



Washington Department of Fish and Wildlife

Wildlife Rehabilitation Manual

3rd Edition, 2019

By Patricia Thompson



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3rd Edition (2019)

In 2018 the WDFW formed the Wildlife Rehabilitation Advisory Committee (WRAC) consisting of permitted wildlife rehabilitators, members of the public, and WDFW staff. This committee was tasked with advising WDFW on revising the wildlife rehabilitation rules (WACs) and encouraged to suggest ideas, edits, and concerns. In 2019 the revisions were adopted by the Fish and Wildlife Commission. The 3rd Edition of the WDFW Wildlife Rehabilitation Manual is a result of this 2018-2019 exhaustive rule revision. Members of the WRAC were Crystal Buckley, private citizen; Alicia Bye, DVM, West Sound Wildlife Shelter; Hailie Christenson, private citizen; Jennifer Convy, PAWS Wildlife Center; Alysha Evans, Whatcom Humane Society Wildlife Services; Jasmine Fletcher Glaze, A Soft Place to Land; Rachel Rivera, private citizen/Wild Lives Foundation; Jenny Schlieps, Focus Wildlife; Jade Shaw, private citizen/Point Defiance Zoo/UW; Kelley Ward, Featherhaven; Suzanne West, Sarvey Wildlife Care Center; Jan White, DVM, Puget Sound WildCare.

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Cover photo: Dr. John Huckabee examining bobcat kitten. *Kevin Mack, PAWS Wildlife Center.*

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INTRODUCTION

Thank you for your interest in wildlife rehabilitation, a demanding but also very rewarding profession. It is a time consuming and expensive occupation and you could be donating personal time and resources. One must be very dedicated and professional to be a successful wildlife rehabilitator. The purpose of wildlife rehabilitation is to release physically and psychologically healthy wildlife back to the wild, or relieve their suffering through euthanasia. First and foremost, the animals must be considered over personal gain, emotions, or difficulties of the job.

All native wild birds, mammals, reptiles, and amphibians are protected by Federal and/or Washington State laws and rules (RCWs and WACs). Therefore, wild animals may not be held in captivity without the proper permits. You must be permitted by the state of Washington before practicing wildlife rehabilitation on your own and comply with all Washington state wildlife rehabilitation rules (WAC 220-450-060 through WAC 220-450-200). Permitting ensures high standards of practice in animal welfare and that all persons engaged in wildlife rehabilitation are trained, qualified, and provide humane care and housing for wildlife in their custody. Individuals must meet several requirements to earn this permit. Those who work with native migratory birds must also have a US Fish and Wildlife Service Migratory Bird Rehabilitation Permit. It is the permittee's responsibility to comply with all federal laws and regulations as well as state laws.

Before making the decision to become a wildlife rehabilitator, ask yourself this most important question:

Am I willing and able to provide humane, legal, and proper care while keeping the patient wild at all times and refrain from allowing my emotions to determine my actions even when it comes to end of life decisions?

All wildlife rehabilitators must avoid becoming one who maintains their self-image through wildlife rehabilitation and views him- or herself as a "savior," "friend," or "trusted companion" of wild animals. Those who pursue wildlife rehabilitation for these reasons, or just to "be around wild animals," usually do more harm than good. These are wild animals who deserve to be recognized and treated as such. Wildlife in the care of individuals pursuing wildlife rehabilitation for the wrong reasons often become habituated, tamed, or are captive for too long and have a poor to no chance of surviving in the wild. This style of rehabilitator also gives the public the wrong impression of normal wildlife behavior and the sometimes dangerous nature of wild animals. They are not pets and never will be nor should be.

Wildlife rehabilitation permits require the completion of 1,000 hours of volunteering, working, and/or training in wildlife rehabilitation at a permitted wildlife rehabilitation facility. This is equivalent to about six months of full time or two and a half years of one day/week, such as volunteering every Saturday. You will also be required to list a sponsoring permitted Wildlife Rehabilitator on your permit application, submit at least one letter of recommendation from a permitted wildlife rehabilitator, and a formal agreement with a licensed veterinarian willing to provide consultation and medical services.

After attaining your permit, you must continue your education. **Thirty hours of Continuing Education are required for permit renewal every three years.** Good rehabilitators continue developing their skills no matter what their level of expertise. State, national, and international professional wildlife rehabilitation organizations as well as fellow rehabilitators provide opportunities for continued education and increased skill. [Washington Wildlife Rehabilitation Association](#) (WWRA), [National Wildlife Rehabilitators Association](#) (NWRRA), and [International Wildlife Rehabilitation Council](#) (IWRC) publish newsletters and journals, put on conferences, or provide in-person and on-line courses. Joining these organizations is essential for rehabilitators to stay current and connected.

WDFW Wildlife Rehabilitation Permits must be renewed every three years. You must complete and submit a Permit Renewal Application one month prior to the expiration date and submit all required Annual Reports and Ledgers to qualify for your Wildlife Rehabilitation Permit renewal.

A wildlife rehabilitation permit **does not** authorize a person to be a veterinarian, wildlife biologist, wildlife officer, public-health official, or Wildlife Control Operator (someone who, for example, removes raccoons

or squirrels from peoples' homes). Nevertheless, rehabilitators aid and support all these professions and you must prepare for a complex role within the professional wildlife community.

The following presents an overview of wildlife rehabilitation requirements, and an introduction to the WDFW Wildlife Rehabilitation Exam.

WDFW and Wildlife Rehabilitation

WDFW manages and preserves wildlife at the population level rather than the individual level. Nevertheless, WDFW recognizes the critical role permitted wildlife rehabilitators play in capturing and caring for sick, injured, and orphaned wildlife in Washington State and acknowledges the value of this service to the public, and appreciates the strong network of permitted wildlife rehabilitators with whom to collaborate. Wildlife rehabilitators assist WDFW by:

- Ensuring humane and professional care of injured and orphaned wildlife;
- Providing a network of professional wildlife handlers to assist with wildlife pick-up and emergencies;
- Providing facilities where WDFW can take injured wildlife;
- Providing data and staff-power for wildlife research;
- Assisting in threatened and endangered species recovery;
- Assisting in disease monitoring, and domestic animal and public health protection;
- Providing self-regulation and information sharing within the wildlife rehabilitator community;
- Providing valuable public education.

For wildlife rehabilitation in Washington to reach its full potential we must:

- Establish and maintain compliance with permits and conditions to ensure the best care for the animals;
- Establish and maintain compliance with permits and conditions to ensure public safety;
- Nurture a positive attitude toward fellow wildlife rehabilitators resulting in cooperative networking and improved services for sick and injured wild animals, and the public;
- Eliminate over-handling, mal-imprinting, taming, and habituating wildlife at all times;
- Provide euthanasia for suffering animals in a timely fashion
- Reduce release of non-native wildlife.

The state does not pay for wildlife rehabilitation, nor is it responsible for any costs incurred by a wildlife rehabilitator. Nevertheless, WDFW offers [Grants to Wildlife Rehabilitators](#) on biennial basis. Wildlife Rehabilitators may also want to become a 501(c)(3) tax exempt non-profit organization but it is not required.

Preparing for Your Wildlife Rehabilitation Permit

Material in this booklet is designed to give a brief introduction to what you need to know to become a wildlife rehabilitator. This booklet **does not** contain enough information, nor should it be used as your exclusive resource, for the exam or learning satisfactory wildlife rehabilitation. To be successful, you will need to read and study materials beyond the scope of this publication. It is equally important that you network with licensed Washington wildlife rehabilitators and veterinarians as much as possible and attend wildlife rehabilitation conferences and workshops.

Study Material

In addition to the WDFW Wildlife Rehabilitation web pages, must-reads are: **The most current editions of the NWRA Principles of Wildlife Rehabilitation and NWRA/IWRC Minimum Standards for Wildlife Rehabilitation** listed below. You will need field guides and basic references recommended to you by rehabilitators to augment your knowledge and understanding. A good source of natural history information for a few species is the WDFW [Priority Habitats and Species Management Recommendations](#).

