

IDAHO FISH AND GAME DEPARTMENT IS RESPONSIBLE FOR THE MANAGEMENT OF GAME ANIMALS.

NO RESOURCES EXIST TO SUPPORT PROFESSIONAL WILDLIFE REHABILITATION.

In some States the professional wildlife rehabilitation centers have funding support; in other states they combine with domestic animal shelters and/or veterinary hospitals. "Friends of ..." organizations exist to promote the mission, plan outreach and fundraising events, write grants and sign up new volunteers. These individuals work behind the scenes to ensure those individuals who are trained, experienced, licensed are able to focus solely on the wild animals in need. The nongame wild animals have no organizations exclusively focused on helping when injured or orphaned through their no actions of their own. Surveys show over ninety percent of these patients are harmed through human actions. We humans have a responsibility to reverse the damage when possible.

WILD ANIMAL REHABILITATION IS NOT THE SAME AS RAISING A DOMESTIC ANIMAL. THERE ARE DISTINCT DIFFERENCES – PRIMARILY AT THE END OF THE EXPERIENCE OF CARETAKING, THE PATIENT MUST HATE YOU! Yes you read that correctly, the wild animal must be respectful enough of humans to know to keep away. Think about your reaction if a wild tree squirrel would run up your leg while you were walking in the woods or if a wild goose would approach while you were swimming in Lake Pend Oreille. You would think this animal is unwell because it is not acting as a wild animal 'should' act. Would you enjoy having a golden eagle landing in your back yard begging for a meal? What about a Raccoon playing with your children while they are in the park? Do you surmise songbirds flittering closely around your frail great grandmother's face as she was exiting the hospital would cause her enjoyment? Does the possibility of an adult deer approaching every person in the grocery store parking lot sound appealing? A resounding *absolutely not* should be vehemently being spoken.

Until such time as Idaho citizens embrace this profession and building a public nature center with wildlife care facility, the only option for those with tender hearts is to search the plethora of misinformation online. This document is the solution to the problem of emotions not having an intelligence quotient. When we see suffering we want to reach out with our heart/emotion and often forget to think/utilize our IQ. If you feel wildlife rehabilitation is your calling – please connect with a local professional to arrange taking one or more courses and learning the correct procedures.

American Heritage Wildlife Foundation is listed as a 'stakeholder' in the IDFG wildlife action plan however that is the extent of the support for the founder and lead wildlife care specialist who has over 3 decades of animal care experience including 20+ years specifically with most every native species of north Idaho. Formerly a member of American Association of Zoo Keepers, National Wildlife Rehabilitators Association, International Wildlife Rehabilitation Council, and US Fish and Wildlife Migratory Bird Rehabilitation permit holder for all species of birds, Idaho Fish and Game Wildlife Rehabilitation permit for all species of nongame mammals, birds, reptiles, and amphibians. Additionally she had been authorized by USFWS & IDFG for educational use of animal artifacts as teaching tools. Excluding the skillsets of fundraising, educating, and business management, a wildlife rehabilitation professional is one part surrogate mother, one part doctor, one part nurse, one part biologist, one part nutritionist, one part enclosure design engineer, one part zookeeper, one part psychologist and public

relations expert. No federal, state or local funds are granted to this charity which provides such important work to mitigate the damage caused by humans and reduce wild animal conflicts.

RULE #2: (recall, Rule #1 is the patient must hate [fear humans] you). Unless physical trauma (blood, broken bones) or parasite infestation (fleas, maggots) is seen, reuniting must be attempted. There is no substitution for a wild mother! Birds do not have the sense of smell and will not reject the baby because you touched it.

RULE #3: If physical trauma is found, please connect with a veterinary clinic to end the suffering! This is a harsh reality but empathize with the animal. Ending the pain of the injury rapidly is the most humane and caring thing possible. The alternative is for that living sentient being to be in pain, be in constant shock and stress from the presence of their enemy, and be potentially subjected to improper nutrition and or housing which cause additional levels of distress even death.

RULE #4: Always keep yourself safe. Gloves are an important tool. Being aware of the defense behaviors of the wild animal being observed will assist in having foresight to avoid injury to yourself or others around you. Be aware of the signs of disease to ensure no transference to you, your family or your pets.

RULE #6: Keep your 'human-ness' to yourself. Do not play music while caregiving. Do not yell or make loud noises while caregiving. Unless absolutely necessary, do not talk while caregiving. When possible hide your face with a mask or kerchief. Do not wear strong scents (perfume / cologne) when caring for mammals. Do not get up close and personal for selfie photos. Three reasons for this, one being the close proximity to face may cause injury to yourself when the animal defends from the close proximity of a predator, two being that close to any animal especially a young animal is problematic due to the threat of habituation or irreversible imprinting and third caring for wild animals without a license is illegal in most states.

*Disclaimer: the information being provided for purely informational purposes which has been collected for over 20 years of experience. Wildlife rehabilitation is equivalent to any other highly skilled profession and should not be attempted without license and training. The lack of licensed professionals in Idaho State with both knowledge and experience forces the sharing of information with the interest of providing the best chance for successful rehabilitation for the individual seeking to offer temporary care to sustain life while seeking to locate a licensed authorized trained professional.*

IF you have determined the wild animal you have found has no physical trauma(s), and the attempts to reunite or renest (meaning an alternative nest has been built and attached near the original nest) have failed, you must ask yourself if you are in the position to be able to provide round the clock care utilizing the best available resources. Do not rush to feed or force fluids. These acts of kindness may cause a fatal reaction. Only with proper nutrition at the proper time will long term survival be possible.

Wild animal digestion is not the same. There is not a 'one size fits all' diet. Not all birds eat seeds. Not all birds eat fishing bait – night crawlers. Not all birds can digest dehydrated mealworms. Maggots are never to be feed any animal. Birds do not drink milk. Peanut butter and chia seeds should not be considered food items. Canned sardines are not a substitute protein for a skunk. Neither Cow milk nor

breast milk is acceptable for other species of wild mammals. Domestic (dog / cat) dry kibble may include harmful dyes and supplements. Domestic animal foods are formulated for domestic animals.

Wild animal rehabilitation requires a massive investment of time and planning. If a young mammal is found, it will require months of daily care. If a young bird is found, it will take weeks of intensive daily care. Some songbirds may require feedings every 15 minutes for 16 hours a day plus have a secure setting to build up flight muscles. Waterfowl may drown without supervision. Game birds are high stress. All require supplemental heat until able to thermoregulate. Mammals are not as demanding with frequency of intervals but they do require overnight feedings as well as the appropriate quantities of (nutritionally acceptable) formulas to ensure starvation is not happening. They also require supplemental heat when young and secure enclosures to develop foraging skills over an extended amount of time. Keeping the patients integument clean is an integral aspect of caregiving. “You remain forever responsible for what you choose to tame.” – saint antoine de Exopeny. Knowledge takes moments to learn but experience takes years to earn. The wild babies must be in a wild environment if they are to learn how to be wild.

Wild animals grow at an accelerated rate. Think about consolidating the level of development of your child from birth to 18 years of age into a 3 week span. Proper care from the minute you lay your hands on this living being is imperative. For example you would not offer your child only peanut butter and jelly sandwiches from age 5 through 15 so you should not offer a wild animal the same food offerings throughout duration of care. Diversity of appropriate and proper nutritional items is paramount. Without that solid basis you both may experience heart break.

Topics covered in this document are as follows: diagnosis of physical trauma, identification of parasites, common species specific diseases, general husbandry, nutrition, frequency as well as quantities, developmental stages, weight range goals, housing, necessary behavioral achievements, acceptable release site locations and appropriate timeline.

Categories of wild animal species will be broken into the following:

- Songbirds with insect diet
- Songbirds with seed diet
- Songbirds with fruit diet
- Waterfowl with vegetation diet (dabblers)
- Waterfowl with prey diet (divers)
- Game birds
- Raptors & birds of prey
- Small arboreal mammals
- Small terrestrial mammals
- Small mammals with insect diet
- Small mammals with omnivore diet
- Small mammals with carnivore diet
- Ungulate mammals (hoofed stock)

Large Game species  
Reptiles and amphibians

BEFORE YOU LEAP INTO ACTION: think AHWF

Become **Aware** of the wild animals which should be present in the area.

**Hesitate** before approaching.

**Watch** for signs of natural behavior or distress

**Follow through** with appropriate actions. Wild animals are dangerous. The caretaker is subjecting themselves to the emotional responsibility as well as moral obligations, legal aspects and logical arguments. Do not allow your emotions to overpower your intelligence.

