provide transport for animals in need.

## 2.3. Event Volunteers

Event volunteers help plan, organize, and execute the events that we hold across the province. The volunteer will have the opportunity to attend the events – we provide free tickets! – and help represent WRSOS.

## 2.4. Administrative

There is a lot of work going on behind the scenes. The Management Committee is responsible for fundraising, social media, volunteer management, technology, education, memberships, newsletters, and much more. The Board of Directors is responsible for the governance and finances of the organization. Volunteers typically have experience as a Hotline Operator and/or a Wildlife Rescuer before taking on a leadership role, however our committees welcome help from skilled people in various aspects of our operations.

### 2.5. Target Veterinary Clinics

Target veterinary clinics agree to accept wildlife to be held until a volunteer is available to transport the animal to a rehabilitator. The veterinarian may also volunteer to stabilize, treat, or euthanize a wild animal in extreme cases.

### 2.6. Wildlife Rehabilitators

Specific certification and training are required to rehabilitate wildlife. We work closely with licensed rehabilitation facilities for the specialized care of wildlife in need. People interested in volunteering for a rehabilitation facility should contact a permitted rehabilitator in their area.

## 3. Hotline Volunteering

The WRSOS hotline operates from 9 AM until 9 PM every single day of the year. The hotline is in place to help the public with wildlife issues in the best and most humane manner. Hotline volunteers provide options and solutions to problems while minimizing stress on both the people and the animals.

Hotline volunteers can choose their own schedule and sign up for shifts on our Volunteer Portal. To measure the success of the hotline, we consider how promptly messages are being checked, how quickly we are responding to calls, and the quality of advice we provide to the caller.

This manual will be the primary resource for hotline volunteers for information to solve cases received through the hotline. Mentors and other volunteers are also great resources for guidance.

### 3.1. Wildlife Requiring Specialized Care

If an animal is injured or orphaned, hotline volunteers can help by deploying our rescue volunteers or giving the caller information that they need to take the animal to an appropriate rehabilitator or veterinarian themselves. You must ask good questions and use your judgement to determine if the animal needs help, and if it is safe enough for the caller to manage the rescue on their own. If the situation is unclear, a rescue volunteer might be required to assess the situation.

Volunteer rescue is subject to volunteer availability. Start by calling volunteers from the contact list on the Volunteer Portal. You may also utilize our Facebook group to coordinate rescue. The caller should know that sometimes we do not have anyone available to help and, if they aren't able to help, we must let nature take its course.

Target veterinarians may provide triage, medical care, and treatment to some wildlife, depending on the veterinarian involved. It is best to check with the clinic in advance, before sending an animal to them.

Please contact Saskatchewan Environment Conservation Officers if the animal is too large or too dangerous to handle.

#### 3.1.1. If Wildlife is Injured

- Make sure the animal is injured – ask the caller for a description of injuries.
- Bring to a target veterinarian ASAP. Call veterinarian in advance to check if they can accept the wild animal before sending the caller to the clinic.

### 3.1.2. If Wildlife is Orphaned

- Make sure all possible means of reuniting with parent have been exhausted first.
- Bring to a wildlife rehabilitator ASAP. Call the rehabilitator in advance to confirm they can accept the animal, before sending the caller or a rescue volunteer to the facility.

## 3.2. Hotline Tips

- Effective hotline management is critical. The more situations we can deal with effectively over the phone, the less stress there is to the wildlife, the veterinarians, and the wildlife rehabilitators.
- Our goal is to keep the animal in the wild and in as little stress as possible. In most cases that means advising people not to intervene. The trauma of needless transport and handling is usually not warranted unless the animal is injured.
- Remember to assure callers that they are instrumental in the survival of the animal they have found and whatever help they can provide is important. Remind them that we appreciate that they cared enough about that animal to call us.
- We should strongly encourage the caller to bring the injured animal to a target veterinarian themselves if it is already contained. If it isn't, we can instruct them over the phone on how to contain it, or we can send a rescue volunteer.
- We will try to plan a rescue for animals which we do not expect the public to have the skills to collect.
- For injured wildlife at large, it is imperative that we get precise directions, the time it was sighted, and whether the caller can stay with the animal until a volunteer arrives.
- Not all calls need to be dealt with immediately. If you are overwhelmed with calls, try to prioritize based on urgency.
- Remember to be patient and clear with your instructions. We are here to offer advice, so if people choose not to take it, we need to accept that. We are not wildlife enforcement officers; however, we may engage them if necessary.
- Some callers may become very upset on the phone, but volunteers must remain professional. If there is a difficult caller on the hotline, please contact your mentor or our Hotline Coordinator for assistance.
- The first thing most people want to do when they find a baby animal of any species is feed it. If the animal is injured, in shock, has lowered body temperature or other medical problems, feeding it will only cause damage. Please emphasize that the best course of action is to provide warmth and a quiet area for the animal as soon as possible, and until it can be transported to a rehabilitator or target veterinarian.
- The second thing most people want to do is hold the animal to offer what they perceive as "comfort." In the eyes of the animal, human beings are the worst of all predators. Direct exposure, including the sounds we make and handling, place severe stress on the animal and will lead to shock. If the caller says, "It is just lying here quietly resting in my hand," this means that the animal is already in shock severe enough to prohibit movement and normal flight response. Advise them to immediately place the animal in a box and move it to a quiet place.

## 3.3. Procedure for Collecting Messages

### 3.3.1. SaskTel Mailbox

- The mailbox can hold up to 40 messages but if you notice the number of messages exceeding 30, please let the Hotline Coordinator know. This can happen quickly during the summer.
- Please return calls as promptly as possible. Check for messages every hour from October to March, and every 10 minutes from April to September.
- Please answer each call in a friendly, helpful way. If you are not sure how to handle the situation, please contact the Hotline Coordinator or a mentor. It is better to say, "I don't know, but I'll find out!", than to guess or become stressed by the situation.

### 3.3.2. Phone

- Dial your local SaskTel message manager system. These numbers may be different depending on where you live, so check what your mail service number is in your area.
- When the message starts press #, then enter: 306-242-7177
- Prompt will ask for password: press WRSOS (97767).
- To check messages, press 11.
- If you need to listen to an already saved message and there are several messages before it, you can press # at the beginning of each message and skip to the next one. You do not need to re-save or listen to them all over again to get to the one you want.
- If the caller forgot to leave a phone number, press 5 and it will tell you the time, date, and phone number of the person who called.
- When you are finished listening to the message, the prompt will say, "To erase this message press 7, to save press 9."
- Please save the messages until you have logged them on the Volunteer Portal. Once you have recorded them, delete the messages so that the inbox does not fill up.

### 3.3.3. Online

- Go to www.msging.sasktel.net.
- The phone number is 3062427177, and the password is 97767.
- To view the messages, click on "Inbox".
- This will take you to the inbox where you can view all the previously saved calls, as well as the new calls which will be highlighted by a red dot. To view the call, click on it.
- Once selecting a message to view you can see the details of the call. If you have QuickTime player installed it may automatically play call, or you can click on the blue link: "Listen to voice message", which will immediately begin playing the message.
- Hit refresh to reload the page through your shift for updates.
- Once you have logged the call on the Volunteer Portal, delete the messages so that the inbox does not fill up.

# 4. Rescue Volunteering

Since the WRSOS hotline operates for 12 hours every day, we need rescue volunteers available to help during these hours as well. Rescue volunteers can choose their own schedule and sign up for shifts when

they are available. During a rescue shift, rescue volunteers are expected to be “on call”; hotline volunteers will contact scheduled rescue volunteers if a rescue or transport is needed.

## 4.1. Capture Techniques

Always approach wild animals with caution no matter how lethargic or lifeless they may appear. Animals cope with threats by using the “fight, flight, freeze” response. As you become more familiar with the different species, you will learn how each animal deals with stressful situations.