Study Guides

1. *PRINCIPLES OF WILDLIFE REHABILITATION: THE ESSENTIAL GUIDE FOR NOVICE AND EXPERIENCED REHABILITATORS*, 2ND EDITION. 2002. ADELE MOORE & SALLY JOOSTEN. NATIONAL WILDLIFE REHABILITATION ASSOC. 667 PP. May be purchased at <https://www.nrawildlife.org/store/default.aspx>.
2. *MINIMUM STANDARDS FOR WILDLIFE REHABILITATION 4TH ED.* 2012. ERICA A. MILLER DVM, ED. NWRA/IWRC. 116PP. (**NOTE:** A new Edition is being published in 2020 titled *STANDARDS IN WILDLIFE REHABILITATION*, ERICA A. MILLER DVM, ED., NWRA/IWRC.) May be purchased at www.theiwrc.org/resources/guidelines-for-wildlife-rehabilitation or <https://www.nrawildlife.org/store/default.aspx>.
3. *COMPENDIUM OF VETERINARY STANDARD PRECAUTIONS FOR ZONOTIC DISEASE PREVENTION IN VETERINARY PERSONNEL*. 2010. NATIONAL ASSOC. OF STATE PUBLIC HEALTH VETERINARIANS, VETERINARY INFECTION CONTROL COMMITTEE. <http://nasphv.org/Documents/VeterinaryStandardPrecautions.pdf>.
4. *AVIAN AND MAMMALIAN ZONOTIC DISEASE COURSE*
https://www.usgs.gov/centers/nwhc/science/avian-and-mammalian-zoonotic-disease-course-material?qt-science_center_objects=0#qt-science_center_objects
5. *USGS NATIONAL WILDLIFE HEALTH CENTER PUBLICATIONS*
<https://www.usgs.gov/centers/nwhc/publications>
6. SEE ALSO NATIONAL WILDLIFE REHABILITATORS MARKET PLACE FOR BEGINNER TO ADVANCED WILDLIFE REHABILITATION REFERENCES – <https://www.nrawildlife.org/store/default.aspx> and INTERNATIONAL WILDLIFE REHABILITATION COUNCIL WEBSITE FOR OTHER RESOURCES
<https://theiwrc.org/>.

THE FOLLOWING ARE FROM *DIFFERENT STATES*; their laws, regulations, and State Threatened, Endangered, and Sensitive Wildlife Lists **WILL NOT APPLY TO WASHINGTON, but the information on wildlife medicine, diseases, housing, husbandry, etc. will.**

7. *STUDY GUIDE FOR PROSPECTIVE MAINE WILDLIFE REHABILITATORS & EXAMINATION BOOKLET FOR PROSPECTIVE MAINE WILDLIFE REHABILITATORS*
May be downloaded from <https://www.maine.gov/IFW/wildlife/pdfs/studyguide.pdf> and <https://www.maine.gov/ifw/docs/testbank.pdf>. The Study Guide contains a good Glossary.
8. *WILDLIFE REHABILITATION IN WISCONSIN: An Introduction and Study Guide*
May be downloaded from <http://dnr.wi.gov/topic/wildlifehabitat/documents/RehabGuide.pdf>.
9. *MINNESOTA WILDLIFE REHABILITATION STUDY GUIDE & MINNESOTA WILDLIFE REHABILITATION EXAMINATION STUDY BOOKLET*. May be purchased from the Minnesota Bookstore.
<https://www.dnr.state.mn.us/eco/nongame/rehabilitation/studyguide.html>.

WDFW REGIONAL OFFICES

Region 1 – Spokane Valley

Asotin, Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman –
(509) 892-1001
2315 North Discovery Place
Spokane Valley, WA 99216

Region 2 - Ephrata

Adams, Chelan, Douglas, Grant, Okanogan –
(509) 754-4624
1550 Alder St. NW
Ephrata, WA 98823

Region 3 - Yakima

Kittitas, Yakima, Benton, Franklin
(509) 575-2740
1701 South 24th Avenue
Yakima, WA 98902

Region 4 – Mill Creek

Whatcom, Skagit, Snohomish, King, Island, San Juan
(425) 775-1311
16018 Mill Creek Blvd
Mill Creek, WA 98012

Region 5 - Ridgefield

Lewis, Wahkiakum, Cowlitz, Clark, Skamania, Klickitat
(360) 696-6211
5525 S 11th Street
Ridgefield, WA 98642

Region 6 - Montesano

Clallam, Jefferson, Kitsap, Grays Harbor, Mason, Pierce, Thurston, Pacific –
(360) 249-4628
48 Devonshire Road
Montesano, WA 98563

Training

See [WAC 220-450-070](#) for permitting requirements

Wildlife rehabilitation is not a hobby. You must complete 1,000 hours of volunteer work and training with an established [Permitted Wildlife Rehabilitator](#) before you may apply for your permit. Of these 1,000 hours, at least 500 must be during the spring/summer “baby” season. The department may consider education in wildlife rehabilitation as a partial substitute for experience. Training and volunteering at a permitted out-of-state wildlife rehabilitation facility counts if you present valid letters of recommendation from the person or facility for which you worked. Internships in Wildlife Rehabilitation are offered at the larger facilities in Washington and other states. When inquiring about volunteering and internships, ask about the facility’s reference materials, training protocols, veterinarians, treatment protocols, procedures, and with whom they network.

If you want to rehabilitate raptors, large carnivores (brown bear, black bear, cougar, wolf, bobcat, and lynx), cervids (deer, elk, moose, and caribou), and/or oiled wildlife you must possess special Endorsements for these species. At least five hundred documented hours of direct training in safety, husbandry, and medical care of raptors and large carnivores at a current wildlife rehabilitation facility endorsed for these species is required. Those who wish to rehabilitate cervids must receive additional department training and oiled wildlife rehabilitation requires extensive training with endorsed oiled wildlife rehabilitators.

Become a member of the Washington Wildlife Rehabilitation Association (WWRA) and National Wildlife Rehabilitators Association (NWRA), read their publications and attend the conferences. Sign up for training courses such as those offered by permitted rehabilitators and International Wildlife Rehabilitation Council (IWRC). Consider joining the IWRC for resources and their Journal of Wildlife Rehabilitation.

Build a Working Relationship with an [Established Permittee](#). The rehabilitator with whom you work should be willing to share any and all information with you as well as network and cooperate with other rehabilitators. This is one profession that should be cooperative, supportive, and communicative.

Some criteria for selecting an experienced licensed wildlife rehabilitator to train with are:

- You feel compatible in your working relationship;
- They are patient, open, honest, and supportive;
- They provide quality wildlife rehabilitation and training;
- They have structured training protocols and documentation;
- They are accessible and available;
- They are willing to evaluate you and communicate with WDFW;
- They are in good standing with WDFW and US Fish and Wildlife Service;

- They are willing to support you after you obtain your permit; and,
- They often network with other permitted wildlife rehabilitators.



Gunshot Red-tailed Hawk. *Blue Mountain Wildlife*

Your Relationship with a Veterinarian

You must enlist a veterinarian to be your Principle Veterinarian before applying for your permit. Ideally, your Principle Veterinarian will have some experience with wildlife.

Your veterinarian is the person who oversees all of your veterinary medical procedures. Wildlife rehabilitators may not practice veterinary medicine (such as surgery, final disease diagnostics, anesthesiology, etc.) unless they currently hold a Washington State Veterinary Medical License. Wildlife rehabilitators are not trained nor licensed to diagnose and treat animal diseases. Medical or surgical treatments, drug prescription and administration, injections, vaccinations, and anesthesia must only take place under the direction and supervision of a Washington licensed veterinarian. You may wish to learn how to perform in-house lab work.

A [Principle Veterinarian Agreement](#) form must be submitted with your wildlife rehabilitation permit application. **Print or download the Principle Veterinarian Agreement form for a list of things you should discuss with your veterinarian.**

Any agreements must abide by the laws and regulations governing the practice of veterinary medicine in Washington State.

Species Identification

Accurate species identification is crucial for raising orphans correctly, knowing which diseases and parasites occur in what species, and for administering the proper medications. Treatments, housing, and diets are often species-specific. You will be asked to record animal admissions to species on your Daily Ledger (for example Song Sparrow not “sparrow”). Some field guides and other natural history books are listed below for your reference. Also consult local colleges and universities and websites such as the [UW Burke Museum](#) and bird conservation organizations such as the Audubon Society. You may ask any licensed wildlife rehabilitator for reference materials. One way to start identifying a species is to know if it even occurs in Washington State or the Pacific Northwest.