There are many lessons to learn about wild animal rehabilitation which is why having a professional in your area is so important. This is why one document should not be the exclusive reference manual. Knowledge takes a few moments, Wisdom requires commitment and time. If you are interested in learning more about this profession and obtaining a license please connect with your local wildlife rehabilitator (Animal Help Now database), or the professional membership organizations (NWRA, IWRC). Lesson one is wild animals are wild and should be treated as such. Lesson two is food or water is not the first action to take. Lessons three keep your presence quick and with minimal interference. Lesson four life in captivity is not the best option. Wild animals fear humans; respect that instinct. Wild animals in duress can die of shock. 90 % of patients admitted to wild animal care facilities are due to human cause. Survey results determine the average being 50 % of patients will survive the trauma and be released back into the wild and survive the first year.

A healthy wild animal should be alert, very responsive and feisty!

CALENDAR YEAR:

At any given time your yard may be providing the seven components a wild animal requires to live. Water, Soil, Light, Air, Shelter, Food and Heat. Please be mindful of how to be a good neighbor. Find helpful and humane tips how to evict the unwanted native neighbor in the multiple pdf's on the secure website [ahwf.org](http://ahwf.org)

Late Winter:

This is the time of courtship for the typically nocturnal **Striped Skunks**. The scent which is released at this time is unmistakable. Underneath a shed or porch are considered man made safe havens since habitats seldom include downed logs which allow for natural dens/ burrows to be made. Young are born in May through June. A citizen eager to remove this nomadic native neighbor (who has an appetite for eating mice and digging up underground wasp nests) will trap and/or dispatch the mother and make orphans of her offspring. These docile animals are not permanent residents, these species move around constantly searching for their predominately insect diet except when a pregnant mother needs a place to give birth and raise her babies to the age where they can all move along. These beneficial animals have a poor sense of sight and poor sense of hearing. They are shy and do not wish to spray, that is the last resort because it is their **ONLY** defense mechanism. The family unit often remains together through

the first winter. The majority of striped skunk patients were admitted as dependent youngsters who were orphaned. There is nothing more innocent and fragile than a days/weeks old skunk. Their digestive system is delicate and dehydration /emaciation happens rapidly. Fleas are not uncommon considering the close proximity to domestic animals. The family unit communicates through buzzing and chirping sounds. Learn the all the behaviors of defense – foot stamping, direct eye contact, twisting to aim at the attacker. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. Clean bedding is changed two or more times a day. There are specially formulated powders for Skunks who still require liquid nutrition. Milk replacer should be high protein and comparatively lower fat such as replacer for felids. Keep the face and fur clean. Keep the area clean from eliminations. The sooner the animal is self-feeding out of a bowl the better. As soon as possible place the animal into a natural outdoor enclosure until it is of acceptable age for release. Gradually introduce assorted foods beginning with soft foods including beechnut beef and chicken baby foods as well as fruits and vegetables. Pouches and Cans of insects are able to be purchased. The cans of mini crickets, grasshoppers etc. are excellent because they are soft and easier to digest. The pouches of soft preserved mealworms, crickets etc. Live meal worms and Super worms are also excellent sources of protein. Be mindful the superworms are large and do bite. Earthworms as food source should be limited due to the fact they pass along parasite eggs which infest the intestinal tract of the predator consuming. Maggots should NEVER be offered as food. Fresh fruits, particularly berries and others found in North American hemisphere should be scattered to encourage foraging behaviors. Hard boiled eggs are also an excellent staple as are mice. Specially formulated dry kibble is available for purchase which provides the micronutrients needed for development however high protein kitten/cat or ferret food without added colors and additives may be part of the diet. Enclosures must be secure enough to allow this animal to dig and search for food. Some form of shelter as well as Clean water must be offered at all times. Adults suffering from disease or trauma require specialized care.

**Raccoon** mothers typically give birth in February, March, or April. Gestation is 63 days. The young remain in the den for the first 2 - 3 months. Predominately nocturnal due to concerns for human confrontation the mother will begin teaching the young what the big world is all about. The mother may be seen during the day due to the increased demands for food. Raccoons are omnivores and are in essence a cleanup crew for the neighborhood. They will eat mice, insects, fruit and more. Do not be alarmed if you see one active in the daylight; Raccoons may not necessarily be 'sick' if seen during the day foraging. Nightly family outings of territory begin in May or June, occasionally as late as July. Being separated from family or becoming orphaned when mother is dispatched have been frequent reasons for admittance of young. Domestic Dogs can carry diseases and parasites which are passed to the animal including Fleas, Roundworm, Distemper and Rabies. The mother communicates with her young by 'purring' at them. Be aware a young raccoon has the ability to defend with claws, teeth, and agile strength. Most family groups disperse in the Autumn. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. Clean bedding is changed two or more times a day. There are specially formulated powders for Raccoon who still require liquid nutrition. Milk replacer should be high fat and comparatively lower protein such as replacer for canids. Keep the face and fur clean. Keep the area clean from eliminations. The sooner the

animal is self-feeding out of a bowl the better. As soon as possible place the animal into a natural outdoor enclosure until it is of acceptable age for release. Gradually introduce assorted foods beginning with soft foods including bechnut beef and chicken baby foods as well as fruits and vegetables. Pouches and Cans of insects are able to be purchased. The cans of mini crickets, grasshoppers etc. are excellent because they are soft and easier to digest. The pouches of soft preserved mealworms, crickets etc. Live meal worms and Super worms are also excellent sources of protein. Be mindful the superworms are large and do bite. Earthworms as food source should be limited due to the fact they pass along parasite eggs which infest the intestinal tract of the predator consuming. Maggots should NEVER be offered as food. Fresh fruits, particularly berries and others found in North American hemisphere should be scattered to encourage foraging behaviors. Hard boiled eggs are also an excellent staple as are mice. Specially formulated dry kibble is available for purchase which provides the micronutrients needed for development however high quality puppy / dog or ferret food without added colors and additives may be part of the diet. Enclosures must be secure enough to allow this animal to dig and search for food. Some form of shelter as well as Clean water must be offered at all times including a shallow pool which has been stocked with crawfish and small fish so the animal will learn how to find food. Adults suffering from disease or trauma require specialized care.

**North American Bat** species which do not migrate will hibernate from October through April. Occasionally, if the winter temperatures warm too greatly, the bats will mistakenly venture out and become stranded without food or water. North Idaho has several species of bat some migrate while some are year round residents. Babies are born around April and remain "in the colony" through August. These animals are the only flying mammals and are responsible for consuming hundreds of flying insects each night. Residents near waterways will praise the presence of these native neighbors because of their ability to consume countless mosquitoes which can spread assorted diseases. Hollywood depicting these animals as cat or dog sized has done great injustice. The adult bat size is merely a couple inches from head to tail – think of a mouse size but add wings. A 'baby' may fall off mother when she attempts to move from birthing site to the nursery site. These animals establish assorted 'homes' depending upon time of year, gender, age. Many telephone calls have been made to AHWF by citizens concerned about a bat hanging on the wall near their front door. Be aware, for whatever reason, bats do seem to rest for a while at front doors. If they are not in danger, please be patient they will fly off as soon as evening befalls. Astonishing fact: a bat CANNOT FLY when the animal is on the ground! If you find one in your yard or on the sidewalk, be kind and gently collect them onto a newspaper or stick and set that item onto an elevated surface such as a bush or tree limb or even at the top of a ladder. Domestic outside cats are a primary threat to these animals. Other reasons for admission of these important animals are human interference of habitat and colony, white nose syndrome and wing membrane degradation. While the rabies virus is a disease of concern, the likelihood is slim. Bats are not 'carriers' of this virus; once the disease is contracted - as with any other animal, it is fatal. An infected animal such as a feral cat attacks a bat, the bat flies away now infected but ability to survive the attack – highly unlikely. Bats communicate and echolocate through clicking sound. A bat can avoid collision with a single string in a pitch black room. Old barns may be used as roosting or colony sites due to the lack of suitable habitat especially during winter. If you discover evidence (droppings along the external wall of your home) of a

bat in your belfry/attic simply set up a fan to continually blow a draft and a light to illuminate. These animals are sensitive and will move along. Please do not create orphans and attempt to evict them from your home during October through April. You may trap the animal inside causing suffering and death. If you discover one in your home – do not panic and swat at it with a broom. Simply remain calm, and allow the animal to perch onto a surface of a lamp or curtain or wall. Allow the animal to also calm itself. If the animal is in a room where you can open a window (ensure screen is off), the animal will leave of its own accord. If the room is not able to be closed off, once the animal is at rest, use a newspaper or magazine and a cup to capture or a towel. Place the cup over the animal, slide the paper under the cup and the animal will climb onto the paper. Take the animal outside and place onto an elevated surface and take the cup off. When using a towel be cautious to not crush the animal. Set the towel onto an elevated surface or drape over a tree limb and watch to ensure the animal will crawl out of the material and fly away. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. Clean bedding is changed two or more times a day. There are specially formulated powders available for (insectivorous) Bats who still require liquid nutrition. Milk replacer should be high fat and high protein. Keep the face and fur clean. Keep the area clean from eliminations. The sooner the animal is self-feeding out of a bowl the better but this is not a natural normal behavior. As soon as possible place the animal into a natural outdoor enclosure until it is of acceptable age for release. Cans of mini-crickets are able to be purchased however live mealworms dusted with nutritional supplements are the primary diet. When the animal is young and just learning to eat solid foods it may be necessary to soak the mealworms in water first. Small size live meal worms can be offered one at a time from a soft tipped or plastic tweezers. Do not use Super worms as they are far too big and skin too thick. Do not feed the dehydrated mealworms sold as chicken supplement. Neither Earthworms nor Maggots as food source should be given. Sweeping for bugs at dusk and dawn then placing them into the secure enclosure will offer variations of diet. The enclosures must be secure enough to allow this animal to develop flight muscles. There must be a vertical surface for the bat to perch. There should be some form of shelter for the bat to escape the bright light of day and elements. Clean water must be offered at all times. Adults suffering from disease or trauma require specialized care.