A wildlife rescue kit is key to your success. Start off with a towel, safety gloves and a box, and build your kit as you go. This will ensure you are always safe and prepared. Eventually your kit might look something like this, and will allow you to go on a variety of rescues:

- Animal carrier (various sizes)
- Blankets, towels
- Gloves (thick safety gloves, surgical gloves)
- Eye protection (safety glasses, goggles)
- Cardboard box and/or shoe box
- Net (long handled fishing net, hockey net)
- Garbage/plastic bags, cloth sacks
- Scissors, knife
- Wire-cutters
- Rope
- Paper towels
- First aid kit (for human injuries)

## 4.2. General Guidelines

The following guidelines are related to rescuing wildlife in general. See subsequent sections on specific groups of wildlife for more detailed tips.

### Before you start the rescue:

- First, ensure you have a plan before you begin to approach the animal.
- Ensure you have all safety equipment necessary.
- Keep on-lookers — people and pets — out of the area, and ensure they remain quiet.

### Rescuing the animal:

- Move slowly, gently, and stay calm, especially if the animal appears panicked.
- Avoid eye contact (lower eyes); direct eye contact is threatening to the animal.
- Guide the animal if possible, rather than attempting to chase the animal. Some animals will die from the stress of a chase.
- Despite an animal’s injury or weakened condition, their survival instincts will take over and they will likely fight and struggle (especially adult animals).
- Wildlife in dire need of care will be weakened and somewhat easily captured with a towel thrown over them, or with a net.

- Throw a towel or blanket over the animal, then tuck it under them, keeping paws, claws and wings tucked in. Covering the head can reduce the visual stimuli and stress. Make sure you are not covering the animal's mouth or nose – leave space for them to breathe.
- Do not over-restrain the animal as this could exacerbate an injury.
- Do not squeeze a bird's or reptile's chest; they need to move their chest cavity to breathe.
- If the animal is very young, or if it feels cold to the touch, provide indirect heat (a hot water bottle or soda bottle with warm water, covered with a towel).

### Transporting the animal:

- Once captured, the animal should then be put in a cardboard box slightly larger than the animal. The top should be secured, and air holes put in the sides (this needs to be done before putting the animal in the box).
- Animals will generally be calmer if completely enclosed and in dim light. Using a blanket to provide darkness and privacy is appropriate, if the cover does not interfere with ventilation.
- Keep the animal/box out of direct sunlight during transport, as they may be dehydrated.
- Do not use air conditioning (summer) or high heat (winter) in the car during transport.
- Do not play the radio during transport and keep conversation to a minimum (whispers only).
- Do not provide any food or water to any animal without professional advice from a rehabber.
- Take the animal to a target veterinarian or wildlife rehabilitator immediately.

## 4.3. Small to Medium Sized Birds

Small to medium-sized birds can be captured by throwing a towel or blanket over them, gently gathering up the wings while wrapping them in the towel and placing them in a box. Ensure you are wearing gloves, especially if you need to contact them directly.

## 4.4. Large Birds

Larger birds, such as swans and geese, will use their wings as a defence, which can be dangerous if they hit you. Larger towels or blankets thrown over their backs will facilitate capture. Firmly, but gently, wrap the towel under their body, leaving their neck and head free. You may need to hold on to their feed. The best method to carry them is like a football, tucking their wrapped body under your arm while also slightly against the side of your chest. Be sure to take caution, as their free head and neck may reach your face. You may very gently hold their head, if necessary.

To place the bird in a box or carrier, maintain hold of their body and push down gently on the back as they enter the container. Hold the back until the container is closed. Do not leave the blanket in the container with the bird; however, padding on the bottom can remain.

Extreme care must be taken with herons, cranes, Western grebes, and loons. Their bills are used for piercing prey and they will strike. Never place your face near any wildlife and always use safety glasses with long-billed birds.

Ducklings must be picked up immediately to avoid dehydration, cooling, and stress.

## 4.5. Raptors

Raptors must be handled very cautiously. A blanket or towel can be thrown over them, however extreme care must be taken to locate the feet (always wear thick gloves) and grasp the legs just above the feet. Both feet must be grasped at the same time. You may either hold one leg in each hand, with the leg being held between your thumb and forefinger. Or a one-handed grasp can be used by placing your index finger between the legs and encircling one leg with the thumb and the other leg with the remaining free fingers. The one-handed technique should only be tried once you have had experience and may be useful if you need to support the back of heavier birds while picking them up off the ground (unless you have help). Once restrained, the bird can be gently transferred to the container. You may gently lower the raptor in, placing it on it's back, so that you can safely let go of the feet and remove your hands from the container.

## 4.6. Mammals

Mammals can be challenging to handle and capture. Always use heavy leather gloves, even for squirrels. Most mammals will bite, scratch, wiggle, twist, and squirm their way out of many holds. Generally, it is better and preferred if they can be herded into a box or cage without physically handling them. Blankets or towels can be used to throw over small mammals, which will allow you to then gently wrap them and transfer them to a carrier.

## 4.7. Hares

Hares must be picked up immediately to avoid dehydration, cooling, and stress. They must be handled carefully because they are prone to panicking and can kick so violently with their hind legs that they may break their own back. Throw a blanket over them and press on their rear so they do not kick. When holding a hare or rabbit, the most secure position is to hold them like a football with their head buried into your armpit. With one hand, support the hind legs, and the other hand pressed over their rear. Always place the hare into a carrier rear first with its head facing you.

## 4.8. Types of Containers

Cardboard boxes work best for most birds except ravens (they can pierce the box with their beaks). Plastic cat carriers also work but larger birds can damage their wing and tail feathers by getting them caught in the ventilation holes. Covering the holes with box board or plastic will help. These carriers work well for most small mammals except squirrels, who can chew through the plastic, and bats who can escape through the holes. Adult tree squirrels and bats can be transported in plastic tubs like margarine containers with small ventilation holes at the top, or ice cream pails. Porcupines can be transported in plastic totes or garbage cans. Wire cages are not recommended in general, due to the potential for extreme feather damage in birds and high stress in mammals.

## 4.9. Recognizing Critical Patients During Transportation

An animal that is in critical condition must be taken to a target veterinary clinic immediately. If you observe any of the following signs, the animal may be in critical condition:

- open-mouthed breathing (continual gasping for air vs. mouth open in defensive response)
- closed eyes

- extreme lethargy or depression
- little resistance or response to handling

### 4.10. Capture Myopathy

Persistent stress raises the "fight or flight" reaction to a dangerous level, which can result in capture myopathy, a life-threatening disease associated with capture or handling of any wild species. A key feature of capture myopathy is hyperthermia (an increase in body temperature); the animal cannot cool itself and will eventually lead to death.

Capturing and restraining injured or ill wildlife is extremely stressful, and the rescuer's primary goal is to reduce stress before it reaches this critical level. The only cure is prevention. Once capture myopathy begins, it cannot be stopped, and the animal will die.

## 5. Young Wildlife

Precocial young are born covered in down (birds) or fur (mammals). Their eyes open right away, and they can stand, walk, or even run with their parents just moments after birth. Precocial animals generally spend a longer time in the egg or womb but are born more fully developed.

Most, but not all precocial birds are ground nesters. All waterfowl and upland game birds are precocial birds. Precocial mammals include ungulates (deer, moose) and some small mammals such as hares (not rabbits) and porcupines.

Altricial young are born naked or lightly covered in down or fur. They are unable to thermoregulate, which means they are unable to maintain their own body temperature. Their eyes open after many days or weeks, and they are not able to move until their legs or wings are more developed. They must spend days or weeks in a nest until they are able to move out on their own.

Most, but not all altricial birds are cavity or tree nesters. Examples of altricial birds are all songbirds (robins, sparrows, jays, magpies) and raptors (hawks, owls). Altricial birds generally hatch quite quickly (some incubate eggs for as little as 11 days) but are less developed at hatching. Altricial mammals include rodents (mice, voles, squirrels) and rabbits (not hares).

## 6. Imprinting, Habituation and Taming

When humans raise wild animals from birth, there is a danger that they will imprint on their human surrogate. This will make survival in the wild impossible. If young animals are brought in for care past the imprinting stage, their chances for release are better, however, care must be taken at this stage to avoid habituation and taming by excessive handling, stroking, or coddling. Habituation to people means the animal learns to tolerate nearness to humans. A tame animal has learned to depend on humans for its survival (provision of food and protection).