Violet Green Swallows. *Featherhaven*

Some species have more than one common name so knowledge of scientific names is important. Diseases are occasionally referenced by species' scientific names. For example, the scientific name for the raccoon is *Procyon lotor*; the scientific name for raccoon roundworm is *Baylisascaris procyonis*.

FIELD GUIDES & NATURAL HISTORY REFERENCES

Baicich, P. & Harrison, C. 1997. *A Guide to the Nests, Eggs and Nestlings of North American Birds*, 2nd edition. NY: Academic Press.

Bell, Brian H., Kennedy, G., & Fisher, C. 2006. *Birds of Washington State*. Lone Pine Publishing.

Benyus, Janine M. 1989. *Field Guide to Wildlife Habitats of the Western United States*. Fireside Publishers.

Corkran, Charlotte C. and Chris Thoms. 2006. *Amphibians of Oregon, Washington, and British Columbia: A Field Identification Guide*. Lone Pine Publishing.

Eder, Tamara. 2002. *Mammals of Washington and Oregon*. Lone Pine Publishing.

Erlich, Paul. R., David S. Dobkin, and Darryl Wheye. 1988. *The Birder's Handbook: A Field Guide to the Natural History of North American Birds*. Fireside Publishers.

Johnson, David H. and Thomas A. O'Neil. 2001. *Wildlife-Habitat Relationships in Oregon and Washington*. Oregon State University Press.

Martin, A., Zim, H. & Nelson, A. 1951. *American Wildlife and Plants: A Guide to Wildlife Food Habits*. NY: Dover Publications.

Maser, Chris. 1998. *Mammals of the Pacific Northwest: From the Coast to the High Cascades*. Oregon State Univ. Press.

National Audubon Society. 1996. *National Audubon Soc Field Guide to North American Mammals*. Knopf Doubleday Pub.

Poole, A. & Gill, F. (Eds.) *The Birds of North America*. The Academy of Natural Sciences and The American Ornithologists' Union. The complete series is available at most university libraries.

Reid, Fiona. 2006. *Peterson Field Guide to Mammals of North America*. Houghton Mifflin Harcourt.

Sibley, D. A. 2009. *The Sibley Guide to Bird Life and Behavior*. Knopf Doubleday Publishing.

Sibley, D. A. 2014 *National Audubon Society The Sibley Guide to Birds*. Knopf Doubleday Publishing.

Sibley, D, A. 2016. *The Sibley Field Guide to Birds of Western North American* 2nd Ed. Knopf Doubleday Publishing Group.

Threatened and Endangered Species Lists. Recognizing threatened and endangered species is critically important. **Federal and State Threatened and Endangered Species Lists are different.** The above list gives both Washington State status and the Federal status. **These lists change when species are added, delisted, or downlisted.** It is your responsibility to keep up with these lists.

Threatened and endangered species must be given priority care. Your permit requires that you notify the WDFW Wildlife Rehabilitation Manager within 24 hours of admitting a threatened or endangered animal or upon the death of a threatened or endangered animal. The US Fish and Wildlife Service must also be notified.

Common vs. Rare Species; Native and Non-Native; Nuisance Species. You will undoubtedly face the question of why one

species is more important or valuable than another and be forced to choose which you treat and which you do not. Many people, particularly biologists, believe that common nuisance animals and introduced species (see <https://wdfw.wa.gov/species-habitats/living/nuisance-wildlife>) should not be rehabilitated and released. Many introduced species are highly competitive and destructive to some of Washington's native wildlife. It is considered by some to be ill-advised to rehabilitate and release, for example, European starlings, house sparrows, Eastern gray squirrels, and red-eared slider turtles. European starlings, for example, kill native songbirds to take over their nests. However, the argument can be made that by learning rehabilitation techniques on common species, one develops skills that can be applied to native and rare species.



Marbled murrelet (*Brachyramphus marmoratus*) State Endangered and Federally Threatened. Kevin Mack, PAWS Wildlife Center

Some of the common urban species such as raccoons can become aggressive annoyances, and sometimes dangerous to people and pets. Licensed Wildlife Control Operators (WCO) are often called to eliminate these animals, meaning they will be killed. Seriously consider whether you have the ability to properly rehabilitate these animals so they do not become a nuisance.

WDFW encourages wildlife rehabilitators to develop policies that reflect best practices for native Washington wildlife. The rehabilitation and release of threatened and endangered individuals will have the most positive impact on their populations simply because there are fewer of them. Conversely, the rehabilitation and release of common species will not positively affect their population numbers, and the release of many rehabilitated non-native species can potentially have deleterious effects on local native wildlife.

Transferring and Transporting Wildlife

Transferring across state lines.

Cervids may **NOT** be transported across state lines for rehabilitation. Cervids are Roosevelt and Rocky Mountain elk, mule deer, black-tailed deer, white-tailed deer, moose, and caribou. State laws are strict against interstate movement of cervids due to [Chronic Wasting Disease](#) (CWD), brucellosis, and tuberculosis. The state Department of Agriculture also monitors these populations and diseases closely.

Transferring within Washington to another permitted Washington facility.

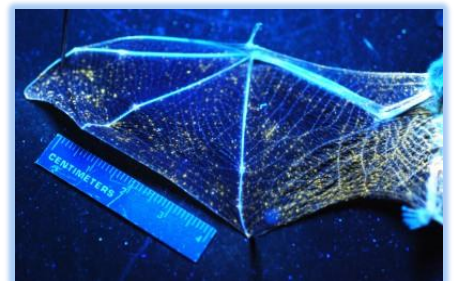
Transfer animals if:

- *The disease or injury is beyond your skill level*
- *Your cages are too small or otherwise inappropriate*
- *You lack necessary diagnostic and treatment equipment*
- *The animal, such as young, needs conspecific companionship*
- *You have received a threatened, endangered, oiled, or a species for which you are not permitted*
- *You are at capacity*

State wildlife rehabilitation laws are strict against movement of cervids within Washington because of emerging and existing diseases. Cervids may not be transferred between Washington Department of Fish and Wildlife Regions without written permission from the department prior to the transfer. Also cervids, beaver, or bats may not be transferred between eastern Washington and western Washington.

Prohibited Importation - Bats, skunks, foxes, raccoons, and coyotes

The state Department of Health prohibits importation into the state any bat, skunk, fox, raccoon, or coyote without a permit (WAC 246-100-197). These are rabies vector species. To import these species, you must obtain a permit from the Washington State Department of Agriculture. Rabies vector species may NOT be transported into Washington State for rehabilitation.



UV of bat wing with **White Nose Syndrome**. Greg Turner

[White Nose Syndrome](#)

Washington's first case of this devastating bat disease that has killed millions of bats across the country was first confirmed in March 2016.

Vigilance to prevent the spread of this disease cannot be overstated.

Exam topics:

- A. Washington wildlife ecology and natural history
- B. Housing and environment
- C. Diet, nutrition, and feeding
- D. Public contact and education
- E. Restraint and handling
- F. Disease, care, and treatment,
- G. Wildlife first aid and triage
- H. Epizootic diseases
- I. Zoonotic diseases
- J. Euthanasia and carcass disposal
- K. Release
- L. Rules, laws, and regulations

Preparing for the Exam

The intent of the exam is to test your understanding of wildlife rehabilitation concepts, practices and procedures, the needs and habits of Washington species, and specifics of wildlife care, injury, and disease. Even though you may want to specialize in birds or mammals, you still must take the General Exam with questions on both. We believe this makes a better qualified wildlife rehabilitator. It is likely that you will be put in situations where the public brings you wildlife not in your “specialty” area. Raptors and large carnivores are not on the General Wildlife Rehabilitation Exam. Those wishing to rehabilitate

raptors and large carnivores must take the General Exam plus an additional Raptor and/or Large Carnivore Exam and achieve a score of eighty percent (80%) or higher on each.