Twice a year two litters are born to female **tree squirrels**. North Idaho has Gray Squirrels, Fox Squirrels, Pine Squirrels (aka Black, Red, Chickaree) and Northern Flying Squirrels. These animals do not hibernate. They do stay in their dens during the coldest days of winter. In March and July/August offspring are born to the two larger species (**Eastern) Gray and Fox Squirrels**. They are weaned at 10 weeks and disperse at 4 months. Both Gray and Fox (some call them Red not to be confused with Pine squirrels) squirrels are gregarious. They often have territories within close proximity to each other and are seen near each other. The smaller native **Pine Squirrels** breed in February/March with 5 weeks gestation four young born is average. They are not gregarious by nature and are quite territorial. **Northern Flying Squirrels** are nocturnal. You may have them in your yard but be unaware of their existence because of this behavioral trait. These animals have exceptionally large eyes and look similar to Australian sugar gliders. After a 40 day gestation 2 – 6 offspring are born. They follow mother on the nocturnal explorations at 2 months old. Contrary to the name these mammals do not fly. They glide from one tree to another with a

'falling rate' of one foot down for every two to three feet across. The slightly flattened tail acts as a rudder. Only one out of three survive the first year. Cold temperatures of early winter or early Spring may create hypothermic conditions. Domestic outside cats are a predominant cause for injury to these animals. Young squirrels are admitted to rehabilitation centers due to falling from nests due to windstorms, cat attack or bird of prey predation. The young squirrel found on the ground should be attempted to be reunited with mother unless the animal is cold, obviously injured as seen by skin discoloration, visible blood, broken bones, or heavily parasitized with fleas, maggots, flies and larvae. Create a secure cozy space such as a small open top box and place this in the tree where the youngster has been suspected of falling. Some citizens have been known to secure this box with wire or cord onto an elevated tree branch making sure to place near the base of the tree not the extended limbs. The created nest must be high enough to avoid ground predators from getting to it. Return to your home and watch to see if the adult female will return and collect her offspring. Do not be alarmed if it takes some time however be aware that this female may reject to reclaim if she senses the trauma is too severe. Common reasons for admittance of young squirrels are as stated above, falls from nests and domestic cat attacks, but also when dens have been destroyed by tree trimming activities at improper times due to the natural cycle of breeding and birthing. Before conducting any tree removal service please watch to ensure you are not destroying a wild animal home. Other reasons for admittance are when tender hearted citizens pick up juveniles whom they mistakenly identified as orphans as well as dog attacks and being hit by cars. Please keep your domestic cat inside and do not allow feral cat colonies to become established. The result when a cat finds a small mammal is punctured body, infection, internal bleeding and even collateral damage of offspring left to starve - all because of human failure to be good pet owners. Major chain pet retail stores have granted well over \$30 million dollars towards feral cat colonies nationwide. These domestic cats need and deserve the same requirements as the one in your home. A domestic cat is to be an indoor pet with provision of shelter from harsh environment, predatory attack, poisoning, leg traps, certainty of water and food, freedom from a myriad of diseases and injury caused by territorial disputes and vehicles. The most humane treatment in the majority of cases where a cat is responsible for catching a native wild animal is euthanasia. Providing a quick and painless end to the intolerable excruciating agonizing suffering is the most compassionate solution. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. Clean bedding is changed two or more times a day. There are specially formulated powders for Squirrels who still require liquid nutrition. Milk replacer should be high fat and comparatively lower protein such as replacer for canids. Depending upon age the ratio of fat to protein changes. Keep the face and fur clean. Keep the area clean from eliminations. The sooner the animal is self-feeding out of a bowl the better. As soon as possible place the animal into a natural outdoor enclosure until it is of acceptable age for release. Gradually introduce assorted foods beginning with soft foods including quality baby food fruits and vegetables. Fresh fruits, particularly berries and others found in North American hemisphere should be scattered to encourage foraging behaviors. Nuts (walnuts, filberts/ hazelnuts, almonds, pecans) already shelled and seeds should be offered. Specially formulated dry kibble is available for purchase which provides the micronutrients needed for development however non-greasy dry food without added colors and additives may be part of the diet. Branches from native trees and bushes should be added to encourage chewing which is a necessary requirement to wear down the ever growing teeth. Green pine cones are particular favorite

for the small native pine squirrel. The nocturnal flying squirrel will appreciate soft bodied insects and hard boiled eggs. Enclosures must be secure enough to allow this animal to climb and leap. Some form of shelter as well as Clean water must be offered at all times. Adults suffering from disease or trauma require specialized care.

**New world Porcupines** is a member of the rodent family and will become mature around 2 years of age but not reach full size around 4 years of age and can live for over a decade. They breed in October through December. Gestation is 7 months. One porcupette is born. The youngster nurses for over a month even though capable of self feeding at 2 weeks of age. Vocalizations include humming. The single offspring will often remain with mother through the first winter. Night is the preferred time to search for food which includes bark, buds, twigs, herb leaf, nuts, fruit, seeds, pine needles. The only defense mechanism is a quill which is in essence simply a specialized hair. With poor eyesight and slow mobility these animals rely upon climbing a tree to escape predators. These animals do not throw the quills at their attacker. The predator must touch the animal to 'be quilled'. The porcupine suffers from this interaction as the quills are ripped out just as a humans hair would be ripped out when another is forcefully pulling. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. Clean bedding is changed two or more times a day. There are specially formulated powders for Porcupines who still require liquid nutrition. Milk replacer should be high fat and comparatively lower protein such as replacer for canids. Keep the face and fur clean. Keep the area clean from eliminations. The sooner the animal is self-feeding out of a bowl the better. As soon as possible place the animal into a natural outdoor enclosure until it is of acceptable age for release. Gradually introduce assorted foods beginning with soft foods including quality baby food fruits and vegetables (sweet potatoes and other root vegetables). Fresh fruits, particularly berries and others found in North American hemisphere should be scattered to encourage foraging behaviors. Nuts (walnuts, filberts/ hazelnuts, almonds, pecans) already shelled and seeds should be offered. Specially formulated dry kibble is available for purchase which provides the micronutrients needed for development however non-greasy dry food without added colors and additives may be part of the diet as well as Rodent Blocks. Branches from native trees and bushes should be added to encourage chewing which is a necessary requirement to wear down the ever growing teeth. Enclosures must be secure enough to allow this animal to climb. Clean water must be offered at all times. Adults suffering from disease or trauma require specialized care.

Other members of the rodent family which are terrestrial include Gophers, Moles, Voles, Chipmunk, Ground Squirrel, Marmot, Beaver, and Muskrat. Rodents are vital to a healthy ecosystem. 40% of all mammals are rodents.

**Muskrat** reside near waterways. They have thick brown fur and a bare flat tale. The small size results in misidentification as a 'baby beaver'. Muskrats have produced more fur pelts than river sable, water mink, hudson seal combined. Breeding takes place from March to September. Gestation is 4 weeks. The average size of litter is 5 or 6. Two births per year. The young are independent at one month of age and

fully mature at one year. They appear to be monogamous. They do not hibernate and require a feeding territory about 60 meters with water deep enough not to freeze but shallow enough to sustain submerged vegetation. Active at night and dusk/dawn feeding mainly upon cat tail roots and stalks and other aquatic vegetation but also occasionally mussels, snails, fish. They do not store their food in the large house in the stream bank. They do coexist with Beavers. Threats are habitat destruction, assorted native predators and birds of prey. Humans create toxic environments through pesticide run off and the likes. The muskrat admitted for care at AHWF have been due to toxicosis – a slow painful death.