Taming and habituation can be reversed in time. However, it is important to understand that imprinting is mostly permanent. Once an animal has identified with its own kind, or a "surrogate," it has a lasting affinity for those characteristics imprinted in its mind.

In waterfowl, imprinting occurs within the first 24 - 48 hours. Goslings and ducklings will faithfully follow the first big moving thing they see, typically the mother. Imprinting is more gradual in altricial young, starting at birth and strengthening when the eyes begin to open.

Wild birds and mammals must learn many things for survival. Behaviours that are essential to survival include feeding and foraging, self-protection, fleeing from predators, social order, and breeding. Some behaviours are learned, some are genetic, and these processes vary from species to species. Raising wild animals for release is a complex process and must be left to the knowledgeable hands of professional wildlife rehabilitators.

## 7. Wildlife Rehabilitation

Wildlife that are potentially releasable will be transported to a licensed wildlife rehabilitator who will care for and eventually release them back to the wild. Wildlife rehabilitation involves caring for injured, ill, or orphaned wild animals with the goal of releasing each animal back into its natural habitat. Releases are planned for appropriate weather, season, habitat, and location.

Before a wild animal is released back to its natural environment, it should have access to what are termed the “Five Freedoms.”

1. Freedom from hunger and thirst.
2. Freedom from discomfort.
3. Freedom from pain, injury, and disease.
4. Freedom to express natural behaviours.
5. Freedom from fear and distress.

The five freedoms are typically used by a wildlife rehabilitator to assess whether the animal can be released back into the wild.

Critics of wildlife rehabilitation may believe that rehabbers impair natural populations by caring for weaker individuals that would normally be removed by predators, disease, starvation, etc. However, most calls into the WRSOS hotline are due to anthropogenic (human-caused) conflicts. Windows, buildings, power lines, traps, firearms, poisons, urban sprawl, and even harmless but curious children and pets pose threats to wildlife. On occasion, rehabbers must deal with something as unnatural and catastrophic as an oil spill. Rehabilitation is our way to help counter the negative affects humans have caused to the environment and wildlife populations.

Some people are tempted to care for wildlife on their own. There are legal and financial consequences to keeping a wild animal illegally. There are also significant ethical concerns to keeping a wild animal captive. If wildlife does not receive proper care, they may be permanently impaired or disabled. Living with people is not an ideal environment for wildlife and when the animal becomes an adult it will be incapable to survive on its own. Furthermore, people and pets may be exposed to diseases from wildlife. It’s best to entrust professional wildlife rehabilitators and veterinarians for the care of wildlife.

Since wildlife rehabilitators' focus is on the recuperation of injured or orphaned wildlife, they do not allow viewing or touring by the public, as this would be unduly stressful for the patients. Once wildlife has been placed in the care of a professional, we cannot give that animal back to the finder if it is non-releasable.

# 8. Scenarios about Avian Species

## 8.1. Baby Birds

Generally, there is no need to interfere unless it is certain that the parents are dead or have definitively abandoned the nest. These cases are relatively rare; baby birds are more often abducted by well-meaning people. The babies should be watched at least a few hours to see if the parents come back. In addition, remember that baby birds are not fed water by the parents as all moisture is obtained from the fluids in the insects, seeds, or fruit brought to them. Attempts to give water to a baby bird may result in it breathing the fluid into its lungs causing pneumonia or death.

### 8.1.1. Nestlings: Naked Baby Birds

- If the caller can find the nest, the nestling should be put back in the nest.
- If the nestling is cold, it can be taken inside for a while, provided with a warm towel in a box, and kept in a warm dark place before being returned to the nest.
- Do not talk to or play music near the bird. It will only frighten it and add to its stress. Keep the area as quiet as possible.
- Do not try to give it any type of food. Baby birds cannot digest bread; it becomes compacted in their crops, sometimes causing death.
- Do not give milk. Baby birds are lactose intolerant; this may also be deadly.
- If the nest has been destroyed, a new one can be made from a small margarine container. Put drainage holes in the bottom. Line it with material from the old nest, dry grass, and leaves or lint from the dryer. *Never* use pieces of string for nest material. Place the new nest securely in the shady area of a tree, as close as possible to the original nest site.
- Studies have shown that the adults will feed the single baby in a makeshift nest only for a few days, after which the adults may abandon the substitute nest and feed only those nestlings in the original nest. In this case, the nestling should be taken to a rehabilitator.
- If a tree has been cut down with a nest in it, the branch with the nest can be attached to a tree close by. The parents will continue to feed the young.

### 8.1.2. Fledglings: Feathered Baby Birds

- If the bird is hopping around, sitting on the lawn looking healthy but not running away, leave it be. It's a fledgling bird, meaning it looks like an adult that cannot fly but it's still just a baby learning to fly. Parents are usually close by and still feeding it while it learns to fly. This can take up to 4 days, or longer depending on the species.
- If the bird has already been picked it up, it should put back immediately, so the parents can continue to take care of it.
- If it is in danger of being attacked by a cat or dog, it can be moved to a nearby bush or shrub for safety.

- The parent may abandon the fledgling if people are too close to the baby for them to return, so encourage the caller to use binoculars from a distance to watch to see if the parents are feeding the baby.

### 8.1.3. Nest blown down with babies still in it

If the babies are unharmed, and respond (peep) when touched gently, the nest can be placed into an old margarine container or similar sized container (without the lid) with holes in the bottom for rainwater to drain out and secured back up in the tree as close to the previous nest site as possible. Watch to make sure the parents return. They are usually close by and will continue to feed the young when they hear the cheeping/begging.

It is not true that the parents will reject the baby if touched by a human. If the nest is still in a very early incubation stage and the parent has time to re-nest elsewhere then they might consider abandoning if they think people are a threat to them.

If the nest has been down for some time, or it is a cold/wet day, or if the parents are not around at all, and the babies are unresponsive (but not dead), they are probably chilled and would benefit from being warmed up. This can be done by placing the nest in a margarine container and putting it atop a blanket covering a heating pad on low. Ensure the birds are safe from predators and the nest can be replaced in the tree (or box) as soon as the babies become more responsive.

If the parents do not return within the next hour to feed the babies, the bird should be taken to a target veterinarian or wildlife rehabilitator. Remind the caller that the parents will not return if it is obvious to them that someone is watching. Encourage the watchers to be discrete; keep their distance and monitor with binoculars.

### 8.1.4. Baby Bird Myth

Picking up a baby bird will not cause its parents to abandon it. Birds do not have a very well-developed sense of smell. It's a myth that the parents will abandon the young if a human touches them. Rather, the parents will try everything possible to protect and care for their babies if they can hear and see them.

## 8.2. Song Birds

### 8.2.1. Birds hitting windows

A bird that has flown into a window and is not moving might be stunned and may simply need a bit of time to recuperate. Monitor the bird where it is or place it in a safe location outside (inside a large open box) until it can fly away.

Sometimes male birds will attack their own reflection in a window during mating season. This can be prevented by putting up the silhouette of a hawk or other window strike prevention products on the outside of the window. A banner or windsock outside the window works well also.

If the bird does not fly away within two hours, then there may be more significant injuries. The bird can be captured and taken to a rehabilitator or target veterinarian for an examination.

A window that repeatedly causes striking problems can be covered on the outside with black plastic garden-protection netting, mounted on a frame and installed a foot away from the window; the netting will act as a trampoline if a bird should hit it. There are a wide variety of window strike prevention products available in stores and online.

Bird feeders around ten feet from a window cause most of the bird injuries. It's better to put the feeder either very close, far away, or at an angle to the window. In addition, feeders should be routinely cleaned and disinfected monthly to prevent bacterial or mould growth on seed residue, especially during rainy times of the year.

### 8.2.2. Bird "attacking" humans in the backyard

This protective behaviour in a bird's territory can cause fear and/or panic in the caller. The birds usually responsible for this behaviour are red-winged blackbirds or grackles, as both are fierce defenders of their territory and their young. Although the adult usually only makes swooping dives, some birds have been known to pluck hair off the head off the perceived intruder (including cats and dogs).