The Washington State General Wildlife Rehabilitation Exam consists of 285 multiple-choice, true-false, and vocabulary questions and you will have maximum 120 minutes to take the exam. All exams are given by appointment at WDFW Regional Offices. For sample questions, see *Appendix 2*. These are real questions on the test. They do not represent everything on the exam but serve to acquaint you with how the questions are asked. Answers are provided to these sample questions

for study purposes.

A. Washington Wildlife Ecology and Natural History

Many of the field guides and references listed above provide natural history facts. You only need to know very basic ecology and life history of the species with which rehabilitators most commonly work. It is important to know, for example, the gestation period of a Douglas squirrel should a pregnant female enter your facility, the weaning age of a black-tailed deer, or fledging age of a songbird species.

B. Housing & Environment

Before proceeding, check that your local jurisdiction (city or county) will permit building and operating a wildlife care facility.

Animals in rehabilitation may not be housed where they are subject to public viewing, display, and human and domestic animal disturbance or access.

Wildlife species have a wide array of housing and enclosure requirements for their physical and psychological health. They need everything from safe caging, proper food display, to appropriate enrichment activities. You will need to know housing requirements for many species and groups of animals if you wish to rehabilitate multiple species. Minimum housing requirements are in NWRA’s *MINIMUM STANDARDS FOR WILDLIFE REHABILITATION 4TH ED* listed in **Study Guides**. You must be particularly good at isolating wildlife from humans.



Exam room with restricted care kennels.
Discovery Bay Wild Bird Rescue



Small-medium mammal enclosure, outside. *Center Valley Animal Rescue*

release conditioning outside.

A critical part of captive animal housing is proper sanitation. There are many types of disinfectants and directions must be followed carefully. A good reference for proper cleaning and disinfecting is the *Minimum Standards for Wildlife Rehabilitation* noted in **Study Guides** on page 6.

Because of the dangers associated with the raccoon parasite *Baylisascaris*, no other species should be housed in a cage that raccoons have occupied, with the exception of stainless steel cages and outdoor enclosures that can be flame sterilized.

C. Diet, Nutrition, & Feeding



Chickadees being fed meal worms.
Robin Purcell, West Sound Wildlife Shelter

Animal diets can be highly specialized or very general, or somewhere in between. Raccoons, skunks, and robins are omnivores, or generalists, as are people. Cats are usually strict carnivores, eating only meat, and deer and rabbits are strictly herbivores, eating only plants. **It is vitally important that you know the details of wildlife nutrition and specific food requirements.** Something as obscure as a calcium to phosphorus ratio imbalance can result in metabolic bone disease which can be debilitating or even deadly.

D. Public Contact & Education

By signing the WDFW Wildlife Rehabilitation Permit, you are acknowledging that your name and contact numbers are public. You may choose not to publish your address on the web page or anywhere easily accessible for the public.

You are not legally or morally obligated to pick up or accept any and all sick and injured animals when a member of the public demands it. In fact, you will only be permitted for certain species. You may choose when and where at any given time that you are willing or able to pick up or receive an animal. You may also decline to rehabilitate any species you do not wish to have in your facility. You may want to prepare a sympathetic answer and reference to another rehabilitator should this occasion arise.

Much of your time as a wildlife rehabilitator is spent on the phone educating callers. You will get questions on wildlife identification, wildlife nuisance problems, life history and behavior, laws and regulations, and “how to take care of” wild animals. **Never tell a caller how to care for a wild animal except to prepare it for transport to a permitted rehabilitator.** Non-permitted members of the public may not care for wildlife, so your advice is limited to how to keep the animal comfortable and stable until it can get to you or another rehabilitator. Always tell the person not to feed the animal.



Fawn hiding for protection. It is not orphaned. *Cliff Rice*

Most of the time you will be educating the public to simply leave wildlife alone, as in the case of “orphaned” wildlife, often not truly orphaned (please see (<https://wdfw.wa.gov/species-habitats/living/nuisance-wildlife>)). Even when wildlife has been injured, you will make the judgment whether it is in the animal’s best interest to bring it in or leave it alone, such as with a three legged deer who looks healthy. At times pursuing and capturing the animal will cause more injury and harm. Wildlife is often better off without our intervention.

When the public calls about nuisance or problem wildlife, wildlife rehabilitators are not permitted nor licensed to remove these animals. This must be done by licensed Wildlife Control Operators. Please refer them to the WDFW [Wildlife Control Operator](#) web page. Many calls that wildlife rehabilitators receive are about perceived nuisance wildlife such as woodpeckers drumming on homes. Wildlife rehabilitators have information for the public on how to mitigate these interactions. Also see <https://wdfw.wa.gov/species-habitats/living/species-facts>.

E. Restraint & Handling

The most important aspect of animal restraint and handling is protecting yourself and your staff against injury. Animal restraint classes are offered by several organizations. You may also train with an experienced wildlife rehabilitator. Restraint skills take experience and an intimate knowledge of a species' behavior and anatomy. You or the animal can be injured due to improper technique. Without proper gloves, rabies poles, etc. even small mammals such as squirrels can give serious bites. Unless you are suitably prepared to restrain a given species and protect yourself, you should not accept it into your facility.



Owlet. *Sarvey Wildlife Care Center*

You must also be able to advise the public on how to handle wild animals and know when to tell them not to. If a member of the public calls to report an injured animal, consider first how that animal could harm the caller. Find out the species, its condition, and behavior. Provide specific advice on how to avoid the animal’s defense weapons (such as teeth in the case of many mammals or feet in the case of raptors). Discourage the caller from handling larger animals. The level of legal liability for yourself is not yet clear should the person get hurt while following your advice.

Animal stress. Wild animals in captivity are exposed to a great amount of stress that can cause physical and psychological injury. Just being close to a human creates enormous stress to a wild animal.

Avoiding stress to the animals in your care is paramount. Some stress reduction practices are:

- Minimize handling
- Evaluate caging and enclosures for frightening or startling occurrences or objects and mitigate them
- Provide visual barriers and distance between other animals, especially natural predators, and humans
- Limit talking and noise (talk quietly, no radio, TV, etc.)

- Prohibit pets within auditory and visual range of any wildlife patients
- Provide proper diet and enrichment
- Provide conspecifics (same species) for orphans or transfer to another facility
- Provide pain management

Taming, Imprinting, and Habituating. It is of supreme importance that wildlife rehabilitators avoid taming, mal-imprinting, or habituating animals in their care. This means no unnecessary holding or visitations, no talking to, naming, or cuddling at any time. Tamed, habituated and human-imprinted, or mal-imprinted, animals cannot be released; they will not survive in the wild and they can be dangerous to humans, pets, and other domestic animals. A tame, habituated, or imprinted animal must be euthanized or possibly placed for education depending on circumstances. If a wildlife rehabilitator does not comply with this directive, they could have their permit revoked permanently.

Taming is a process by which wild animals learn not to fear humans, purposely seek human company and social interaction, care, or attention, do not reject human handling, and at times become aggressive, all of which prevent release.

Imprinting occurs in very young animals at a precise critical period where the animal fixes its attention on and follows the first object or creature it sees, hears, or touches, and becomes socially, and later sexually, bonded, identifying itself as whatever it imprints upon. Mal-imprinting means imprinting on a species not its own. If the animal imprints upon you, it will believe it is supposed to follow you and do what you do resulting in the animal not recognizing its own species and preventing its release. Imprinting persists into adulthood, is permanent, and cannot be reversed.



Elk feeding at bottle rack with no human contact. *A Soft Place to Land*

Habituation is a course by which an animal stops responding to frequent and repeatedly occurring stimuli (noises, sights, smells) because no negative consequences have occurred. If an animal hears humans talking all the time and nothing bad happens to it, they will no longer believe they are in danger and will not respond appropriately when around other humans, such as bolt.

There is a fine line between habituation that occurs as a stress coping mechanism for wildlife in captivity (rehabilitation), and over-habituation resulting in a non-releasable and potentially dangerous animal. The risk of over-habituation in rehabilitation facilities is high if wildlife is not sequestered and cared for properly.

You can decrease the chance of habituation by minimizing to the extreme any noises or other disturbance, and handling and exposure to yourself and other people, especially once the young are feeding independently. The more comfortable a wild animal is around people, the less likely it is to survive and properly function in the wild. It is appropriate for the animal to be uncomfortable even aggressive around rehabilitators. An additional way to avoid taming and improper imprinting is by raising animals with others of their own species (conspecifics). Wildlife in rehabilitation facilities must be handled and interacted with as little as possible and only to provide quality husbandry and necessary medical treatment. Wildlife rehabilitators must be as hands-off as possible.