The **North American Beaver** monogamous pair (being at least 3 years of age) will breed in January or February with a 105 day gestation. 2 – 4 kits born is the average. These young remain in the lodge. The offspring move along at 2 years of age to find their own territory. These animals have a lifespan of over 15 years. They do not hibernate. They consume bark (elm, alder, oak, ash, willow, birch, poplar. In the summer thistles, aquatic plants, seeds, roots. They do store these food supplies to utilize when foraging is not possible. They are social animals and typically nocturnal. By creating dams they create marsh areas which are rich in plants, fish, insects and provide vital habitat for species such as the Moose. Humans are a primary threat by highway casualties and habitat alteration/destruction. Hunted mercilessly for their pelts the population numbers declined.

**Yellow bellied Marmot** / Rockchuck mate in the spring, shortly after emerging from the winter hibernation den. Young are born in summer after a 30+ month gestation. Average litter size is 4 – 5. They disperse at two years of age. The colony consists of one male with two or three adult females and the yearlings and young. These animals loose up to half their body weight during winter hibernation.

**Columbia Ground Squirrel** breed in early summer. 4 – 8 young born after one month gestation. Burrows are vast for these social animals. Males of 4 years old or more are territorial. Habitat regulates the size of colonies. They make a series of vocalizations to communicate amongst themselves.

**Golden mantle Ground Squirrels** are smaller than Columbia Ground Squirrels but larger and heftier than Chipmunks. Burrows are short. These animals have one breeding season per year and gestation is less than one month. 4 is the average but as many as 7 are known.

**Chipmunks** (red tailed and yellow pine) have a 31 day gestation after a March to May breeding. 4 – 8 young are born in underground locations but being moved to an elevated nest is not uncommon. Only a life span of 64 months. They have a pocket in their cheeks to store food to transfer to caches. Winter is a time of torpor. The shelter is a ground tunnel, the summer shelter is hollow logs, rock crevices, or branches. Chipmunks are not exclusively terrestrial; they can climb trees and bushes. The skin and fur are striped. Human disturbance causes populations to be in jeopardy. One example the extinction of a subspecies in a region of New Mexico in 1980.

Tunnel runners such as **Gopher, Mole, Vole** all utilize elaborate tunnels. Gophers are herbivorous consuming plants roots and forbs. They have powerful front claws and small eyes. Seldom leave the underground tunnels. Moles are insectivorous consuming insects such as earthworms, grubs, snails. They have small eyes and ears and remain predominantly underground. Voles are also known as meadow mice. They are herbivorous and consume grass, veggies and roots. Shrews are insectivorous, and are one of the few animals who eat slugs. One species the short tailed has a 'venomous bite' which

is beneficial to consuming quantities of harmful insects. All live in the tunnels created by Moles. Gophers are helpful because they aerate the ground and break up hard soil adding nutrients to enrich. Males mature at one year of age. Females less than 3 months of age. After breeding and less than 3 week gestation the litter of 5 young remain with mother 2 months before creating their own burrow and territory. Urbanization and assorted predators (owls, hawks, fox, bobcats, raccoons, skunks, snakes, and domestic cats) are the enemy. Several species of Voles can be active day or night. April to October is the breeding season with as many as four litters each year. Independence at around 3 weeks of age but maturity does not occur for females until 4 months of age. They do not hibernate.

Other native species of rodents are the Bushy Tailed Woodrat (aka Packrat), Western Jumping Mouse, Common Deer Mouse (same as the White-footed Mouse of the southeastern US), Western Harvest Mouse. There are non-native species which include the House Mouse, Wood Mouse, and Norway Rat (brown rat, barn rat, sewer rat).

The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. Clean bedding is changed two or more times a day. There are specially formulated powders for these rodent species who still require liquid nutrition. Milk replacer should be high fat and comparatively lower protein such as replacer for canids. Keep the face and fur clean. Keep the area clean from eliminations. The sooner the animal is self-feeding out of a bowl the better. As soon as possible place the animal into a natural outdoor enclosure until it is of acceptable age for release. Gradually introduce assorted foods beginning with soft foods including quality baby food fruits and vegetables. Fresh fruits, particularly berries and others found in North American hemisphere should be scattered to encourage foraging behaviors. Nuts (walnuts, filberts/ hazelnuts, almonds, pecans) already shelled and seeds should be offered for those species who consume them. Insects should be offered for those who consume them. Branches and Leafy vegetables should be offered for those who consume them. Specially formulated dry kibble is available for purchase which provides the micronutrients needed for development however Rodent blocks and non-greasy dry food without added colors and additives may be part of the diet. Branches from native trees and bushes should be added to encourage chewing which is a necessary requirement to wear down the ever growing teeth. Some form of shelter as well as dirt, rocks, clumps of grass and clean water must be offered at all times. Enclosures must be secure enough to allow this animal to exhibit natural behaviors. Adults suffering from disease or trauma require specialized care.

Depending upon your location you may have Lagomorphs in your yard, **Wild Rabbits and Hares.**

Snowshoe Hare breed from March to August. Gestation is 5 weeks. With 1 – 4 young born Cottontail Rabbits breed from February to September. Gestation is less than one month and 1 – 9 young are born. The location for the mother to give birth is in a shallow depression of earth with she lines with her fur. The young remain cozy underneath her fur while she leaves the nest to forage. These animals have a plant based diet. If you suspect the nest may have been abandoned because the mother killed, place an X across the top of the nest using string or even small branches. If upon returning the X is still undisturbed and the young are cold perhaps slightly vocal, there is doubt the mother is alive. Common issues for admittance of adults are hit by car and domestic dog attack. Admittance reasons for the young

are nest disturbance and orphaning (lawnmower, domestic cat or dog, native predator including raptors) and mistakenly suspecting the wild one is in need of care and capturing. Wild Rabbits and Hares are independent at an early age. If you see the animal (even if only several inches in length) with eyes open, fully furred, posture even and erect, acting naturally i.e. foraging you can safely surmise the animal is fine. However to ensure all is well, keep an eye out for signs of distress such as lethargy or immobility. These animals are very high stress species meaning providing care is challenging due to all the stressors (sight, sound, confinement). Keep your pets inside and allow the animal to continue along its way. Please keep your domestic cat inside. The result is punctured body, infection, internal bleeding. The native wild animals have existed for generations with the same requirements as the domestic house cat in your home. A domestic cat is to be an indoor pet (not a feral outdoor cat struggling to survive) with provision of shelter from harsh environment, predatory attack, poisoning, leg traps, certainty of water and food, freedom from a myriad of diseases and injury caused by territorial disputes and vehicles. The most humane treatment in the majority of cases where a cat is responsible for catching a native wild animal is euthanasia. Providing a quick and painless end to the intolerable excruciating agonizing suffering is the most compassionate solution. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. Clean bedding is changed two or more times a day. There are specially formulated powders for Lagomorphs who still require liquid nutrition. Milk replacer should be very high fat and high protein such as replacer for felids with additional fat content from goat milk or heavy whipping cream (not cool whip) is necessary. Keep the face and fur clean. Keep the area clean from eliminations. The sooner the animal is self-feeding out of a bowl the better. As soon as possible place the animal into a natural outdoor enclosure until it is of acceptable age for release. Fresh grass and fauna, root veggies and fruits, particularly berries and others found in North American hemisphere should be scattered to encourage foraging behaviors. Specially formulated dry kibble is available for purchase which provides the micronutrients needed for development Branches from native trees and bushes should be added to encourage chewing which is a necessary requirement to wear down the ever growing teeth. Soil and dirt with clumps of grass and other vegetation should be added as well as den. Enclosures must be secure enough to allow this animal to dig and run and leap. Clean water must be offered at all times. Adults suffering from disease or trauma require specialized care.

**Weasel** family members are the River Otter, Mink, Wolverine, Fisher, Marten, Weasels. The weasel patients admitted for care have been due to kidnapping of young who were mistaken as orphans and also animals who have been attacked by domestic cats. Some older taxonomy includes skunks but they have since been categorized into their own family. Weasels are predators. The stoat is an ermine is a short-tailed weasel. Mostly nocturnal. Coat changes seasonally, breeding in the summer with up to a 10 month gestation due to delayed implantation. 4 or more young are born in April or May. The young explore nocturnally with mother. Habitat is in brushy wooded areas near water but not dense forest. Long tailed weasel are also primarily nocturnal, have seasonal coat changes, do not hibernate and breed in summer with 205 to 337 day gestation and birth typically in April. Habitat is near water avoiding dense forest. American Marten also known as Sable and Pine Marten but not *M. martes*. Mates in summer, young born in April, Mature conifers and mixed wooded forest are preferred habitat. Mainly a