Ask the caller to describe the behaviour of the bird. If you ask them questions such as "What size was the bird – sparrow, robin, or crow size? What colour was the bird? Do you know if there is a bird nest nearby?", they will pause to think about the answers and, in the process, calm down as they might be afraid.

The first suggestion is to temporarily avoid going into the area of the yard that is being protected. Then explain what the bird is doing and why — it is a parent protecting its babies. Tell the caller the worst-case scenario will result in a few hairs lost; people are often reassured to know diving is all that happens.

Let them know that the babies will be in the nest only a short time. They can also watch the adults – from inside – to locate the nest. The nest can be destroyed after the young have left in the fall so that the parents do not return the following summer.

### 8.2.3. Small bird that does not seem to be able to fly very well

These are probably fledgling birds. To determine if the bird is injured or fledgling, ask the caller if it is fully feathered, and if other birds come to it when it calls. These other birds would be the parents. If the bird is in a tree, able to hop about, and appears otherwise healthy, it is best to leave it alone. The caller may want to consider keeping cats inside for a day or so until the bird is better able to fly.

If the bird is on the ground, appears to be off balance, or clearly has a wing that is out of place, the bird should be transported to a target veterinarian or wildlife rehabilitator.

### 8.2.4. Bird caught by cat, but it is still alive

If the bird has obvious puncture wounds, take it to a target veterinarian immediately. Cats have toxic bacteria in their mouths. So, even if the bird appears unharmed, it is best to take the bird to a target veterinarian for treatment as injuries can be very difficult to see.

#### 8.2.4.1. Reducing cat kills

- Keep cats indoors (especially during May and June). Note: Cats are not allowed to roam free in most Saskatchewan cities.
- Put at least two small bells on the cat's collar.
- Declawed cats are still effective predators, and thus is not an effective prevention.
- Relocate bird feeders somewhere that does not provide hiding areas for cats to ambush birds from.
- To prevent cats from climbing to bird nests, put animal guards around any trees in the yard that may have nesting birds.
- Don't release unwanted cats in rural areas.

Note: Cats are not part of the "natural food chain." They are non-native predators and are responsible for killing hundreds of millions of migratory songbirds every year.

### 8.2.5. Birds in the chimney

If a damper is open 1" or more, active birds can get through the opening. A nest may be built in the fireplace below the damper. A chimney professional should collect the entire nest, including babies, and place it in box. The box should be placed on the roof near the top of the chimney where the parents can continue to feed young. Otherwise the baby birds should be transported to a wildlife rehabilitator.

- Chimneys should be cleaned in late fall after birds have migrated for the winter.
- Capping the chimney to prevent further nesting should be done only after October 30th or before March 30th to avoid trapping birds.

## 8.3. Woodpeckers

### 8.3.1. Attacking house

The wood may be infested with insects or they are building nest sites, or if springtime, they are establishing territory with the sound emanating from the house.

It is better to start control efforts as soon as the problem begins since woodpeckers are not easily driven away from their established territories. Treat insect infestations immediately. Repair holes and damaged areas quickly. Cover the pecking site to prevent access (e.g. plastic bird netting, aluminum sheeting painted to match the siding), or use materials to dampen the sound produced (e.g. hardware cloth raised on 1" wood spacers). Padding can also be used to muffle the sound of the drumming to discourage the woodpecker. Hang bright strips of cloth, plastic, or foil to flutter in the wind to frighten the birds.

In general, decoys (e.g. plastic owls, falcons) do not work. Woodpecker young are extremely aggressive towards each other in the competition for food being brought by their parents and will push the smaller ones out of the nest hole or stab at them and cause injury. Finding a single, young woodpecker at the base of a tree is not uncommon and replacing him in the nest cavity often does not work as he will be pushed out again. These babies should be referred to a rehabilitator.

### 8.3.2. Attacking more than one tree in the yard

There is either a good food source in the tree, or a potentially good nest hole. Consistent woodpecker activity is a forewarning of a possible problem with the trees. Either a tree is starting to rot and die, or it has a major insect infestation. The caller may either do nothing or engage an expert to advise them on the problem with the tree(s).

## 8.4. Raptors: Hawks, Falcons, Owls

These large birds are born altricial and require over one month to hatch, and another month in the nest before testing their wings and independence. These parents can be extremely aggressive, so no young should ever be approached while in the nest.

A person finding a young raptor should observe it from a distance to determine if the parent is caring for it. Even if there is evidence that a parent is dead, the other parent will continue to provide for the young as best as possible.

All clearly injured raptors should go directly to a target veterinarian. A helmet might be needed, if rescue is attempted, to protect from swooping raptors which may cause injury from the talons.

### 8.4.1. Raptors preying on passerines at feeders

Bird feeders attract birds and cause a useful feeding site and easy food source for raptors. This should be considered an environmental education opportunity rather than a “problem”. Seed-eating birds have high reproductive rates and bird populations can tolerate very high mortality rate without being adversely affected. Temporarily stopping feeding will not work.

## 8.5. Waterfowl: Geese, Ducks, Grebes, Loons, Swans, Coots

Young waterfowl are generally born fully feathered and ready to leave the nest, although not able to fly. The parents have been known to take their brood to a location for safe keeping while they go away for the day. First, determine if the bird is clearly injured or truly orphaned, based upon parental presence and the condition on the young.

### 8.5.1. Young found without a mother

If there are more than one, and they are together, lying down, or pecking for food, do not interfere, and watch - from a distance - for the mother to return. If she does not return within 24 hours, the caller should recontact us, so the young waterfowl can go to a rehabilitation facility. If there is a delay before transport to a rehabilitator is possible, commercial duck food can be given so they aren’t left hungry during this wait.

Injured young or adults (possibly in the fall, from hunting “misses”) should go directly to a target veterinarian. These birds will be identified by their inability to fly, wings out of place, or failure to migrate with the rest of their flock in the fall.

### 8.5.2. Ducklings

Do not put ducklings in water; they may become waterlogged, chilled, and die. If it is necessary to temporarily keep ducklings, make sure they are in a deep container or box, as they will jump. Keep them warm by placing a warm blanket in the container. Contact a rehabber immediately.

### 8.5.3. Finding eggs

Ducks and geese do not incubate their eggs until all have been laid, and the nest is left unattended between each laying. This often results in calls from the public claiming to have found "abandoned" eggs which need attention.

If eggs have truly been abandoned by any species of birds, often it is neither successful nor practical for us to attempt incubation. The egg embryos have often been thoroughly chilled and are no longer alive or are irreversibly damaged. The best instruction is for the caller to leave the eggs for other animals to eat (after all we eat eggs, too).

## 8.6. Shorebirds, Herons & Gulls

Generally, for this group of birds, both parents help to raise the young, who are precocial. Unless there is an obvious injury, the young should be left alone and observed for an hour or more to assess parental presence. Even when there is an obviously missing parent (corpse on the road), monitor for parental involvement before taking the young to a wildlife rehabilitator.

Herons spear their food with their bill and may do the same to a person's eyes. Extreme caution should be used in handling these birds. Eye protection is essential.

Cormorants may carry Newcastle's Disease, which is highly contagious to other birds; therefore, most veterinary clinics will not take them in. It is best to check with the clinic first.

### 8.6.1. Baby killdeer

Attempt to return baby killdeer to the parents. If this is not possible, they must be kept warm, dry, and in a very quiet location. Call a rehabilitator or target veterinarian.

## 8.7. Grouse: Ruffed, Sharp-tailed, Grey Partridge

Grouse are precocial. They often have very large broods, and only the mother cares for the young. If the mother is killed, the babies will need to be taken to a wildlife rehabilitator. Unfortunately, because these birds can run and fly quite fast, even at a young age, the babies may not be easily captured.

## 8.8. "Nuisance" Birds

### 8.8.1. Keeping fish-eating birds out of ponds

- Physical barriers can deter most fish-eating birds.
- For small ponds, complete screening with bird netting may be effective. Properly spaced monofilament lines suspended over a pond may exclude gulls (every 4 feet) and herons (every foot).
- Perimeter fences provide some protection from wading birds.

- Scarecrows which are moved regularly, perhaps daily, may help.