Ultimately, a wild animal should be in your care only as long as it takes for it to completely heal or mature.

F. Disease, Care, & Treatment

Only extensive study, training, and working with skilled licensed wildlife rehabilitators will prepare you for care and treatment of sick and injured animals. Wildlife rehabilitators are not veterinarians but it will be necessary for you to provide medical treatments, but by law only under the direction of a licensed veterinarian. Wildlife rehabilitation requires no less training than some other medical technical professions.

Life threatening conditions require even more skill and training. Shock, severe dehydration, and emaciation are three of those. For example treatment of dehydration and emaciation requires very specific steps. Emaciated (starving) animals need warmth and fluids first and must not be given solid food right away. Ingesting solid food can abruptly shift the patient's physiology to a condition called Refeeding Syndrome. This is a potentially fatal condition.

A rehabilitator must be able to recognize shock instantly and respond with the correct treatments. Major bleeding is another life threatening situation that may be alleviated by manual pressure directly over the wound. You will learn to recognize and treat these conditions as you train with a permitted and experienced wildlife rehabilitator.

G. Wildlife First Aid & Triage

Triage is deciding which illness and injury will be treated first (urgent and life-threatening), and which can be done later (stable and minor). Some animals cannot be treated at all and must be euthanized. Those are animals severely injured beyond repair or treatment, and sometimes those with zoonotic or epizootic diseases. Training with an experienced permitted rehabilitator will teach you the process of triage and how to identify which conditions need immediate attention and which do not.

Often the best initial treatment, even for broken limbs and larger wounds, is simply fluid therapy and placing the animal in a warm, quiet, dark enclosure for stabilization and recovery from stress.



Electrocution wound. *Marsha Dalan, Raptor House*

H. Epizootic Diseases

An epizootic disease is the nonhuman equivalent of an epidemic, such as West Nile Virus in birds and [Epizootic Hemorrhagic Disease \(EHD\)](#) in deer. An epizootic disease is one that occurs in many individuals of the same or related species in the same area. Also, wild animals transport a variety of diseases that can cause significant disease and mortality in pets or food animals. Canine distemper carried and suffered by raccoons is a disease with the potential of causing large-scale mortality in dogs and other susceptible species. It is, therefore, essential to isolate new animals entering a facility. Domestic animals should be kept well away from all wild animals, their feces, and bedding. Be careful to change contaminated clothing and wash well before going into family or pet areas.

It is required that you report epizootic diseases to the WDFW state veterinarian and Washington Dept. of Health; rehabilitators can play a significant role in protecting domestic animal health. A list of required reportable diseases and reporting form is provided to all wildlife rehabilitators.

I. Zoonotic Diseases – Your Safety & Public Health

Zoonotic diseases (or zoonoses) are animal diseases transmissible to humans - you. Zoonoses are caused by bacteria, viruses, parasites, protozoans, vectors such as ticks, or other agents. Diagnoses of zoonoses in wildlife cannot be made by a single clinical sign or even multiple signs but must be made through a veterinarian's examination and diagnostic tests. A few examples of zoonoses are:

- Staphylococcus and streptococcus infection
- Leptospirosis
- Cryptosporidiosis
- Salmonella
- Tularemia
- Psittacosis
- West Nile virus
- Raccoon roundworm *Baylisascaris procyonis*

- Rabies

The potential for zoonotic infection is everywhere. Good hygiene and sanitation practices, and personal protective equipment (PPE) are essential. Wildlife rehabilitators are required by WDFW to report all zoonotic diseases to the WDFW state veterinarian and Washington Dept. of Health. You will receive a report form and a list of required reportable diseases with your packet upon becoming a wildlife rehabilitator. Rehabilitators play an important role in protecting human health.

All zoonoses can cause disease in humans. However, some are more prevalent and dangerous if encountered. Two examples of those diseases are raccoon roundworm and rabies; diseases for which you must be extra careful. Both of these are potentially deadly to humans. Raccoon roundworm is very prevalent in raccoon feces, whereas, the rabies virus is very rare in Washington State. Bats are the only rabies vector species in Washington that have tested positive for rabies. Be sure to get to know your local county health department web pages should you encounter bats in your practice (see [Washington State Department of Health](#)).

Because of wildlife rehabilitators' potential to come into contact with illnesses not typical of the general public, they should always inform their medical care givers of the unique aspects of their job so medical professionals can accurately diagnose and treat properly. Medical alert wallet cards for wildlife rehabilitators are available from the [USGS](#).

***Baylisascaris procyonis* – Raccoon roundworm.** The eggs of this parasite are shed in raccoon feces and when ingested cause a condition called visceral larval migrans to which humans are highly susceptible. When the ingested eggs hatch, they penetrate the digestive tract and migrate to other organs of the body, not uncommonly the brain. The eggs are extremely resistant to degradation in the environment and can lay dormant and viable for years. They are not killed by common cleansers, disinfectants, or conventional cleaning. To successfully kill and remove *Baylisascaris* eggs, flaming with a blowtorch throughout the cage is most effective.

Rabies Vector Species. Any mammal can be a carrier of rabies but the primary reservoir in the Northwest is bats, and even then the occurrence is very rare. Between 5-10% of bats **submitted for testing** in this state are found to be rabid. In 2017, 22 out of 326 bats submitted for testing in Washington State were positive for rabies (7%); in 2018, 40 out of 531 bats tested positive (7%). But all of these are sick and injured bats submitted for testing. In reality, it is estimated that less than 1% of the total Washington state bat population is infected with rabies. For reported rabies occurrences in Washington and rabies maps see the Washington Department of Health. **It is the wildlife rehabilitator's responsibility to report to the local county health department when exposure to the public by bats is known.**

Other wild animals infected in other states, particularly the eastern U.S., are raccoons, foxes, and skunks. A few coyotes in Oregon have

ZOONOTIC DISEASE PREVENTION

Good hygiene – wash hands after handling wildlife;

Always wear PPE – Personal Protective Equipment such as gloves;

Do not store food, eat, or drink where wildlife is housed or treated;

Immediately and thoroughly wash well the site of bite wounds;

If you are bitten by a carnivore or bat, contact your doctor or county health department;

Appropriately disinfect all areas where wildlife is housed and treated and all items wildlife touches;

Launder wildlife rehabilitation clothing and towels separate from any personal laundry;

Let your doctor know you work with wildlife;

Keep tetanus shots current;

Consider rabies pre-exposure vaccination if you work with rabies vector species.

tested positive for rabies. Lagomorphs (rabbits and hares) rarely carry rabies, and rabies is rare among rodents with the exception of woodchucks.

Be aware of the risks not only to yourself but to your family, staff, volunteers, and anyone else who might come in contact with these animals, including the public. Become familiar with the symptoms of rabies and their similarity to symptoms of other conditions. Discuss the pre-exposure series with your physician, and the protocol for managing situations involving bites or other exposure to animal saliva with your local Health Department.

The primary defense against zoonotic disease is good hygiene – wash hands well after handling wildlife and do not store or consume food where animals are housed or treated. Thoroughly wash animal bite wounds and safely capture any bat that has had contact with a person.

J. Euthanasia and Carcass Disposal

You must have your euthanasia policies and procedures in place before you begin admitting animals for rehabilitation. You can expect that possibly half or more of the animals you admit to your facility will die or need euthanasia. **You must be confident in your emotional ability to euthanize animals when necessary.**

Many humane euthanasia techniques require the use of injectable drugs that can only be administered by a veterinarian or certified technician; therefore, make arrangements with your veterinarian or take a euthanasia certification class before opening your facility. You may also find a safe and humane alternative to scheduled drugs and these must be listed in your written protocol. [American Veterinary Medical Association Guidelines on Euthanasia](#) are the national euthanasia standards.