boreal animal. Dens are in snags and deadfall. Food sources include carrion. The rare and scarce Fisher is a Marten also known as fisher cat, black cat, pekan, wejack, atchok, oochik. Do not hibernate. Nocturnal and diurnal. "Pregnancy" is nearly one year are born February to May and separate from mother in the fifth month. Coniferous forests are the habitat both able to climb trees and den in the ground. Habitat loss of clearing large deciduous trees is a primary cause for decline. Mink are likewise nocturnal unless a nursing female which may hunt in daylight. These solitary animals breed in January through March. Gestation is 40 to 79 days depending if delayed implantation occurs. April or May is birthing season with an average litter of 4 or 5. The family disperses at summers end. Water is a requirement for their habitat. River Otters also prefer nocturnal but are active in the day. Do not hibernate. Mating is in late winter or early spring. Gestation is 8 to 12 months as delayed implantation is possible. They venture from the den around 10 weeks of age to explore the lake and river habitat. The den is often one created by Beavers. They can swim 15 miles per hour. Numbers are declining. Trapping for pelts is one enemy, vehicle collision another. Domestic pets attack causing injury and also diseases such as distemper. Habitat alteration causes added duress for the young who leave their mother in search of their own territory. They must travel great distances passing through territories of other otters who defend it. These distances are often inhabitable due to the human factors of asphalt and houses. The young animal has no food source – fish and other aquatic prey. The patients admitted for care have been undernourished young suffering from bites caused by larger animals attacking them and also have damage to their foot pads from having to walk long distances on hard rough surfaces. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. Clean bedding is changed two or more times a day. There are specially formulated powders for Weasels who still require liquid nutrition. Milk replacer should be high protein and comparatively lower fat such as replacer for felids. Keep the face and fur clean. Keep the area clean from eliminations. The sooner the animal is self-feeding out of a bowl the better. As soon as possible place the animal into a natural outdoor enclosure until it is of acceptable age for release. Gradually introduce assorted foods beginning with soft foods including beechnut beef and chicken baby foods. Pouches and Cans of insects are able to be purchased. The cans of mini crickets, grasshoppers etc. are excellent because they are soft and easier to digest. The pouches of soft preserved mealworms, crickets etc. Live meal worms and Super worms are also excellent sources of protein. Be mindful the superworms are large and do bite. Earthworms as food source should be limited due to the fact they pass along parasite eggs which infest the intestinal tract of the predator consuming. Maggots should NEVER be offered as food. Foods should be scattered to encourage foraging behaviors. Hard boiled eggs are also an excellent staple as are mice. Specially formulated dry kibble is available for purchase which provides the micronutrients needed for development however high protein kitten/cat or ferret food without added colors and additives may be part of the diet. Enclosures must be secure enough to allow this animal to dig and search for food. Some form of shelter as well as Clean water must be offered at all times. Adults suffering from disease or trauma require specialized care.

**Carnivores:** these predators consume prey species as the nutritional requirements for survival.

*These species have very special requirements if they are to learn the skills necessary for survival. Unless the animal is very young and severely debilitated, do not attempt to offer food or water. Even the young have the ability to defend themselves and can cause injury. Contact local wildlife agencies.*

Canids are Fox, Coyote, Wolf. Canids do not hibernate and birth their young in dens. The fox is mostly nocturnal. Winter mating with 52 day gestation average. Coyote are nocturnal unless no threat is detected. Breeding in January through March with a 60+ day gestation. Wolves breed in February to April with a gestation of 9 weeks. All these animals have no desire to be in close proximity to humans. The patients admitted for care at professional wildlife rehabilitation centers are due to human causes. Humans kill an adult and orphan a den of pups. Humans create habitat destruction and cause starvation. Vehicle collisions on highways which isolate territories forcing animals to cross in search of food and shelter.

Cougar, Lynx, and Bobcat are Felids. They are solitary unless it is a family unit of mother and offspring and do not hibernate. Cougar also known as Mountain Lion, Painter, Puma, Panther, Catamount is the largest of the genus and equivalent to the size of a leopard in that genus. Solitary predators which do not hibernate and active day or night. Only one deer per week is average quantity required to sustain their survival. Sightings are rare. No set breeding season but a 3 month gestation. The spots on the fur of the young are kept for 6 months and the young may remain with mother the first year. Lynx are nocturnal and mating is February to March. 9 to 10 week gestation. The family unit is known to remain through the first winter. Bobcats also known as wild cat, cat of the mountains, bay lynx, lynx cat. Bobcats are nocturnal. Spring litters are born but late summer litters are possible. Unlike other felids, the males are known to assist with rearing and bringing food to his mate. Males have large territories with several females. The family separates in the winter. Primary reasons for admittance for wildlife rehabilitation is human interference. Orphans created by mothers killed by wild cat hunters. Also when the youngsters are exploring the habitat they get separated from mother and 'treed' by domestic dogs (either hunters or hikers).

**Bears** (Black and Grizzly) are not carnivores but omnivores consuming berries, insects, plant matter, fish, carrion, and some prey species. Summer is the mating season and young are born in January or February. The young are not weaned until 6 to 8 months of age. They are not fully independent until the following spring or summer. Bear cubs are received at wildlife rehabilitation centers due to mothers being killed by bear hunters who shoot first and look later creating orphans. The majority of cubs are admitted during the months of Spring Hunting season. The bear mothers, who have given birth over winter are exploring habitat and desperately searching for sustenance. She has not eaten since the Autumn and lost significant weight over the past months. She is in need of feeding herself and one or two additional mouths. Those orphans who are of an age to leave the den and become found by humans then taken to professionals for care are the fortunate ones. Ones too young become prey to predators or become hypothermic and slowly starve. Other reasons are emaciation/starvation and gunshot or archery injury.

**Ungulate** species are animals with hooves. The long legs, sharp hooves, and antlers create a very dangerous situation for caregivers. These animals are prey species meaning they are on constant alert for predators. Unfortunately, this makes them a poor candidate for captive care. When confined the animal is simply too stressed by the nearness of humans and being enclosed causes a physiological

response called capture myopathy. The heartbreaking reality when an ungulate is hit by a car and sustains a broken leg, euthanasia is the only option for rapid release from pain. Yes you might have seen a deer with three legs but this is because the animal was able to chew off its own leg, keep infection and flies away by constant licking for weeks. Then this animal suffers day after day while searching for food, water, shelter and escaping predators. When a hip or back is broken, the animal slowly starves to death. Perhaps you heard tales of a neighbor of a friend who had a relative who raised a fawn, please do not attempt this. Tender hearted citizens have attempted this and inadvertently killed the young deer by feeding it the incorrect milk and created extreme gastrointestinal distress causing pain and heartbreak. Not every attempt ends in death however if you listen to enough hunter tales, you will hear of the ones which spoke of about deer walking right up to them in the hunting blind. The animal had no respect, no fear.

January through March is the time for **White Tailed Deer** males to drop their antlers. Conditions of high stress such as heavy snow impact timing however for all ungulates. Breeding is early Spring for White Tailed Deer species. Birthing takes place after 200 days, typically May to June. Older females may birth twins. The young remain spotted for 4 to 5 months. Young may remain through winter and often as long as 2 years.

**Mule Deer** males drop their antlers from December through March. The species breeds late September to mid-November with a 200 +/- gestation. Fawns are born in June to July and weaned (still nursing from mother) for 6 weeks. Twins are common and triplets have been recorded. Young remain through winter and as long as 2 years. Males start to bud antlers at 9 months of age.

**Elk** males drop their antlers in Spring (March through April). Breeding in the Autumn. Birthing in late spring after approximately 255 days. The young remain spotted for 3 months.

Male **Moose** shed their antlers in Winter typically from November through January. The younger males may not drop them until early Spring. Breeding occurs in September / October. Gestation ranges from 230 to 260 days. Young are born late spring as well and weaned at 5 months of age. The young remain with mother for one year.

**Big Horned Sheep** breed in late Autumn (August) to early winter (January). Gestation is 175 days average. Weaned at 5 – 6 months. The young remain with the herd at last two years. The horns grow slowly. The males do not curl until 6 years of age and are not full length until 12 years of age.

**Mountain Goats** breeding does not happen until the animal is 30 months of age. November through January is typical with a gestation of 184 days average. A single offspring is born in late May to early June but completely weaned by September. They are driven away the following May or June. Both males and females have horns.

**Pronghorn Antelope** breed late summer. From July to October. Typically only adults of age 3 to 5 years old breed. Gestation is 252 days. Twins usually born late Spring. At 3 weeks old the coat changes to a tan color. At 2 days old the young can outrun a man and 4 days old outspurt a horse. The sheath of the horn is shed after breeding season.

**Birds of prey** – eagles, hawks, owls, kingfishers, herons, raven, vulture. The predatory bird which has a diet of (prey) animal protein is a diverse group. These birds have sharp beaks and most also have strong feet to grasp. These birds will not hesitate to defend themselves from an attacker. Reasons for admission are struck by car, emaciation/starvation/undernourished, dehydration, broken legs and/or

wings. Fishing line entanglement is also a reason for admittance for the species with habitats containing large bodies of water. Young are admitted after windstorms when the nest falls. Feather mites or lice are a common parasite. As with all wild animals it is paramount to provide proper nutrition to accommodate the demands of these important indicator species.