### 8.8.2. Keeping roosting birds away

- To eliminate birds on ledges, try removing flat surfaces, laying down porcupine wire, stretching a “slinky” toy, or stringing rows of monofilament, one or two inches above each other about two feet apart.
- A sheet of metal or hardware cloth placed at an angle on ledges may also make roosting more difficult.
- Pruning may eliminate birds roosting in trees. Removing some cover may be enough to make the roost site less attractive.
- Rubber snakes placed on roofs and overhangs of buildings may deter pigeons, but only for a limited time.

### 8.8.3. Keeping waterfowl away from rivers, ponds, lakes, crops, and yards

- Scarecrows should be of simple construction and move in the wind. Put one in every five acres and move them every two to five days.
- Flags may be the most effective and least expensive control tool. Make 2 ft x 3 ft black plastic flags on 4 ft posts. Put one flag per acre in fields where waterfowl have been feeding, one per five acres in fields with no damage.
- A free-ranging dog, trained to chase birds as they land, will discourage waterfowl.

# 9. Scenarios about Mammals

## 9.1. Bats

IMPORTANT: Never handle bats without gloves or cloth. Involving a specialist may be required. You must also be vaccinated against rabies to handle bats. This is for your safety!

Other useful information and educational resources about bats are available in the Documents section of the Volunteer Portal. Please refer to this section if more information is needed.

### 9.1.1. Rabies and bites

- Bats may bite in self-defence if handled. Aggressive behaviour is rare even when bats are rabid. Less than 1% of bats can be rabid.
- Bat bites feel like raspberry thorns. Never handle them unless protected with gloves.

### 9.1.2. The pros of bats roosting at a house

- A single bat can eat up to 600 mosquitoes in an hour!

### 9.1.3. Bats in the house

- Bats will usually leave on their own if a window or door to the outside is opened while others are closed. Turn off all lights.
- It’s *not* recommended to catch bats in flight. They will eventually land and when the bat lands, cover it with a coffee can or ice cream pail and slip a piece of cardboard under the opening. If in summer the bat can be released outside. They must be placed as high as you can reach on a

tree trunk with no branches or on the side of the building if brick, stucco or wood. Most bats *cannot* take off from the ground. In November to April bats need to be hibernated by a permitted rehabber.

- It's important to contact a rescue volunteer with bat expertise to catch it rather than encouraging the caller to attempt it.

### 9.1.4. Discouraging bat roosting at a house

- Exclusion should be done between September and April.
- Nylon screen can be put up during the day above areas where the bats emerge, using duct tape or staples. A strip of netting at least two feet wide, hung 1 - 4 inches in front of bat exit holes, and extending at least 2 feet below the lowest exit point, will allow the bats to emerge, but later they will fail to find their way back.
- Suspending 2-inch-wide by 7-10-inch-long strips of aluminum foil, or helium-filled mylar balloons, at a roost may deter bats.
- Lighting the area with motion detector lights may help discourage bats.
- Entry sites can be plugged with silicon caulking, steel wool, or, temporarily, with tape.
- Ultrasonic generators tested by reliable bat experts have proven to be ineffective.
- There are currently no poisons or chemicals licensed for use against bats.
- Sticky traps, still recommended by pest control companies are cruel and cause prolonged suffering, *must not* be used.
- Cover chimneys and vents with 0.5-inch hardware cloth screens.
- Install draft guards below doors.
- Seal around screen doors, windows, plumbing, dryer vents, and other ventilation holes.
- Bats do not chew wires or insulation or make new holes.

## 9.2. Raccoons

IMPORTANT: Callers should be cautioned not to attempt to catch or handle raccoons. Never corner a raccoon, thereby forcing it to defend itself. Raccoons can be very dangerous with strong and aggressive bites. Call a Conservation Officer in your area for help.

Raccoons are incredibly intelligent, creative, and resourceful animals. They have been able to adapt to life near humans, sometimes to their own detriment. The most common concern with raccoons is their consideration by the public as a nuisance animal.

### 9.2.1. Raccoons in the garbage

All garbage should be in cans that can be tightly closed, ideally with a twist-on lid. Garbage cans should be put out in the morning for collection rather than the night before. Bungee cords may not be enough to keep lids on.

### 9.2.2. Raccoons in the daytime

Raccoons observed during the daytime does not mean it is rabid. They will sometimes forage during the day, especially when they have hungry young to feed, or they will nap in a tree. Call the local Conservation Officer only if the raccoon is showing abnormal behaviour such as partial

paralysis, appearing drunk or circling and disoriented, screeching, exhibiting unprovoked aggression, or unnatural tameness. Otherwise, leave the raccoon alone and keep people and pets away from the animal.

### 9.2.3. Raccoons in the attic

Turn on the lights and a radio in the attic for a few days and seal the entrance point when all animals have left.

### 9.2.4. Raccoons in the garden

Use scare tactics (lights and radio), or sprinkle vegetables with baby powder or cayenne pepper; if it rains, reapply.

### 9.2.5. Raccoons in the chimney

- In spring and summer, mother raccoons often take advantage of chimneys and attics as den sites to raise their cubs. The easiest solution is to wait the few weeks until the raccoons have moved out on their own. As soon as the cubs are old enough to go on night-time outings with their mother, she will permanently take them out of the chimney/attic.
- Place a bag of mothballs in the fireplace (if needed, leave the flue open 1/8 inch) to drive the animal out.
- Put a radio in the fireplace on a talk show or hard rock station.
- If the chimney is made of metal and the raccoons can't get out, securely tie a 1-inch-thick rope with knots at 1-foot intervals to the top of the chimney and throw the rope down for the raccoons to climb out.
- Apply these deterrents just before dusk. Be patient, it may take a few days. Once they have moved, install a mesh chimney cap and/or seal any entry holes to the attic to prevent future home invasions.
- It is when people trap raccoons in spring and summer that starving babies are left behind to rot and then there is a bigger problem in the chimney.

### 9.2.6. Cat doors and outside cat food

- A raccoon may come inside through a cat door in search of an easy meal. The best solution is to feed cats indoors, and not have a cat door. Otherwise, local pet shops often carry strong, electronically controlled doors that will only let in designated pets.
- Mount a flood light or motion detector light above the pet door. Lock and secure the pet door at night.
- On the ground outside of the pet door, sprinkle a liberal amount of cayenne pepper. It can be swept or washed away daily, so pets can use the door. If this is on grass or dirt, use a piece of plywood or cardboard which can be picked up daily.

### 9.2.7. Raccoons eating the fish in a pond

Maintain a higher water level, at least 3 feet deep, and have rocks, cinder blocks, or ceramic pipes at the bottom so the fish can escape the raccoons and take refuge.

### 9.2.8. Raccoons in the dumpster

Place a thick branch at an angle as an escape route for the raccoons to climb out. If this happens often, contact the company and ask them to be sure to close the lids after emptying the container.

### 9.2.9. To repel animals from under decks or other nesting spots

Mix the following animal deterrent solution and add 1tsp per into a gallon (4L) of water. Spray it liberally in the area you don't want animals visiting.

- 100 ml Castor Oil
- 200 ml Murphy's Oil Soap
- 125 ml of the hottest hot sauce you can find
- 1 tsp of human urine

### 9.2.10. Orphan raccoons

Baby raccoons generally stay with their mothers for 12 weeks, so if one is found without a mother, it may be orphaned and should be taken to a wildlife rehabilitator.

Under no circumstances should a caller be invited to capture a raccoon. They can place a laundry basket over it with a brick or weighty object on top, to keep it safe until a volunteer can go to pick it up. Raccoons are rabies-vector species and the public should never be asked to place themselves at risk.

## 9.3. Skunks

IMPORTANT: Neither the caller not a volunteer should attempt to catch or handle this animal. Call a Conservation Officer, pest management in the city, or pest control if on private property.

Skunks are nocturnal, generally, but may be seen during the day, especially in the early morning and evening hours. They are nearsighted and will hardly notice you if you are quiet. They like to den under porches and sheds, particularly for the breeding season and/or winter, leading people to want to trap them to get rid of them. This results in abandoned young who require care, or dead skunks, which is a bigger problem. The skunks are not loyal to a location, and, unless seeking a den for the young, they will choose a different site each night. Ideally, people will tolerate their new neighbour for the short duration of breeding and raising the litter. When the young are old enough, like raccoons, the skunks will move them out to forage.