An animal must be euthanized if it is:

- Unable to recover from injuries or illness;
- Suffering with a severe injury;
- Unable to hunt or forage successfully upon release;
- Required by the state to do so;
- Any bird with injuries requiring amputation of a foot, a portion of a leg or wing at the elbow or above;
- Any animal that is permanently blind;
- After medical treatment unable to feed itself;
- After medical treatment unable to walk or ambulate without inflicting additional injury to itself;
- Tamed, imprinted, or over-habituated except in rare circumstances of educational placement.

Bald and Golden Eagles and Threatened and Endangered Species. Bald eagles, golden eagles, and state endangered or threatened wildlife may be euthanized without prior department approval if the animal is suffering and untreatable or has a terminal illness or injury. In all other cases, prior department approval must be obtained before euthanizing state endangered or threatened wildlife.

Carcass Disposal

Animals that die of natural causes or are euthanized must be disposed of according to local rules and ordinances. Any animal that has been chemically euthanized must be disposed of in a way that prevents scavenging by free wildlife or domestic animals in order to prevent poisoning.

Examples of acceptable disposal methods include: incineration, rendering, transferring to an institution with a valid salvage or possession permit, or burying to a sufficient depth to prevent excavation by scavengers. Valid and current wildlife rehabilitation permits allow wildlife rehabilitators to retain wildlife carcasses for education with approval from WDFW.

Bald eagles and golden eagles must not be disposed of but must be sent to the National Eagle Repository after notifying USFWS. **Endangered or threatened** species must not be disposed of until the WDFW and USFWS have been notified. Endangered or threatened, and bald or golden eagles must not be necropsied without first obtaining permission from USFWS.

Carcasses of any wild animal cannot be sold or used for any other commercial purpose. You may check with [Washington State University Conner Museum](#), [University of Puget Sound Slater Museum](#), or [University of Washington Burke Museum](#) to see if they would like the carcasses for study skins. You may give deceased wildlife, or parts including feathers, only to institutions that have a valid permit to possess them for educational or scientific purposes, including permitted wildlife rehabilitators.

K. Release

Rehabilitated wildlife must be released as soon as the animal is deemed physically, behaviorally, and psychologically fit and conforming to the species natural history for successful reintegration into the wild. In Washington, there is a six-month (180 day) limit on the length of time an animal may be kept in rehabilitation. Extensions may be requested if longer recuperation or conditioning could realistically result in release. There are many criteria to consider when planning for release.

Rehabilitation and release should only be undertaken when the animal has a reasonable chance for survival and reproduction in the wild. To find a mate, the animals must have all appropriate social behaviors intact. Rehabilitated animals release to the wild must be physically and psychologically equipped and conditioned to handle life in the wild.

Species natural history must be known and reproductive potential considered. A major concern at release time is to minimize stress on the animal. Some of the most important release criteria include:

- Recovery from the primary injury/illness,
- Positive health screening; zero exposure to infectious diseases and parasites during rehabilitation,
- Physical conditioning,
- Acclimation to weather,
- Release site selection,
- Seasonal timing of release, and
- Behavioral and psychological fitness such as food recognition and hunting/foraging skills, conspecific recognition, and predator recognition and avoidance, including human.

Release restrictions

Wildlife must be released in locations where there is little stress caused by the presence of people and observers, where it is quiet and the animal has a good escape route into natural habitat. Ideally wildlife should be released to their location of origin if it is safe to do so. Wildlife may not be given to the public to release.

Permittees must obtain department authorization for release location prior to releasing cervids, large carnivores, coyotes, or beaver. Cervids may not be released out of their WDFW Region of origin.

Because of the deleterious nature of introduced species, eastern gray squirrels, Virginia opossum, eastern cottontail, European starlings, and house sparrows must be released where these species already abundantly occur, releasing these species outside of where these species already occur is prohibited.

Amphibians and reptiles have very strict release rules because of disease concerns and must be released at point of origin, without exception. It is unlawful to release amphibians and reptiles if they are a Washington state nonnative species, they have been in captivity as pets, school, or research specimens, or they have



Beaver. *Laura Rogers*

been exposed to items or animals from the pet trade or pet stores including live food items or plants prior to being admitted to the permitted rehabilitation facility.

Nonreleasability

"Nonreleasable" means wildlife that cannot be released with a reasonable potential for survival in the wild due to physical or psychological impairment, such as amputation of a limb, neurological damage, inability to express species-specific and appropriate behavior, including the ability to hunt or forage, recognize threats, or is tamed, over-habituated, or mal-imprinted. If an animal is non-releasable, there are two options: 1) euthanasia, 2) life in captivity.

For most captive wild animals life in captivity after rehabilitation means constant stress from human contact and confinement, and possibly constant pain, which may result in self-destructive behaviors, secondary injuries, and psychological problems. It is inhumane to keep these animals and euthanasia rather than placement should be seriously considered. Any animal that is tamed, habituated, or mal-imprinted and released is very unlikely to survive in the wild, and is *highly likely* to become a problem animal due to its lack of fear of people. These animals may not be released.

L. Laws, & Rules Pertaining to Wildlife Rehabilitation in Washington State

You will need to know WDFW requirements, WACs (Washington Administrative Code), and RCW's (Revised Code of Washington) pertaining to wildlife rehabilitation and captive wildlife in Washington State. See <https://wdfw.wa.gov/species-habitats/living/injured-wildlife/rehabilitation/resources> for relevant rules and laws.

Additional Rules and Laws

All native wildlife is protected by state and/or federal laws, and Federal permits are required for everyone holding a migratory bird. This encompasses all native species of wild birds including songbirds, perching birds, waterfowl, wading and shore birds, and raptors.

The following laws are necessary for you to know and are at <https://app.leg.wa.gov/rcw/> under Title 77.

- RCW 77.12.020 – Wildlife to be classified
- RCW 77.15.130 Protected fish or wildlife-Unauthorized taking-Penalty-Criminal wildlife penalty assessment.
- RCW 77.15.120 Endangered fish or wildlife-Unlawful taking-Penalty

These are other codes (rules) you must know:

See <http://app.leg.wa.gov/wac/> and <http://app.leg.wa.gov/rcw/>.

- WAC 220-200-100 – Wildlife classified as protected shall not be hunted or fished
- WAC 220-640-200 - Deleterious exotic wildlife
- WAC 220-450-020 – Revocation, modification, or suspension of a permit to hold wild animals, wild birds, or game fish in captivity
- WAC 220-450-030 – Live wildlife – Taking from the wild, importation, possession, transfer, and holding in captivity
- WAC 246-100-191 Animals—General measures to prevent human disease.

APPENDIX 1. Wildlife Rehabilitation Permit Conditions

These conditions apply when you receive your permit; your signature and WDFW signature are required on the permit to be valid, indicating that you agree to abide by these conditions.

WILDLIFE REHABILITATION PERMIT CONDITIONS listed on the Permit:

1. Wildlife acquired and held under this permit, including deceased wildlife and parts, remains the property of the state and will not be offered for sale or sold;
2. Only the facility specified on this permit is authorized as a wildlife rehabilitation facility;
3. The wildlife rehabilitation facility must be associated with a primary permittee at all times.
4. The Primary Permittee must notify the WDFW Wildlife Rehabilitation Manager within ten business days of moving or relocating their rehabilitation facility, failure to do so will result in suspension of the permit;
5. The Primary Permittee is responsible for ensuring that their subpermittees abide by all permit conditions and state and federal rules and laws and that all subpermittees are qualified to care for the animals assigned to them;
6. Only subpermittees listed on the Primary Permittees permit are authorized to care for wildlife at their off-site facility;
7. The Primary Permittee is responsible for ensuring that any subpermittee's facilities meet minimum qualifications for species and treatment stages for animals within the subpermittee's care;
8. The Primary Permittee must display a copy of their permit where it is visible to the public;
9. Subpermittees must have a copy of the Primary Permittee's permit at the subpermittee's facility;
10. Primary permittees may not use subpermittees' facilities to increase the capacity of the primary permittee's facility.
11. Subpermittees may not intake wildlife at their subpermittee facility; all animals must go to the primary permittee's facility before being transferred to the subpermittee.
12. The Daily Ledger must be kept current on a daily basis;
13. Wildlife rehabilitation facilities must designate separate and exclusive rooms used only for wildlife housing, treatment, feeding, food preparation, and rehabilitation.
14. It is unlawful to house, treat, or care for wildlife anywhere human food is prepared, stored, or consumed.
15. Facilities and wildlife enclosures must be kept in sanitary condition;
16. Wildlife held for rehabilitation at the facility shall have no contact, including visual, with domestic animals and education animals, and minimal contact with humans to prevent habituation and imprinting;
17. The Primary Permittee will submit to the Department an Annual Report on the form provided by the Department no later than January 31 of each year;
18. Wildlife may not be held longer than 180 days from the day of admittance without written authorization from the department;
19. Wildlife may not be given to the public to release;
20. Primary permittees must consult with the department before releasing cervids, coyotes, large carnivores, or beaver at a site other than where it was recovered;
21. Cervids may not be released outside of their WDFW region of origin.
22. Amphibians and reptiles must be released at point of origin.
23. The Primary Permittee will notify the Wildlife Rehabilitation Manager in writing within 24 hours of receiving a state or federally threatened or endangered species, or oiled wildlife;
24. The Primary Permittee will notify the Wildlife Rehabilitation Manager prior to the release of a threatened or endangered species;
25. The Primary Permittee will notify in writing the Wildlife Rehabilitation Manager within 24 hours of the death of a state or federally endangered or threatened species, or as soon as a threatened or endangered species is determined to be non-releasable to the wild;
26. Threatened or endangered species may not be euthanized without prior department approval except in the case where it would be inhumane to keep the animal alive;
27. This permit does not authorize the practice of veterinary medicine unless the permittee is a licensed veterinarian as required by state code;
28. All wildlife diseases must be diagnosed by a veterinarian; the Primary Permittee must report within 24 hours to the WDFW Wildlife Veterinarian any wildlife diagnosed with or to have died from any of the diseases listed on the Wildlife Disease Reporting Form;
29. Permittees must submit all animals for rabies testing if requested by the WDFW, Washington Dept. of Agriculture and/or local health department;
30. Permittees must properly dispose of wildlife carcasses and must not allow chemically euthanized wildlife to be scavenged;
31. Other federal and/or local permits may be required; it is the responsibility of the Primary Permittee to obtain all required permits and abide by all local, state, and federal rules and laws.

APPENDIX 2. General Wildlife Rehabilitation Exam Questions

SAMPLE



**Washington Department of Fish and Wildlife
GENERAL WILDLIFE REHABILITATION
EXAM**

Sample Questions: Answers are provided for study purposes

The General Exam contains questions on both birds and mammals

Section A. Washington Wildlife Ecology & Natural History

1. All passerines are precocial. FALSE
2. It is natural for some mammals to leave their young unattended for long periods of time, only returning to feed their young. TRUE
3. The following mammal species are considered introduced in all or part of Washington State EXCEPT:
 - a. Coyote
 - b. Eastern cottontail
 - c. Common opossum
 - d. Fox squirrel
 - e. All are introduced in Washington State a. Coyote
4. In mammals, what type of feeding group has both sharp canines and smooth molars for grinding food?
 - a. Carnivores
 - b. Omnivores b. Omnivores
 - c. Herbivores
 - d. Insectivores
 - e. Pre-weanlings
5. The term weaning refers to:
 - a. Sleeping
 - b. Drinking water
 - c. Transition from milk to solids c. Transition from milk to solids
 - d. Releasable
 - e. Shedding winter coat

Section B. Housing & Environment

6. Detergents are effective against fungi and viruses. FALSE
7. Deer should be kept in pens with smooth cement floors. FALSE

8. Wild birds should never be kept in damp, poorly ventilated holding cages because:
- This environment is favorable to the development of fungal and bacterial infections
 - The bird's feathers will be damaged
 - It will cause an unnatural molt
 - Food will spoil quickly in this type of environment
 - This type of caging is acceptable for ducks
- a. This environment is favorable to the development of fungal and bacterial infections
9. If an adult of the same species is not available for proper imprinting, what substitutes can be employed?
- Unrelated juvenile or fledgling conspecifics
 - Sibling conspecifics with a bird skin puppet
 - Bird skin puppet if conspecifics are not available
 - All of the above
 - Substitutes should not be used
- d. All of the above

Section C. Diet, Nutrition, & Feeding

10. For their size, growing juvenile animals have greater caloric requirements than adult animals. TRUE
11. The mothers' milk of all mammals has pretty much the same proportions of macronutrients (protein, fat, carbohydrate); therefore, mammal orphans can all be raised on the same milk substitute. FALSE
12. In captivity, a wild animal offered a variety of foods will always eat those that are good for it. FALSE
13. Mammals are easier to tube feed than birds because their glottis is visible when the mouth is opened. FALSE
14. The natural diet of chickadees, finches, and grosbeaks consists of which of the following food groups?
- Mainly seeds with some insects and fruits
 - Mainly fruits with some insects
 - Mainly earthworms
 - Mainly fruits
 - Mainly nectar
- a. Mainly seeds with some insects and fruits
15. Metabolic bone diseases can result from which of the following problems?
- Calcium deficiency
 - Vitamin D deficiency
 - Improper calcium/phosphorous ratio
 - All of the above
 - None of the above
- d. All of the above
16. Aspiration pneumonia is a common problem with bottle-feeding orphaned mammals. It is caused by:
- Feeding too large a volume of formula too rapidly
 - Burning the face with the warmed formula
 - Missing more than one feeding
 - a and c
 - b and c
- a. Feeding too large a volume of formula too rapidly

Section D. Public Contact and Education

17. Advise people to feed weak animals as soon as possible before taking them to a rehabilitator. FALSE
18. The primary concerns when advising the public on how to handle ailing wildlife are to (first) avoid injury to the handler, and to (second) avoid any further injury to the animal. TRUE
19. When a fledgling bird is found on the ground under a bush in the yard, the best advice is:
- a. Take it in immediately for care and rehabilitation
 - b. Place the bird in a sheltered location nearby and leave the scene so that the parent bird will return to its young
 - c. Remain nearby in the yard to observe the bird for awhile
 - d. Ignore it
 - e. Chase it to make sure it can fly
20. In spring, a caller tells you that a bird is repeatedly flying into her window; this goes on for long periods on a daily basis. This bird:
- a. was probably hand-raised and tamed by a human
 - b. is cold and hungry and is trying to get inside, where there is food and shelter
 - c. thinks that the bird in the window is its baby
 - d. has a neurological problem and should be captured, if possible, and brought in for rehabilitation
 - e. sees its reflection in the glass and is attacking what seems to be a competitor

Section E. Restraint & Handling

21. You may restrict a bird's ability to breathe by holding it too tightly around the chest. TRUE
22. The health status of an animal does not determine the restraint method used. FALSE
23. Rescued animals should be transported in which manner?
- a. In your hands
 - b. In a warm, well ventilated, dark, quiet box or pet carrier secured at the top
 - c. In an open box or bucket
 - d. Under your jacket
 - e. None of the above
24. In rescuing an animal in the field, your paramount concern is:
- a. Securing the animal at all cost
 - b. Safety to the people involved
 - c. Using high-technology capture equipment
 - d. Possibility of hypothermia
 - e. To bring as many people as possible

Section F. Diseases, Care, & Treatment

25. The clinical signs or symptoms of infectious diseases (e.g. rabies, distemper) are distinctive enough for a rehabilitator to determine the difference in a wild animal. FALSE
26. Many parasite eggs can be identified in a stool sample by use of fecal flotation or sedimentation. TRUE
27. Avian pox is a viral infection that causes lesions on the unfeathered portions of the skin of birds. It is generally not a life-threatening illness. TRUE
28. Home products such as Gatorade® or flat cola are as good for treating shock and dehydration as commercial medical products like Lactated Ringers® or Normasol®. FALSE
29. The most common problems in orphaned wildlife are dehydration, starvation, and exposure. TRUE
30. A bird's normal body temperature is considerably higher than that of a mammal. TRUE
31. Accurate body weights are necessary in determining which of the following?
- a. Fluids for replacement or maintenance
 - b. Proper growth or maintenance
 - c. Caloric requirements
 - d. Medication dosages
 - e. All of the above
- e. All of the above
32. Once an emaciated animal has been warmed, what is the next step in caring for it?
- a. Feed it solid food
 - b. Administer fluids
 - c. Give it antibiotics
 - d. Feed it a diet consisting of basic elements that requires little energy for digestion
 - e. Put it in a quiet environment
- b. Administer fluids
33. You have a litter of three young mammals in your care, when another young animal of the same species is brought to you, you should:
- a. Immediately add this animal to the existing litter
 - b. Do a fecal exam and if it is negative, add this animal to the litter
 - c. Isolate this new individual for several days before adding it to the litter
 - d. Isolate this new individual for a few hours, and if it appears healthy, add it to the litter
 - e. Do a complete physical then immediately add the animal to the existing litter
- c. Isolate this new individual for several days before adding it to the litter
34. PCV stands for:
- a. Poor circulatory venting
 - b. Packed cell velocity
 - c. Premium carbohydrate volume
 - d. Packed cell volume
 - e. Poor circulatory velocity
- d. Packed cell volume