**Waterfowl** species can be separated into groups of dabblers or divers. What the bird eats is a primary indicator. Not all 'ducks' eat plant matter, some eat invertebrates, some are not ducks at all and consume fish. One bird which is often mistaken as a duck is actually a **Grebe**. Idaho waterways are home to several species of **Grebes**. These highly specialized birds are usually admitted for care due to them being stranded on the highways and roadways which parallel waterways. While in flight, as dusk settles, the light fades which creates the illusion that a road is a river. The bird begins to land on what looks like a surface of water but instead actually suffers potentially severe trauma from the collision onto the hard rough surface. These birds CANNOT walk to get off the road. They are stranded. The anatomy of these birds does not allow them to use legs for anything except paddling when in the water. They may manipulate a slight bit using the wings to pull themselves along for a very distance but no sense of direction guiding them as to where they are going they slowly starve. Additional complications may arise from internal bruising as well as damage to their specialized webbed feet. These birds do not survive without clean water and a healthy ecosystem. Their food consists of fish and aquatic invertebrates.

The **Canada Goose** is prevalent in most waterways and habitats near water. Nests are made in areas where the female can see all around to ensure no approaching predators. If you reside in an area and do not wish to encourage these large birds from sharing your yard, simply plant a few tall ornamental grasses and shrubs. These birds used to be mostly migratory in the extreme north however mild winters and readily available food sources have created year round residents. The breeding season in mid-June results in a clutch of eggs which are incubated for nearly one month. The precocial young goslings hatch and follow adults to the nearest waterway to learn how to be a goose. Becoming separated from family unit is not uncommon due to habitat alterations. The newly hatched can only remain in the water for short durations and the adult will guide them back onto a bank to rest. The young nestle underneath mother for warmth and security. As evening falls, the group will return to the nest. The most common admission reason into professional wildlife rehabilitation facilities is 'orphan'. The tender hearted citizen saw a gosling alone, perhaps vocalizing so they took the bird home. It is often possible to reunite this bird with family group. Locate the closest waterway, search for a group with the same size as the one you found. If no birds are in sight, keep the bird calm – often a towel lined crate covered in a quiet place is sufficient. Ideal times to see the groups are morning and evening. Another reason for admittance for care is a young goose which has been habituated to humans. A single gosling has been picked up and taken home then raised in the bathtub and backyard alongside the children, the dog, the cat, the television and the chaos of a typical human household. The bird identifies with the family not aware it is a wild Canada goose! As the bird develops, the family realizes they cannot keep this pet so they take it to a nearby lake and leave it. The bird has no concept of what is happening and feels abandoned. This young bird then approaches and or follows other humans which seem similar to the ones who raised it. Sometimes the habituation can be reversed and the bird can learn how to be returned to the wild and cohabitate with other Canada Geese. Other times the habituation is to extreme and has developed into

imprinting - not reversible. The bird has no wild social skills, foraging ability or sufficient flight capacity and can never be returned to the wild. Another condition caused by tender hearted humans who do not acknowledge the importance of proper nutrition is 'angel wing'. This is a permanently debilitating ailment which does not allow the bird to fly. Intentional assaults by humans, Dog attack on adults and young, Cat attack on young, Hit by car, Poisoning, Emaciation are additional reasons for these waterway birds admission for care. These birds are very heavy bodied so finding one with broken wing or leg is a heartbreaking. The most humane option is euthanasia. This is also best to end the suffering rapidly when the bill has been broken. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. The heat source can be removed once the bird has full plumage of feathers. An area to hide and snuggle to get warm must be provided. Clean bedding is changed two or more times a day. Fresh water must be provided for drinking as well as swimming however the very young must be observed to ensure they do not become too chilled or drown. The outside enclosure must be secure from predators and provide natural forage. Local animal feed stores sell waterfowl specific grain. Species specific formulas is also available online from reliable manufacturers. The dry crumbles should not constitute the entire offering of nutritional requirements. Chopped leafy greens such as spinach and kale as well as (untreated) grass, clover, native nontoxic plants. Shredded apples and carrots. Live mealworms and crickets. Dehydrated 'chicken barnyard mealworms' should be offered sparingly to adults only. Oyster shell and grit should also be given. Birds with a crop which are not given grit will starve even when appropriate items are provided.

Most **Wild Duck** species breed in May or June and less than 30 days for incubation. Waterfowl females (as with all birds) lay one egg a day, once the clutch number is acceptable the incubation process begins. These young will hatch the same day. This will explain why there is a discrepancy of size between siblings. Once hatched, the young follow mother to the nearest waterway. Unfortunately this causes the risk of becoming separated from the family group; highways are a common reason for creating orphans. Fishing line entanglement is also a reason for admittance. Ducklings are precocial but still dependent. Some species (mallard) feed on plant matter and dabble on the surface for duckweed. Some species (merganser) diet includes fish and invertebrates. They dive for their supper. Providing feed store duck mash is not a one size fits all when you find a youngster who has been separated from family or a group of orphans has been found. These birds are very heavy bodied so finding one with broken wing or leg is a heartbreaking. The most humane option is euthanasia. This is also best to end the suffering rapidly when the bill has been broken. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. The heat source can be removed once the bird has full plumage of feathers. An area to hide and snuggle to get warm must be provided. Clean bedding is changed two or more times a day. Fresh water must be provided for drinking as well as swimming however the very young must be observed to ensure they do not become too chilled or drown. The outside enclosure must be secure from predators and provide natural forage. Local animal feed stores sell waterfowl specific grain. Species specific formulas is also available online from reliable manufacturers. The dry crumbles should not constitute the entire offering of nutritional requirements. Chopped leafy greens such as spinach and kale as well as (untreated) grass, clover, native nontoxic plants. Shredded apples and carrots. Live mealworms and crickets. Dehydrated 'chicken barnyard

mealworms' should be offered sparingly to adults only. Oyster shell and grit should also be given. Birds with a crop which are not given grit will starve even when appropriate items are provided.

Other birds seen around waterways are categorized as shorebirds. These include Common Snipe and Killdeer. **Snipe** perform incredible aeronautical displays during mating season, this can cause wing trauma when collisions with the ground. **Killdeer** reside near waterways and make their nest in the ground. When the eggs hatch, the precocial young follow mother to a place to feed. Offspring become separated from family unit. Other reasons for admission of these delicate birds are domestic cat and dog attack. **Gulls** are a group all their own as nature has created them to live near water (webbed feet and sharp peak to grasp prey) however due to survival instinct and observing humans, they have adapted to including parking lots and refuse sites as a territory to forage for food. These birds are specialized in their own way. Each has a distinct diet and habitat requirements. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. The heat source can be removed once the bird has full plumage of feathers. An area to hide and snuggle to get warm must be provided. Clean bedding is changed two or more times a day. Fresh water must be provided for drinking as well as swimming however the very young must be observed to ensure they do not become too chilled or drown. The outside enclosure must be secure from predators and provide natural forage.

**Game birds** such as the **Wild Turkey** will travel within a specific territory but do not migrate to avoid winter. The female will lay a clutch of eggs (10 – 14 eggs) anywhere from mid-April through early June. Incubation is less than one month. Laying a second nest may occur if the first nest fails therefore a brood can be seen in August. These young (as are waterfowl) are precocial, meaning they are born with feathers. This “advanced” state of development does not indicate they are independent. The young remain with the family unit. Wild Turkey young can fly as soon as 2 weeks of age and will roost high in the trees; this causes the common issue of injuries to toes, feet, legs when they fall. Dog and Cat attack to the nest or animals are reasons for admission as well as hit by car. Other birds in this group are **Grouse and Quail**. These birds are very heavy bodied so finding one with broken wing or leg is a heartbreaking. The most humane option is euthanasia. The young unable to thermoregulate must have supplemental heat source and the ability to get on as well as off as they feel they need. The heat source can be removed once the bird has full plumage of feathers. An area to hide and snuggle to get warm must be provided. Clean bedding is changed two or more times a day. Fresh water must be provided for drinking, however ensure they do not become too chilled. The outside enclosure must be secure from predators and provide natural forage. Local animal feed stores sell game bird specific grain. Species specific formulas are also available online from reliable manufacturers. The dry crumbles should not constitute the entire offering of nutritional requirements. Chopped leafy greens such as spinach and kale as well as (untreated) grass, clover, native nontoxic plants. Shredded apples and carrots. Live mealworms and crickets. Dehydrated 'chicken barnyard mealworms' should be offered sparingly to adults only. Oyster shell and grit should also be given. Birds with a crop which are not given grit will starve even when appropriate items are provided.