Litters are usually 4 – 6 altricial babies. Young skunks can spray lightly at a couple weeks of age, when they begin to move about, but their full spray capabilities come at 12 weeks or so. Skunks also tend to stay with their mothers for 12 weeks, so a young skunk found by itself may be orphaned, or it may simply be lost due to poor eyesight.

### 9.3.1. Orphan skunks

A young skunk should be observed from a distance to see if the mother returns for it or covered by a lightweight basket that the mother can tip over to access her young. This way, callers unable to

stay and keep the young skunk from wandering off can contain it for the mother to find. If she does not return within an hour, the skunk is likely orphaned.

Under no circumstances should a caller be asked to capture the skunk. They can place a laundry basket over the youngster to keep it safe until a volunteer can be contacted to pick it up. Skunks are rabies-vector species and the public should never be asked to place themselves at risk.

### 9.3.2. Skunk in the garage/shed

Skunks commonly wander into open garages and sheds. Make a path of cheese (smellier, the better) leading out the open door. Move slowly and quietly - the skunk will hardly notice. A band of flour across the doorway will show footprints when the skunk has left.

### 9.3.3. Methods to exclude skunks

Remove attractants from the vicinity of houses, such as garbage and pet food left out at night and convenient denning sites such as wood and rock piles, elevated sheds, openings under concrete slabs and porches, and access to crawl spaces under houses.

Mild harassment, such as repacking the hole with leaves or straw or other material, may encourage the skunk to get the message and move elsewhere. Evict them by using a one-way door (but do not do this in baby season).

Wait until late June, then sprinkle a thin layer of flour around the entrance hole and then examine for tracks soon after dark. If tracks lead out and none lead in, the hole can then be sealed with lumber, fencing, or concrete. Since skunks are diggers, any barrier must extend 12 – 18 inches below the surface.

Mild repellents such as ammonia-soaked rags, placed near the burrow or inside the burrow (to one side) so that the skunk must pass them, may be a deterrent.

### 9.3.4. Methods to exclude skunks from chicken pens

Chickens must be securely enclosed in the coop at night. All openings must be repaired and fencing around the coop should be extended to 12 – 18 inches underground to prevent skunks from digging underneath.

### 9.3.5. Skunks in the garden

Skunks can be quite helpful as they eat many insects, grubs, and moth caterpillars.

### 9.3.6. Skunk spraying

Odours under the house are usually not skunk sprayings; what most people are smelling is the skunk's excrement. Some skunks produce the "skunk" odour every time they defecate, some never produce an odour, and others only occasionally.

Skunks only spray when they fear for their lives (some skunks scare more easily than others) and tend to avoid doing so. There is a delay before they can spray again, which would leave them defenceless, so they only spray if they feel that they are in fatal danger.

Loud noises and sudden movements may scare a skunk, but if the skunk does not think you are threatening its life, you can avoid getting sprayed.

If you are sprayed by a skunk, try using tomato juice, Avon's Skin-So-Soft, diluted vinegar, or Massengil Herbal Douche. If your home is sprayed, spread lime in the area, put bowls of white vinegar throughout the house and increase air flow.

### 9.3.7. Skunk Spray Neutralizer

Apply the neutralizer to the sprayed areas. Wash off with tap water. The solution must be made as needed. It can't be contained in a bottle.

- 4 cups of 3% hydrogen peroxide
- ¼ cup of baking soda
- 1 tsp. of liquid soap

## 9.4. Rabbits & Hares

In south Saskatchewan, we have cottontails, but otherwise, most "bunnies" are hares. Rabbits are born altricial in litters with 3 – 6 babies. Their eyes open at 6 – 8 days, and they are weaned at about 3 weeks. They are self-feeding and thus releasable at 5 – 6 weeks old.

Hares, which include jackrabbits and snowshoe hares, are born in litters of 3 – 6 precocial young. They are left alone during the day to reduce discovery by predators. The mother only returns during dusk and dawn to nurse her babies.

### 9.4.1. Orphaned rabbits and hares

**If the caller has found a baby hare, they should leave it alone.** They can watch for evidence that the mother has returned, but often these brief visits are easily missed. Unless the hare is showing clear signs of distress or injury such as bleeding, shivering, or an obvious broken limb, or a dead parent is close by, the caller should assume the baby is being cared for.

Rabbits and hares are sensitive to smell and may abandon their young if handled. If the caller has already handled the animal, they can rub a towel in grass and then gently rub the baby hare and returned to where it was found. The caller can monitor the area for a day or two, and if the baby continues to appear healthy, then a parent is likely caring for it.

Hares do very poorly in rehab as they require the bacterial supplement of their mother's night-time feces to maintain a healthy bowel track, and acidophilus is a poor substitute.

Adult hares that are injured require special care in capturing as they are extremely skittish and have been known to break their own back attempting to escape. They can also die by darting into the sides of the container from stress. Extra care is required in their handling.

## 9.5. Squirrels, Chipmunks, Gophers

The average red squirrel is 8 -10 inches in length, with fur that ranges from red to black. Most will have a white belly and a long fluffy red tail. Tree squirrels are active all year round, though not as frequently seen in the winter, since they stay in their nests to conserve body heat.

Squirrels build nests, called dreys, made of twigs and leaves. The interior is lined with fur, feathers, or other soft material for comfort. Squirrels also will build a nest, called a den, in a hollow tree cavity. They usually have a litter of 4 altricial babies who are raised by the mother.

The least chipmunk is one of the smallest chipmunks. Considerable geographic variation occurs in colour and pattern. The least chipmunk usually has five dark dorsal stripes, alternating with four paler stripes. Mating occurs shortly after emergence from hibernation in the spring, resulting in the production of a single litter of 4 – 5 altricial young following a gestation period of approximately 30 days. Litters are raised in nests built in burrows, tree cavities, and abandoned bird nests that have had roofs added.

Thirteen-lined ground squirrels dig burrows for shelter, raising their young, hibernation, and food storage. Their gestation period is about 28 - 30 days, with an average litter size of 7 – 9 altricial young. There is only one litter produced annually. The ground squirrel hibernates, spending the cold months holed up in burrows 2 – 3 feet underground.

What people call gophers, are the Richardson's ground squirrel. We do not recommend interfering with them and discourage poisoning due to the domino effect that this has on the other species that hunt the ground squirrel.

### 9.5.1. Squirrels in the attic

- Bang on the rafters, play a loud radio in the attic.
- Install a one-way exit and seal holes when there are no more sounds.
- Squirrels will often leave attics in the summer because the attic becomes too hot. Wait until the hottest part of the summer and block the holes then.

### 9.5.2. Squirrels in the chimney

Hang a 1/2" thick rope down the chimney and attach it to the top so that they can climb out.

### 9.5.3. Squirrels around bird feeder

When setting up baffles, keep in mind that squirrels can jump 8 – 10 ft horizontally and 4 feet up from the ground.

### 9.5.4. Squirrels in the garden

- Blood meal fertilizer mixed in with the topsoil should put an end to excavations.
- Use a repellent on bulbs prior to planting.
- Encase bulbs in a circle of hardware cloth before planting.
- Plant narcissus; squirrels prefer tulips and crocuses.

- Spray mixture of 1 gallon of water, 2 tsp of Wiltguard, and 2 tsp of hot sauce on the flowers being eaten.

### 9.5.5. Orphan squirrels or chipmunks

With squirrels and chipmunks, the young may be discovered if a tree is cut down with a nest inside, or if the parent is killed on the road. If a tree is removed, and the parents are still around, the nest can be relocated to a nesting box (like a large bird box) and put up in an adjacent tree. Observe the nest for 24 hours to ensure the parent is caring for the young. If the parent does not return, the babies should be brought directly to a wildlife rehabilitator. If young squirrels are found to be injured, they should be taken to a target veterinarian.