35. What is the fungal disease called whose hosts are generally wild birds and transmission is through inhalation of spores?
- Ornithosis
 - Aspergillosis
 - Distemper
 - Rabies
 - Viral pneumonia
- b. Aspergillosis
36. In species other than raccoons, which of the following symptoms are caused by *Baylisascaris procyonis* (raccoon roundworm)?
- Central nervous system abnormalities
 - Blindness
 - Death
 - All of the above
 - None of the above
- d. All of the above
37. The term for excessive elevation of the body temperature characterized by panting and increased respiratory and heart rates, is called:
- Anemia
 - Hypothermia
 - Hyperthermia
 - Acidosis
 - None of the above
- c. Hyperthermia

Section G. Wildlife First Aid and Triage

38. Shock, severe dehydration, severe emaciation, blood loss, or other fluid loss are life-threatening conditions and should be treated immediately. TRUE
39. Rehydrating animals too quickly without careful monitoring can be fatal. TRUE
40. Signs that help you to recognize an animal in shock include:
- Severe, watery diarrhea
 - Rapid, shallow breathing
 - Weak pulse and pale mucous membranes
 - b and c
 - You can never recognize shock
- d. b and c
41. Which of the following disinfectants may be used to clean wounds?
- Iodophores (e.g., Betadine®)
 - Chlorine (e.g., Chlorox®)
 - Creasols (e.g., Pine-Sol®)
 - Phenols (e.g., Lysol®)
- a. Iodophores (e.g., Betadine®)
42. A rabbit attacked by a cat has a two-inch tear through the skin in the back of its right thigh. The wound is jagged and contaminated with debris. After stabilizing the animal, you should:
- Flush the wound thoroughly with lots of saline or warm water
 - Wash the wound vigorously with a lot of soap and water
 - Amputate the leg
 - Apply antibiotic salve to the wound and bandage the leg
 - Immediately begin oral antibiotics
- a. Flush the wound thoroughly with lots of saline or warm water

Section H. Epizootic Diseases

43. Mammals cannot contract West Nile Virus. FALSE
44. Which of the following statements about raccoon distemper in wildlife is **false**?
- a. The symptoms often resemble those of rabies
 - b. Raccoons, foxes and skunks are all commonly affected
 - c. The symptoms often include a runny nose and eyes, disorientation, and lack of fear
 - d. A raccoon with distemper, found walking in circles in someone's yard, can probably be saved if taken to a veterinarian right away
 - e. Unvaccinated pet dogs can contract distemper
- d. A raccoon with distemper, found walking in circles in someone's yard, can probably be saved if taken to a veterinarian right away.
45. Mycoplasmal Conjunctivitis (or "finch eye") is spread by:
- a. Eating contaminated foods
 - b. Physical contact with infected birds
 - c. Contact with eye secretions from infected birds
 - d. Spread at bird feeders
 - e. Any or all of the above are possible.
- e. Any or all of the above are possible

Section I. Zoonotic Diseases

46. Quarantining wild animals for a ten-day period is sufficient for determining rabies infection. FALSE
47. Although *Baylisascaris procyonis* (raccoon roundworm) can be spread to humans, it is not particularly harmful to humans. FALSE
48. If a wildlife rehabilitator is bitten by a raccoon or other mammal, the **first** thing he or she can do to reduce the risk of possible rabies infection is:
- a. Wash the wound well with soap and water
 - b. Kill the animal
 - c. See a physician immediately
 - d. Quarantine the animal
 - e. Look for signs of rabies
- a. Wash the wound well with soap and water
49. Humans may become infected with raccoon roundworms by:
- a. Eating undercooked raccoon meat
 - b. Swallowing something contaminated with roundworm eggs
 - c. Coming in contact with the blood of a raccoon killed on the highway
 - d. Being bitten by a raccoon showing nasal discharge, weeping eyes and matted greasy fur
 - e. Petting a raccoon
- b. Swallowing something contaminated with roundworm eggs

Section J. Euthanasia & Carcass Disposal

50. Acceptable methods of euthanasia for cold-blooded vertebrates include placing them in a freezer. FALSE

51. When deciding to continue treatment or to euthanize an animal, factors to consider should include:
- a. The availability of an effective and humane course of treatment
 - b. Once treatment is completed, whether the animal will be able to re-enter the wild with a reasonable chance of survival
 - c. If an animal is not releasable, whether there is a good justification for keeping it in captivity other than just to avoid euthanasia
 - d. All of the above
 - e. Never euthanize an animal
- d. All of the above

Section K. Release

52. Even though a wild animal has been kept with humans and habituated to them, it is okay to release them because they are wild. FALSE
53. Normal body weight is a factor in considering the release of an animal. TRUE
54. One of the most important factors to the success of releasing a rehabilitated animal is:
- a. Releasing the animal in its natural habitat
 - b. Releasing the animal on a weekend, so people are more likely to find it if it gets into trouble
 - c. Releasing the animal on a weekday, because people are likely to be at work and not bother it
 - d. Releasing **all** your rehabilitated animals in the same place
 - e. Releasing the animal as far away from your facility as possible
- a. Releasing the animal in its natural habitat
55. Which problem in each of the following animals would prevent the successful release of the individual back into the wild?
- a. Loss of vision in a red-tailed hawk
 - c. Loss of one eye in a red fox
 - b. Loss of a digit in the hind foot of a raccoon
 - d. Loss of the tip of an ear in a rabbit
 - e. All would prevent the successful release of these individuals
- a. Loss of vision in a red-tailed hawk
56. Assuming all other release criteria have been met, it would be appropriate to release which of the following species in Washington in December:
- a. Western tanager
 - b. Rufous hummingbird
 - c. Yellow warbler
 - d. Vaux's swift
 - e. Ring-necked pheasant
- e. Ring-necked pheasant

Section L. Laws, Rules & Regulations

57. It is permissible to allow the public to view wildlife while it is being cared for in rehabilitation. FALSE
58. Birds such as robins, mourning doves, crows, etc. that are present in Washington year-round are not migratory; therefore, a federal permit is not required to rehabilitate them. FALSE
59. A permitted wildlife rehabilitator may accept sick and injured deer from outside Washington. FALSE

60. A wildlife rehabilitation permit may be revoked or not renewed if the rehabilitator:
- a. keeps permanently crippled animals as pets
 - b. keep animals in environmental conditions not approved by the WDFW
 - c. habituates wild animals and keeps as pets
 - d. performs anesthesia and surgery without a vet
 - e. all of the above
- e. all of the above

61. For a wildlife rehabilitator who does not have a federal rehabilitation permit, which of the following species may be kept for treatment?
- a. crow
 - b. bald eagle
 - c. turkey
 - d. robin
 - e. great blue heron

c. Federal permits are required only for native migratory birds (as defined by the Migratory Bird Treaty Act), marine mammals and reptiles and endangered species. Washington State governs non-migrating game birds such as turkeys.

62. Which of the following is **not** listed as a state threatened or endangered species in Washington?
- a. snowy plover
 - b. sea otter
 - c. Vaux's swift
 - d. western gray squirrel
 - e. gray wolf
- c. Vaux's swift

63. The WDFW must be notified within what time period after receiving a threatened or endangered species:
- a. 24 hours
 - b. 48 hours
 - c. 72 hours
 - d. 7 days
 - e. WDFW does not have to be notified
- a. 24 hours