**'Songbirds'** category consists of species which provide a symphony of vocals to announce territory many. These Migratory and Non-migratory species of **Wild Birds** (Crows, American Robins and other Thrush species, Warblers, Finches, Sparrows, Wrens, Flycatchers, Rock Doves, Swallows, Waxwings, Kinglets, Nuthatches, Woodpeckers, Hummingbirds etc.) have two breeding seasons which take place in Spring (March, April, May) then again in late Summer. June and July are the busiest time for bird patients. The most common reason for admittance of adults is domestic cat attack. The result is punctured body, infection, broken wings, internal bleeding and collateral damage of nests of offspring left to starve - all because of human failure to be good pet owners. Major chain pet retail stores have granted well over \$30 million dollars towards feral cat colonies nationwide. These domestic cats need and deserve the same requirements as the one in your home. A domestic cat is to be an indoor pet with provision of shelter from harsh environment, predatory attack, poisoning, leg traps, certainty of water and food, freedom from a myriad of diseases and injury caused by territorial disputes and vehicles. The most humane treatment in the majority of cases where a cat is responsible for catching a native wild animal is euthanasia. Providing a quick and painless end to the intolerable excruciating agonizing suffering is the most compassionate solution. Second most common reason is window strike, which cause head trauma (concussion), internal bleeding and broken bones. A bird with a broken wing unless it obtains accurate diagnosis and very specialized care has a low chance of being able to return to the skies. Windstorms are the most common reason for nest falls. Young birds are found on the ground when the siblings push one or more out, when cats and other predators destroy the nest, or when they are of age to attempt to fly but are not quite capable yet. When a bird is found on the ground and not flying use the words BLUE KFO to check for vitality. BLUE as in blue sky where these birds should be flying stands for body alignment, legs, urates, eyes. Letters KFO are similar to UFO only a meaning a kindly flying object indicating keel, feathers, and odors. A bird should hold itself even and equal. Legs should both functioning. Urates are the defecation which should be white with some fecal matter. Any other color is an indicator of problem(s). Eyes should be bright alert and responsive. The keel should not be sharp. This bone is where the flight muscles attach. Feathers should be clean and perfect. There should be no odors. *ALWAYS* make try to renest a young bird unless there is physical trauma. There is no substitute for the natural mother. Place the bird into a small open top box in an elevated place of the tree you suspect he/she fell from and locate it as close to the base of the tree as possible. Watch to see if the mother returns to feed. She will not do this if the human is too close (same with tree squirrels). Please do not kidnap fledglings by mistake. They are in essence synonymous to a teenager out exploring and learning what it means to be an adult. Keep watch to ensure safety from predators. The parent will be nearby and checking on them (as well as siblings) throughout the day. These 'baby' birds do not all consume the same foods. The local fishing bait store will not be able to provide safe food options. Birds cannot digest milk from any mammal. Not all birds have the ability to digest seeds. No bird species eats maggots nor should they be fed 'farmyard style' dehydrated mealworms. Appropriate nutrition is paramount to successful development. Maintaining a low stress environment and socializing the bird to its own kind are equally imperative. These birds have required care for physiological reasons. Long Hot Summer days cause dehydration. Flying hundreds of miles during migration cause exhaustion. Cold temperatures and rain in early Spring cause hypothermia. Limited food supplies in Autumn cause malnourishment. Improper use of lawn care products cause poisoning. Bird population numbers

particularly songbirds numbers are declining to the point of extinction for many species. These native wild animals provide a service to this planet – they consume countless insects, pollinate plants, transfer seeds which create flora, clean up carrion. The young unable to thermoregulate must have supplemental heat source but not be too hot. Creating a small nest is a must to ensure the bird does not develop splayed legs. The heat source can be removed once the bird has full plumage of feathers. An area to hide and snuggle to get warm must be provided. Clean bedding is changed two or more times a day. The nest cup is lined with toilet paper or paper towel and will be changed at each feeding. A defecation should happen at each feeding. The bird will instinctively try to eliminate over the nest edge. It should be a formed clean sack of waste. The color and consistency should be the tan color of the formula and not liquid. For nestlings do not give water directly; this is not necessary because the formula given is made with water therefore providing hydration. For juveniles and adults fresh water must be provided for drinking. The outside enclosure must be secure from predators and provide natural forage. Local animal feed stores do not sell appropriate one size for all songbird bird formula. Species specific formulas for nestlings are available online from reliable manufacturers. Keep the beak and face and body clean! Do not allow any residual formula to remain stuck on the body, face, beak as it will create permanent deformations. Read the ingredients and feed the powdered formula for seed eaters only to those birds with the primary diet of seed namely Rock Doves. Know that not every bird eats seeds. Most birds consume a blend of invertebrate and seed. Some birds (Swifts, Flycatchers, and Swallows) consume insects exclusively. Know that all nestling birds are fed assorted soft bodied insects even Hummingbirds. Baby birds must have high protein if they are to develop properly. Hard boiled eggs which are mashed into a paste can be mixed with nutritionally acceptable powder and water. Neither dehydrated ‘chicken barnyard mealworms’ nor maggots be offered as food. Equally ubiquitous Nightcrawlers from bait shops are not acceptable food for Robins or any bird. These worms are unnaturally large, may cause choking, and often carry an internal parasite which is passed along to the bird. This will be discovered when you hear the bird cough. An antiparasitic medication obtained at a veterinary clinic is the cure. You can purchase the species specific Formula of Nestling Songbirds and Insectivore powder and add the appropriate variations including calcium, it is possible to purchase a high quality protein based ferret kibble and pulverize and soak it into a paste but be mindful additional nutrient supplements are needed.

Ensure the bird does not habituate to you during the multiple feedings each day for 2 weeks you by following strict protocols. Keep the nest of birds in an enclosure which shields them from the constant human presence. Establish a feeding schedule based on species requirements – birds without a crop (true insect eaters) must be fed every 15 minutes for 16 hours each day for the entire time in captivity whereas birds with a crop can be fed every 20 minutes from dawn to dusk but as they develop and grow, the crop gets larger allowing the time to be extended to every 30 minutes and can be reduced to hourly until self-feeding is confirmed. The bird will vocalize when it is hungry. Do your best to emulate the whistle of you cannot create your own chirp or whistle sound. While feeding, make this sound. This is what the mother does and it is the only way a newly hatched bird with eyes still closed knows to open mouth and be fed. Do not talk to the birds. Keep your human presence minimal. Be aware the young will leap up vigorously so make sure you have a strong grasp of the feeding utensil. In one hand have the feeding utensil such as a flat rounded wooden spoon and in the other hold up a small mirror. The bird will see itself and not your face. When the bird begins to explore the area you have

created, make sure to place a mirror, shallow lid of water, bowls of species appropriate food (seed blend and grit, mealworms in water, canned crickets, chopped fruit and vegetables, natural ground cover and flora. As soon as wing feathers begin to grow in, get the bird into an outside enclosure so it will begin to experience the natural world. There have been observations where a wild mother will feed juveniles through the wire mesh cages. This interaction of seeing and hearing other birds are vital for long term survival. Do not allow domestic pets outside nor children to play near the bird. Adults suffering from disease or trauma require specialized care.

**Reptiles and Amphibians** are known as indicator species. If a habitat is not balanced and thriving these species are one of the first to show signs of decline. Every species of turtle is threatened. Every species of turtle has population decline. These animals are historical species with evidence from dinosaur era. However due to the modern era of man, roughly 100 years, they are on the verge of extinction. Highway casualty. Nesting site destruction. Intentional capture for entertainment purposes at independence day celebrations. Invasive plant and reptile species destroying natural environment. Habitat alteration. Intentional killing. Dog attack. Be aware a turtle can survive catastrophic injury which would be fatal to a mammal. Unable to feed itself it will slowly starve. Be kind – if you see a turtle on the roadway, do not assume it is dead. Ensure you are safe then approach the turtle on the road. Place the animal off the road over the bank in the direction it was headed. If the animal is injured take to the nearest veterinarian for euthanasia. We need experts in turtle rehabilitation, please consider learning about this incredible animal and becoming trained. There are courses and lectures to teach shell repair. Other reptiles in our wild north Idaho include the Northern Alligator Lizard and many snake species (Garter Snake, Rubber Boa, Gopher Snake, North American Racer). Amphibians in North Idaho include assorted frogs, toads and salamanders. Primary reasons for admission of amphibians and most reptiles is domestic cat attack. Habitat destruction and causing intentional harm as well as ingestion of poisoned prey are reasons as well. These animals are ectotherms. They require a supplemental heat source to raise their body temperature when needed. They cannot create it themselves as an endotherm as mammals and birds.