### 9.5.6. Procedures to follow when finding a baby tree squirrel on the ground

First, check for dehydration by pinching the skin in the back of the neck. If the skin stays up, this means that the mother was not present for several days and that the baby is dehydrated. In this case, contact a rehabilitator immediately. If the skin goes down, the baby is not dehydrated. The following steps must be then followed:

- Pick the babies up and place them in a small container with paper towel in the bottom.
- Place the new 'nest' securely in a tree as close as possible to the original nest.
- The mother will usually come to retrieve the babies when no one is around.
- Resist the urge to keep peeking at or checking up on the babies — this will only cause them additional stress.
- Observe the site from inside the house. If the mother has not come after a few hours, this means that she might be dead. At that point, the babies need to be taken to a rehabilitation facility.
- Do not attempt to feed the babies.

Note: The main reason why someone would find a baby squirrel on the ground is because its mother either was killed or died. The baby instinctively escapes the nest after a certain period without the presence of its mother.

## 9.6. Deer

IMPORTANT: Never chase a deer or attempt to catch it - it may die from stress and exhaustion.

We have both White-tailed and Mule deer in Saskatchewan. Fawns are usually born in late May and into June. A doe can give birth to 1 - 3 fawns. Fawns can stand and walk within 20 minutes of birth. Fawns are born a reddish-brown colour with white spots, which provides camouflage when they are lying on the ground. Newborn fawns also have no scent. These two key elements, (camouflage and lack of scent) protect them from predators.

They spend much of their time in the first two weeks lying quietly, waiting for the doe to return to nurse. Does leave their fawns alone for most of the day. This behaviour ensures she does not draw attention to the fawn. Twin or triplet fawns are often not together. The doe returns to nurse the fawns briefly (for a

few minutes) several times a day but quickly leaves again. The doe is generally within hearing distance of the fawns.

Mule deer will respond quickly to a bawling fawn but studies have shown that White-tailed deer do not respond or show a weak response to a bawling fawn. White-tailed deer are known to be extremely skittish and will not show themselves to humans even if their fawn is being picked up and is bawling.

Fawns are not able to run well enough to evade predators until they are about 2 weeks old. Until then, their response to threat is to freeze and remain still. People who encounter these fawns often think they need help because they are alone. They do not need help and should not be touched.

If a fawn has been inappropriately moved, instruct the caller to return the fawn to where it was found. Fawns have been successfully reunited with their mothers even after 24 hours apart.

Deer do very poorly in captivity. They habituate to people quite easily, especially given the lengthy time to raise them on a milk formula. These deer have now lost their fear of humans, leaving them vulnerable to hunters. The males pose a danger to people as they become quite aggressive in breeding season and will attack people in the absence of healthy fear. Often, they need to be euthanized if they become habituated.

### 9.6.1. Methods to exclude deer from a yard, garden or orchard

- Hang a stocking filled with human hair, dog hair or blood meal (fertilizer) on each tree, shrub or around the garden.
- Hang a bar of soap on each tree, shrub or around the garden.
- Tie ammonia-soaked rags to shrubs, etc. Replenish often.
- Construct fences at least 8 feet high that slant away from the area being protected.

### 9.6.2. We found a fawn what do we do?

- If found lying quietly alone, leave them be unless you have clear evidence that the doe is dead (corpse on the road), or the fawn is showing signs of distress, bleeding, shivering, obvious broken limb, or other distinct injury.
- Mothers will only nurse twice a day (dawn and dusk), otherwise leaving their young alone. The mothers feed elsewhere so that predators won't be attracted to the fawns which themselves have no scent.
- "Kidnapped" young can be returned to their mother if taken back to where they were found but should be done before night fall.
- Deer are wary of human smells, so if you handle the fawn, rub an old towel in the grass and rub the fawn with it to remove your scent.
- Never attempt to give a fawn cow's milk or any other food.
- If certain that the mother is dead or missing for more than one day, take the fawn to a rehabilitation center.

### 9.6.3. When do fawns need help?

- When the fawn's mother is known to be dead (i.e. fawn(s) standing beside dead doe, not merely the absence of doe).
- The fawn has an obvious serious injury or broken bone.
- The fawn has been chased or attacked by domestic dogs or other animals. However, it's best not to interfere if a coyote pack or cougar is attacking the fawn.
- The fawn has not moved for over 24 hours.
- The fawn is crying, and the doe does not respond even after you leave the area and observe for at least an hour or more from a hidden vantage point.
- The fawn is found lying in or near a road and is not trying to leave.
- If a fawn has been collected due to lack of information and the doe is not known to be dead, the fawn can be returned immediately to the area it was found.
- It is imperative that people understand that raising a fawn in captivity is a last resort.
- It is against the law for anyone to raise a fawn and it is cruel to subject the fawn to the stress of handling when this is not necessary.

## 9.7. Foxes

Foxes usually have up to 6 kits in a den. The group resides in a den, and consists of a male, one or two females, and their young. The young are often alone for long periods during the day while the adults are out hunting. The kits are fine and should be left alone. Territoriality in foxes has not been studied, but it is believed that they remain in the same area for life. Foxes are nocturnal, but there are observations of diurnal activity during daylight hours.

### 9.7.1. Methods to encourage a fox family to relocate

Foxes will typically change den sites 2 - 3 times before the kits become independent and leave the family group in late summer. They will commonly choose to den under sheds. Most people will not even realize they have a fox family living under their shed until mid summer when the kits begin to emerge from the den to play and learn how to hunt.

People should be asked to be patient and wait for the family to leave on their own. Only in extreme cases where the location of the den could put the kits at risk, such as a school yard should they attempt harassment techniques to encourage the adults to move the kits. Harassment can result in parents abandoning their young and is very stressful to the animal, so it should only be used as a last resort.

If necessary, harassment should be done at night as this is when it is safest for the foxes to relocate. The most effective and humane harassment method is urine placed all around the den site. Human, dog, or cat urine can be used. Other methods such as bright lights placed so they shine into the den and a loud radio playing can also be effective. The caller will need to be patient and give the foxes a few days to find a new den site and move all the kits to it.

### 9.7.2. Orphan fox kits

Even when there is clear evidence that the mother fox is dead, (corpse on the road), the kits should only be monitored for their well-being. The male may be able to care for the young on his own. Only if the kits are completely alone and clearly abandoned, showing signs of distress such as shivering, failure to escape, or bleeding should they be brought to a wildlife rehabilitator or target veterinarian.

Foxes can seriously injure a human trying to help. It is never recommended that a caller attempt to catch a fox. Contact a local Conservation Officer to pick it up and take it into a wildlife rehabilitator or target veterinarian.

## 9.8. Wolves, Bears, Coyotes

All calls about wolves, bears and coyotes should be directed to a Conservation Officer who can bring the animal to a target veterinarian or wildlife rehabilitator, if necessary.

# 10. Potential Health Risks – Zoonosis

Zoonotic disease are diseases that can pass between animals and humans. Zoonotic disease includes illnesses from bacteria, virus, fungus, and parasite. The best prevention is by following proper biosafety protocols and proper hygiene.

- Disinfect any scratches or bites.
- Ensure you are up-to-date on your vaccines. If you have not had a tetanus shot in the past ten years, you should schedule that with your doctor.
- If you feel ill or notice any unusual symptoms, please notify your doctor immediately. We recommend that you notify your family doctor that you are working with wildlife.
- Report injuries or incidents to the President or the Hotline Coordinator within 24 hours.

## 10.1. Bacteria

### 10.1.1. Salmonellosis

The *Salmonella* bacteria is probably the most widespread zoonosis in the world. Most animals can be hosts. Transmission occurs via fecal-oral routes. In animals, symptoms are diarrhea, vomiting, and mild fever. Death often results from dehydration. Those that recover often shed the bacteria in their feces for varying amounts of time. In people, the signs are the same. The incubation period is 6 – 48 hours and recovery take place in 2 – 4 days.

### 10.1.2. Staphylococcus

*Staphylococcus* is the bacteria most likely to infect a volunteer because it is widespread. The danger occurs if you receive a bite or puncture. The resulting infection quickly enters the bloodstream, causing redness, swelling, and soreness, which will spread if untreated. Proper restraint of wild animals (using gloves) is the best way to avoid infection. If bitten or punctured with a talon, immediately disinfect the area. Deep punctures or serious wounds should receive medical attention from your doctor and be reported to the WRSOS.