#### PHYSICAL TRAUMA:

A wild animal who sustains a broken bone requires VERY specialized care. In many cases, the absolute most humane option is a quick peaceful physically painless death. This is the sad but harsh reality unless a trained professional is available to accept the patient. Even if there is no physical trauma the animal is still in a state of duress because of the confinement and the proximity to humans. A quick silent thorough examination is necessary as soon possible after the trauma has occurred. Unless you have a background in animal sciences you will be asking yourself a series of valid questions: what is normal, what am I looking for, what am I looking at... etc. First and foremost unless it is obvious a trauma has occurred wait and watch. Second do not rush to feed or force water. Third empathize with the living being. For example you are on a ladder painting your house. You fall off the ladder. Your neighbor rushes over and sees you lying on the ground. What would your reaction be if that beloved neighbor started asking you endless questions, shoving a cup of water in your face followed by a sandwich and

chips and then started feeling your legs and arms and pushing you to sit up and move your head? Allow the wild animal dignity to process what just happened in a calm, quiet, darkened place. A small box with paper towel lining or a vari-kennel with the door and side bars covered by a towel are ideal. Do not concern yourself about setting a dish of water or food or even branches and dirt into the container. Allow the animal to remain in this quiet calm place without interruption for at least 20 minutes.

#### **How do you determine if the animal injured and needs help?**

- *Does the animal appear to have dirty, matted, ragged or missing any feathers or fur?* Wild animals keep themselves clean and tidy. Looking disheveled is not normal.
- *Is the animal holding itself evenly?* (right side even with left side, both wings look the same, legs equal and bones straight, head upright, eyes alert and responsive)
- *Yes – perhaps no broken bones or trauma. No – most likely broken bones or injury present.*
- Broken bones are not always compound, meaning they are not sticking out of the skin. A broken bone can feel like a hot spot or a slight bulge. A broken bone may feel crunchy or spikey sharp. A broken bone may not have been felt during an examination but if the wild animal is holding themselves asymmetrically there may be a possibility that a broken bone is the reason. Without specialized care and equipment and medication a wild animal with a broken bone is suffering immensely.
- *Is the musculoskeletal structure sound?* Do the muscles on both sides of the body feel equal? Do you feel ribs or is the abdomen sunken? Is there a difference in strength and weakness of right and left?
- *Do you see blood?* It may appear as simply as a wet spot on the feathers or fur. It may be a discoloration on the skin.
- Was the wound caused by a bite from another animal such as a domestic cat? If yes the wild animal must be tended to by a medical professional and always receive antibiotics. Bites are problematic unless treated properly right away.
- *Is the wound new or old? Is the tissue healthy looking?* When in doubt, think of your own skin and natural healing process. Discoloration and odors are indicators of significant life threatening problems.
- *Dehydration* is common in the summer. The mouth will be dry, saliva stringy, the mucous membranes tacky, the eyes sunken, the skin wrinkled. The skin will remain tented for a prolonged time. Urine appears concentrated or 'sparkly'. The animal may be less active depending upon the level of depletion.
- Stress is trauma. Stress, even if the animal seems tame, causes internal trauma. Increased heart rate and respiratory rate as well as trembling, panting, not moving, moving repetitively, self-nursing or over grooming, frequent urination and high water intake are also signs of duress and strain.
- *Do you see any external parasites?* There may be fleas, lice, ticks, or flies and maggots present.
- *Do you see internal parasites?* When the animal 'poops' do you see worms? Is there a strong odor?
- Does the animal appear perfect? A wild animal will keep clean and tidy. Evidence of ruffled fur or feathers is a concern. Dirt or debris is a concern. Unnatural odors and discharge are signs of concern. Behavior of approaching humans is a concern. Limbs not being used are a concern.

Head remaining tucked is a concern. A wild animal easily captured is a concern especially if it is an adult.

- *Diseases* may be a cause for the animal not behaving as it should. How do you identify what the animal may be suffering from without studying infectious diseases? Watch from a safe distance the behaviors of the animal. Is the animal standing evenly or is it swaying; is it foraging for food or is it profusely salivating; do the eyes appear clear and bright or sunken or closed; is the animal circling or pressing the head against a solid surface; does the animal appear to be sickly or a walking skeleton? Are the defecations formed, minimal odor, and color consistent for the species? These are all sample questions to ask. Did you know that 1/3 of people undergoing treatment for rabies exposure is due to feral free roaming domestic cats.

Before deciding to help a wild animal many aspects must be considered: husbandry, nutrition, quantity, developmental stages, weight goals, housing, behavioral achievements, release site and timeline. Do not rush in and force food or water because there are times when food and water is toxic and deadly. If an animal is severely emaciated and dehydrated even the act of providing food or water will kill them. When an animal is found in an extremely debilitated condition they must be tended to by a wildlife professional.

The demands of a Little Brown Bat weighing a few grams to the requirements of an adult moose weighing well over 1000 pounds are the same for these native neighbors. Factors to consider are size, age, diet, defenses, and location. Is the mammal in a safe and low stress environment? Can you identify the species? Is this mammal developed enough to have fur or is it still in the natal state without fur? Small size does not necessarily indicate a 'baby'. Does the mammal appear sick or injured signs? What behaviors do you observe: problematic symptoms include seizures, neurological actions such as circling, twitching, abrupt head motions and tameness, blindness, bleeding, swelling, foreign substance on fur, discharge from eyes nose mouth, fur loss, impaired limb use, shock symptoms may include: acting sleepy or signs of tameness. Do you see signs of parental neglect such as cold body temperature, dehydration, fleas, or loud vocalizations? If the mammal is a prey species respect the high alert instincts. Just because the animal is docile does not mean it is not in distress. Shock mimics tameness. Tameness is not affection. Tameness equals shock means dangerous. Mammals have large eyes to observe the surroundings and all have some means of defense. If the mammal does need help, use a towel or heavy gloves to protect yourself and the mammal. Secure in crate or box.

A 3 inch gold crowned kinglet and a 5 foot great blue heron are vastly different in many ways. Birds are a greatly diverse group. Many factors must be considered before caring for them. Is the bird precocial or altricial; what is the diet and natural habitat; what are the social behaviors; from hatching to independent what are the size transitions; is this species migratory or resident; are the nests placed in a tree or ground; what habitat is the natural setting i.e. perching species or waterway; what age is this species dependent; is this bird single or double brooded; is this bird dependent upon parents through winter or independent when leave the nest; is this a predatory or prey species? The initial questions to ask begin with Is the animal safe and in a low stress environment? There are many qualified bird identifications sites found online to confirm if the species you see is one you should be seeing. What age

is this bird and is it altricial (no feathers and completely dependent upon adult for warmth and food) or precocial (feathered with down but not able to thermoregulate therefore dependent upon adult for warmth and guidance to locate food). Does this bird appear sick or injured? Is the bird cold? Are there parasites (lice, flies, hard black spots, soft white spots, etc.) present? Is there a dead sibling or adult nearby? What behaviors do you observe: problematic symptoms include seizures, neurological actions such as circling, twitching, abrupt head motions and tameness, blindness, bleeding, swelling, foreign substance on feathers, discharge from eyes nose mouth, feather loss, impaired limb use, shock symptoms may include: acting sleepy or signs of tameness. A bird does have the means to defend depending upon the type of bird. Raptors have sharp beaks and talons to pierce and grasp. Herons use their pointed beak to strike out. Ducks and Geese as well as Turkeys and Grouse are heavy bodied with strong leg muscles as well as claws on their feet. Songbirds have strong jaw muscles and toe nails. Each bird also has powerful wing muscles which will be utilized in an effort to slap away the predatory attack.

There are over 100 million outside cats in North America. Each housecat cat let outside to play kills an average of at least 2 animals per week. Your beloved may only return home with one out of every five. A study from 2013 reports 4 billion birds and 20 billion mammals were killed annually. Outdoor cats are an introduced predatory species and the single greatest human caused mortality of native wild animals. An adult cat has four sets of claws and sharp teeth as well as agility which allow them to kill small animals (baby birds and mammals, songbirds, squirrels, snakes, weasels) as well as larger animals (rabbits, grouse, ducks, owls, hawks). [https://youtube.com/shorts/d5M3nMb9iwE?si=qb7owpbpj\\_H9riz1](https://youtube.com/shorts/d5M3nMb9iwE?si=qb7owpbpj_H9riz1)

Domestic dogs which are free roaming are also innately prone to chasing prey species. Unlike cats which puncture and shred, dogs crush and break. Along with turtles, birds, squirrels, rabbits they also can harm ungulates directly and indirectly. Unable to outrun will be captured subjected to being chewed on, those who attempt to leap over fences may become entangled.

[https://youtube.com/shorts/jZ11HxNQnnE?si=4fPafJW1dbNL\\_3Cn](https://youtube.com/shorts/jZ11HxNQnnE?si=4fPafJW1dbNL_3Cn)

*Nature is not a museum, it is an organic system and the removal of any link in its unfathomable chain weakens the whole and impoverishes us all in ways we cannot know. We should not mandate and choose which species are good and which are bad. Every native species has a distinctive place in a natural habitat. Only the removal of man from an ecosystem creates no ripple.*

Read about some of the patients admitted for care in the books [Divine Calling](#) and [Imagine](#) by Mrs.McGee