#### 10.1.3. Tularemia (Rabbit Fever)

Rabbit fever is caused by *Francisella tularensis* bacterium and is transmitted through direct contact, contamination of wounds, drinking contaminated water, or by deer fly bites. It is common in rabbits, but uncommon in wild hares. Symptoms include an ulcer at the site of infection, enlarged lymph nodes, headache, aching pains, weight loss, and a fever lasting several weeks. Treatment is with antibiotics. Prevention includes wearing gloves and general hygiene.

#### 10.1.4. Leptospirosis

Leptospirosis is caused by *Leptospira* bacteria and causes infectious disease in rodents, dogs, and other mammals. Transmission occurs via direct or indirect contact with the infected animal, its urine, or urine-contaminated water. Symptoms include sudden fever, headache, nausea, vomiting, diarrhea, and/or constipation, and possibly jaundice. Prevention includes proper hygiene, wearing gloves, and disposing of waste properly.

#### 10.1.5. Lyme Disease

Lyme disease is caused by the transmission of *Borrelia* bacteria, through the bite of a deer tick. In the wild, occurrence is low but affects a wide number of species. Human symptoms include an expanding ring-shaped skin lesion, chronic or recurring arthritis, and possible fever. Other signs may be chills, profuse sweating, headaches, vertigo, and varying jaundice. In later stages, neurological and cardiac problems can cause death. Ticks should be removed with forceps from any mammal.

### 10.2. Fungi

#### 10.2.1. Aspergillosis

This fungus is found everywhere. The most likely carriers in wildlife will be waterfowl and raptors. While under stress, animals are more likely to develop the disease and shed the spores that can be inhaled. Most healthy people have no trouble resisting infection. Symptoms are common to pneumonia. Treatment is with anti-fungal drugs. Prevention is best achieved through good hygiene and good ventilation.

### 10.3. Viruses

#### 10.3.1. Rabies

In Saskatchewan, most cases of rabies are found in skunks, raccoons, foxes and bats. The virus is transmitted by contacting the infected animal's body fluids, often from saliva through a bite wound, although the virus can also be passed through an open cut on the person's body. The virus is fatal, although some protection is offered through a pre-exposure rabies vaccine, administered in a series of three shots. These are also used as an intervention should a non-vaccinated person be bitten; the post-exposure series is five shots, with several occurring within 24 - 48 hours of the bite occurrence. Contact the Public Health Office immediately should a bite occur from a wild animal.

### 10.3.2. Hanta Virus

The deer mouse, a common wild mouse in Southern Saskatchewan, carries the Hanta virus, which is shed through feces. It is a deadly disease that is transmitted by inhaling infected fecal particles. This often occurs when cleaning out old sheds and barns where mice have nested. Symptoms are flu-like with high fever. The use of disposable gloves and facemask when cleaning any area with mouse feces is recommended. Wetting down or spraying areas with water or disinfectant also helps prevent the virus from becoming airborne.

### 10.3.3. West Nile Virus

Mosquitoes are the primary mode of transmission of the West Nile virus. You may protect yourself by wearing mosquito repellent and proper clothing. The virus spreads through the transfer of body fluids such as blood, and fluids from the mosquito. West Nile virus has a variable impact on individuals with some showing exposure (antibodies) but no history of symptoms, while the virus has been fatal for others. Symptoms are generally mild flu-like symptoms. Wear gloves when handling birds (especially corvids; crows, magpies, ravens).

### 10.3.4. Ornithosis (Psittacosis, Parrot Fever, Chlamydiosis)

The disease caused by the *Chlamydia psittaci* bacteria and is found in many species of birds including pigeons, raptors, finches, and parrots. Transmission occurs through inhalation of aerosolized feces. The disease may be acute and consequently the animal can die with few symptoms. In humans, the onset is sudden flu-like symptoms that can develop into a bronchopneumonia.

### 10.3.5. Newcastle Disease

Newcastle disease is caused by the Newcastle disease virus (NDV). It is a highly pathogenic, contagious, and fatal disease affecting all avian species. It is transmitted through respiratory aerosols, fecal contamination of food or water, or direct contact with an infected bird.

Birds exposed to NDV may have respiratory, nervous system, or gastrointestinal clinical signs. Symptoms include, depression, anorexia, weight loss, sneezing, nasal discharge, laboured breathing, conjunctivitis, bright-yellow green diarrhea, loss of coordination, head bobbing, and partial to complete paralysis.

Species most frequently carriers include chickens, turkeys, ducks, geese, partridges, pheasants, quail, guinea fowl, peacocks, doves, pigeons, grouse, swans, and cormorants.

## 10.4. Parasites

There are many tapeworms and roundworms found in most wildlife. Few are debilitating unless an animal's immune system is depressed. An animal exhibiting a heavy infestation upon admission is likely to show one or more severe injuries or illnesses and may be in a life-threatening situation. The parasites with which you should be most aware are ectoparasites, those living on the outside of the animal.

### 10.4.1. Ectoparasites

Ectoparasites reside outside an animal and are usually transmitted through contact.

#### 10.4.1.1. Fleas

Most wild mammals have fleas. They are normally host-specific, meaning they have evolved to exist within a narrow range of species. (i.e., dog fleas are different than ground squirrel fleas). Though fleas may jump onto you, they will not stay on you.

#### 10.4.1.2. Lice

Feather lice live on all wild birds. A few feather lice are quite normal, but a heavy infestation usually indicates a debilitated patient. You could possibly be carrying lice home with you and this could be a concern if you have pet birds. Change your clothing and wash what you were wearing when you get home.

#### 10.4.1.3. Ticks

Ticks are bloodsuckers. They are very common in Saskatchewan: you are more likely to acquire a tick while hiking than you will while rescuing wildlife. Ticks may cause Lyme disease, which can be reviewed in the bacteria section.

#### 10.4.1.4. Flat flies (Hippoboscids)

These flies can transmit blood parasites from one bird to another and have been implicated in the transmission of West Nile disease (from bird to bird). They are similar in appearance to the house fly though smaller and have a distinctive flying pattern. You may see this fly come off a bird or burrow into the feathers of a bird.

#### 10.4.1.5. Mites (Sarcoptic Mange)

Mites are often called “walking dandruff.” On close observation of an infested animal, it may be possible to see movement of the mites on the skin. The adult mite is transmitted by direct contact between animals. The mites can live several days while off the host, so it is possible for animals to become infected through environmental contamination. Mites cause skin irritation, usually along the back of the animal. Infested animals may have slight hair loss, scales (dandruff), itching, and possibly some thickening of the skin.

### 10.4.2. Endoparasites

Endoparasites reside inside an animal and are usually transmitted through the feces.

#### 10.4.2.1. Baylisascaris

Raccoons most commonly get these intestinal roundworms, which can infect a variety of other animals, including humans. The worms develop to maturity in the raccoon intestine, where they produce millions of eggs that are passed in the feces. When humans ingest these eggs, they hatch into larvae in the person's intestine and travel throughout the body, affecting the organs and muscles. Anyone who is exposed to environments where raccoons live is potentially at risk. Symptoms include nausea, tiredness, liver enlargement, loss of coordination, lack of attention to

people and surroundings, loss of muscle control, coma, blindness, and, in the most serious cases, death. If you suspect you have been infected, consult your health care provider immediately. Prevention through good hygiene and protective clothing is essential.

#### 10.4.2.2. Giardia

This is common in the digestive tract of aquatic mammals (muskrat, beaver). It can be transmitted simply by drinking water in which such animals live. Cattle and waterfowl may be significant carriers. Symptoms are flu-like; diarrhea, lethargy, low-grade fever. The best prevention is attention to cleanliness. Use disposable gloves and wash hands frequently with antibacterial soap.

## 11. Legal Reference

- The federal Migratory Bird Act and the provincial Wildlife Act are the laws that prohibit or restrict the possession of wildlife by any individual who does not possess the appropriate permit or license.
- It is illegal to shoot any animal within city limits even if it is a species not protected by law.